

East Altadena Resilient Land Engineering Program

Tiered Soil Remediation & Resilience Model

1. Core Structure

This program operates as a diagnose → classify → engineer → remediate model. The \$50,000 package represents entry-level remediation, with pricing scaling based on soil severity, slope risk, erosion exposure, and infrastructure complexity.

2. Soil Classification Framework

- Hydrophobicity testing
- Burn severity assessment
- Erosion and runoff grading
- Slope and drainage evaluation
- Soil compaction measurement
- Organic matter and carbon testing

3. Tiered Remediation Structure

Tier 1 – Standard Resilience (\$50,000)

Includes 15–20 tons of imported engineered amendment, local soil blending, fire-smart landscaping, irrigation upgrades, and certification audit.

Imported Soil (20 tons @ \$500)	\$10,000
Other Costs (labor, irrigation, audit, admin)	\$27,000
Total Cost	\$37,000
Gross Profit	\$13,000

Margin	26%
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Tier 2 – Moderate Remediation (\$65,000–\$75,000)

Includes 25–30 tons amendment, erosion engineering, enhanced infiltration systems, and expanded certification.

Imported Soil (30 tons @ \$500)	\$15,000
Estimated Total Cost	\$50,000 (avg)
Average Revenue	\$70,000
Gross Profit	\$20,000
Margin	≈ 28–30%

Tier 3 – Severe Remediation (\$85,000–\$120,000)

Includes 35–45 tons amendment, excavation, grading, reinforced stabilization, and advanced infrastructure engineering.

Imported Soil (40 tons @ \$500)	\$20,000
Estimated Total Cost	\$70,000 (avg)
Average Revenue	\$100,000
Gross Profit	\$30,000
Margin	25–35%

4. Five-Year Projection (1,000 Homes)

Tier 1 (500 homes @ \$50k)	\$25,000,000
Tier 2 (300 homes @ \$70k)	\$21,000,000
Tier 3 (200 homes @ \$100k)	\$20,000,000
Total Revenue	\$66,000,000
Estimated Gross Profit	~\$18,500,000
Net After Overhead (5 yrs)	~\$14,000,000–\$15,000,000

Positioning: This is a Resilience Engineering Contractor model with a proprietary carbon-enhanced soil system. Carbon revenue remains supplemental, not foundational.