

East West Rail Preferred Alignment – Plan Profile Drawings – Clapham to Tempsford

The attached plan profile drawings have been released recently in response to a succession of FOI requests to EWR Co initially raised by Cambridge Approaches over 2 years ago. They comprise a series of drawings (-410 to -417) starting at the River Ouse at Clapham and running through Brickhill, Ravensden, Wilden, Colesden, to the north of the Black Cat roundabout and on to Cambourne and finally Harston, SE of Cambridge. The preferred Tempsford Variant which was subsequently revealed by EWRCo at the Route Update Announcement in May 2023 cuts to the south of the Black Cat to a station on the East Coast Mainline located at Tempsford. This supersedes one diagram (-412) in the series. An additional plan (-168001) which shows the Tempsford variant has also recently obtained by BFARe but it has less overlaid graphical detail.

Across the lower half of the main drawings are the respective ground and intended track heights at 100m intervals. Principally, these reveal the scale of the engineering works required to create a railway with 1:80 maximum gradients.

Although 2 years old, these drawings show what we consider will be very close to the intended fundamental final design and layout of the railway across north Bedfordshire. The included landscaping features will no doubt be subject to debate and variation but the 'structural' nature of the design and the location and size of the construction logistics parks are believed unlikely to change.

The drawings show the immense scale of the intended works – not only the embankments, viaducts and cuttings, but also road diversions, public right of way closures and diversions, drainage works, and the huge construction compounds located at frequent intervals along the route. Conspicuously absent are any plans showing how many of these compounds will be accessed, unless by wholly unsuitable country lanes.

Since the map section of the Tempsford Variant drawing is not annotated with embankment or cutting footprints, BFARe have produced a Google Earth map with these features, but it lacks a lot of the additional detail in the other drawings.

It is not known if EWR Co will release updated drawings containing the same or greater detail during the presumed forthcoming Phase 1 statutory Consultation.

A FOI request to EWRCo to publish similar drawings for Bedford Town is currently under consideration by them.

Notes on the drawings:

Each section is orientated to run left to right across a landscape sheet, 'Cut lines' are marked at each side which indicate the relative orientation of adjacent sheets and their drawing numbers.

Distance is expressed as "Chainage" and the lower matrix is arranged in 100m segments. Each 1000m (1km) of distance is tagged along the track displayed in the upper maps.

The meandering track section in the upper map is 'straightened but not stretched' to be shown as a straight line in the lower matrices.

The difference between the green ground level and the red track level lines in the lower matrices is the actual height of embankments/viaducts and depths of cuttings along the route.

There is a great deal of detail in these drawings but the pdf files can be magnified significantly to appreciate the detail available on a reasonably sized PC or laptop screen.

The drawings indicate where public rights of way are being impacted and whether they are being stopped up or diverted and how. Use a high magnification (150%) and trace the light dotted red lines for foot and bridle paths. If the line changes to a green line that route is cut but there may be brown lines indicating diversions - and overbridges where intended are normally identified as such.

Dimensions can be measured on the upper map and, provided the magnification is not altered the dimensions can be ascertained scrolling to and using the right hand (0 – 1,000m) scale.

Each Parish Council active within BFARe intends to hold communal events soon to discuss the information obtainable from these drawings and the latest state of play as revealed by EWR Co.

Only the drawings covering Clapham to the end of the Tempsford Variant section are attached here. The whole sequence to Cambridge is available on the Cambridge Approaches web site using this link:

<https://cambridgeapproaches.org/clapham-to-caxton-gibbet/>

Bedfordshire Drawing Coverage scope:

AI1(TV) Plan Profile Drawings Publicity Brief v4 Final.docx (this document)

Drawing -410 Clapham flood plain, Escarpment, Carriage Drive, North Brickhill/Woodlands, Graze Hill, Thurleigh Road, Sunderland Hill and Ravensden Water Tower

Drawing -411 Ravensden Water Tower, Redbrick Cottages, Wilden, Reservoir, passing loop, start of Tempsford Variant

Drawing -412 Original alignment 1 – Colesden, Chawston, Black Cat North, St Neots Station (S) and Little Barford

An A4 extract of the drawing series key is included which can be printed for reference whilst browsing the -41* series of drawings at higher magnifications

Drawing -168001 Shows both original alignment (blue) and the Tempsford Variant (red) from Colesden above Roxton, below the Black Cat to Tempsford Station, then rejoining alignment 1

Google Earth Overlay (BFARe)– covers between the cut lines of -412 and its replacement -168001 indicating embankments, cuttings and the viaducts but no details on land take whether permanent or just supporting construction. The land take for the original Alignment 1 via St Neots (S) marked on -412 is broadly indicative of what will be required for the Tempsford Variant diversion.