

Gill Brook Gazetteer



Mike Barton.
October / November 2020

Introduction:

Gill Brook first came to the notice of Gnosall Heritage Group when copies of documents and other historic information relating to the Manor of Plardiwick were obtained from Mr Ronald Smith, the present owner of the title of “Lord of the Manor”.

The content of some of these documents raised more questions than answers, which prompted many hours of further research by a “Plardiwick Study Group”. An account of their findings to date is available on the Gnosall History website:

http://www.gnosallhistory.co.uk/manor_of_plardiwick.htm

One of the documents: “**The Perambulation of the Manor of Plardiwick, 1773**”, describes a walk around the boundaries of the manor by twelve sworn jurors, essentially to confirm and define the boundary in law.

In simple terms: the jurors start their walk, near Plardiwick Manor Farm. Their description refers specifically by name to a ‘Gill Brook’ and a ‘Gill Brook Lane’. The walk proceeds around the boundaries in a clockwise direction and returning to Plardiwick by way of “the main river” (Doley Brook) and then Gill Brook again.

The earliest maps of Plardiwick: dated 1795 (Thomas Unett) and 1813 (Anson’s Map) do not show either Gill Brook or Gill Brook Lane as named features. Also the names do not appear on the Tithe Maps (1838) nor on the Parish Map (1880).

It is thought that as both are named: Gill Brook and Gill Brook Lane must have been important recognisable landscape features at the time of the perambulation, but their names have been lost over time. Their actual locations “on the ground” in 2020 became puzzles for the study group to solve.

A considerable amount of “desk research” was undertaken including: a closer detailed study of all the above maps and comparing them with modern satellite images; and by taking a “line by line” approach to the wording and description of the perambulators.

This was supported by “field research” looking for evidence and traces of the brook (and the lane) on the ground today; and on occasions using very rudimentary surveying techniques i.e. a pocket compass and estimating distances by pacing out!

We are as confident as we can be that the locations of Gill Brook and Gill Brook Lane as they are in 2020, have been mapped and identified correctly.

This Gazetteer has been put together to help visualise the route of Gill Brook historically and as it now appears in 2020

The mapping of Gill Brook Lane is presented in a separate document

Gill Brook:

Gill Brook rises in the Coton area, at approximately 108m AOD. It is thought that it is fed by a natural spring which are fairly common in this area. The brook flows broadly north eastwards for approximately 1km (towards Gnosall) until it joins the Doley Brook at an elevation of approximately 92m AOD.

Gill Brook's flow rate is now rather slow and sluggish but would have been greater historically. Groundwater abstraction from modern boreholes has caused a lowering of the water table: some wells in the Coton area have gone dry and it is considered that the natural flow from springs would have also been reduced.

At a few points along its length the Gill Brook does collect water from other ditches and agricultural drains etc. which adds to the volume of water carried to Doley Brook.

From the point of view of the reader the course of Gill Brook is best thought of as being in three sections: **upper, middle and lower**.

The upper and lower sections still follow their original courses as they would have been at the time of the perambulation, whereas the middle section has been affected by the construction of the canal and then later by the railway.

Upper and Lower Sections:

The upper and lower sections of the brook are actually shown on: the Plardiwick Maps, the Tithe Maps, the Parish Map and subsequent Ordnance Survey Maps but not one of them names it as Gill Brook.

Furthermore Gnosall Parish is covered by four separate Tithe Maps which adjoin or in the case of the "Gnosall, Apeton and Alston Map" and the "Gnosall Heath, Befcote, Coton, Cowley and Plardiwick Map" interlock with one another (a bit like a jigsaw).

See: <http://www.gnosallhistory.co.uk/1838Tithe/1838tithe.htm> for an illustration.

The Tithe Map "surveyors" used the route of the lower section of Gill Brook as the dividing line between the "Gnosall ... Map" and "Gnosall Heath ... Map", which supports the proposition that Gill Brook was historically significant.

