

# 3D Design Modelling and Digital Data Sharing in Embankment Stabilisation

OSBORNE

Repairing a failing embankment behind a group of flats provided an opportunity to use 3D modelling to improve efficiency and to share project data in real time via iPads.

PROJECT

Hook Road Embankment Stabilisation

CUSTOMER

Network Rail

LOCATION

Epsom

CONTRACT

One Team Wessex



# Issue

The wall between the flats and the rail embankment was failing. The work consisted of replacing the insufficient makeshift wall provided by the landlord with a properly designed and approved retaining wall. In completing the project, it was also important to create detailed asset data.

# Solution

A full 3D design model featuring animation and visualisation was created using BIM methodology. Attaching a programme of works to the model ensured the construction methodology was feasible and safe. Other aspects of digital data sharing using iPads included:

- Daily diaries, complete with weather, site hours, photos and notes.
- Progress photographs captured during the project.

Access to digital drawings and documents that could be annotated and shared in real time.

# Outcome

Digital technologies improved the efficiency of data capture, project execution and also the accuracy of site diaries. The common data environment acted as a central store for all data and a 3D model. This improved data organisation and management and created a detailed 'as built' record.

