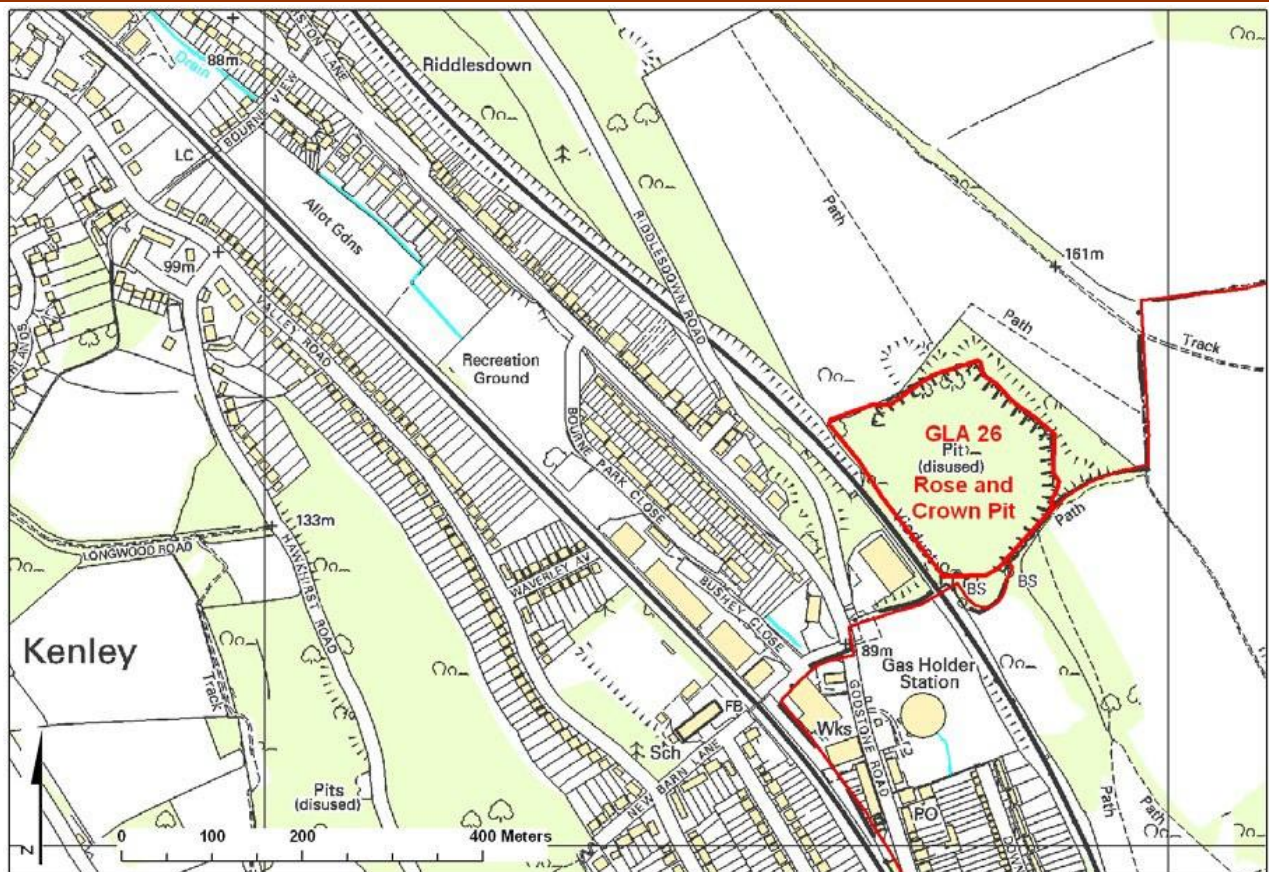


GLA 26 Riddlesdown Quarry (formerly Rose and Crown Pit)

Grid Reference: TQ 3375 5941	Site Type: Former quarry works
Site Area (hectares): 3.66	Current use: Disused
Site ownership: City of London Corporation	Borough: London Borough of Croydon
Field surveyor: Joanna Brayson Latest visit: Diana Clements	Date: November 2010 Date: October 2018
Current geological designation: RIGS	Other designation: NNR (South London Downs); Biological SSSI; Metropolitan SIN (Riddlesdown and The Rose an Crown Chalk Pit)

Site Map

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Stratigraphy and Rock Types

Time Unit: Late Cretaceous	Rock Unit: New Pit Chalk Formation; Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation Undifferentiated, Chalk Group
Rock Type: Chalk	Details: Chalk

Site Description

Large abandoned chalk quarry (also called Riddlesdown Quarry) in area called Riddlesdown. The finest chalk exposure in London and well-maintained by the City of London Corporation who lead guided tours around the quarry. Features include nearly 50m of chalk lithology from the Glynde marls (New Pit Chalk Formation) to the Seaford Chalk Formation, different styles of fracturing within the chalk, characteristic of each Chalk formation with associated faults, conspicuous large flint bands forming marker beds across the face of the quarry, marl and dissolution pipes filled with clay-with-flints. It is one of the few remaining Chalk exposures in the Lewes Nodular Chalk Formation in this part of the North Downs and exposes the contact with the underlying New Pit Chalk Formation and the overlying Seaford Chalk Formation.

Assessment of Site Value

Geodiversity topic: Lithostratigraphy; sedimentology.

Access and Safety		
Aspect	Description	
Safety of access	Access is restricted – fence surrounds site. Close to and beneath railway line, care should be taken. Quarry visible from footpaths surrounding site – these are steep and slippery in places.	
Safety of exposure	Quarry contains steep faces and slumped material.	
Permission to visit	Permission for access via City of London Corporation ranger 01372 279 083	
Current condition	Partially overgrown but many faces clear.	
Current conflicting activities	None.	
Restricting conditions	Fenced off, safety concerns.	
Nature of exposure	Disused quarry.	
Culture, Heritage & Economic		
Aspect	Description	Rating
Historic, archaeological & literary associations	Roman road built across downs. Saxon burial sites close by.	8
Aesthetic landscape	Extremely well used surrounding area – chalk downlands.	8
History of Earth Sciences	Described by Caleb Evans in 1870. <i>On some sections of Chalk between Croydon and Oxted, with observations on the classification of the Chalk.</i> Geo. P. Bacon, Lewes, for the Geologists' Association Publication.	
Economic geology	Chalk quarry.	8
GeoScientific Merit		
Geomorphology	None.	0
Sedimentology	Chalk succession – environment of deposition.	8
Palaeontology	Chalk Stratigraphy determined in part by macro and micro palaeontology.	8
Igneous/mineral/ Metamorphic Geology	None.	0
Structural Geology	Nature of jointing and faulting is important for engineers	8
Lithostratigraphy	Chalk succession.	8
Potential use	Research; training for engineers' higher further education; school education; on-site interpretation; on-site geotrail.	
Fragility	Natural overgrowing; geohazard.	
Current Site Value		
Community	Surrounding area is a valuable open space, used daily. Pit is restricted access	10
Education	Good site for fieldwork, with appropriate safety. Included in GLA Guide 68, Itinerary 9.	8
Geodiversity value		
RIGS: Excellent outcrop with great potential for research and education. This quarry should really be an SSSI because of the number of features listed above. It is a valuable teaching aid for engineers tunnelling under London. There are many accessible sites on the South Downs but the North Downs are not well served.		8

GLA 26 Riddlesdown Quarry

View of north east quarry face



Geo-conserved south west face in 2016, the youngest exposure; photo: N. Stevenson