Middle Section:

The coming of the canal necessitated this middle section of Gill Brook to be diverted and engineered through a sizable culvert which passes under both the canal and under Plardiwick Lane. When the railway came the constructors were able to use the canal culvert, but downstream they had to completely realign Gill Brook, eventually connecting with the original line near Glendower Close and also build their own culvert nearby to maintain the flow of water under the railway.

There have also been some later, more modern, alterations to Gill Brook, but the principal engineering structures are still in place and it functions as a watercourse just as it did in 1773, when the perambulators walked the boundary.

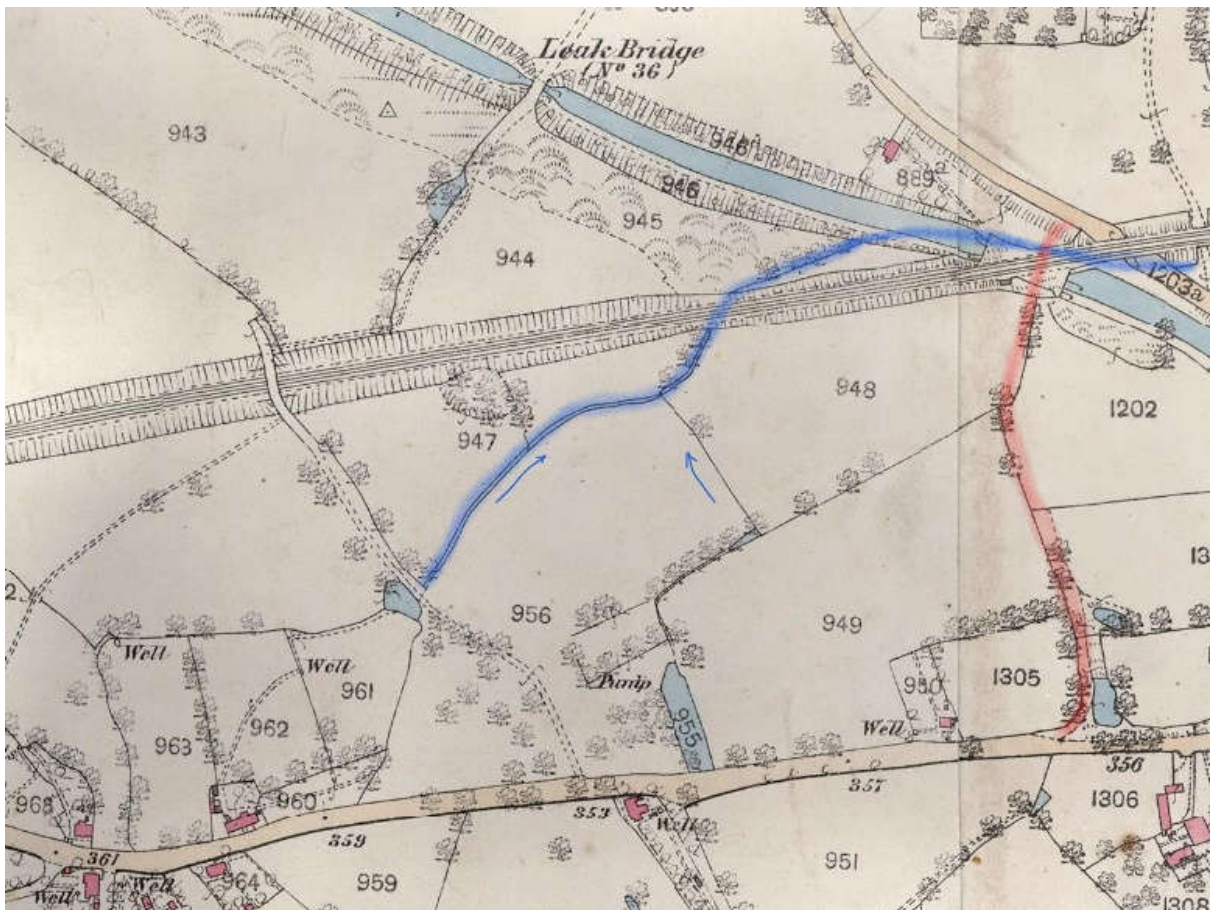
Upper Section:

The following sequence of photographs show the Upper Section of Gill Brook covering the length from its source in Coton downstream to the area where it was intersected by the canal and railway necessitating diversions etc.

