



## RAF Leuchars Coastline Protection

**PROJECT:**

RAF LEUCHARS  
AIR BASE, FIFE

**CLIENT:**

M.O.D  
(MINISTRY OF DEFENCE)

**VALUE:**

@£160K TO DATE  
ANNUAL MAINTENANCE  
CONTRACT

**CONSULTANT:**

M.O.D  
(MINISTRY OF DEFENCE)

**SUPPLY & INSTALL:**

JML CONTRACTS LTD

## Project overview

RAF Leuchars is situated on the north side of the Eden Estuary in Fife and has extensive mud and sand flats surrounding it. The estuary is a Local Nature Reserve (LNR), and a Site of Special Scientific Interest (SSSI). The air base has a long stretch of coastline which requires annual maintenance from erosion caused by the North Sea. An extensive sea defence wall of gabions was installed in the late 1980's, which over the years has been deteriorating.

## Challenges

Working in a military air base brings its own challenges regarding security, movement of plant and labour through the air base to the works area. In addition, as the estuary was tidal and therefore alongside worker's safety, operations had to be coordinated with the tide times, Scottish Natural Heritage and the RSPB due to the large amount of birds and complex natural habitat present. This stretch of coastline is completely off limits to any human access as the natural wildlife is abundant.

Access on and off the salt flats/beach with plant and machinery was particularly difficult and plant movements were carefully planned and monitored every day and the method of works designed to keep this to a minimum. Where possible we reused existing stone from the failed gabions to rebuild and only imported new when required to do so. Although flat, the coastline had a large tidal range and the tide moves in very quickly. Good monitoring of this and coordination of the project was paramount so works could be demobilised in a prompt fashion and materials/plant moved off the beach in good time.

## Services Provided

JML Contracts carried out a number of infill repairs to the 3m high gabion wall and a complete refurbishment and replacement of the scour mattresses along the front of the wall. Once all the mattresses were replaced, JML then applied a second layer of PVC gabion lids to ensure added protection from the elements for the years to come. These works were always done outwith the nesting season and during periods of neap tides. JML continues to return each year to carry on this programme of erosion maintenance.