

Job no: 23/17
Client: Northumberland County Council
Project: The Shambles Market, Hexham
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THE SHAMBLES CONSERVATION PROJECT ROOFING INVESTIGATION

1.0 Introduction

The 2020 report on the conservation of the shambles proposed that prior to a contract a roofing contractor would be employed to open the roof and investigate the concealed elements of the roof.

Since the report was written it has been reported that Matthew Charlton's of Hexham archive documents report that the building was re-weathered with newly cut slates in 1911. Today's visit has found a small plaque which says that the leadwork was repaired in 1993. The aim is to get the roof in good fettle for the next fifty years.



2.0 Leadwork

This all appears to be code 6 or 7 lead sheet, in good condition without any splits or cracks. The lead has dips in it where the water is holding, but none are leaking. The various repairs all appear to date from 1993, when the plaque was welded on, they were done by a good welder and they do not appear to have decayed in any way. There must be copper clips incorporated into the open rope formed rolls. Recently the odd brick and plastic vapes appear to have been thrown on to the roof and access to install Christmas lights is known to have occurred, but have caused no lead damage.



The east and west end panels of lead have welded lead mitres at the corners, and they are fixed down using copper nails into the side of the final rolls.



The standing water seem to coincide with the locations of the damaged and deflecting trusses.



The open lead rolls will have been formed around a heavy sisal rope.

3.0 1993 Lead Patch Repairs

There are thirty three bays of lead work. Eighteen are unblemished. Fifteen of the lead bays have 1993 welded repairs. These welded patches are sound and we do not see a reason for replacing them or reworking them. The table below was prepared by Ray Loughhead the roofer to record the repairs.

Bay	Description
1	Lead weld patch and both corners lead weld patches
2	2 weld patches
3	3 weld patches
6	1 weld patch
8	Lead patch with date
10	2 weld patches
11	4 weld patches
12	1 weld patch
22	3 weld patches
23	1 weld patch
24	1 lead patch
25	1 lead patch
27	1 lead patch
32	1 lead patch
33	1 lead welded split

CC propose that the lead panels are all carefully lifted and the boards below are all checked and repaired prior to the lead panels being replaced. For pricing purposes, we will allow for five panels to be replaced.

4.0 Slating



The slates are between 250 and 275mm long and twice nailed at the shoulder. The nails are copper and corrosion free. Some nails and some slates have broken especially at the eaves. The hips are mitred with lead soakers.



The bottom rows of slates have suffered worse from loosening nails in the lowest sarking boards, which will be the dampest boards.

5.0 Sarking boards and other timbers



Ray opened up the base of the west pitch and found that here the boards and drip were in sound condition. However, we were not confident that the eaves boards were in good condition in most other locations. We will include for replacing 50% of the two lowest boards and all the drip, as water will trap behind it. The groove in the eaves fascia board in a water trap and should be corrected.

We did not find any sarking board to rafter nails, but we imagine that these will be iron nails and will have decayed.



The south eaves fascia boards are suffering from very poor or missing fixings and the sarking board stopping short of the rafter ends. The fascia boards are twisting out of the vertical plane.



The upper fascia boards behind the gutter have some strange splices in and decay where water has not been caught by the gutters.

6.0 Cast Iron Gutting

The gutter brackets are fixed with a mixture of old slot head screws and some modern cross head posidrive screws. I think the cross heads relate to sections replaced following recent damage. The main problem with the guttering is lack of painting, leading to corrosion. Generally the corrosion is not excessive and the guttering can be taken down shot blasted, primed and repainted. Some sections will need to be replaced but hopefully less than 20%. The sections seem to be available, as where there is some recent replacement in the southwest corner a recent manufacture date is still marked on. All the joints will be resealed and falls realigned when the gutters are refixed.