The various works and diversions will be covered in more detail in the Middle Section of this gazetteer.

The sketch map below (using the 1880 Parish Map as the base) shows the upper section of Gill Brook highlighted in blue, as far as the canal, and beyond there a best estimate of its course prior to construction of the canal.

Gill Brook Lane has also been highlighted in red to assist readers.



Gill Brook also collects the drainage from the pond (Encl 955) next to Newport Rd.

1 & 2 are taken from Newport Road looking toward the railway line.



1 The source is by the pond, out of shot behind the hedge, near the oak tree.



2. Gill Brook occupies the "dip" in the land surface in the centre ground.

3 & 4 are taken from the railway looking back across to Newport Rd.



3. Gill Brook occupies the dip in the centre ground.



4. The steep "step" in the field is the edge of the cart track from the railway bridge to the gate on Newport Road. (See 1880 Parish Map Base Plan)

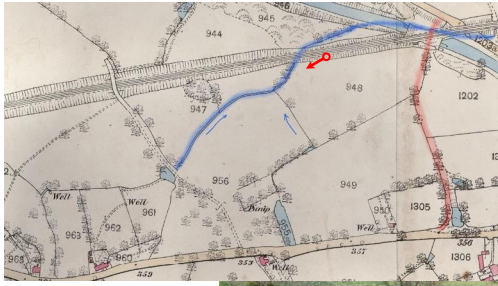
5 & 6 are taken from the railway embankment but at different places.



5 is a downstream view. It shows a line of distinctive trees and a silted up brook.



6 is taken further east along the railway looking back up stream.



7. Shows the location where Gill Brook meets the Railway embankment. The area is very boggy and the actual course of the brook is very hard to determine. From here onwards it has been diverted, piped and culverted at a number of different times because of the construction canal and the railway.



8. The blue line is a best estimate of the original course of Gill Brook before the coming of the canal, necessitating its diversion.

The Middle Section:

This section of Gill Brook covers the length from where it was first intersected by the canal (Photo 8) to the point alongside Glendower Close where it flows out of a culvert under the railway line which is the start of the Lower Section.

In this middle section, the original course of Gill Brook has been so affected by diversions, piping and other engineering works undertaken during the construction of the canal, then some years later by the railway and then again by more modern “improvement” works that it is impossible to find it on the ground today in 2020, apart from a short stretch at the end of Glendower Close.

