Promax Case Studies



Our Underground Tanks Overcome Every Challenge







Who: Chester Consultants and Frontline Drainage who were managing stormwater retention on a private site.

Where: Hobsonville Point, Auckland

Products: 1x 3000L Promax Enduro Super Duty Underground Tank, Promax Hydraulic Uplift Restraints and a Promax Trafficable Riser

Why: Stormwater retention tanks fit perfectly into housing developments, including those becoming commonplace in Auckland's Hobsonville Point.

The installation of an underground tank presents any number of challenges including trafficability, safety, limiting the site footprint, and compliance.

Chester Consultants and Frontline Drainage were in charge of stormwater retention on a private site in Hobsonville Point and they asked Promax for an underground solution that would tick all boxes.

Thanks to our renowned "outside the square" thinking we were able to provide a rectangular answer; a tank that allowed for a shallower, safer and easier installation.

What: We supplied a 3,000 litre Promax Enduro Super Duty Underground Tank. The rectangular shape of this tank has several key advantages over conventional tank designs and ticked every box at Hobsonville Point including:

Trafficable. Our underground tanks are trafficable with a Promax trafficable riser inset into reinforced concrete driveway.

Safety. With conventional tanks, the walls of the trench need to be battered back for safety, increasing the spoil and backfill material. With the rectangular shape of the Promax Enduro Super Duty Underground Tank, the trench is the same width as the depth and battering is not required.

Small site footprint. No safety batter and a shorter tank length result minimise the site footprint.

Easy install. Less backfill material and no haunching makes installation a relatively simple process.

Flotation. Ground water can rise to ground level and under these circumstances, an empty tank will try to float. We solved this potential problem with our Hydraulic Uplift Restraints that mitigate flotation.

Compliance. Of course! PS1 to sub-soil class M provided.

As an additional benefit, a shallower tank means a reduced depth to invert. This wasn't an issue in this case as the tank was used for retention. But if it was intended to be a detention tank, which also collects stormwater with the purpose of managing the flow of runoff entering streams and rivers, there could be a problem if the stormwater connection is high invert. That rectangle shape means no problem.

Promax have always been innovators. The Enduro Super Duty Underground Tank is yet another example of that - it's shaped to overcome every challenge.

