Starter Camp

Premise:

Overcoming the gap between homelessness and mainstream living is almost impossible.

Objective:

Create a strata of infrastructure economical enough to be achieved by the homeless, but the appearance, sanitation, and safety must impose no blight upon the surrounding properties. This would provide long term stability until a better solution arose.

This would provide them with the stability and health to pursue education or employment, and even ministry to others. History has proven that if all you do is feed and house people without touching their hearts, you only acquire more people to feed and house. Purpose and empowerment are essential to changing lives.

Action:

It begins with an individual or group willing to oversee a limited demonstration of suitable technologies. External oversight will be needed to interface with the surrounding community.

This would empower individuals and nonprofits to redeem relatives or small groups without the need of public funding. It would also provide people graduating from programs a next-step alternative to being dumped on the street.

A small demonstration program would encourage the city to make it legal for compassionate people and ministries to care for people in need.

Example Technologies:

These technologies are proven and documented. The structures and utilities are either portable, or can be dismantled and moved with negligible environmental impact. This makes even a limited lease period of a site practical. Furthermore, this transitory capability could not be construed as improvement upon the property and thereby impact tax assessment.

The costs of these technologies would be within reach of most homeless people on an extremely low rental basis, by which their cost could be recovered within a few months. After this, positive cash flow would be available.

The technologies could be produced and installed by docent candidates without conflict with civic codes. Their occupation however, may invoke some level of civic obstruction, and would need to be negotiated.

For a single dwelling within a fenced and lockable area, consider this bolt-together structure encompassing about 210 square feet.

The frame for this 16'8” diameter dome can be built for about $500. Properly covered it can be weather-proof and easy to heat. The cost of membrane coverings varies widely, but is typically less than half the cost of the frame. The frame dismantles down to a bundle of struts a little over 5 feet long with a weight of less than 150 lbs.

The photo on the left was occupied by otherwise homeless people for a number of years.

Since the covering is a membrane covering less than 800 sq.ft, it qualifies as a tent and does not need a building permit.

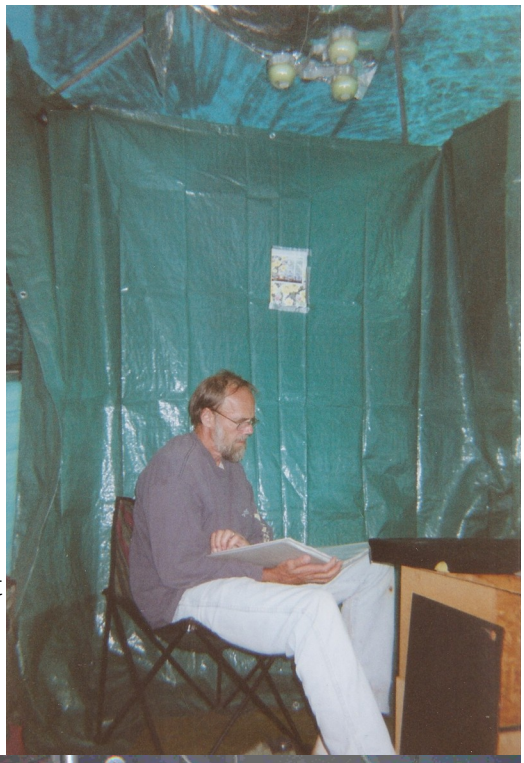
This next photo shows an identical frame providing my wife and I shelter on a primitive camp site we had rented for a week.

As seen, the covering could be opened for fresh air in the day time. It took us less than an hour and a half to set up this camp.

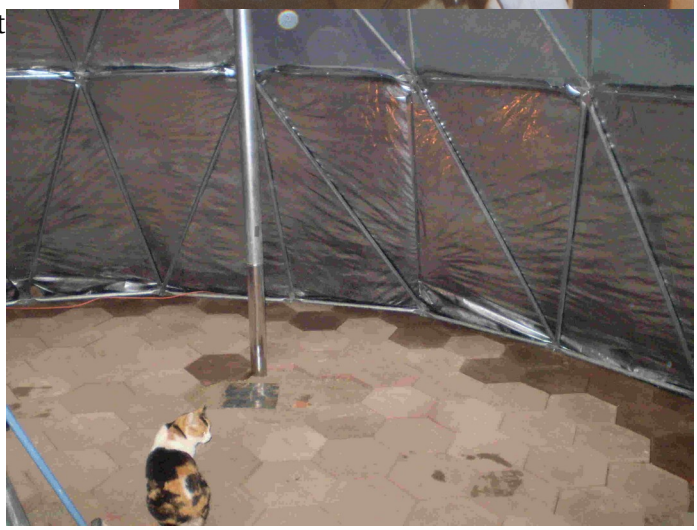
This interior view shows the partition that walls off the master bedroom and bathroom from the kitchen, dining and living room. You can also see the chandelier comprised of scroll-work from a screen door decoration, with a capacity of up to six votive candles. (Yes, there's even artwork on the walls – eat your heart out Hearst Castle).