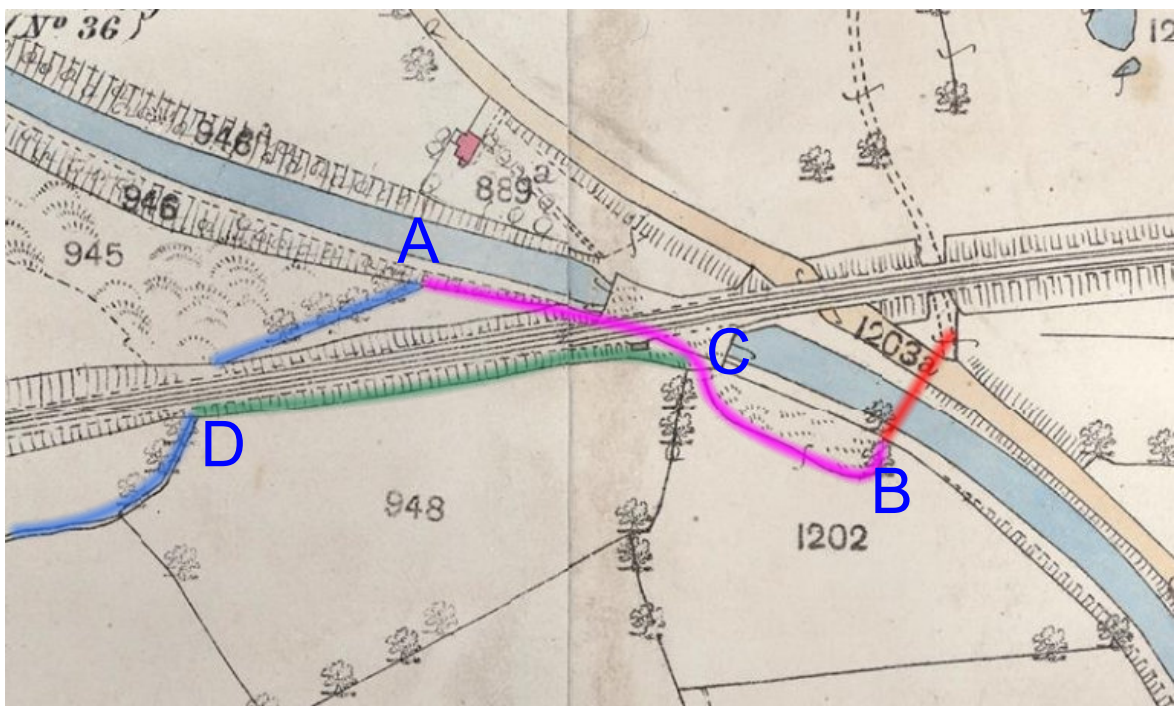
As regards of the construction of the canal: the most significant diversion work was the installation of a culvert that would carry Gill Brook under both the canal and the Plardiwick Lane and into a large chamber, approximately 5m deep located on the far side of the lane.

The culvert is a very convenient feature at which to divide the Middle section into two separate subsections: one describing the length upstream of the culvert and the other covering the course of the brook downstream of it; making it easier for readers.

Upstream of the Culvert:

Below is a sketch map (using the 1880 Parish Map as the base) showing the diversions and works as a result of the Canal and Railway.

The position of the culvert under the canal and Plardiwick Lane is shown in red.



The various diversions over time are discussed in broadly chronological order:

The first diversion was undertaken during the construction of the canal in the early 1830's before the advent of the railway.

Gill Brook (coloured blue) follows the original course (upper section) from the left edge of the sketch map to where it now meets the railway at D and would have continued to flow onwards until it met the boundary of canal land-take somewhere near A. The course may have been realigned between A and D to skirt the spoil mound (encl no. 945).

The diversion occupies a position close to the boundary of the canal running from A through C, to point B where it enters the culvert. It is not known whether the length from A to C was, at that time, an open channel or contained within a pipe.

The length from C to B which loops around another spoil mound was for much of its life an open channel. It is still shown as such on modern 1:50,000 Ordnance Survey Maps, although now there is no trace of it on the ground and it has been piped.

The second diversion would have been necessary during the construction of the railway in the late 1840's.

The 1880 Parish Map and subsequent OS Maps indicate the installation of a culvert under the railway at point D and suggest that the railway engineers made use of the same course from D to A as the canal had done.

The building of the railway bridge over the canal between A and point C created further diversionary work. The re-routed Gill Brook was situated where the southern bridge support pier needed to be constructed and had to be moved again.

It is thought that during these particular works the entire length from A to C would have been piped running alongside the masonry to point C where it reconnected with the open channel from C to B.

Field research shows that at present there is no trace of a culvert under the railway at D nor any trace of a ditch or pipe connecting D to A. It also shows that although the area upstream of where Gill Brook meets the railway at D is very wet and boggy, it rarely floods indicating that the water does get away downstream.

There is some anecdotal evidence that at some time after the nationalisation of the railways in 1948, British Railways removed the culvert at D and then diverted Gill Brook (for a 3rd time) through a pipe located in the adjacent fields which runs parallel to the railway embankment down to point C, where it re-connects with the former route; as is shown on the sketch map by the green line.

