

An additional defective nut had been found by contractors during the course of wrapping the cable. This change out was successfully carried out on Friday 12th of June 2009.

Present at time of operation:

The defective nut and bolt was de-torqued without incident and replaced using the push through method (where the new bolt pushes the defective piece through, until old bolt has been extracted).

Cable band washer faces were cleaned for good mating finish.

Nuts were run up into position, and no apparent gaps between nut and washers were found this time.

Using a single PS4 tensioner, an initial load of 15000psi was applied. This resulted in giving a load of 501kN. This was measured using the Boltscan machine 184. The new Boltscope machine was unable to give a comparative reading, and it was decided not to use this further.

It appeared that we had a problem with the hydraulic hand pump and that a seal had possibly blown, as we could not raise the pressure above 16000psi. It was decided that we would revert back to the air driven hydraulic pump.

An intermediate pressure 18500psi was reached using the air driven pump, resulting in a load of 649kN.

For the final stage of the process, a maximum pressure of 19848psi was achieved; the three final actual pressures were 19500psi, 19602psi and finally 19848psi giving a final load of 731.4kN

The resulting elongation was measured at 2.13mm.

Bridge Inspectors: