

RECONSTRUCTION OF BELL BRIDGE AND BELL LONNING

Progress Report at 7/08/17

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

Initially the remaining sections of the downstream West abutment were removed with the masonry recovered for reuse. This allowed us to excavate and create a river edge protection area and space for a piling platform using a dumpy bag coffer dam. Piling commenced on 1 August; the mudstone bed rock was first augured with Larson Sheet Pile walling then driven in by percussive piling. The new abutment will be constructed inside this area, shown in the lefthand picture below. It is anticipated that a suitable foundation level will be reached approximately 1.5m below river bed level. A length of overhead BT cables has also been diverted underground to avoid any future issues with the site craneage.

On the East abutment more extensive temporary works were required to create the longer piling platform that would protect both the bridge abutment and the adjoining riverbank training walls. A dumpy bag cofferdam was installed along the river bank to create a pool where a fish rescue was conducted. The overhanging sections of the old bridge were carefully taken down and masonry recovered. A piling platform was then created behind this cofferdam through which the rock below will again be augured and a sheet pile wall cofferdam constructed. Once the works are complete the sheet piles will be cut down below river bed and left as permanent scour protection. The heavy rain in the first week of August delayed us commencing piling on the East side, and the time was spent preparing other works on site. Masonry trial panels have also been erected for agreement with the County Planners.

The Ground Investigation works revealed problematic ground conditions along Bell Lonning. An options report has been prepared and is currently being considered by Cumbria County Council. Pending a decision on the final solution the Bell Lonning road will 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 is being sought and will be implemented in 2018.



Auguring for Sheet Piling to West Abutment

John Slee

Demolition of East Abutment

Project Manager Story Contracting

07/08/17

Masonry trial panels