Cobham Services HGV parking area expansion
Cobham, Surrey

GABION TERRAMESH RETAINING WALLS
Product: Gabion Terramesh & gabions

Problem:

Cobham Motorway Service Area (MSA) 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 gamezone, 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 HGV 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 Maccaferris 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.

Maccaferris construction were appointed to design, supply and install the gabion retaining walls under Breheny who were the main contractors. Elliot wood were the design engineers for Extra MSA Group who were the main client.

Main Client:
EXTRA MSA GROUP
Client’s Engineering Consultant:
ELLIOT WOOD
Main contractor:
BREHENY
Installer:
MACCAFERRI CONSTRUCTION
Products used:
GABION TERRAMESH & GABIONS
Date of construction:
APRIL—SEPTEMBER 2019

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

Stand alone gabions with safety rails

Gabions with rail inserted planted trees & shrubs in front

Placement of granular material (in this case, Class 6F5 SHW)

Close up of the wall with the DT mesh