

**COBHAM SERVICES HGV PARKING AREA EXPANSION  
COBHAM, SURREY, UNITED KINGDOM**

Mass Gravity Retaining Walls

**Problem**

Cobham Motorway Service Area (MSA) is located at J10 of the M25 motorway. It is a single site used by traffic in both directions, which opened for business in 2012.

The service area contains a customer service building with restaurants and refreshment areas, retail facilities, a game zone, toilets, showers, pay phones and cash machines.

The building is located in a central position to the southern end of the MSA away from the motorway. It was necessary to expand the heavy goods vehicle (HGV) parking as the site had been extremely popular and was running beyond capacity. Meaning the lorries are parking on slip roads and access roads into the site, causing jams and safety concerns.

**Solution**

The proposal was to increase the HVG parking numbers by 79 new spaces, to the west of the petrol filling station. The proposal sits into the ground meaning there would be the need for retaining walls around the circumference of the site. To aid functionality and reduce its visual impact, gabion retaining walls were used. Tree planting and earth modelling will also help set the scheme into the landscape.

A mixture of mass gravity gabion walls for smaller heights and Maccaferri's Gabion Terramesh® system reinforced with ParaGrid 50/05 for larger heights was utilised for value engineering purposes.

The site consisted of a 300m wall up to 5.5m high and a 100m wall 2m high.

Maccaferri Construction was appointed to design, supply and install the gabion retaining walls under Breheny who were the main contractors. Elliot Wood the design engineer for Extra MSA Group was the main client.

**Client:** Extra MSA Group

**Designer / Consultant:** Elliot Wood

**Contractor:** Breheny Civil Engineering

**Products used (Qty.)**

- Gabions N/A

**Date of construction:** 04/2019 - 09/2019

[Google Maps](#)

[Google Earth](#)



The tallest part of the wall at 5.5m high



Neatly placed stone in the gabions minimising voids



Terramesh® wall runs to edge of parking area and steps down



The wall surrounding the slip road and then the HGV parking area



Gabions with rail inserted planted trees & shrubs in front



Close up of the wall with the DT mesh