

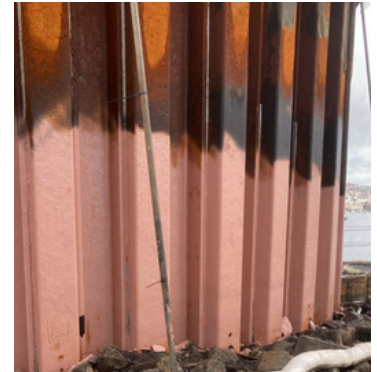


Client: Discovery Quay Square

### Requirement:

The existing Roundhead Quay Wall at Discovery Quay is an existing sheet piled wall that protects the National Maritime Museum Cornwall.

The wall had been showing signs of corrosion, particularly in the splash zones, which was evidenced in the pitting, rust staining and surface delamination that was present.



### Solution:

TMS Ltd were engaged by Discovery Quay Square Ltd to refurbish the wall by cleaning away the rust, delamination and corrosion back to bare metal and protect with a specialist paint coating. All works were to be undertaken within and above the intertidal zone and within close proximity to an existing, fully berthed marina.

TMS worked with the scheme designer Beckett Rankine to engineer a suitably robust solution that could be applied successfully within the intertidal zone.

All works were completed from a floating platform, formed specially around the shape of the roundhead and secured using temporary guide rails. A fully sheeted enclosure was then erected around the platform to prevent any debris and / or paint droplets from carrying to the yachts moored at the adjacent marina.

Working with the tide, the piles were blasted using ultra-high pressure water jetting to remove any deleterious material and restore the sheet pile surfaces to clean and grease-free conditions. Cemprotec clutch filler was then applied to all pile clutches to prevent water ingress and egress, and any pile drain holes were temporarily extended to ensure that impounded water could not ruin the preparation or subsequent painting.

Immediately following preparation, three coats of Corroless EPF were applied by airless spray, and worked by hand into any hard-to-reach areas. This provided a minimum 600 micron DFT paint thickness to protect the piles from future corrosion and thereby extend their working life.

All work was completed to programme and budget, to the Client's full satisfaction

