Sustainable design - Permaculture Implementation - Conservation

Synchronis City - Trine



Fly Ranch Submission 2020

The Environment is of utmost importance in every regard involving the creation of this new technologically advanced desert city. The golden rule of the build is Easy On The Earth. All plastic will be made into art or reused. We will use as much reclaimed wood as possible and anything we buy we will implement research into how it is sourced to ensure that it comes from a place that meets our presidents and standards. Human waste will be transformed into golden soil. All roads built will be measured and the environment will be replaced to offset the damage. The goal for this project is 100% land restoration, utilization and conservation. We will pay mindful attention to every detail and in the tradition of Burning Man, we will leave it better than we found it. Each moment of implementation of the plan to build will be measured and calculated to ensure the utmost standards of environmental protection are at the forefront of all we do. We will treat the Land and all it provides for us with compassion.

Energy



Cost is dependent on usage. A dollar a watt is a reasonable approximation for power cost.

Energy – Energy will be sourced from every viable method. Using state of the art technology. We will catch every breeze and every beautiful day. If the sensitive ecosystem allows, we will borrow its warmth from the geothermals as well as refill what we have taken. Our community gym setup and movement spaces will have equipment that will harness the energy of human effort. For example if we have cycling machines, they will be attached to electricity producing gyros that will contribute to our grid. Our sprung floors for movement spaces will be pressure sensitive producing power as well. Lifting dumb bells will turn a gyro. Energy will be produced where energy is used. Each dwelling will be net zero. Every roof will be covered by panels, producing surplus. The parking lot for cars will be shaded by solar panels for charging and surplus. As water passes through our cities system turbines will turn to produce energy.

We will do some simple math for our energy consumption and build the infrastructure to produce three fold what we consume. Our grid will be independent and well guarded. Lines will be run underground. Our internet will be fast as the fiber optics we will run will allow.

Geothermal is possibly our biggest contributor to our power needs if we can find a way to harness this energy of the heat without disturbing the flow and perfection of the environment. The premise behind Nuclear energy is that steam turns a turbine that produces power, cleanly. My brain imagines a system that mimics both the natural formations of Fly Ranch with the principles of nuclear energy in its usage of steam. Perhaps this could be a backup system should something go wrong. Only used when it's needed. Should it be needed. As I have stated previously, Fly Ranch will use this only if we can do so without destroying the environment to do so. The power stored beneath our feet could power the future of this land along with all the other ways we can harness nature.

<u>Dwellings & Community Spaces</u> <u>Homes</u>









Materials: Air crete, shipping containers, ethically sourced/reclaimed products. each

Price:18,000\$

This area of the United States is on fire and vulnerable to Earthquakes. This really specific area we aim to manifest a civilization on is shadeless, cold, hot, windy, sandy and sensitive to humans existing in it. The honest answer is to insulate with the ground. There are many advantages to this method. The first and foremost is land conservation. What is above is not permanently affected by what is below. Land conservation is 100% possible after the initial disturbances that will come from us all being present with the land. Privacy in these dwellings is guaranteed. Aerial photography doesn't tell much. A city can eventually emerge beneath the desert in an earthquake proof and fire proof utopian dance dream. When top side, its beautiful, horticulture permaculture beds six feet tall mounds we use the dug out soil to create are growing side by side on our well maintained foot paths. Cars are located a walk away and are shaded beneath solar panels which contribute to the community grid.

Each home will be buried on the sides. The roof and walls will be reinforced to withstand the weight of all happening around it. The homes will be made simply out of reclaimed reinforced and cleaned shipping containers. It will not be expensive to buy three 10x40 shipping containers and make a 1200sqft house. The inside of these dwellings will be a clean, modern, , well filtered, sealed to the elements, quiet, cozy and large enough for a family of five. They will be equipped with modular walls

that can be rearranged as the users need. From a studio to a three bedroom.

Top side each home will be equipped with Solar panels as well as a windmill. Power will be produced where power is consumed. This is a general rule for all structures that will be developed in this project. Each home will be equipped with a Natures Generator Platinum Wind and Solar system for huge power storage as well as mobile portability. These Battery banks will store power and come pre packaged with solar and wind inputs. It will be equivalent to each home having a 3600 watt generator. The biggest power consumer a typical american home has is the refrigerator and hot water heater. To replace the need for the fridge is an attached root cellar to the underground home that will stay in the 50 degree range all year round. Hot water will be sourced from geothermal if possible to not disturb the natural environment. If this is not possible each home will be equipped with a tankless hot water heater for instant hot water needs. Heating and cooling will be easy because insulating will be done by the Earth itself.

The land above these dwellings will be used for the communities farming and recreation needs paying mindful attention to always respect and restore the natural environment as well as improve the floral situation through mindfulness and conscious effort. What is beautiful about this approach is above the ground will not be cluttered with human sites. Aside from above ground community spaces and our water tower art centerpiece, the dwellings for all of us will be underground.

The Eternal Temple



Material: Air Crete, bamboo, reclaimed metal. Cost. \$35,000

In the true tradition of Burning Man we will erect a temple that will act as a centerpiece of our good will and memory of whatever can be imagined the temple to represent. This space will also serve as a venue, education center and a grand display of sustainable design.

The Star Observatory

Materials: Reclaimed Wood, Bamboo, Creative artistry.

Cost 30,000\$

A quiet place to witness and observe the beauty of the celestial bodies.





Water

Cost: \$120,000 Tower prefabricated off site. Artistic additions will be purchased from an artist.

A state of the art 165ft tall beautifully art designed water tower will be constructed and all water to fly ranch will be gravity fed into each housing system as well as to advantages areas located around Fly Ranch. As water is gravity dropped from the tower it will pass through a series of water turbines to generate power. The higher the tower the better the pull of gravity, the more electricity generated. The water system will be on a continuous pump system that on the out end mimics the water pressure and trickles back into the water source we draw from. Never sucking it dry or taking too much.

Water for drinking will be filtered through industrial grade carbon filters, softeners and reverse osmosis machines.

The water tower will also be a viewing tower for a centerpiece 360 degree view of all of Fly Ranch. From here four fast travel ziplines will be created in multiple directions for human fun and cargo alike as well as speed from A to B on the property with minimal disturbance of the environment. The Tower will power itself by harnessing wind energy, solar and gravity fed water turbines.

Waste Products

Human waste – The future of this world has no room for pissing and shitting in our shared fresh water. Fly Ranch will be an example for all the world to emulate on how to process human waste in a way that is mutually beneficial for all beings involved. The method is Simple, ash and soot to change it to dirt. We will grow flowers out of the population's waste. We will identify native flowers who will find this source of nutrition viable and propagate the winners. Bathrooms are bucket based and smell free with this method. We will be responsible for the biological material we produce and we will act responsibility to assure this material is worthy of producing our flowers. We will rejoin the full circle of the decomposition system by managing ourselves appropriately.

Plastic/wood/non recyclable waste - We will invest in technology to turn certain plastics into 3D printer material. We will create purpose for every scrap of trash or plastic brought on site. From repurposing of bottles for bricks to repurposing of cans for metal. A creative solution for all of the trash usage is in the mind of the treasure seer. If we make it a goal, a community like ours will rise to this challenge.

"CLOSE THE LOOP AND TRANSFORM THE POOP"

