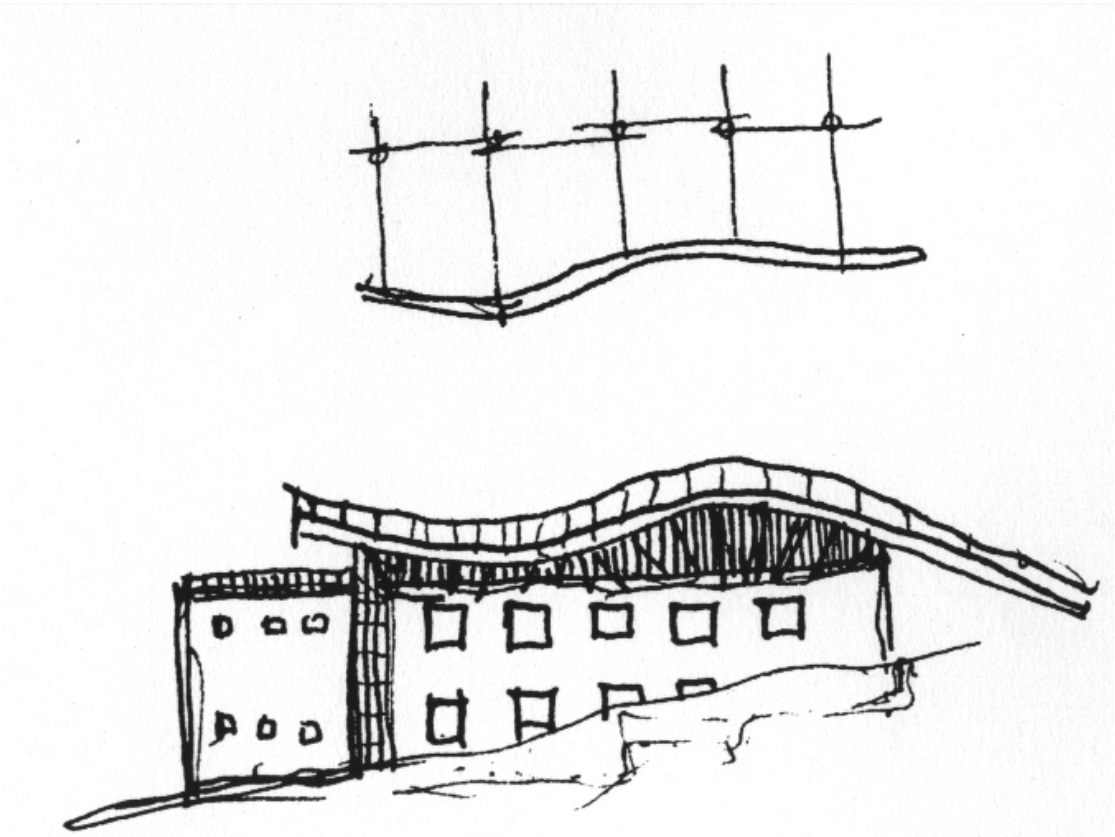
Incremental Growth

It is the architect's role to challenge the conventional thinking on how a project is developed. Our society has allowed the role of the architect to become one of decorator and permit expediter. This project is a perfect example of how by bringing in architecture at an earlier point the whole project may benefit. Instead of defining the scope of the project as an individual building, i.e.: "hospital" the architect can help to devise a methodology for growth and development and develop a series of tools to allow future growth to follow. A project like this is in more need of planning then of individual building design, but by developing planning tools it will



The progression of the design started with work on a larger structure of mass wall and light roof.

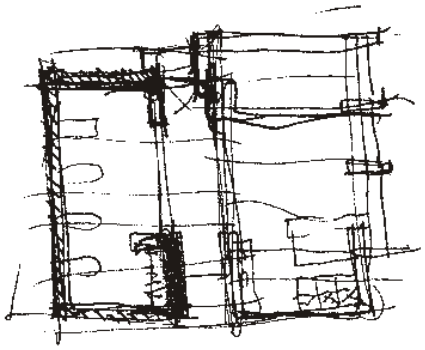
The design progressed as the larger parts were dissembled in to smaller parts with a less rigid composition.

