



Leak Sealing & Waterproofing • Concrete Repairs • Crack Injection • Pressure Pointing & Grouting • Structure Condition Surveys • Protective Coatings • Joint Sealing  
Diamond Drilling & Sawing • Concrete Bursting & Crunching • Robotic Demolition

Scheme: **Portishead Quays Marina Development**  
Problem: **Degradation of mortar in quay side retaining walls**  
Solution: **Re-pointing using pressure pointing techniques**  
Client: **Crest Nicholson / Bideem Construction**

As part of a major marina and quayside development of the site of a former power station and harbour at Portishead, just outside Bristol, Ram Services Limited undertook a series of operations to make good long term deterioration to the retaining walls on the approach to the sea lock, and later to the lock itself.

Work include removal of vegetation accumulations by high pressure water jetting, assessment of the wall condition in conjunction with client engineer Arup, and then repointing of the walls using pressure pointing techniques and infilling of voids in the wall with engineering brickwork, detailed to contrast with the existing masonry.

The huge tidal range prevalent on the Severn estuary made work outside the lock quite tricky, and the decision was taken early on to avoid the use of scaffolding where ever possible. To meet the demands of the location, Ram Services Limited developed an approach using access cradles suspended from the top of the quay for the majority of the work.

Where cradles were not suitable, purpose designed tube and clip scaffolds were also suspended from the quayside, rather than allowed to rest on the sea bed. Work in the lock chamber was able to make use of the existing floating pontoon.

Re-pointing work used a polymer modified pressure pointing suitable for immersion in water within minutes of application, mechanically mixed and placed using a Turbosol T20 pump and pressure pointing techniques.

Contract duration: 12 months                      Contract value: £331,000.00