Photo's 9 and 10 are taken from the railway at D, the area of the former culvert.



9. Upstream view: The course of Gill Brook is visible in the field beyond the railway.



10. Downstream view: D to A. There is no trace of any watercourse. The fence in the middle ground marks the top of the canal cutting. Plardiwick Manor Cottage is just visible through the trees on the far bank of the canal.



11. Near D where Gill Brook meets the railway. It is very silted up and boggy.



12. Near D, looking along the railway embankment. The Pipe Inlet, installed by British Railways, is somewhere in this vicinity, but the area is now so silted up that it cannot be seen. The Post and Rail Fence in the centre ground is a new boundary established in the field (no 948) and marks a change of land ownership.



13. Shows the Post and Rail Fence with Gill Brook beyond it. The pipe installed by British Railways pipe is about 0.5m into the field and parallel to embankment, and has made a significant improvement in the surface quality of the field.



14. The same field but looking toward Point C. The post and rail fence marks the route of the former Gill Brook Lane. The bridge over the canal is by the corner of the field.



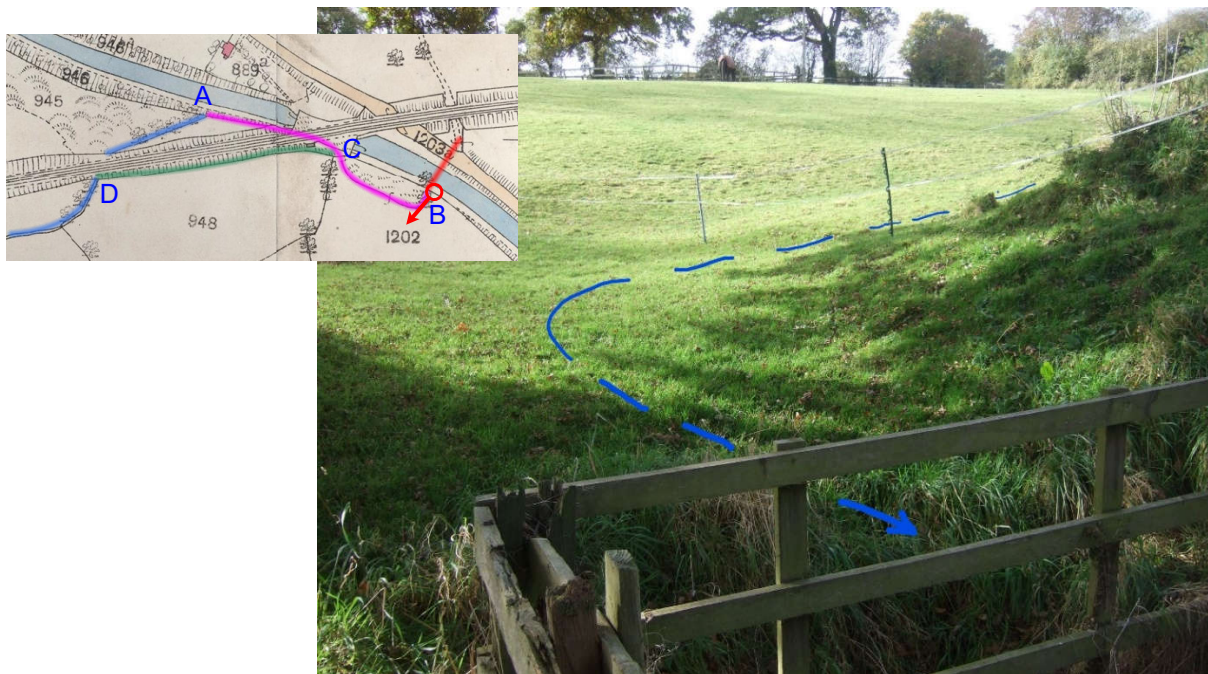
15. Taken from the edge railway bridge. The pipe is in the field on the other side of the boundary fence. Nowadays Gill Brook picks up drainage from the properties on Newport Road, as evidenced by the manhole situated in the field.