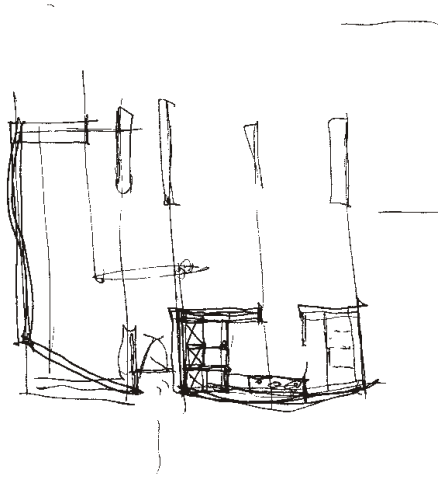
make for more dynamic designs.

An incremental growth model is ideally suited for Gesundheit. Make use of the volunteers, low skill, low cost. Minimize the need to import skills and materials. Be wary of high skill projects and high cost materials. Make use of evolutionary development. Buildings and systems change and become more dynamic over time. This is already in evidence at Gesundheit in the several existing buildings. Although there is no overall design concept, there is a linkage running through the different buildings. Sustainable development is well suited to incremental growth. It is in its very nature an incremental path.

Flexibility over the long haul should be maintained. An alternative health care model may slowly change over time, with new treatments and approaches to health care. A single building with all capital gone does not lend itself to change. A series of flexible buildings will evolve over time to be a more efficient model.

The first step in using the Gesundheit institute as a subject for this proposal is to look at what happens on the site and how an incremental approach to development can work in such a situation. We start by taking a look at the site and the functions of a fully realized Gesundheit Institute. Can the master plan be broken down into smaller pieces? By breaking the master plan into smaller blocks, a pattern of development for systematic growth can be established. Trying to solve all issues at one time with one action will create problems for a volunteer based effort. By looking at the simple needs for future growth we can break the project into different areas.





Healing

How to design for various types of healing.
What is required on a programmatic level for "alternative" healing?
The need to develop flexible thinking that leads to flexible buildings.
The Gesundheit model of humor in healing and how it plays out in the buildings themselves. Patch has suggested that the hospital have trap doors and light fixtures to swing on. Although these ideas may be hard to implement the idea of buildings that make the users smile and have fun is a great concept.
The importance of sustainability as a core design concept that impacts more then just the buildings. Sustainability as healing concept. Healing the earth as a part of a holistic healing approach.

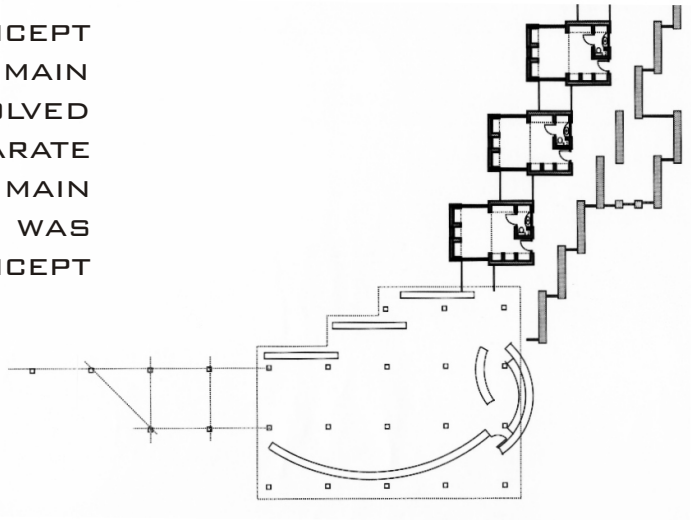
Eating/Meeting

Food is a critical part of Gesundheit. This is no hospital cafeteria.
How are meals and meetings organized?
How will this change over time?
Where/ how do people eat?
Who prepares? Everyone or via workers?
Differences between health care providers and patients, volunteers
Where does food come from? Is that an issue for design?
Dining and meeting, using the dining hall for multiple uses.

