Warwickshire Geological Conservation Group

Warwickshire Local Geological Site	
Site No: 01	Roundberry Quarry
Geological Formations	Chester (formerly Polesworth) Triassic
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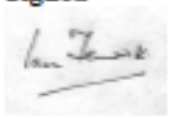
Local Geological Sites (LoGS), designated by locally developed criteria, are currently the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). The designation of LoGS is one way of recognising and protecting important Earth science and landscape features for future generations to enjoy.

WGCG is responsible for the identification of LoGS in Warwickshire and the West Midlands.

Please note that designation of a site as a LoGS does not confer a legal right of access. Unless the site is on a designated public right-of-way, the landowner's permission is required before visiting.

Warwickshire Local Geological Site - Criteria Form					
Site name: Stipers Hill Plantation		**Also known as:**			
District: North Warwickshire		**County:** Warwickshire			
Grid reference: SK2706 0275 (road) to 2715 0249 (plantation)		**LoGS Number:** 67		**ESCC Class:**	EO/ER
Brief Description: Exposures of basal Triassic Hopwas breccia					
This site qualifies as a Local Geological Site for the following criteria:					
A Good Example of Hopwas breccia					
Educational Fieldwork					
1. Educational Potential	✓	2. Physical access	✓	3. Safety	✓
Scientific Study					
1. Diversity of interest	✓	2. Rarity of interest	✓	3. Size of feature	
4. Typicalness of feature	✓	5. Geological/physiographic linkage to: *Roundberry Quarry (1)*			✓
Historical Value					
1. Celebrity link		2. Pioneering research		3. Historical link: *Horace Brown*	
Aesthetic Value In The Landscape					
1. Local importance in the landscape		2. Promotion of Earth science			
Signed  I M Fenwick, Chairman, **Warwickshire Geological Conservation Group**		**Date first selected** 13th March 2002			
		Reviewed by LoGS panel Oct. 2009			
		Further survey required			
		LoGS Confirmed			✓
Endorsed by					
Warwickshire Museum J Radley, Keeper of Geology		**Natural England** J A Irving, Conservation Adviser			
In the event of any development or planning consultation relating to this site or its surrounds please inform: The LoGS Officer WGCG, c/o Keeper of Geology, Warwickshire Museum, Market Place, Warwick CV34 4SA (tel: 01926-418182)					

The site was resurveyed in August 2020 and May 2023 by Ray Pratt. In 2023 the owner applied for planning permission to convert the site to a wedding venue. WGCG were assured that this would not be a problem regarding future access.

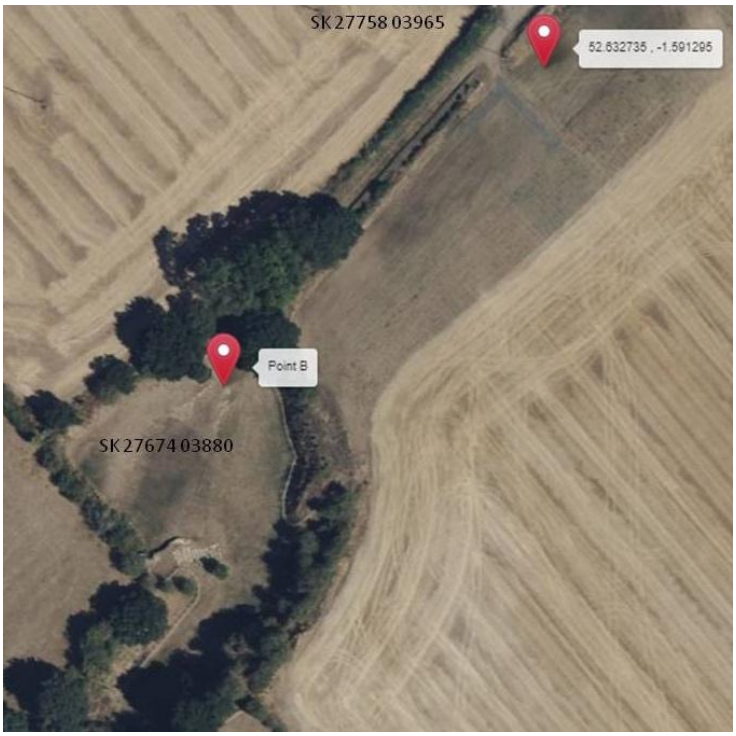
WARWICKSHIRE GEOLOGICAL CONSERVATION GROUP
LOCAL GEOLOGICAL SITE (LoGS) - resurveyed May 2023

