SOFT SOIL COUNTERMEASURE OPTIONS



Over-Excavation

Method

Pros

Cons

Remove existing soil and replace it with select fill.

Tried and true method using conventional

Depth of unsuitable

material is unknown.

How low do you go?

materials.

Woven Fabric (Geotextile)

Installing a layer of geotextile and placing a material (usually an aggregate) on top of it.

Provides separation to prevent pumping of subgrade soil into aggregate.

Greater thickness of aggregate required compared to geogrid.

Chemical **Treatment**

Chemically modifying the existing soil by adding lime or a similar product.

> Effective on moderate to high plasticity clay soils.

Installation possible only in dry weather above 40 degrees F. Lengthy curing period required (3-7 days.)

BX Geogrid (BX 1200)

Installing a layer of BX geogrid and placing an aggregate fill material on top of it.

Provides separation with well-graded aggregate and stabilizes more effectively than geotextile

> Lower performance than TriAx Geogrid.

TriAx Geogrid (TX 160)

Installing a layer of TriAx geogrid and placing an aggregate fill material on top of it.

Highest performing geosynthetic. Separates and stabilizes soil with least amount of aggregate. Proven to maintain performance long-term.

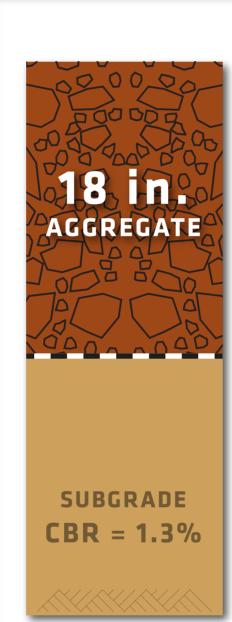
The TriAx Geogrid line item may cost more. But, the total solution costs (grid and aggregate) will be lower than with other geosynthetics.

How much aggregate is required for each method?

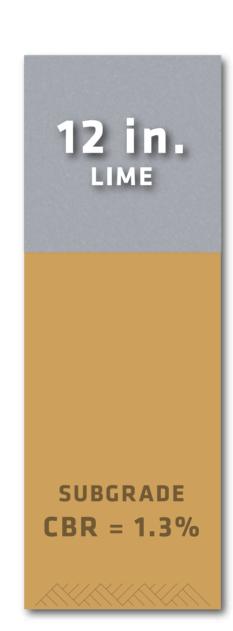
Example subgrade has CBR (California Bearing Ratio) of 1.3%



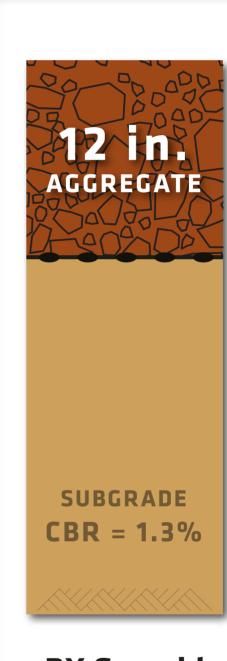
Over-Excavation



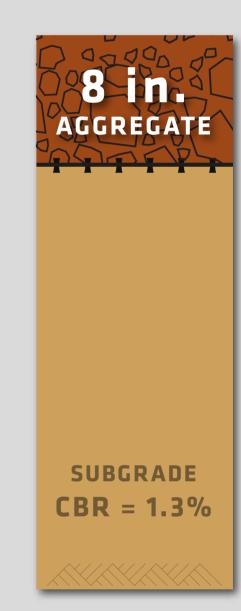
Woven Fabric (Geotextile)



Chemical **Treatment**



BX Geogrid (BX 1200)



TriAx Geogrid (TX 160)

WHATEVER YOUR PROJECT, WE CAN HELP

Tensar International is a manufacturer of proven geosynthetic products and full provider of engineering services. Backed by extensive research and thoroughly tested, Tensar's world-renowned geogrid products have set the industry standard. We help engineers, contractors and owners use geogrid to achieve more cost-effective, reliable solutions for soil stabilization, earth reinforcement, and other site development challenges.

LEARN MORE: info.tensarcorp.com/soft-soil-solutions