The entire camp loaded nicely into the 6'-long bed of a compact pickup, and I could still see over the load through the rear-view mirror. When we would rent a campsite for a week at a time the appointments of this cabin included a self-contained flush toilet and a bath pan we would use for hot solar-heated baths every afternoon.

Other embellishments included the kitchen, wood stove space heating, lighting, chairs and hammocks as desired. From this campsite base we would tour an area with all the convenience of a nearby home (using the economy vehicle that carried it).



For another residence option, consider this 20 ft diameter (x 10 ft tall) parabolic model. This is based upon the same metal frame principles as the dome above. This one features a high efficiency enviro-friendly (and virtually smokeless) cook stove built into the floor. Unfortunately, the lovable kitty is no longer available.



Although the floor covering may appear to be a permanent luxury, it consists of off-the-shelf pavers from a local home improvement store. These could all be rounded up and moved with the rest of the structure should a move become necessary.

The cook stove (shown in the floor of the 20ft dome illustration) is explained in the photo below: The hole on the right widens out to a burn chamber. The bottom of this chamber is connected to the riser shown as the hole on the left. This blasts the exhaust against the bottom of the plate covering the rectangular hole. The exhaust is then sucked underground to the flue pipe. This chimney creates the vacuum that in turn blasts the combustion air into the burn chamber. A counter top version of this stove is also shown.

During the summer, when indoor heat is no longer welcome, a duplicate set of holes can be excavated outdoors and the metal components can be painlessly moved outdoors to their seasonal home.

If multiple shelters become involved, You might add a larger structure such as a 28 or 30ft model to serve as a community cooking-dining-living room. The operation then becomes a conference ground style micro-community. Centralizing these and other amenities rather than individually duplicating them can save enormously when compared to individual replication.

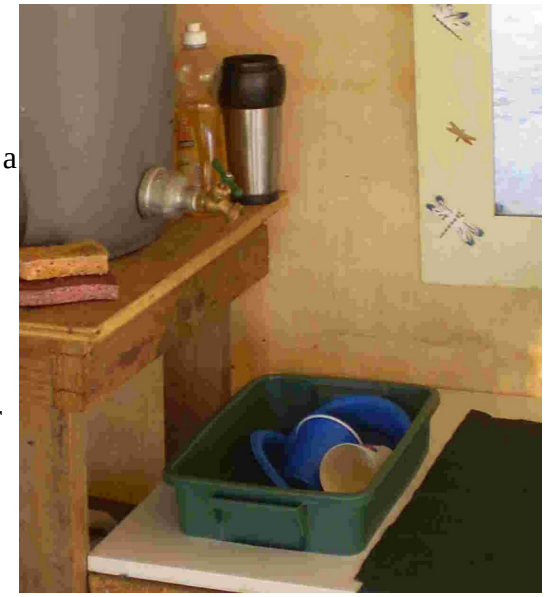
To safely manage flue gasses, a section of steel pipe can be adapted to intercept the topmost dome struts.

With longer bolts and an extra set of nuts on the outside, the bolt ends can be adjusted to provide the desired clearance of the flue pipe itself.

During the summer, this piece can serve as a vent to exhaust heated air. A black-painted section of sheet metal pipe extended above it might enhance the draft of air pulled through the rest of the structure.

Lighting would be provided as needed by 12 volt solar electric systems typically costing about $300 – off-the-shelf car batteries not included. Anything under about 48 volts is classed as “Safe Low Voltage,” and thereby bypasses a litany of building and safety code concerns. This system of energy can provide adequate LED lighting, recharge cell phones and hand tools, and even support laptop computers.

In one experiment I connected a 2kw inverter that powered a small arc welder.



Water would be hauled and stored on site, avoiding yet another utility connection. In this illustration we show a 30 gallon plastic trash can with a spigot installed in the bottom. This provided potable water for sanitation and other needs of a homeless camp for months, until the community was uprooted by code enforcement.

This sturdy “recycling cart” could haul hundreds of pound of water or other materials.

