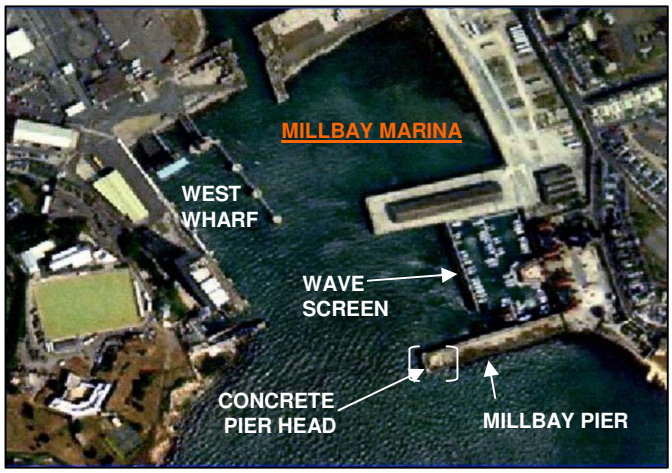
BridgeZone Ltd

Millbay Marina, Plymouth
Inspection and testing
Diving Inspection
Client: Midas Homes



BridgeZone were commissioned by Midas Homes to carry out an above and below water survey on selected structures within and adjacent to Millbay Marina in the City of Plymouth.
The primary objective of the inspection was to identify and comment on the condition of the structures with regard to their primary functions and the influences upon them.

The structures specified for inspection were;

Millbay Pier, the **Marina Wave Screen** (revetment stability) & the **Marina Mooring piles.**

Millbay Marina is located within Millbay Harbour. Entrance to the harbour is from Plymouth Sound which is afforded major protection from coastal wind and weather conditions by the main Plymouth breakwater. The marina is further protected from sea condition experienced in the sound by the Millbay pier and within the harbour by a dedicated wave screen. As such, relevant conditions to the Marina comprise diffracted wave and ship – particularly ferry – operations within the harbour.

Each component of the Marina held a unique challenge with varying design problems ranging from change of use surveys, condition assessment through to remediation and scheduling of repair works. All of which held particular importance to both the client and residents, and required specialist access techniques and equipment to facilitate the required level inspection before appropriate solution and recommendations could be made.

BridgeZone Diving and Inspection teams carried out Bathymetric / Hydrographic bed level surveys, and NDT testing using a Cygnus thickness gauge, testing for accelerated low water corrosion, Schmidt hammer and cover meter testing and core sampling of the more recent concrete piles.

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