
A5 DR3 Cadeby Waste Water Works

Site information

Site name: Cadeby Waste Water Works

Site key: DR3

Grid reference: [SE 5121 0036] (centred on)

Site type: disused quarries, pits and cuttings

Local authority: Doncaster Metropolitan Borough Council, South Yorkshire

Site dimensions: 10 m x 6 m

Site owner: Yorkshire Water Conservation

Status: Proposed Regionally Important Geological

Site date: No Date

Field surveyor: Scott Engering Date: 13/3/07

Stratigraphy and rock types

Time unit: Carboniferous, Westphalian **Rock unit:** Dalton Rock, Pennine Upper Coal Measures Formation, Pennine Coal Measure Group

Rock type: Sandstone **Details:** Massive medium grained reddened sandstone and fine grained, cross bedded, pale yellow sandstone

Site map

(Figure 27) — DR3 Cadeby Waste Water Works

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Site description

An old quarry exposure of a section through the Upper Coal Measures strata beneath the limestone escarpment immediately to the west of the South Don Fault. The gates were locked and a close inspection not possible but the lower half of the section appeared to comprise massive reddened sandstone, overlain by cross-bedded pale yellow friable sandstone which does not have the typical darkened and weathered appearance of Carboniferous sandstone. They also contain occasional large vugs/nodules, which appear as discontinuous lenses.

At [SE 513 004], 100 m down the limestone escarpment from Cadeby, small exposures of reddened massive sandstone identified as Dalton Rock are seen in the road cutting.

In view of the rarity of good exposures in the Upper Coal Measures in Doncaster, further investigation of this site is recommended with the permission of the owners, Yorkshire Water.

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 Limited outside gates to old quarry site. Care needs to be taken when pulling out into a busy back lane. Rating: 5

Safety of access No access beyond gates but visible from safe area away from road. Rating: 5

Safety of exposure Not assessed. View from outside fence to site. Appears reasonably safe. Rating: 5

Permission to visit Yorkshire Water D/K

Current condition Clean, clear rock faces. Shrubs and vegetation to lower rock face. Rating: 7

Current conflicting activities Site used as waste water treatment works

Restricting conditions Gated and fenced

Nature of exposure Old quarry face

Multiple exposures /prospect for trail Good potential for stop off with small party/minibus in association with a variety of other sites in the area

Notes A locked site in private ownership

Culture, heritage & economic

Aspect/Description/Rating

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

Aesthetic landscape Limited quarry exposure but good views at top of escarpment near Cadeby. Rating: 5

History of earth sciences Locally important as an outcrop of Dalton Rock. Rating: 6

Economic geology Source of local building stone. Rating: 6

Notes

Education and science

Surface processes General weathering of rock surfaces. Rating: 6

Geomorphology Base of limestone escarpment. Rating: 5

Sedimentary Varied lithology of Coal Measure sandstone, vugs, nodules and possible Permian sandstone. Rating: 7

Fossils Not applicable. Rating: 0

Igneous Not applicable. Rating: 0

Metamorphic Not applicable. Rating: 0

Tectonic: structural Close proximity to position of the South Don Fault, an important feature of regional structural geology. Rating: 7

Minerals Not applicable. Rating: 0

Stratigraphy rare exposure of Dalton Rock in Doncaster. Rating: 7

Notes Limited general education value for close study due to inaccessibility but a very good fieldwork and research site, with permission

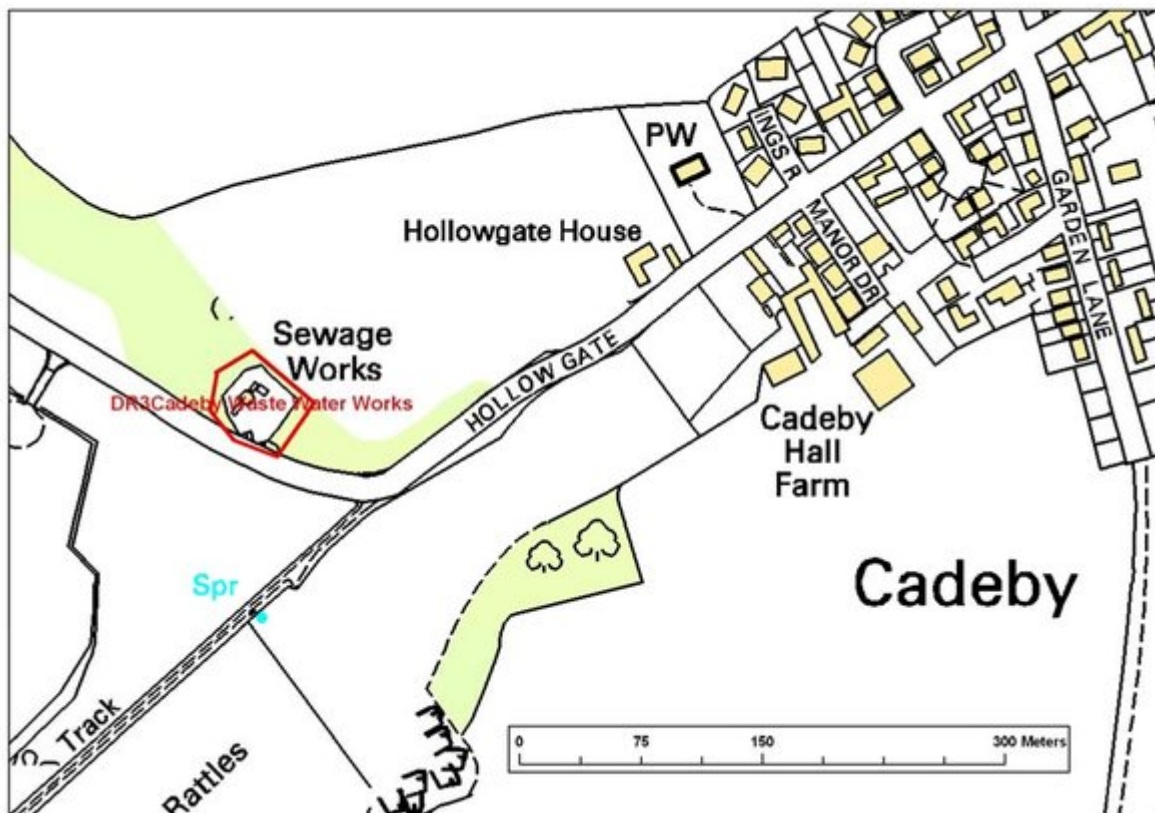
Geodiversity value

Very good, on strength of rarity of Dalton Rock and possible associations with unconformable Permian rocks. Rating: 8

Site photographs

(Figure 28) General view of old quarry face. [SE 51205 00361].

(Figure 29) Detail of old quarry face showing yellow and red cross bedded sandstone. [SE 51205 00361].



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(Figure 28) General view of old quarry face. [SE 51205 00361].



(Figure 29) Detail of old quarry face showing yellow and red cross bedded sandstone. [SE 51205 00361].