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HISTORIC PAINT AND FINISHES RESEARCH

SCIENCE AND INDUSTRY MUSEUM, 1830 WAREHOUSE, RAINWATER DOWNPIPES

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THE 1830 WAREHOUSE BACKGROUND INFORMATION:

The 1830 warehouse, Liverpool Road, Manchester, is a 19th-century warehouse that forms part of the Liverpool Road railway station complex. It was built in five months between April and September 1830, almost certainly to the designs of] the Liverpool architect Thomas Haigh. The heritage listing report attributes the work to George Stephenson and his son, Robert. It has been listed Grade I on the National Heritage List for England since May 1973.

Figure 1: Façade of the 1830 Warehouse, showing rainwater downpipes in situ



The warehouse is of red brick in Flemish bond, with sandstone dressings and slate roofs. It is three storeys high, though only two storeys present to the level of the railway to allow for direct loading and unloading. At the ground floor at street level, carts could also gain direct access. The internal structure is of timber, but with cast-iron columns in the basement.

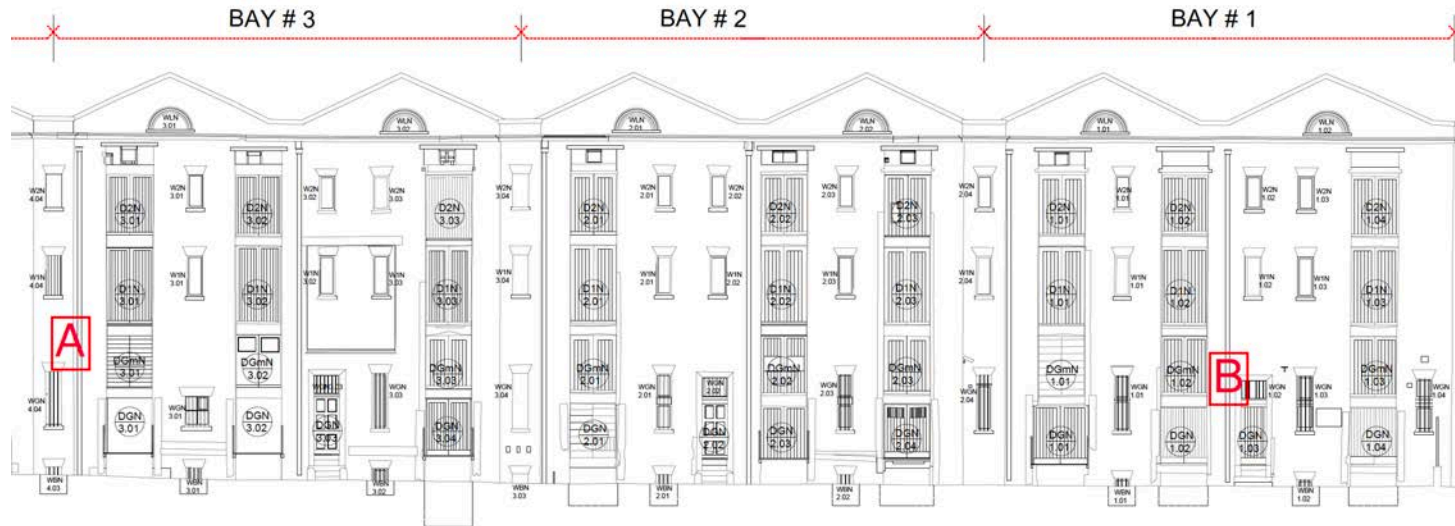
The processing of goods within the warehouse was originally a manual operation but steam-powered hoists were installed within a year as the manual system could not cope with the volume of goods. The steam system of 1831 was replaced with a hydraulic system between 1866 and 1880 to increase efficiency.

The 1830 Warehouse was researched by Crick Smith in February 2017 and August 2021

1830s Warehouse, Science & Industry Museum, Manchester

The samples were taken by the contractor Ollie Glasse, from four rainwater downpipes on the North & South elevations.