Sleeping

How is sleeping organized?
Do people sleep in individual rooms?
Are there barracks or group areas?
Do patients and staff sleep in similar quarters?
What is different between sleeping areas for long term and short-term visitors/workers?
How do the building

ORIGINAL CONCEPT INCLUDED A LARGE MAIN BUILDING THAT EVOLVED INTO SEPARATE STRUCTURES. THE MAIN BUILDING DESIGN WAS ROOTED IN THIS CONCEPT



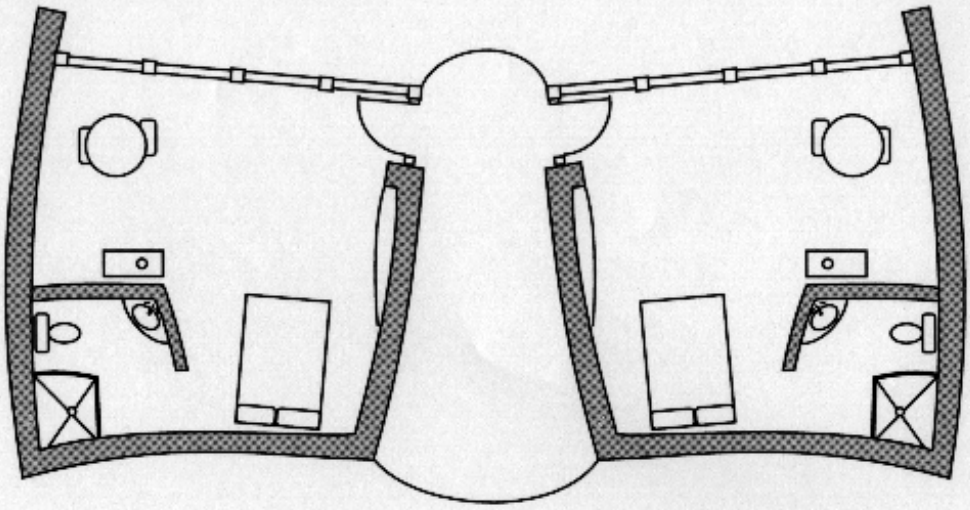
arrangements that are designed now remain flexible in the future?

Playing

Play is a critical part of the community
Outdoor plays areas for structured play
Hiking paths
Swimming
Dance
Rituals and performances
Play areas will need to be flexible and allow for future growth and changes in the community.