I once equipped a friend who recycled hundreds of pounds of glass every week with this cart, that had a wheel capacity of about 800 lbs. The Cart was 7’ x 30” x 16” deep, and cleared the ground by 6”.

It was also equipped with a handle for pushing it that could be removed for concealment behind shrubbery.

On most nights there would be enough room to sleep in it. He called it his “coffin.”

Finally, when significant building materials or belongings must be hauled, small highway class trailers can be conscripted, balanced, and manhandled.

Perhaps the most therapeutic activity that I get to experience is being barefoot and busy in a garden. There is something primal and fulfilling about this that separates me from all the demands of finances, taxes, regulations, vehicle expenses, politics, insurance, people who were too busy to play outdoors, and even my own ominous concerns about the future. I am engaged and empowered by something positive, against which no one will argue.

In a word, I would suggest that even the maintenance of established container gardens could help connect people to a sense of being needed and of productivity. Beyond this, perhaps growing food for themselves and the ministries that have helped them could provide purpose and direction to minds otherwise focused upon overcoming the results of wasted years.

Although gardening would be just one of many options for providing direction and purpose for broken lives, I offer a few of my own experiences and objectives below:

It occurred to me that I might be able to save water by creating a plastic-lined bowel under a garden space. So I dug out an oval area was approximately 5'x7'.

I laid some perforated drain pipe, connected a riser for access from the surface level, bedded it in gravel, and covered the pipe and gravel with a layer of landscape fabric. The riser would allow me to monitor and control the water table and nutrients if necessary. The result did indeed reduce the maintenance and water needed

That same year I topped a plastic- lined trench with a row of cement blocks and planted sunflowers in alternate holes. The cement blocks had been sealed to prevent water from soaking up into them and evaporating. The shorter sunflowers shown here are at least 6' tall.

The following summer when that part of the yard was generally ignored, a crescent of much richer growth testified to the water-saving benefits of the membrane beneath the former crop of sunflowers.

Upon further considering captive water tables, I visualized creating a trench profile that could be implemented in any length. Having a garden area underlain with multiple adjacent segments of this format could make a standardized design flexible enough to fit a wide range of garden shapes and spaces. Beyond this, as a trench, it could be implemented in commercial-scale lengths by mechanized equipment.

If the membrane terminated in foot-wide plateaus a foot below the surface between parallel segments, there would be no visible evidence of the trenches on the surface (except for occasional risers). This would allow large areas for lawns or other decorative vegetation at reduced water needs.

When the need arose for food production, it could be replanted with vegetables overnight. This would be an excellent means of sustainable prepping with little impact upon your lifestyle in the meantime – other than a major reduction in the amount of water needed.

Take a deep breath before you start moving dirt. You're going to need it!

In order to maintain a consistent profile, I made a depth guide consisting of a 10' 4x4 with chains suspended to indicate the depth at various points of the cross section.

I sloped the drain pipe towards the riser by about ½" per foot (purely arbitrary, but I assumed the water would be intelligent enough to take the hint).

The perforated riser was installed and wrapped with landscape fabric to keep dirt and mud from entering it.

The drain pipe was also wrapped, bedded in a thin layer of sand, and then the sand and the pipe were overlain with a 3' wide piece of landscape fabric. The back-filling then began.

Two butternut squash seeds from a squash butchered in February were planted, and they exploded into tendrils over twenty feet long. By the end of the season they had produced four dozen mature squash.

For an additional water saving technique, consider: Where do weeds thrive – even in summer heat? Seriously, if you were looking for small green unwatered plants in the landscape about town in late summer, where might you find them? How about adjacent to sidewalks and driveways, and even in cracks in seldom used pavement?

So cover your membrane-enhanced garden with 12” cement pavers that are offset to allow holes exposing only about ten percent of the surface of the ground to show through. For plants that require less spacing, develop a pattern from 4” by 8” pavers – although you would need to leave some of the spaces unplanted to allow pathways. Plant your things in these holes and you save about ninety percent of the surface evaporation.

The pavers could be temporarily removed if compost etc. needed to be added to the garden.

In actual practice, consider the tender seedling barely visible poking through the lattice near the bottom of the next photon. This was transplanted there on the first of September on a 100° day. Nonetheless it prospered as shown in the photo on the right, and managed to produce a mature butternut squash before the plant was destroyed by frost.

There are an endless variety of sub-code technologies for safe comfortable, and meaningful living. I am sure that many of them are far better than those I have offered out of my own experience.

In any case, I believe that such an infrastructure strata could provide an alternative to absolute disaster, until society in general can come up with a better solution.

For additional technologies and details, visit technosmith.com