A32 D102 Common Lane Quarry

Site information

Site name: Common Lane Quarry

Site key: D102

Grid reference: [SK 567 962] (centred on)

Site type: disused quarries, pits and cuttings

Local authority: Doncaster Metropolitan Borough Council, South Yorkshire

Site dimensions:

Site owner: RMC Aggregates (Eastern) Ltd

Conservation status: Regionally Important Geological Site Date: 4/10/97

Field surveyor: Scott Engering Date: 16/2/07

Stratigraphy and rock types

Time unit: Triassic Rock unit: Sherwood Sandstone Group

Rock type: Sandstone (undifferentiated) Details: Fluvial sandstone with large scale cross bedding

Time unit: Anglian, Middle Pleistocene Rock unit: Glaciofluvial deposits

Rock type: Sand and Gravel Details: Sequence of sorted and cross-bedded sand and gravels

Site map

(Figure 148) — D102 Common Lane Quarry

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Site description

Large rectangular disused sand pit in Sherwood Sandstone with overlying Older River Gravel.

This exposure comprises an extensive section, up to 10 m thick, of medium grained, cross-bedded pink to red sandstone. Generally, there are only occasional pebbles but as at [SK 65926 96179], there are a few lenses of red, pebbly material, including white quartzite and marl. Thin beds of marl occasionally separate thick beds of sandstone and at [SK 65914 96211] there are two isolated boulders of deep red weathered marl. Throughout the length of the exposure, the sandstone is very consistent in appearance, colour and texture.

Overlying the sandstone, in places there are up to 2 m of orange/red sand that appears to be reworked Sherwood Sandstone which is in turn overlain by coarse sandy gravel, dirty red-brown in colour which has a well developed horizon.

In most places around the quarry, this is seen to be generally less than one metre thick but at [SK 65960 96256], it increases to a thickness of over 3 m, where the gravel fills a depression in the underlying sandstone and appears to be a channel deposit. Here the coarse gravel is interbedded with brownish sands.

The sand and gravel beds are inaccessible in most places but theses can be observed at close quarters along the access ramps into the quarry along the north and west sides. A brief examination of the pebbles found at the base of the quarry faces shows white and liver coloured quartzite, carboniferous sandstone, dolerite and chert.

In the sands above the Sherwood Sandstone, there are numerous burrows and rabbits are common. However, many of these could be Sand Martins nests and there are signs of possible mining bee activity.

Access is down a gently sloping ramp and the quarry floor is vegetated but slightly uneven. To the far south of the quarry, there is a pond. Although potentially a hazard, there is no need to access this part of the quarry to observe geological features.

RIGS assessment of site value

Ratings: 1–2 very poor; 3–4 poor; 5–6 acceptable/useful; 7–8 quite good; 9–10 very good/excellent; N/A not applicable; D/K don't know

Access and safety

Aspect/Description/Rating

Road access & parking Parking for 2-3 vehicles outside entrance gate. Rating: 6

Safety of access Down gently sloping ramp to quarry floor. Some care required when wet. Rating: 6

Safety of exposure Clean quarry faces with no rock overhangs. Access to sand and gravel requires care on loose sloping material. Rating: 7

Permission to visit Owned by CEMEX.. Gate is locked to prevent possibility of fly tipping. Land let out for shooting rights N/A

Current condition Good condition. Clean and clear quarry faces. Sand and gravel also well exposed. Some Biffa bins in quarry floor Rating: 8

Current conflicting activities Shooting

Restricting conditions Private ownership and locked gate

Nature of exposure Quarried rock faces

Multiple exposures /prospect for trail Limited opportunity due to remote position. Link with biodiversity interests

Notes Private ownership and locked gate may prevent access. Keys held by person who owns shooting rights and works at Doncaster Airport

Culture, heritage & economic

Historic, archaeological & literary associations Local industrial archaeology. Rating: 5

Aesthetic landscape Sunken pit so minimal aethetic value. Rating: 4

History of earth sciences Not known

Economic geology Extraction of building sand. Rating: 6

Notes Limited value for culture and heritage apart from local industrial archaeology

Education and science

Surface processes Weathering and erosion of sand and gravel. Rating: 6

Geomorphology Not applicable. Rating: 0

Sedimentary Varied lithology in Sherwood Sandstone and Quaternary sands and gravels. Rating: 8

Fossils Not applicable. Rating: 0

Igneous Not applicable. Rating: 0

Metamorphic Not applicable. Rating: 0

Tectonic: structural Not applicable. Rating: 0

Minerals Not applicable. Rating: 0

Stratigraphy An accessible location to see permanent outcrop of Older River Gravels. Rating: 6

Notes A good succession of Sherwood Sandstone and Older River Gravel for research purposes but a bit remote and limited appeal to general public

Geodiversity value

Remote location but one of few exposures of Sherwood Sandstone not under threat, with Glaciofluvial deposits. Rating: 7

Site photographs D102 Common Lane Quarry

(Figure 149) General view of Sherwood Sandstone along east quarry face. [SK 65933 96386].

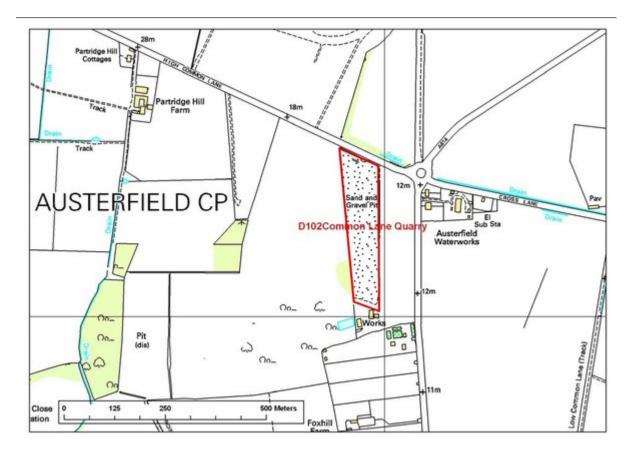
(Figure 150) General view of Sherwood Sandstone in the west quarry face, with large scale cross bedding. [SK 65944 96127].

(Figure 151) Burrow/nest and mining bee holes in Sherwood Sandstone. [SK 65970 96268].

(Figure 152) Weathered boulder of red marl in Sherwood Sandstone. [SK 65914 96211].

(Figure 153) Boundary between Older River Gravel and Sherwood Sandstone. [SK 65912 96305].

(Figure 154) Channel of Older River Gravel on Sherwood Sandstone in east quarry face. [SK 65960 96325].



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(Figure 149) General view of Sherwood Sandstone along east quarry face. [SK 65933 96386].



(Figure 150) General view of Sherwood Sandstone in the west quarry face, with large scale cross bedding. [SK 65944 96127].



(Figure 151) Burrow/nest and mining bee holes in Sherwood Sandstone. [SK 65970 96268].



(Figure 152) Weathered boulder of red marl in Sherwood Sandstone. [SK 65914 96211].



(Figure 153) Boundary between Older River Gravel and Sherwood Sandstone. [SK 65912 96305].



(Figure 154) Channel of Older River Gravel on Sherwood Sandstone in east quarry face. [SK 65960 96325].