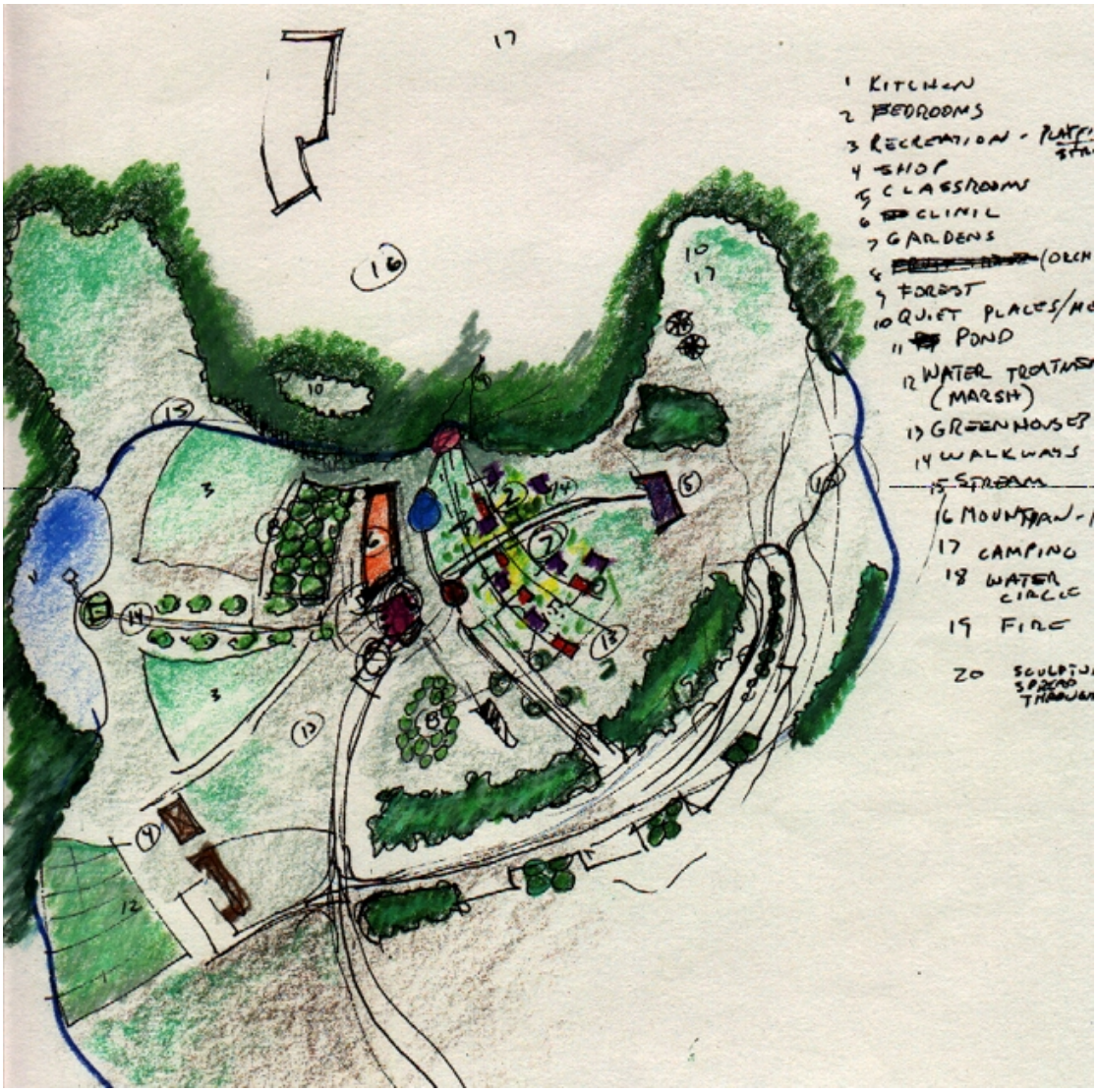
Working

The integration of work as a critical part of healing
Patients will be workers, leading to needed design flexibility.
Areas needed to support operations: fund-raising, organization, management, planning, coordination, bookkeeping, etc.



Master Plan

The original plan that the community has for view consists of a winding car pathway with fairly formal gardens and what appear to be a large main building and several other smaller structures. It is assumed (but not clear) that an analysis of local environment had been included (solar wind view – microclimate). Instead of using the existing plan and designing the one main building, I evaluated the whole site and developed a basic building scheme or system that would work for future buildings and allow for the inherent change of the community over time. It was not my objective to complete a formal plan but to suggest a base structure to allow for future growth.