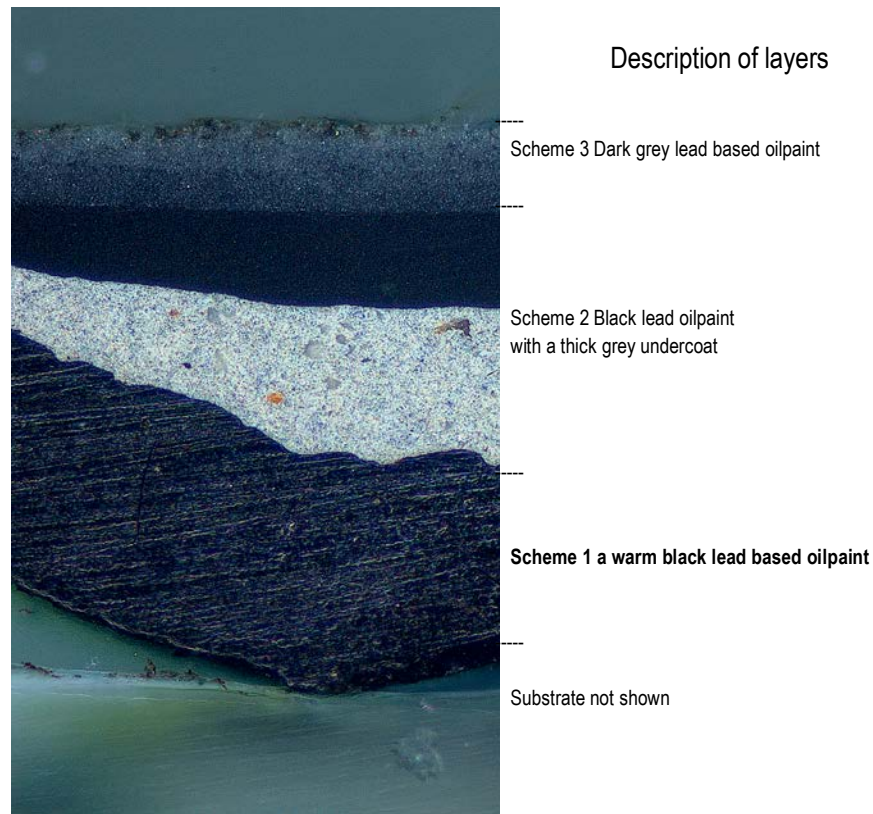
North elevation



South Elevation



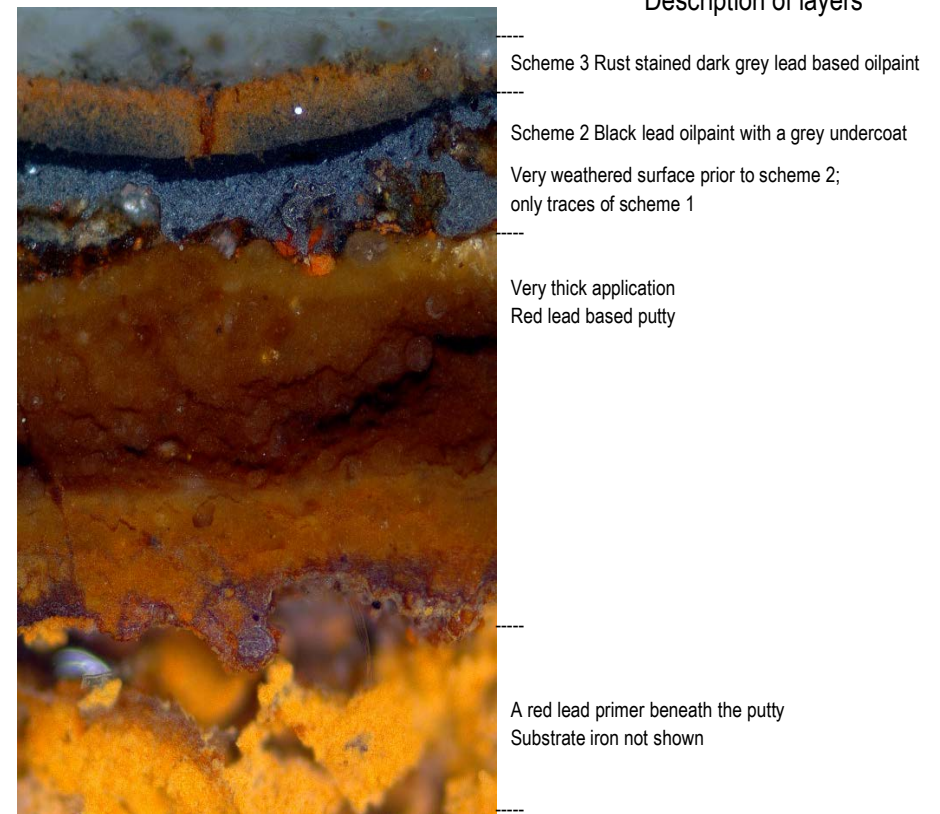
FIGURE 2: SAMPLE: SIMM/1830WH/DPIPES 1.1 SAMPLE A