16. Taken from the parapet of the railway bridge. The gorse is growing on what was once a spoil mound formed when the canal was first dug. The diversion flowed in an open ditch along the side of this mound before looping around the end of it to enter the culvert under the canal at point B, but the ditch has now been piped.

The Culvert under the Canal and Plardiwick Lane:

The Culvert is not shown on OS Maps but does appear on the Tithe Map, annotated C & F, (highlighted in red). The map also shows the upstream diversion (highlighted by the broken blue line: A – C – B) and from C to B it skirting no 1923 (spoil mound). Gill Brook is highlighted solid blue where it is on its original course.



17: Taken by the Culvert access shaft. The broken blue line shows the route of the diversion around the former spoil mound, which has been now piped.



18. This view shows the location of the culvert in relation to the towpath and bridge.



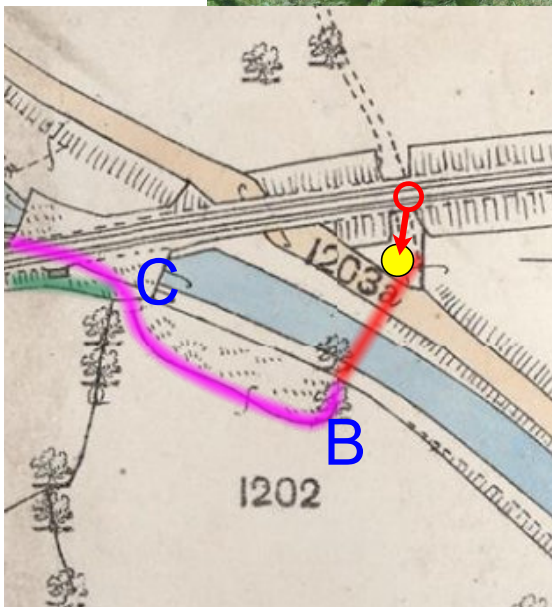
19. Culvert access shaft and safety fencing.



20. View into the access shaft showing the pipe outlet and inlet for the culvert.



21. The culvert was built on a steady gradient passing under the canal and Plardiwick Lane to discharge into a 5m deep chamber between the lane and the bridge.



22. The Canal and River Trust's contractors cleaning silt out of the chamber and culvert in September 2020. It took them 4 days to complete the work.



23. After the desilting, a photographic survey was done to check the culvert. This photo shows the Chamber's access manhole and the camera trolley.

Middle Section: Downstream of the Culvert

The orange line from V to X, as shown on the sketch map is a “best fit” approximation of the original course of Gill Brook before the coming of the canal and the railway.

