Design Rationale

The basic design for the soil pulverizer is to provide soil digging, pulverizing, loading into the tractor bucket, and dumping into the CEB press in one step. Otherwise, one must use a tractor to dig, followed by pulverizing with a stationary pulverizer, and followed by a conveyor belt into the machine.

The Soil Pulverizer satisfies many of the OSE Core Values

Open Source: The LifeTrac was designed from the ground up with the intention of making freely available not only the design, but also the education necessary to understand, use, and improve the design.

Low Cost: As compared to its commercial equivalent, the LifeTrac is 1/5 of the cost to acquire. There are even more dramatic reductions in the cost to own.

Do-It-Yourself: Most of the components and sub-assemblies are held together with bolts. If you've got a wrench you've got a tractor.

Closed-Loop Manufacturing: Because the materials the LifeTrac is made out of require so little machining, they can be produced by future GVCS machines. No need for exotic materials or fancy injection molding.

Industrial Efficiency: The LifeTrac's performance is designed to be comparable to industry standards, and we are approaching that point quickly.

Lifetime Design: Unlike what is available commercially, the LifeTrac is designed to function indefinitely. Design for obsolescence is avoided, as maximum service to the user is part of the design.

Robustness: It ugly, but it works.

Technological Recursion: LifeTrac is part of technological recursion at the deepest level, in that it is responsible in part for extracting raw resources from which all things are made.

Local Resources: What good are the resources under your feet if you can't use them? The LifeTrac opens up new avenues for self-sourcing.

Replicability: With full documentation of how to source the materials, build the tractor, and use it in the field, the LifeTrac eradicates barriers to entry.

Product Ecology

Uses

-  **Induction Furnace** - Steel
-  **CNC Torch Table** - Steel
-  **Hydraulic Motor** - Power
-  **Power Cube** - Power
-  **Tractor** - Mounting