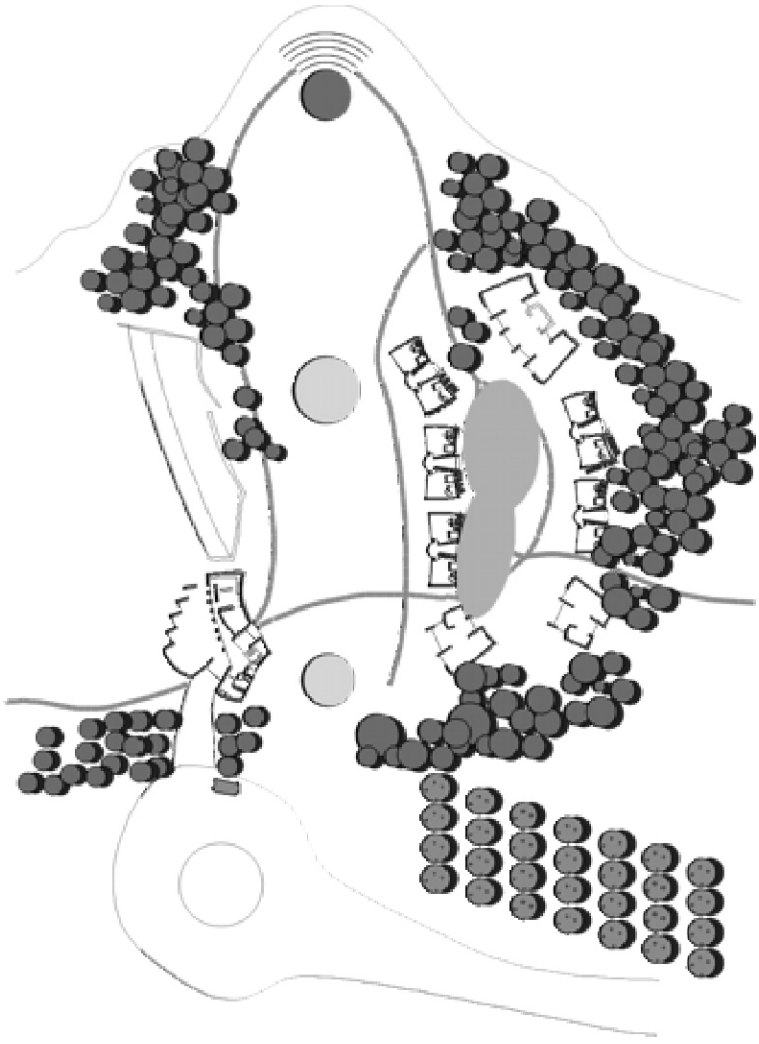


Refocusing on the Site

The plan will allow for views and be centered with a pedestrian focus. Buildings located fairly close together, a more urban method. Not a suburban spreading out, but a pedestrian scale, with room for gardens and private space. Allowing the incorporation of sustainable methods. All buildings are to have solar and wind access. Yes there are cars, but cars are not the focus. All people arrive to the center by car, but once on site there is no reason to use cars day to day.

Rethinking building uses

Not the conventional hospital with major support groups and heavy utilities, what does alternative means, in the way of planning? The buildings



need to be more flexible and allow for radical changes in future use. So the planning of the whole sites needs to have a structure that allows for this type of change. All building go through different uses over time, and it is a mistake to place overemphasis on the current use of building or site. The challenge is to make a place that has a life beyond its current use.

New Plan

The original plan that the community has on display consists of a winding car pathway with fairly formal gardens and a large main building and several other smaller structures. It is not clear if any analysis of local environmental site issues had been included (solar wind view – microclimate).

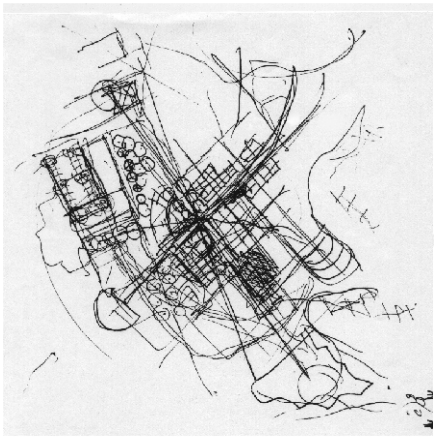
I decided that instead of using the existing plan and designing the one main building that I would evaluate the whole site and develop a basic building scheme or system that would work for future buildings and allow for inherent change of the community over time.

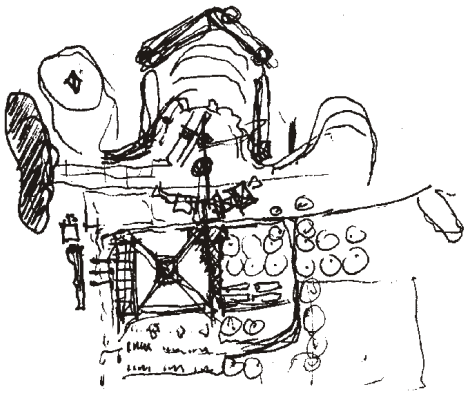
A refocusing on the plan to make it a dynamic tool for future change.

The plan will be based on a pedestrian focus with an environmental basis.

Buildings situated close together, a more urban model. Not a suburban spreading out, but a pedestrian plan with room for gardens and private space. A revised scale will be used. Allowing the incorporation of sustainable methods. All buildings will have solar and wind access. Water and waste systems will develop over time and be open to evolving technologies.

Yes there are cars, but cars are not the focus.





The design will include a rethinking of uses, not the conventional hospital with major support groups and heavy utilities. What does alternative mean, in the way of planning? A reworking of the process of community building.

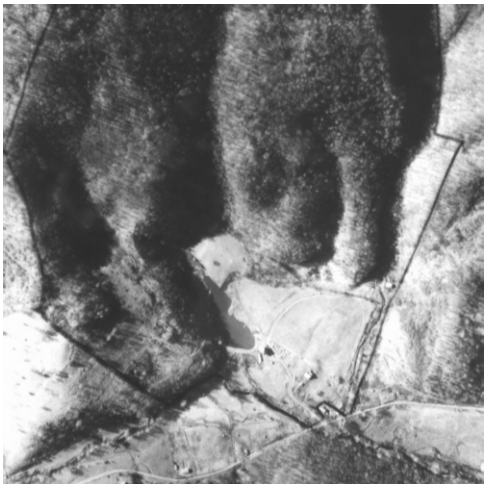
Ecological Issues

It is a beautiful site, but ecologically by building there we are having a negative impact. How we chose to lessen the impact of building on the environment is a major issue facing all of us now and in the future. Building construction uses a high amount of energy and resources and we must be more accountable to the impacts of construction.