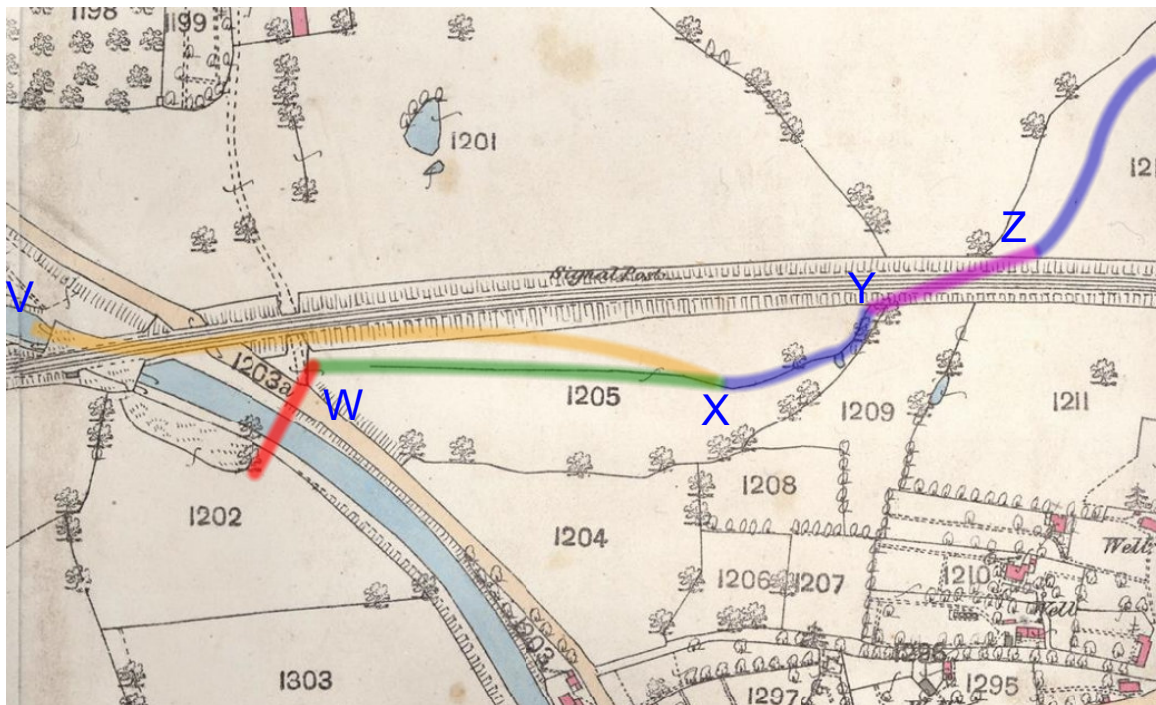
In keeping with other sketch maps: the position of culvert and chamber is shown in red; and Gill Brook is highlighted solid blue, where it is on its original unaltered course.

As can be seen the routes of Gill Brook and the railway coincide for some length. This meant that Gill Brook had to be realigned: a new channel was dug in field no 1205 which is still there today, it is shown from W to X, highlighted broken green. An outlet pipe from the underground chamber connects with channel at W.

Later editions of OS maps refer to W-X as a drain and not a stream or brook supporting the proposition that it is man-made rather than a natural feature.

At point X the channel re-joins Gill Brook and is back on its original course, before being culverted under the embankment between Y and Z.

There is a possibility that Gill Brook may have collected drainage from the small fields and paddocks: 1209, 1211 etc. These fields have been built over by Glendower Close and if it was the case all traces have been lost.





24. Taken from the steps of Plardiwick Lane Railway Bridge looking toward Glendower Close. The broken blue line maps the route of the outfall from the chamber to the open channel (drain) at W. At X the channel picks up the original course of Gill Brook.



25. Closer view of X from where Gill Brook regains its original course as marked by the fence. North Drive properties are in the background.



26. The fence line (centre ground) marks the course of Gill Brook as it starts to arc around the back of Glendower Close (extreme left).



27. Taken from the railway looking upstream in the vicinity of the culvert Y – Z. The back gardens of Glendower Close are on the left.



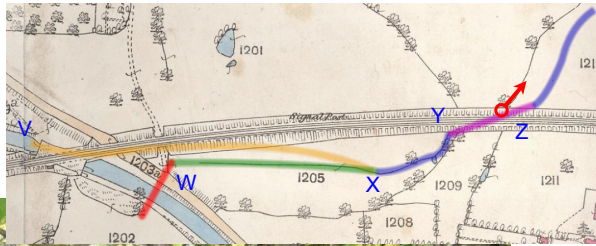
28. The Inlet of the culvert (Y) is at the base of the embankment more or less under the end of the panel fence. A brick headwall and pipe can be seen through the trees a little distance upstream, and is thought to be a drainage outlet for Back Lane.



29 The outlet of the culvert (Z) is located some 40m distant further along the railway at the base of the embankment by the oak tree.



