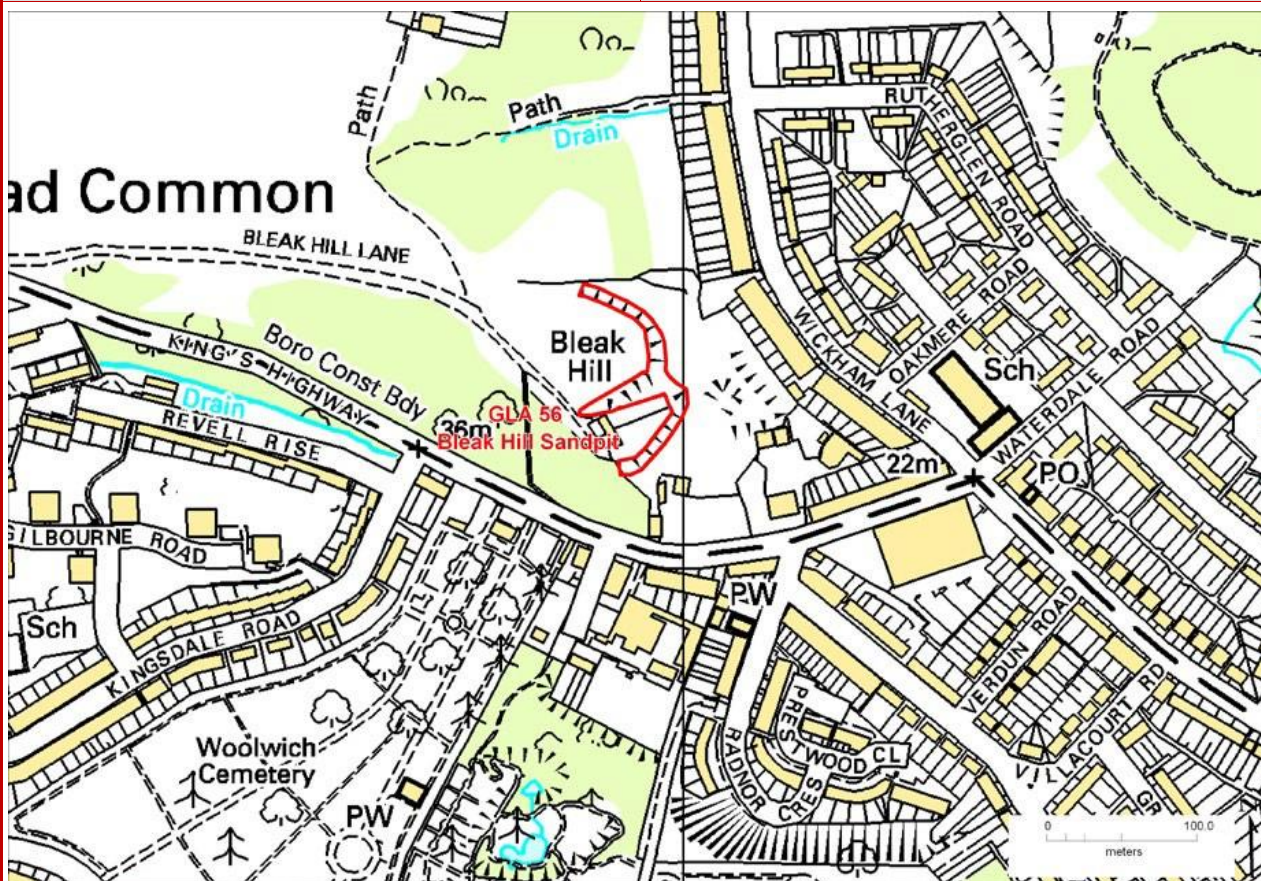


GLA 56 Bleak Hill Sandpits	
Grid Reference: TQ 4606 7776	Site Type: Former aggregate site
Site Area (hectares): 0.23	Current use: Recreational Land
Site ownership:	Borough: London Borough of Greenwich
Field surveyor: Vernon Marks, Paul Rainey, Laurie Baker	Date: November 2010
Last visited: Paul Rainey, Diana Clements	Date: 2014
Current geological designation: LIGS	Other designation: Borough Grade I SINC (Plumstead Common)
Site Map	OS Topography © Crown Copyright



