NORTH YORKSHIRE LOCAL ACCESS FORUM

10 SEPTEMBER 2014

WOODHALL BRIDGE - UPDATE

1.0 <u>PURPOSE OF REPORT</u>

1.1 This report is to advise members of the current position relating to the repair of Woodhall Bridge

2.0 BACKGROUND

2.1 Woodhall Bridge is a five span wrought iron truss. The bridge, originally constructed as a railway bridge, carries a bridleway over the River Wharfe and is situated 2 miles south of Sicklinghall at OS Grid Reference 436487, 446069.

The bridge was constructed in 1868 by Jospeh Whitham and Son of Leeds. There are three spans of 15.470m to the north and two spans of 12.190m to the south. The two smaller spans are over riverbanks and the two piers supporting these are masonry. The three longer spans cross the River Wharfe and their two intermediate piers comprise pairs of cast iron circular columns with cast iron cross beams. The abutments comprise masonry stonework. The main trusses are 3.05m apart. The deck comprises timber planks and kerbs spanning between iron transoms. There are rakers supporting the top flanges of the trusses throughout their lengths.

The most northerly intermediate pier sustained damage during March 2013 as a result of large debris within the watercourse colliding with the pier resulting in the pier rotating/sliding.

The bridge is currently closed to pedestrians (timber fencing erected at each end) and the foundation to the defective pier has been filled and protected with sand bags.

3.0 THE PROPOSED REPAIR WORKS

3.1 Construct a temporary access road from the highway to bridge on the north (NYCC) side of the bridge.
Place a temporary 1 tonne sand bag dam around the North intermediate pier and place temporary supports at 1/3 span to support spans 4 and 5.

Excavate the river bed to 500mm into the Siltstone and place 4 sets of precast concrete manhole rings filled with C32/40 micro-silica concrete to form the foundations for the jacking/support frame.

Remove the timber decking over the damaged pier area.

Erect the jacking/support frame around the damaged pier and to support the cross member. Jack up to temporarily support spans 4 and 5.

Remove the stone foundation pads from the damaged intermediate pier.

Jack up the intermediate support and spans 4 and 5.

Excavate the area between the manhole rings to 500mm into the Siltstone and concrete with C32/40 micro-silica concrete to 25mm below the pier base plates casting the pier holding down bolts in.

Grout the pier base plates.

Repair the damaged members of lattice trusses, any associated steelwork and reinstate the timber deck with GRP non-slip panels attached.

Remove the jacking/support frames and the temporary 1 tonne sandbag dam. Remove the temporary access road and reinstate the land.

4.0 <u>TIME TABLE</u>

- 4.1 The closing date for the tender is 12 noon on the 9th September 2014.
- 4.2 Start date on site is 20th October 2014.
- 4.3 Completion date is 20th December 2014 Weather permitting

5.0 <u>RECOMMENDATION</u>

5.1 It is recommended that members receive this report for information..

Contact:

lain Burgess Senior Ranger 01609 532894