

Main cable inspection.

Following a recent inspection requested by Advitam with reference to a high quantity of acoustic activity recorded at specific locations on the main cable, A decision was taken to carry out a full main cable survey to inspect & record all relevant information related to the status of each & every location throughout the suspended structure.

It was established that the hand-strand cable casting clamp / post connections at various locations had a certain degree of horizontal movement possibly due to wear-down (excessive in some areas) of the phosphor bronze washers (Item 1 as per drawing. Enlarged detail B.) It was also established that vertical movement was apparent at certain locations (excessive in some areas) of the phosphor bronze sleeves (Item 2 as per drawing. Enlarged detail B.) It was also apparent that on the majority of the upper cable band bolts that some form of minor impact damage had occurred as small areas of paint had been removed leaving a small part of the machined face of the bolts exposed throughout.

Before completion of the inspection Colin Clarke of consultants (Fairhurst) arrived on site and a request was made to visit certain locations on the main cable to carry out observations of his own with regard to the findings. This accompanied with the findings made by bridge inspector G. Elliott & records of the works carried out may help establish the possible reasons for these findings. Individual location findings will be recorded on survey sheets to the relevant spans and will accompany this report.

It should be noted that no main cable inspection has been carried out since general report no **125**. This was mainly due to the completion of major works related to hanger replacement and access restrictions with regard to work at height & rescue procedures.

Bridge Inspector. :