Case Study

Cribwall For Sunway South Quay in Petaling Jaya, Selangor Darul Ehsan.

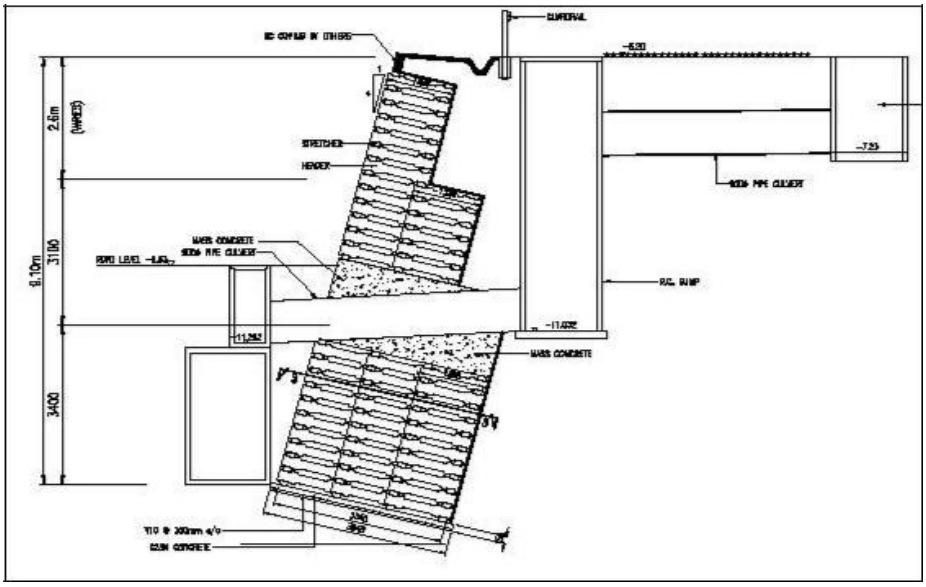
Cribwall was constructed to retain the driveway area of the 2 block-Condominium. The main contractor was Sunway Geotechnics (M) Sdn bhd and was awarded the job by Sunway South Quay Sdn bhd.
The project is located in an old tin mine near Sunway Pyramid.

The ground consisted mostly of hard materials.

Extensive hacking and excavation is required to cast the footing of the wall because the ground consists of hard materials. Furthermore, there is a 3.40m deep culvert adjacent to the alignment of the wall.

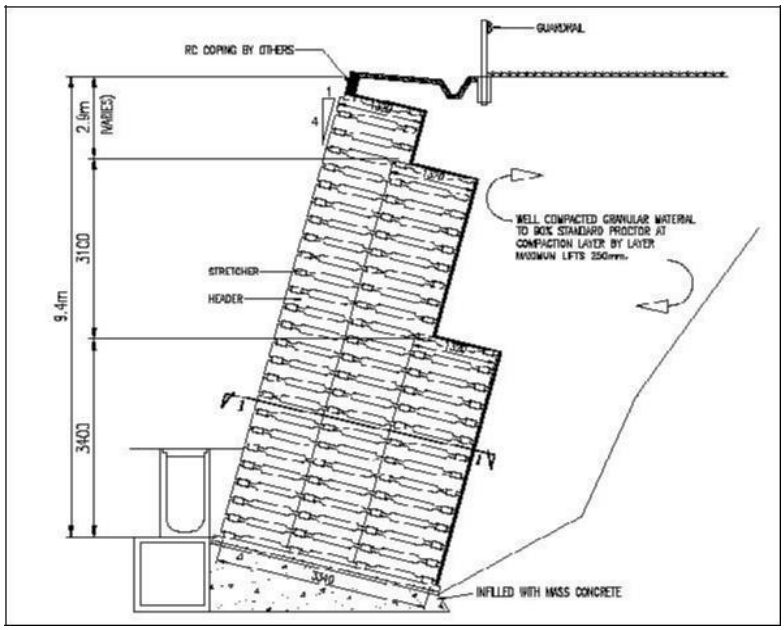
Since the Cribwall footing has to be at the invert level of the culvert (to avoid transferring the additional lateral load to the existing culvert), 3.40m excavation from the road level is required.

Hard materials were hacked by a hacking machine (b).

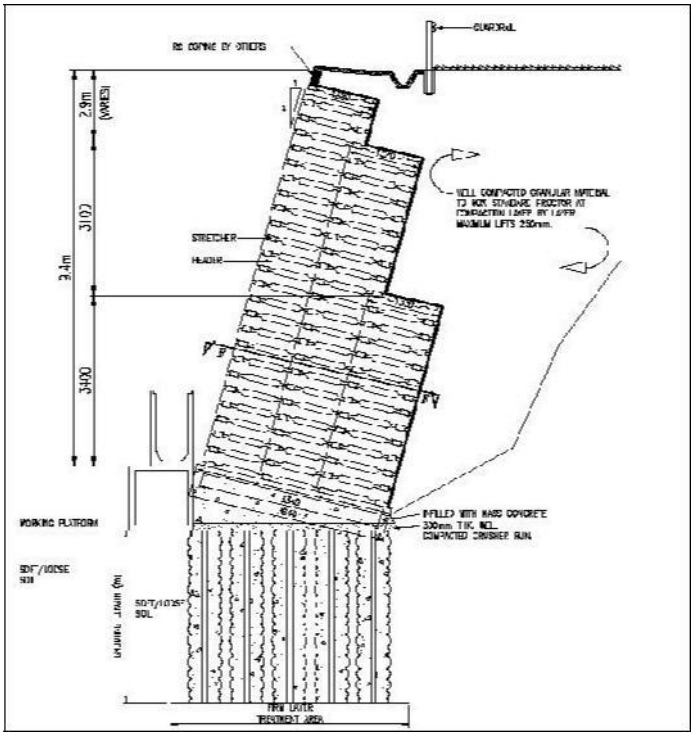


Section showing the depth of footing from the road level..

Mass concrete were poured at certain sections (below the footing) while some sections requires grouting to achieve the allowable bearing capacity of 225kN/m^2.



Mass concrete below the footing



Normal grouting for ground treatment.

The construction of the wall was cut short to 216m from the design length 248m due to obstruction of existing water pipe. Walls up to 8.50m high were constructed with curved profiles to match the existing road.

Before vegetation

The architect of the project proposed the installation of HDPE net behind the front stretchers so that they can plant flowers and vegetation which will be fully grown a couple of months later, making it aesthetically pleasing.

After Vegetation: Cribwall with creepers plant.