Stratigraphy and Rock Types

Time Unit: Eocene	Rock Unit: Blackheath Member, Harwich Formation, Thames Group
Rock Type: Sand and gravel	Details: Sand and pebbles (mostly round, black), marine fauna, locally brackish. Calclitic conglomerate found at certain horizons.
Time Unit: Paleocene-Eocene	Rock Unit: Upnor and Woolwich Formations, Lambeth Group
Rock Type: Clay, silt, sand	Details: Glauconitic sands overlain by interleaved grey clays and sands with brackish fauna. Marine Upnor sand at base.
Time Unit: Paleocene	Rock Unit: Thanet Formation
Rock Type: Clay, silt, sand	Details: Pale yellow-brown fine-grained sand that can be clayey and glauconitic.
Time Unit : Late Cretaceous	Rock Unit: Seaford Chalk, White Chalk Subgroup
Rock Type: Chalk	Details Chalk with flints (unseen)

Site Description

The site is the remains of three pits:
 1) Hope Cottage pit (TQ 4600 7768) (visited 1887, 1906) only in the strata above the Chalk, the floor is now a car park;
 2) Jenner's (Hoar's) pit (TQ 4606 7766) (visited 1894, 1906, 1908) only in Thanet Sand and Chalk, floor is

now a car park. Today it is a very steep, inaccessible face with mainly obscured geology;
3) Tuff and Hoar's pit (TQ 4598 7776) (visited 1908, 1919, 1929).

A photo (Priest, 1919) shows 25m high face to upper pit with Blackheath, Lambeth and Thanet strata and, lowering its floor, a 3m deep lower pit in Chalk. This area is now heavily overgrown and is accessed with difficulty by several minor footpaths from the Green Chain Walk to the north. There is still clear evidence of quarrying activities in the steep central valley. Several lumps of calcitic conglomerate were found (presumably from the Blackheath Beds). One appeared to be natural but a several cylindrical pieces were manmade possibly as test pieces?

The geology is believed to be similar to Gilbert's Pit but few clear exposures were found.

Assessment of Site Value

Geodiversity topic: Lithostratigraphy; sedimentology; palaeontology.

Access and Safety

Aspect	Description
Safety of access	A matter of scrambling on steep slopes for Tuff and Hoar's pit. Other pit faces inaccessible near property boundaries
Safety of exposure	The faces are heavily overgrown.
Permission to visit	Open access.
Current condition	The faces are heavily overgrown.
Current conflicting activities	Development
Restricting conditions	Vegetation and leaf cover in autumn.
Nature of exposure	Disused pits in woodland and behind car parks.

Culture, Heritage & Economic

Aspect	Description	Rating
Historic, archaeological & literary associations	There is scope for a geological/industrial archaeology walk through this area and neighbouring former brick pits and chalk mines to the south and chalk pits to the east.	6
Aesthetic landscape	Mainly forming high wooded background "island" to otherwise built up area.	4
History of Earth Sciences	Geologist Association excursions to the quarries are described in the Proceedings (PGA): Goodchild, 1887; Leach & Polkinghorne, 1906; Priest, 1919; Baker & Priest, 1919; Leach, 1929. Hope Cottage Pit (King's Highway Garage) is also described in GA Guide No. 68, 2012.	4
Economic geology	In 19 th century worked for sand. In 20 th century worked for sand and chalk.	4

GeoScientific Merit

Geomorphology	Steep valley beneath Harwich Formation plateau.	4
Sedimentology	Thanet Formation, Upnor Formation, Woolwich Formation (and probably) Blackheath Beds (Harwich Formation) were all originally quarried at this site and illustrate the variability in the succession from marine to estuarine and back to marine with alternating sands, clays and shell bed, with the rounded Blackheath Pebbles at the top. Now it is only orangey sand that is visible, probably from the Thanet &/or Upnor Formations but without access it is difficult to confirm. The Chalk is buried beneath the car park.	4
Palaeontology	None observed but probably to be found in Woolwich Formation and possibly in Harwich Formation.	4
Igneous/mineral/ Metamorphic Geology	None.	0
Structural Geology	None.	0
Lithostratigraphy	Succession of lithology at one site (better seen at GLA 14, Gilbert's Pit, SSSI). Historically pits were of much interest for displaying the variability within the Lambeth Group and researching the divisions	4

	between the Formations.	
Potential use	Research; further education; on-site interpretation.	
Fragility	natural overgrowing; weathering/slumping	
Current Site Value		
Community	Near paths on Green Chain Walk	6
Education		6
Geodiversity value		
LIGS:	Disused quarry included because of the possibility of informing walkers on the Green Chain Walk.	4

GLA 56 Bleakhill Sandpits



Photo: Diana Clements 2012