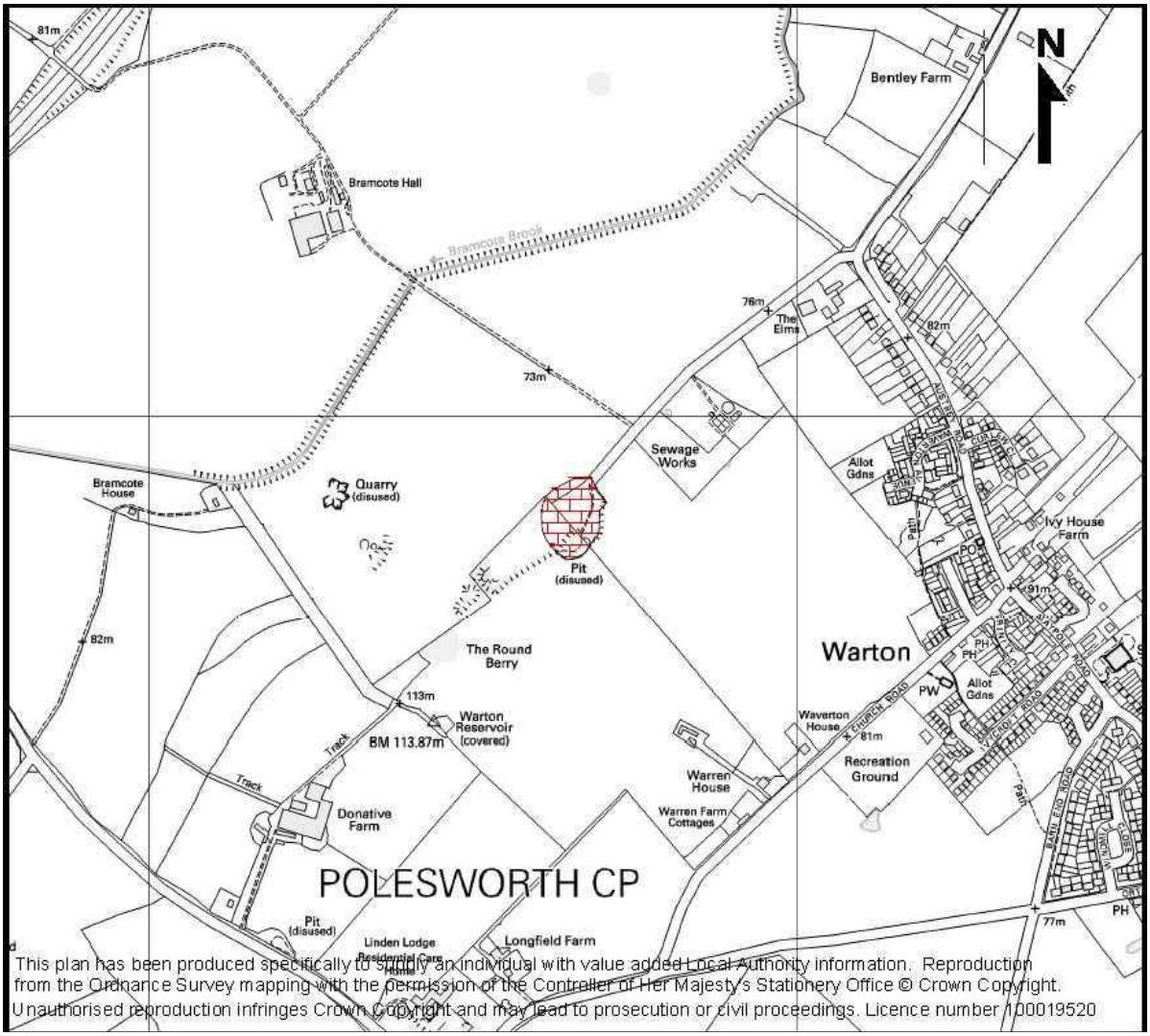
Site	01	Roundberry Quarry
Parish		Polesworth
District		North Warwickshire
County		Warwickshire
National Grid Reference		SK 2765 0382
Ordnance Survey Sheets **1:50000** **1:10000**		140 SK 20 SE

Location

A private disused gravel quarry 1.6 km north east of Polesworth. The quarry can be reached 500m down a track which is to the south of the road from Warton to Austrey, the turning being at GR SK 282 043.

The quarry is being used for wedding venues and is kept in immaculate condition. Contact the owners for permission to visit. Significant parking can be accommodated in the assigned field immediately to the left after entering the gated track way.