Although some of the schemes have been lost from certain samples, a very clear chronology has been found, including the use of red lead and linseed oil putty, originally and for repairs.

Traditionally red lead putty was used to seal the joints in the downpipes and guttering.

FIGURE 3: SAMPLE: SIMM/1830WH/DPIPES 1.2 SAMPLE B



Consisting of the same material components as lead oil paint, (whiting, linseed oil and pigment/drier), the main difference lies in the proportions mixed. This creates either a malleable putty as a filler and sealant or a brushable thick liquid paint.

Scheme 2 is a late lead-based paint, typical of the mid C20th.

FIGURE 4: SAMPLE: SIMM/1830WH/DPIPES /1.3 SAMPLE C

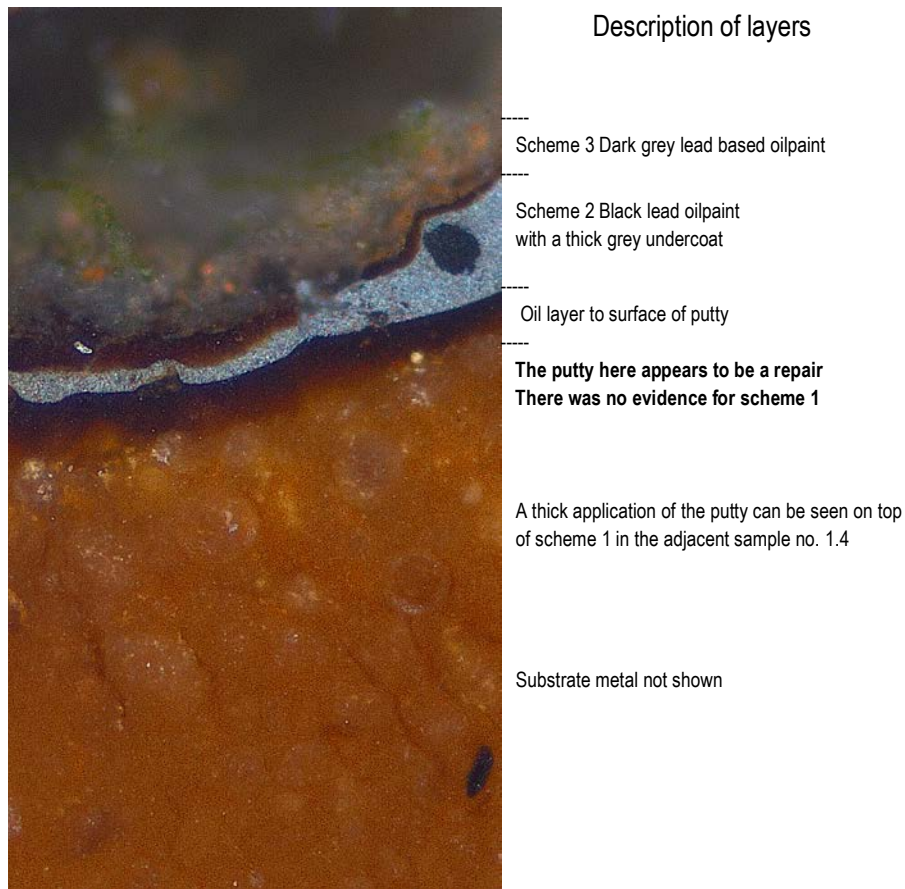
