

SOIL REMEDIATION

Nature has a way of replenishing nutrients in soil that chemical fertilizers cannot.

Tremendous care was taken with this project to prepare the soil on site to enhance its natural characteristics for water absorption and aeration, nutrient enrichment, and replenishment.

Drainage and Water Absorption:

The site was graded to make the most of thousands of cubic feet of sandy loam, which had been imported to the location in the 1970s to create the original landscape. A natural layer of clay several feet below ground level was punctured with holes to allow water drainage down into the aquifer below. Soil was mixed with mulch and layered with the sandy loam to achieve optimum drainage in nutrient-rich earth. Once grading was complete, gypsum was rototilled into the upper layers of soil to break it down and help loosen it.



SmartScape team member Guy Stivers (left) demonstrates his unique planting technique, which boosts the organic effect on the surrounding soil that feeds the plant. With him is Pablo Santos of Harvest Landscape Enterprises, Inc.

Nutrient Enrichment: Mulch

and other organic materials have been used onsite to boost the nutrient content of the soil. Healthy soil is a “living” soil, containing millions of small creatures such as worms and insects, (which you can see), and microscopic organisms such as nematodes, bacteria and fungi. These life forms convert plant debris into organic matter that nourishes plants. They also create small tunnels and pockets in the soil, opening spaces that allow water and oxygen to permeate the roots and feed plants what they need to live.

Replenishment: Organic materials such as mulch, compost and worm castings enhance the number of organisms in the soil, and help to create an eco-system that sustains itself without the need for chemical fertilizers.

Vermiculture: Worms are used to break down organic matter, fertilize the soil with their castings and enhance the amount of air and water that enters the soil.

Carbon Sequestration: Soils play an important role in capturing carbon from the atmosphere and sequestering it in the earth. Generally speaking, the healthier the soil, the more carbon it contains. The carbon, in turn, improves soil structure and productivity.