
A26 D31 Leys Hill Bridge

Site information

Site name: Leys Hill Bridge

Site key: D31

Grid reference: [SE 523 067] (centred on)

Site type: cutting, railway, disused

Local authority: Doncaster Metropolitan Borough Council, South Yorkshire

Site dimensions: 100 m x 2 m

Site owner: DMBC

Conservation status: Regionally Important Geological Site **Date:** 14/9/97

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

Stratigraphy and rock types

Time unit: Permian **Rock unit:** Edlington Formation, Zechstein Group

Rock type: Calcareous mudstone **Details:** Marl

Site map

(Figure 122) — D31 Leys Hill Bridge

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Site description

Exposure of Edlington Formation in roadside drainage ditch at the edge of landscaped Brodsworth Colliery waste tip. At date of previous survey in 1997, calcareous precipitation associated with weathering of marls visible.

The ditch has been fenced off and planted with hawthorn and gabions have been erected to stabilise the slope. The ditch is now largely overgrown and obscured by osiers with only the occasional exposure of red weathered marl soil now visible. Along the bottom of the ditch and on man made waterfalls, there is a white/grey precipitate but this bears no obvious relationship with the marl exposures.

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 in nearby country park. Rating: 8

Safety of access Grassy bank at edge of shallow ditch and now fenced off s. Rating: 5

Safety of exposure Exposure is safe but precautions are required because of the presence of a shallow water filled ditch. Rating: 5

Permission to visit Not applicable. Accessible from public highway. Rating: 5

Current condition Largely overgrown and obscured by grass, hawthorns and osiers D/K

Current conflicting activities None envisaged

Restricting conditions No collecting

Nature of exposure Exposure in roadside drainage ditch

Multiple exposures /prospect for trail Very limited

Notes

Culture, heritage & economic

Aspect/Description/Rating

Historic, archaeological & literary associations Not applicable. Rating: 0

Aesthetic landscape Not applicable. Rating: 0

History of earth sciences No formal associations, but good local marker horizon. Rating: 5

Economic geology Not applicable. Rating: 0

Notes Not applicable

Education and science

Surface processes Weathering and calcite precipitation from marls. Rating: 7

Geomorphology Not applicable. Rating: 0

Sedimentary Modern sedimentary processes. Rating: 4

Fossils Not applicable. Rating: 0

Igneous Not applicable. Rating: 0

Metamorphic Not applicable. Rating: 0

Tectonic: structural Not applicable. Rating: 0

Minerals Calcite precipitation. Rating: 5

Stratigraphy Useful marker horizon and correlation of Edlington Formation. Research/fieldwork interest for field mapping. Rarity value. Rating: 5

Notes Limited exposure is useful for advanced studies, especially for field mapping work

Geodiversity value

Limited value except use as a marker for the position of the Edlington Formation. Rating: 5

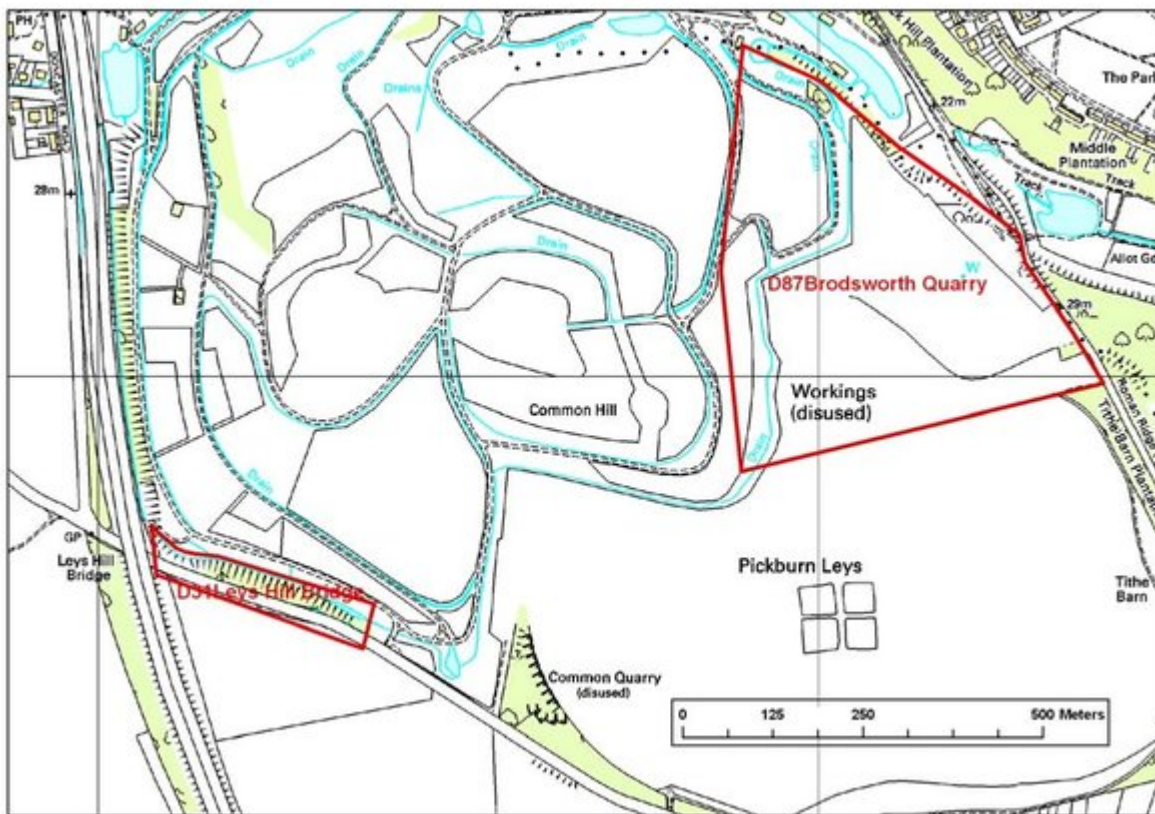
Site photographs D31 Leys Hill Bridge

(Figure 123) General view along drainage ditch to the east. [SE 52150 06720].

(Figure 124) General view along drainage ditch to the west. [SE 52340 06650].

(Figure 125) Exposure of weathered red marl of the Edlington Formation. [SE 52280 06679].

(Figure 126) View of osiers that largely obscure the exposures of marl in the drainage ditch. [SE 52280 06679].



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(Figure 123) General view along drainage ditch to the east. [SE 52150 06720].



(Figure 124) General view along drainage ditch to the west. [SE 52340 06650].



(Figure 125) Exposure of weathered red marl of the Edlington Formation. [SE 52280 06679].



(Figure 126) View of osiers that largely obscure the exposures of marl in the drainage ditch. [SE 52280 06679].