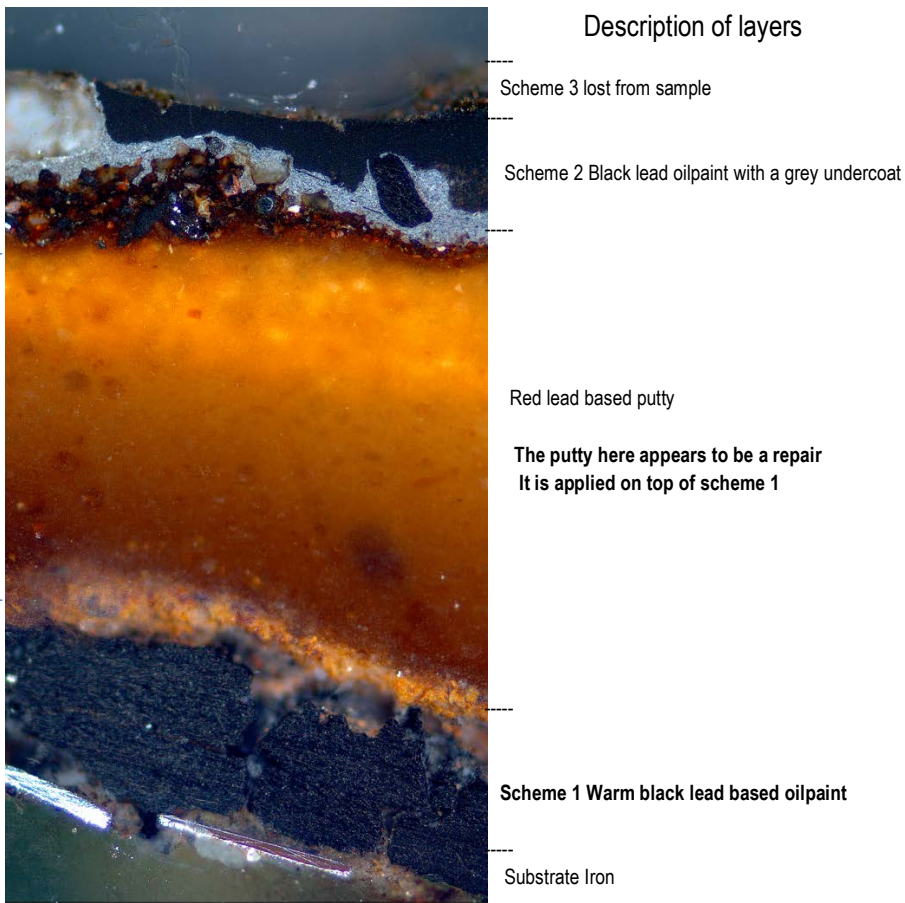


FIGURE 5: SAMPLE: SIMM/1830WH/DPIPES 1.4 SAMPLE D



COLOUR REFERENCES FOR REDECORATION:

The sample analysis clearly shows that the downpipes were originally painted in a warm black lead oil paint, the colour created from a carbon black and red lead mix. This colour is the same as used for the exterior cast iron signs, where it was contrasted with a lead white.

The samples also show the use of red lead linseed putty, both originally and for subsequent repairs.

Colour references are taken from the Natural Colour System (NCS*). Accepted as industry standard. *

BLACK LEAD OIL PAINT.

NCS S9000-N. (a warm black)

MID SHEEN FINISH

(SATIN/EGGSHELL)

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