

GeoGrow were approached to design and install two Rootlok earth reinforced retaining walls to two attenuation ponds for Tonic Construction on a new Bloor Homes in Faringdon, Oxfordshire. The retaining walls were installed early in the contract to allow the roads and sewers to be completed quickly to allow surface water to drain directly into the attenuation ponds.

## The works

The larger of the walls approximately 2.5Ms high was built with extended geogrids and a backfill length of 3M's due to poor ground conditions. The wall was designed as a tie-back build incorporating Stratagrid BBA certified geogrids using quarried type1 stone, which is compacted at every bag level, geogrids are installed at every third bag level (420mm intervals), a roller and HD wacker plate was used to compact the stone in accordance with Table 6/4 of the MCDHW specification for highway works. Pipe sleeves were installed during the wall build so that the fencing contractor could install fence posts easier and not disrupt the walls backfill during the fence installation.

The second wall had no loading parameters at 1.2Ms high and was designed as a standard tie back build with a small compacted stone backfill area of approximately 1M.

Both walls were hydroseeded on completion with a low maintenance grass seed mix in May and by the end of the summer the walls have a good coverage of grasses.

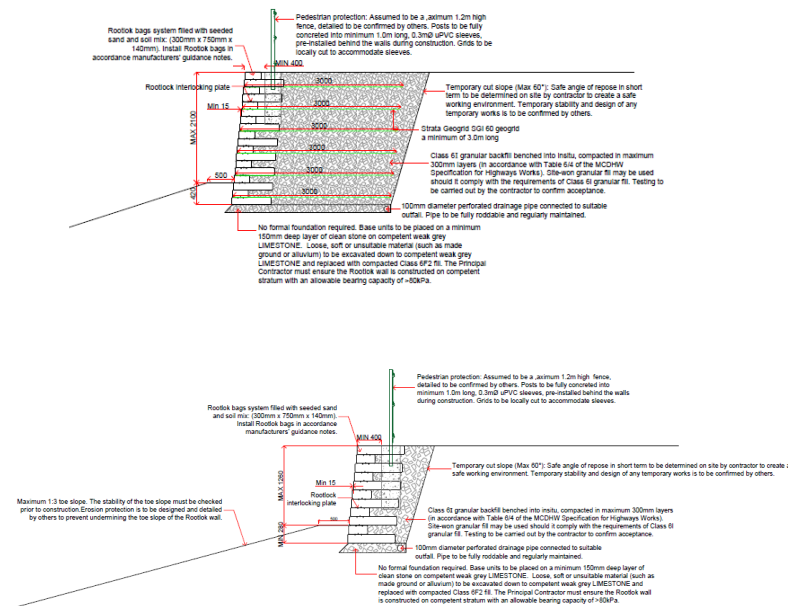
The Client, Tonic Construction and the Rootlok in-house installation team were very happy with the quick install and sustainable green finish.



**Contractor:**  
GeoGrow®

**Completed:**  
April 2021

**Rootlok® Vegetated Wall System installed 2  
attenuation ponds on a housing development in  
Oxfordshire**



Rootlok is a cost-effective system that provides end users with a strong, yet flexible, green solution for retaining walls. It's ability to vegetate creates a retaining wall that blends seamlessly with the natural environment. It is important to consider the choice of vegetation to ensure that the result is aligned with expectations and the ability to effectively and safely maintain it.