

GLA 12: Finsbury Gravel, Spa Green, Sadler's Wells, Potential LIGS

London Borough of Islington, TQ 31470 82811

Ownership: Local Authority. Public open space.

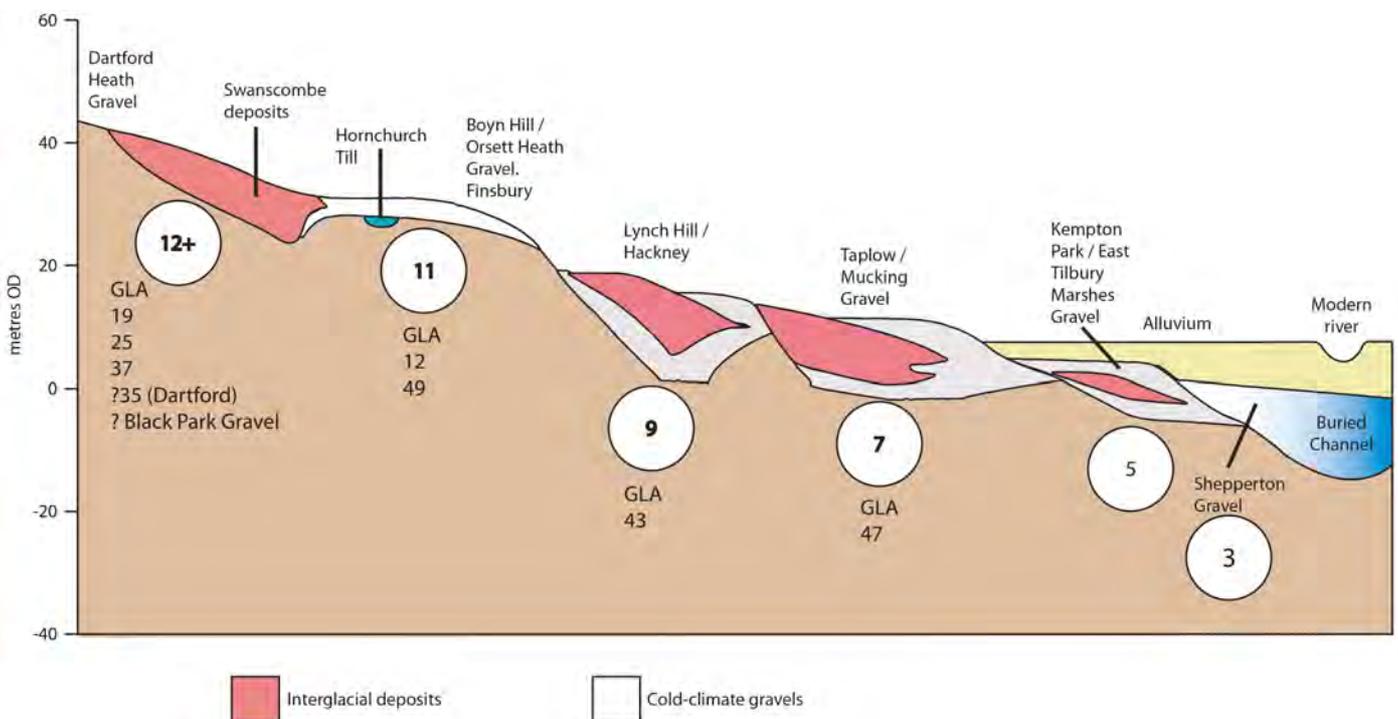
Finsbury Gravel

The Finsbury Gravel is very restricted in its extent but underlies the small park area of Spa Green in Rosebery Avenue and Sadler's Wells Theatre opposite. It is approximately 2 m thick. Just up the hill to the north, from the Angel to Highbury Fields the underlying gravel is the thicker Boyn Hill Gravel which was laid down around 350,000 years ago. The Finsbury Gravel is thought to be of a similar age but the characteristics are slightly different and it is situated at a slightly lower elevation (see [BGS Special Memoir](#), p.61-63). It probably relates to a late stage of the Boyn Hill Gravel deposition. To the south a third gravel, the Hackney Gravel is dated at a little younger than 250,000 years BP and in the Clerkenwell area is about 9 m thick. The gravels are divided by strips of London Clay exposed as the gravel was eroded by the Thames as it cut an ever deepening valley. The alternating terraces of level gravels and the slope in the intervening London Clay form a staircase. The complete staircase seen in the London area was deposited under extreme conditions at the beginning and end of glacial periods over the last 400,000 years.

