

CASE STUDY



E'GRID 2020SX

Biodiversity Business Park, Epping VIC

Project Overview

Our customer, a Victorian civil construction firm, recently secured a contract to perform site remediation and bulk earthworks of a decommissioned quarry. The old quarry site is being remediated ready for use as a new business park, with extensive work required to get the soil into shape before construction could begin.

When complete, the Biodiversity Business Park will provide over 30,000 square metres of building area, conveniently located 20km from Melbourne's CBD. With access to an expanding infrastructure network, the site in Epping is strategically placed to attract large industrial tenants.

However, before any construction work could begin, the damaged soil needed significant remediation and stabilisation.

Challenges

This project involved mass bulk earthworks, including filling the existing quarry site and remediation of uncontrolled conditions.

After decades of use as a quarry, the area was in poor condition, and over 300,000 cubic metres of bulk earthworks would be required to bring the site up to spec. To add to the complexity of this project, the contractor needed to remediate and reuse 100,000 cubic metres of contaminated soil.

With the business park zoned for industrial use, the underlying soil would need considerable reinforcement to ensure it could accommodate heavy-duty use above ground.

The Solution

The contractor worked with Polyfabrics to select a geogrid that would provide stabilisation and reinforcement to the subgrade soil. E'GRID was selected as an ideal solution, providing reliable distribution of loads and reduction of stress

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concentration over the soil.

This rigid biaxial geogrid is commonly used for subgrade reinforcement, rock stabilisation and erosion control. It is available in a range of strengths - in this case, the 20/20 variant was selected, providing excellent tensile strength and shear resistance along with long term stability in the soil. E'GRID rigid biaxial geogrid is 100% UV resistant and made from polypropylene, making it neutral when installed and unaffected by naturally occurring acids, alkalis and microorganisms.

The Result

Working around culturally and environmentally sensitive areas, the contractor was able to install 30,000 square metres of Polyfabrics E'GRID geogrid quickly and easily, providing a cost-effective long term solution.

For more information and specifications on E'GRID rigid biaxial geogrid, take a look at the fact sheet online or contact our engineering team for advice and assistance on your unique project.

