

RECONSTRUCTION OF BELL BRIDGE AND BELL LONNING

Progress Report at 23/08/17

Following establishment of our site compound, and diversion of the 11kv overhead electric cables on 23 July, reconstruction work is now progressing well and on programme. An ecological survey was undertaken before work commenced and a temporary footbridge was erected to allow safe access by the workforce.

Following installation of the sheet pile walling to the West abutment, excavation was completed into the mudstone bedrock to allow construction of the reinforced concrete base slab and abutment wall. In total 46m³ of concrete was placed in two pours.

On the East abutment, more extensive temporary works were required to create the longer sheet piled walling that would protect both the bridge abutment and the adjoining riverbank training walls. Despite losing several days due to rain and high river levels, the cofferdam frame has now been placed allowing excavation into the mudstone bedrock. This was sealed with blinding concrete allowing the base reinforcement to be fixed and the concrete base to be poured.

A milestone was reached on Monday 21 August when the steel beams arrived from Hamilton in Scotland. These were placed on temporary concrete plinths using a 200t crane and work has now begun to erect the underslung scaffold and permanent formwork for the reinforced concrete deck. Doing this work in the compound avoids working over the river with access walkways being added before the deck assembly is lifted into position in the middle of September. The precast concrete units that will form the inner skin of the wing walls have also started to arrive from the casting yard in Northern Ireland.

Following consultation with the Parish Council and local residents, the County Planners would prefer the use of reclaimed masonry from the old bridge throughout with a fallback position of allowing new masonry parapet walls above the steel beams should there not be enough reclaimed masonry.

As previously explained, the problematic ground conditions along Bell Lonning means that the Bell Lonning road will now have the verge hardened (using highways land only) and be re-opened to light traffic to coincide with the re-opening of Bell bridge. A permanent solution will be designed and will be implemented in 2018.



East Abutment base



Steel beams and West Abutment



Unloading Precast concrete units



West Abutment Wall