Springs and wells from the gravels

London expanded around the availability of water. The Thames and its tributaries provided the initial source but the nature of the underlying gravels soon became an important element. Water filtered through the gravels and where it met the underlying impervious clay it was forced to the surface as a spring line. Until the area was covered with tarmac there were a number of natural springs in this area at the edge of the Finsbury Gravel. Additional wells were sunk into the gravel to supplement the water supply drawn from natural springs.

The staircase of gravels in Islington, the oldest at the top is the Boyn Hill Gravel dated at about 350,000 years BP. The isolated patch of gravel in the Sadler's Wells area is the Finsbury Gravel which is a little younger and has slightly different characteristics. The gravel in the south of the Borough is the Hackney Gravel dated at around 250,000 years BP. Spring lines are shown.



Sadler's Wells and Islington Spa

It is no coincidence that Sadler's Wells is situated here. Mr Sadler was a surveyor of gravels and, while digging under what is now Sadler's Wells Theatre, came across an ancient well. The water was diagnosed as having health benefits and he immediately saw the potential of creating a spa. Sadler's Wells sits on the 100 foot (30m) contour and its lofty position with clean air and views to the City below provided a nearby

recreational space for Londoners. The health-restoring water, rich in iron from the gravels, added to the attraction and a number of spas and tea gardens sprang up. Islington Spa once stood on what is now Spa Green and a description of the water from the spa can be found in Brooke's *Natural History* of 1772¹.

"New Tunbridge-Wells are near the New-River-Head, at the entrance of Islington, on the side next London. The water has the taste of iron, and is little stypstick, with some degree of quickness both in smell and taste, especially in the summer season. It will lather with Soap, and turn a little milky with a large proportion of Oil of Tartar; but it will not let fall any sediments with volatile alcalies. A gallon will yield from 10 to 30 grains of reddish earth, which will ferment with Oil of Vitriol. It is light and comparatively pure chalybeate, of considerable strength at the fountain head, where it ought to be drank. It is of great efficacy in all nervous disorders, and restores the strength after violent acute diseases: it opens all obstructions in women and is excellent in a dropsy; in which case the dose is from half a pint to a pint, and no more. It opens obstructions of the glands, and is of some service in reducing corpulent habits."

[When the present Sadler's Wells Theatre was opened in 1998 a borehole was sunk to extract water once again at this famous site but the modern well goes much deeper to the Chalk, about 50 metres beneath the surface. The extracted water is used for the hydraulics to operate curtains and scenery as well as for circulating air conditioning and the flushing of toilets. The water is no longer marketed for drinking.]

In its heyday as many as 1,600 took the waters in a day from the tea gardens and spas of Islington until they finally declined in about 1810 when small terraces of houses began to encroach over the fields. By 1840 the gardens were built over. The Spa Green Estate was constructed on the remaining site after the end of the 2nd world war².

Access

Spa Green is a small strip, open daily, opposite Sadler's Wells Theatre on Rosebery Avenue; buses 19, 38 and 341 stop outside the theatre.



The bricks from the original well are on display in the Islington Museum at 245 St. John Street, EC1V 4NB (153 bus stops outside). The modern well can be seen in Sadler's Wells theatre where there is also a small exhibition about the history of the building (see www.sadlerswells.com).

¹ Brooke's *Natural History*, 1772, *The Natural History of Waters and Earths, of Stones, Fossils, and Minerals. Including the Observations of Linnaeus on those Subjects, with their Properties and Uses in Medicine*. Vol. V, p. 29.

² J.C. Curl, 2010. *Spas, Wells & Pleasure-Gardens of London*. Historical Publications.

Exposure of gravel in borders

Source: London's foundations, page 141



Site Map

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