# Warwickshire Geological Conservation Group (WGCG) Local Geological Site - LGS 65 Canley Brook, Update September – October 2020

#### **Brief Description:**

The stream banks and bed expose sandstones, interbedded with mudstone and siltstone, of the Upper Carboniferous, Tile Hill Mudstone Formation. The mudstones are red-brown, well-bedded, locally silty, and contain green reduction spots. The sandstones are often hard, flaggy, red-brown or green, thin fine-grained and calcareous.

#### **Monitoring Report:**

This report covers the full length of the LGS whereas the 2013 report only monitored the section between Wolf Road and Mitchell Avenue. The local environment of the site varies along its length and it is convenient to report on different sections of the LGS separately. However, there are some **general points**.

- There are significant changes to the map used for the original designation.
  - a. The area marked as allotment gardens is now the site of the Charter Primary School;
  - b. To the west of the school there is an extension to the housing estate (Pappenham Green) and a childrens' play area (Pappenham Green Play Area) now occupies some of the open space;
  - c. The eastern part of the Recreation Ground to the south of Prior Deram Walk is now a housing estate (and at the date of this survey building was extending towards the stream); the western part is now Prior Deram Park.
  - d. Up-to date mapping is at <a href="www.google/maps.co.uk">www.google/maps.co.uk</a>. Entering Charter Primary School Coventry in the Search box will bring up the area covered by the original designation map.
- 2. The stream is incised below the level of the flood plain. The intermittent exposures of the Tile Hill Mudstone Formation (mainly buff to orange mudstone but with beds of sandstones) occur in the bed or lower cut banks of the stream. The exposures are not visible when the stream level is high and may be obscured when levels are very low (after a period of high run off) when bed load has been deposited. [The varied nature of the pebbles is worth examining and explaining?]. The banks are mostly of weathered mudstones or flood plain deposits.
- 3. Much of the banks are obscured by vegetation which also makes access to the stream bed difficult. Any detailed surveying can only be done by walking along the stream bed (in wellingtons).

#### The LGS is described in 4 sections.

#### Section 1 Wolf Road to the footbridge behind Charter Primary School at Mitchell Avenue

- 1. There is parking on the roads off Wolf Road (the Western boundary of the LGS) and on Mitchell Avenue, near the school.
- 2. In this section the site is only easily accessible from the south bank but the small stream can be explored and crossed if equipped with wellingtons.
- 3. In this section there is a well-developed meander suite, which appears natural and is developing normally. The stream flow helps to keep the features of interest (thin beds of sandstone within the orange mudstones) exposed.
- 4. The south bank has tall grass growth and access to the stream is only by 'informal' paths (where children access the stream). This makes observation of any exposures difficult from the banks. For any detailed work it would be best to go equipped with shears and something to pull grass up from the faces.
- 5. There is a lot of scrub and small tree growth which make access to north bank difficult.
- 6. This is an urban stream and there is a lot of rubbish in the, notably shopping trolleys, although this does not affect visibility of features.
- 7. Note the storm water drain from the housing estate (see section 4)
- 8. There is no mention in the site designation that this is a geomorphological feature of value in its own right, not only on account of the meander belt but also the presence of riffle and pool features, the nature of the bed load 'pebbles' and the flood plain deposits exposed in the banks of the stream.

#### Section 2 Footbridge behind the school to bridge at Sherriff Avenue/Prior Deram Walk

Note: For sections 2 and 3 there is ample roadside parking in Templars Fields and Prior Deram Walk, except on Freeburn Causeway where permits are required.

- 1. Immediately over the bridge there is no footpath along the stream and the area is overgrown by long grass and when surveyed in September there was no access to the stream.
- 2. Eastwards beyond the bridge at John Rouse Avenue the stream runs through the housing estate between Prior Deram Walk and Templars Fields. The banks are overgrown, mainly with brambles.
- 3. Opposite No. 112 Prior Deram Walk sandstone is well exposed in the stream bed (in low flow conditions).

#### Section 3 The Prior Deram Walk bridge to the A45 (formerly Recreation Ground)

- 1. In Prior Deram Park
  - a. Sandstones are observable in the stream bed at the Prior Deram Walk bridge. The width of the stream has been artificially channelled on the downstream side of the bridge (to increase water flow rate?). See Note on flooding below.
  - b. At the Park footbridge (Thimbler Road) bedded mudstones can be observed at low water.

- c. Downstream of the bridge there is an unexplained hollow in the flood plain which has an even more unexplained scattering of small boulders, clearly not of local origin, although one looks unambiguously like a piece of sub-rounded diorite from the Nuneaton area.
- d. The banks are partly tree-lined but there is also some scrub.
- 2. There is currently no access to the stream from the new housing estate, although there is an unused/overgrown footpath along the stream outside the building site.

## Section 4 Behind the Police Station/bridge on Sir Henry Parks Road/access road to Homebase

- Beware traffic here
- 1. Park in the Homebase car park
- 2. There is no foot access to the stream but bedded sandstone outcrops are visible in the bed of the river from the bridge on the road into Homebase car park
- 3. There is a stream monitoring station at the west side of the bridge on Sir Henry Parks Road. Note the height range measure which gives some indication of the possible variation in flow of the (flashy) stream. [In over 50 years of knowing the area I can remember only one occasion when the stream flooded at Prior Deram Walk and the surrounding houses, as well as part of the Recreation Ground. The problem was the constriction of flow (and possible blockage) at the Prior Deram Walk bridge ponding the water back to a height where it overflowed into the road, houses and flood plain ie the Recreation Ground].

#### NOTE

Downstream from Section 4 and beyond the LGS there are much better exposures of sandstones at Canley Ford (SP313770). This is accessible on the foot path from the Esso Filling Station on the A45, or on the Canley Ford track from the Memorial Park.

#### **Photographs:**

Three of the following photographs are from 2013 when access was much easier plus one of Canley Ford which was not included in the original designation. The author believes that current photos would add anything to the record.



**Above: Canley Brook Flood Plain Deposits (2013)** 



Above: Canley Brook Weathered Mudstone in the Stream Bank (2013)



Above: Canley Brook Sandstone Outcrop in the Stream Bed (2013)



**Above: THMF Sandstone at Canley Ford** 

### Link to Original LoGS (RIGS) document:

http://lgs.wgcg.co.uk/LoGS65.pdf

#### **IMPORTANT**

Visitors to LGS sites do so at their own risk and WGCG cannot accept responsibility for any injury, loss or damage which may occur.