### **K1651** Condition Report

**Conservation Started:** 18/02/2013 **Conservation Finished:** 22/02/2013

Conservator: Ciarán Lavelle Time Taken: 2.5 hours

Including digital photography, report, conservation and packing.

Dimensions of Largest Fragment: (L) 11mm; (L-Rivet Head). 6mm; (W-rivet head) 4mm; (Th-head) 1mm;

(Th-Rivet Shaft). 3mm Weight before: 0.63g Weight after: 0.61g Catalogue number: 672

## Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

### Annotation on any of the storage bags or boxes: K1651

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Silver-alloy Rivet head/boss.

## **Associated Objects:**

**Pre-Conservation Condition:** Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

The object a silver alloy metal rivet head with visible surface loss on the top and side of the domed surface of the rivet head. The rivet is thick and short with a wide thin/flat head. The visible surface appears to contain silver tarnish and corrosion products. The object is covered in a light layer of loose and compact soil.

**Treatment:** Carried out using a Meiji stereo microscope

**Purpose:** Display / Study / Analysis **Aim:** Total cleaning / Stabilisation

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on

metals, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front/back was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

### **Post-Conservation Condition/Findings:**

# **During Treatment:**

During treatment a sliver of the silver alloy metal surface of the shaft spalled off revealing white coloured silver-alloy corrosion products beneath it. The sliver was sampled and the corrosion products were removed.

#### **After Treatment:**

The object a silver alloy metal rivet with a thick and short body with a wide thin/flat head. There is visible surface loss on the rivet with damage/break-edges visible on all sides of the rivet head and with surface loss and a break-edge on the shaft. There are areas of insoluble crustations on the remaining surface of the rivet shaft and rivet head. As there were no decorative features on the object, some silver alloy corrosion products and insoluble crustation was left in-situ to prevent the potential damage to the surface. There is evidence of tarnish, nicks and scratches on the surface. There is evidence of possible iron corrosion on localised areas of the object from the burial environment; this was left in-situ to prevent the potential damage to the surface. The object required minimal interventive conservation, removal of excess soil.

## **Key Features:**

- Silver alloy rivet.
- Rivet head and shaft suffered extreme damage and surface loss.
- Iron/Silver alloy corrosion products and insoluble crustations visible on the surface.

# **Analysis Undertaken:**

XRF analysis of the object was performed. See document 'KXXX XRF Report'.

# Samples:

Sample 1 – Silver alloy fragment from the shaft.

## References: