

By Greg Warner

THE RENOVATION OF THE EASTERN SECTION OF THE VALVE HOUSE

The paintwork in the Grade 2 Listed Valve House building had long been in a poor state, but in 2014/15 the Trust took the decisions:-

- 1) to refurbish the roof and install lighting, etc in the Engine Shed (previously known as the Atcost building) so that the 101-year old locomotive “the Woolwich” (Woolwich Arsenal’s last surviving narrow-gauge loco) could be moved there, in August 2016, from the eastern section of the Valve House, for the remainder of its restoration.
- 2) to relocate, early in 2016, the small steam engines, which have been restored by Crossness volunteers, from the Boiler House (where only one was operable at a time) to the eastern section of the Valve House, where they could be displayed properly.

These decisions have provided a unique opportunity to deal with, at least, one half of the building.

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The redecoration of the eastern section of the Valve House has now provided a much more acceptable location for displaying the restored small engines which, with a more powerful air-compressor, can be run more than one at a time.

The pictures below show “From Thatto This”



The following dimensions give some idea of the size of this project:-

Back wall 63' 0" (19.1m) long x 18' 6" (6.75m) high (the pictures above only show part)

Roof boarding 63'0" (19.1m) long x 21'2" (6.45m) high

Ridge timbers 63'0" (19.1m) long. x 34' 6" (10.5m) high (from floor)

Max 65'8" (20.0m) wide.

The initial tasks on the long back wall of the Valve House East included scraping the flaking paintwork, cleaning and rinsing, before applying alkali-resistant paint to the brick wall surface above 8'00" (2.44m).

Below that level, parts of that wall were known to be damp due to the higher ground level (on its Thames Water side) of approx. 4'6" (1.37m). Although it is probable that there is no complete solution to this problem, the erection of a 100% demountable structure close to the wall was reckoned to provide a natural airflow over the its internal surface. This structure comprises sixteen 8' x 4' panels of sealed weather-proofed plywood, suitably anchored at both floor and top levels. At floor-level, the panels stand in wooden rebated feet where two panels adjoin and the base of the foot will also support the pipework for the compressed air supply to the engines.

In recognition of the one-time use of this section of the building as the Schoolroom (for the children of Crossness workers living on the site or in the Police houses nearby), the middle area of the panels has been painted to resemble a blackboard. It will now also provide a suitable surface for information panels about the small engines displayed nearby. The other walls have the same two colour scheme as on the bottom and top sections of the panels.

Under the principle of starting at the top before working down, it was highly desirable that the roof-boarding and trusses should be done as soon as possible, but in practice, the planned sequence of tasks had to be modified, because of other work, on several occasions.

The roof comprises two layers of double glazed panels and up to 7 layers of wooden boarding and ridge timbers, and is strengthened by 5 transverse trusses (creating six bays) on which the paintwork was all in the same poor condition. Access to it has required the erection of one (or more) towers and the positions of the trusses has entailed frequent changes in tower height.

All of the walls, roof-boarding, ridge timbers and accessible portions of the trusses have now been repainted. Some quirky architectural features have also been highlighted.

Other repainting includes the inside surfaces of the three-section sliding doors and the double round-headed doors, the staircase beside the Transformer Room, various railings (some providing a safety-barrier in front of the engines on display) and the anything-but-level concrete floor, because of which two concrete plinths were created in it to provide a level base for two static railway engines (long since removed). It is planned to display a wooden quadrant-shaped model of the Easton & Anderson engine against one wall, and possibly other items.

It is hoped that the engines will be operational by April 2018, by which time work on the lighting and heating systems and the new compressor and its air supply will have been installed.

In the adjacent bay, housing the biomass boiler, however, the walls and roof-boarding on the north side are to be left untreated, to show their current condition.

This mammoth refurbishment has been undertaken over the last twenty-two months by a dozen or so volunteers, to whom the Trust is greatly indebted for their patience and persistence. Thanks too to the tower rebuilders for their efforts.

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