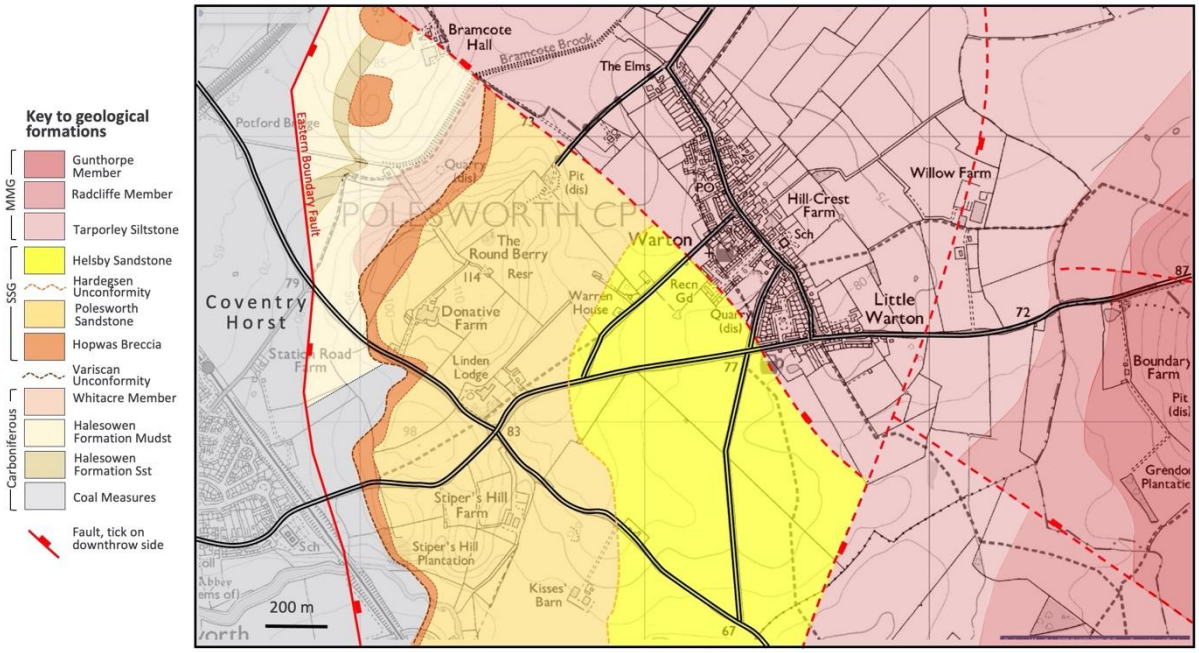




Summary of Interest

The only good exposure in Warwickshire of the lowermost Triassic Chester Formation (formally known as the Polesworth Formation and before that "Bunter Pebble Beds"). Roundberry Quarry is located east of the Coventry Horst of Carboniferous basement rocks and is close to the base of the Sherwood Sandstone Group. The Eastern Boundary Fault of the Coventry Horst occurs about 1km to the west. The Hopwas Breccia was exposed to the north and west of this LGS (Stipers Hill). The exposure in Roundberry Quarry comprises poorly cemented pebbly sandstones and conglomerates with thin beds of red coloured mudstone. This site is suitable to use as a type section for the ‘Polesworth Formation’ in Warwickshire although the type section of the Chester Formation is in northern Cheshire.

The exposures are mostly of the west and south faces of the quarry which were around 70% vegetation free in the summer of 2023. There are some smaller exposures within the NW part of the quarry. The beds dip quite steeply generally to the north-east. Some of the dip is depositional.