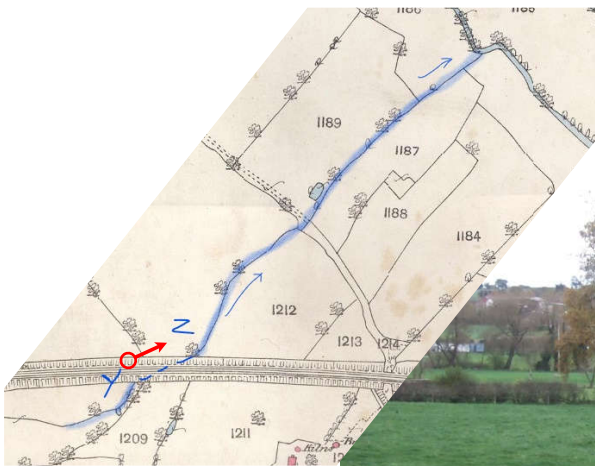
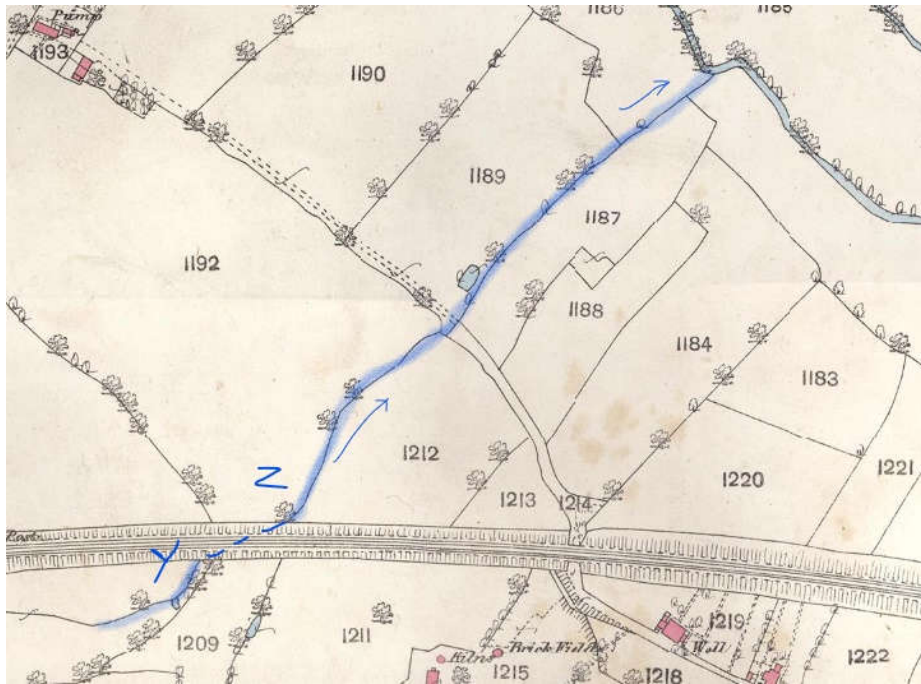
30. The outlet of the Culvert under the railway at Point Z.



31. From here onwards Gill Brook flows downstream on its original course.

Lower Section: Railway Embankment to the Doley Brook.

The sketch map, again using the 1880 Parish Map as the base charts the course of Gill Brook from the culvert under the railway: Y-Z, downstream to where it joins the Doley Brook at a distinctive “right angled kink” which is evident today. This particular section was used by as the boundary between Tithe Maps.



32. Taken from the railway line to the west of the culvert. Gill Brook follows the sinuous hedge forming the boundary between field 1192 and 1212.



33. Taken from the railway between Willey Lane Bridge and the culvert. Gill Brook meets Willey Lane by the oak tree in the centre ground. Doley Common in the distance



34. Gill Brook is piped under Willey Lane just in front of the gate.



35. Is taken from Willey Lane. Gill Brook follows the hedge line in the middle distance. The boundary between fields 1189 and 1187 in the foreground.



36. Taken very close to where Gill Brook meets Doley Brook looking toward Plardiwick Farm, showing the difference in elevation.



37. Gill Brook and Doley Brook meet by the Gauge Board, and it is very boggy!



38. Taken a few metres downstream showing Doley Brook's right angled "kinks".