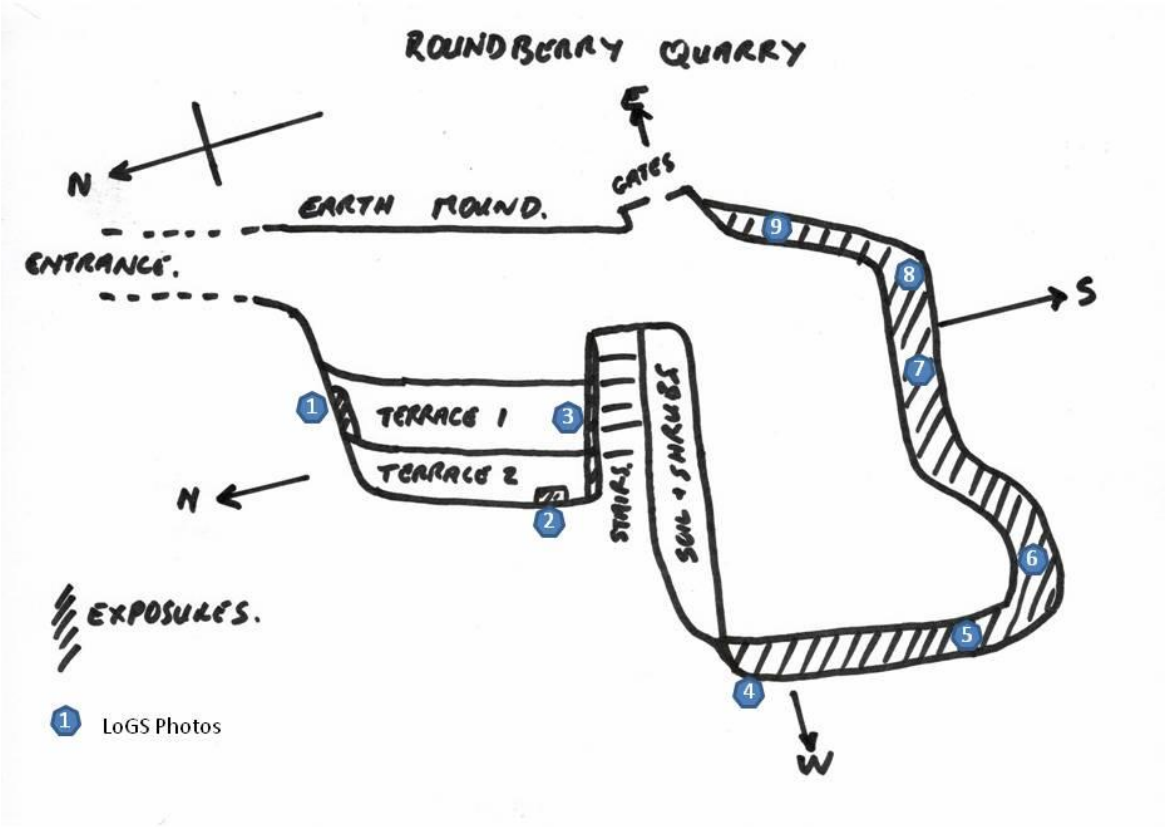
The main west quarry face exposes a cumulative section of 10m in height. The vertical faces show a section through soft, pale-buff coloured, cross-bedded sandstones of varying grain size. The finer-grained sands are thinly bedded and can be considered as flagstones.

The sandstones are organised into fining-upwards packages comprising well rounded conglomerates, coarse-grained pebbly sandstone and finer grained sandstones and mudstones. The fining upwards units are separated by an erosion surface that records the base to fluvial channels. The gravels are poorly sorted, ranging from small pebbles to large cobbles. They are composed dominantly of vari-coloured quartzites (white, cream, brown, black). Many are metaquartzite. Orthoquartzites have also been reported. They are all well rounded, commonly elliptical is shape. Pebble imbrication can be observed. Occasionally cream-coloured claystone pebbles can be seen, probably of local origin from the Carboniferous. Gravels pass laterally into cross-bedded sandstones recording changes in current capacity in the channels. The conglomerates are well cemented with carbonate.

The thin clay lenses within the conglomerates are discontinuous and commonly eroded by the overlying conglomerate or sandstone.

The site is of considerable educational value at all levels. The exposures record Lower Triassic coarse grained, gravelly rivers flowing from the south around the eastern side of Coventry Horst. An educational discussion can be held around the nature of the Triassic rivers and whether these sandstones were derived by long distance transport or more local alluvial fans sourced from the nearby Carboniferous basement. The quarry is excellent for teaching sedimentology, bedding dip and strike, and regional geology.

May 2023 Resurvey



Location 1 (north side of quarry) May 2023

Location 2 NW side of quarry. May 2023

Location 3 Mid part of quarry. May 2023

Location 4 West side of quarry. May 2023

Location 5 West South West part of quarry. May 2023

Location 6 South West side of quarry. May 2023

Location 7 South side of quarry. May 2023

Location 8 South side of quarry. May 2023

Location 9 South East side of quarry. May 2023

Looking south from quarry entrance. Sep 2020

Location 2 Aug 2020

Location 3 Mid section of quarry by steps. Sept 2020

Location 3 Mid section of quarry by steps. Aug 2020

Location 5 West South West part of quarry. Aug 2022

Location 9 South East side of quarry. Aug 2020

Location 7 South side of quarry. May 2008

Location 7 South side of quarry. May 2008

Location 5-6 South side of quarry. May 2008

Location 7 British Geological Survey P210284

Location 4 British Geological Survey P210284