A community can be sustainable, even if located a good distance from major urban areas. Many simple steps will lead to this community having a light presence. Limited car use once people are on site. Allow for alternate methods of movement of goods. Place a strong emphasis on gardening and locally available produce. Using highly conserving structures with natural light and ventilation will lower energy requirements. A high percentage of heat will be generated from passive solar. Low flow hydro and wind electrical generation may be developed. The small steps approach to growth will allow for the addition of new soft technologies to be introduced as

The original master plan by Sellars and Makay. Included a main hospital building formal gardens and main entrance roadway

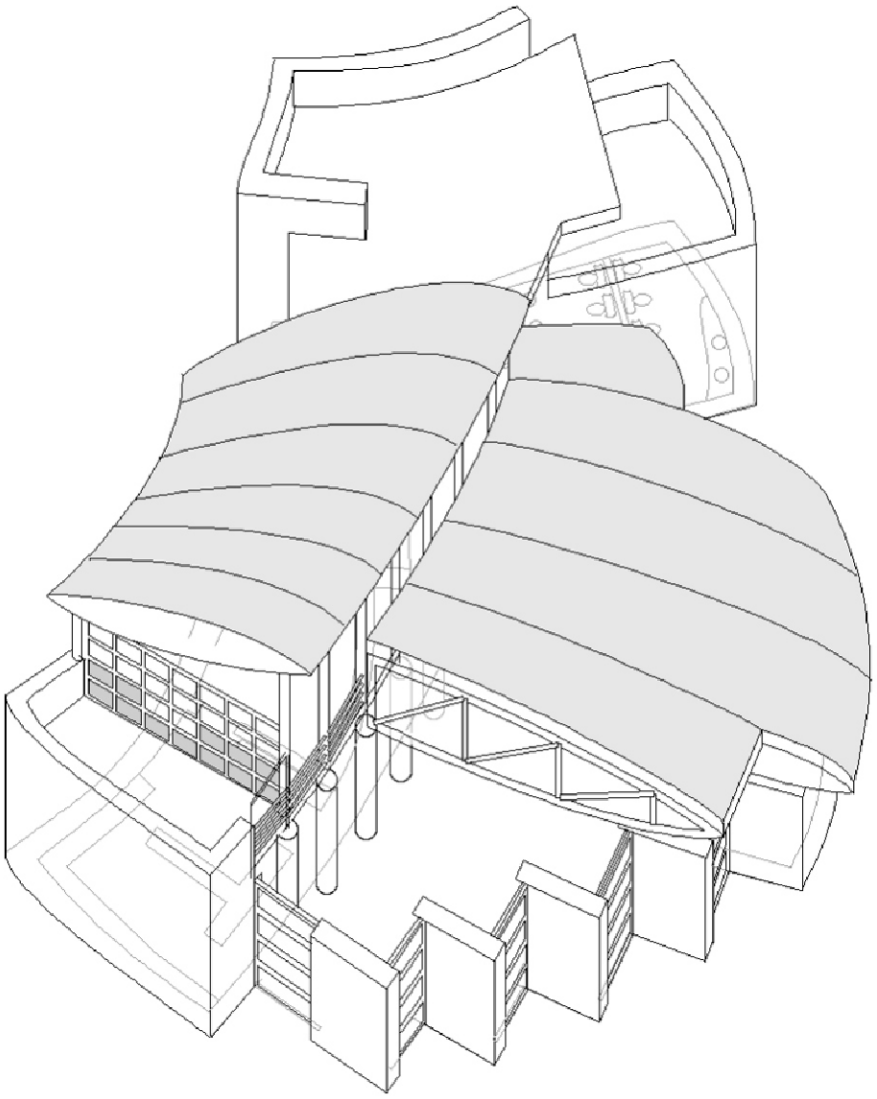
An aerial photo of the site showing the foothills beyond the basically level fields



they become available (from photo-voltaics to fuel cells). Building schemes that are inherently sustainable, by using recycled materials and other technologies that conserve resources.

One Step at a Time

The most important concept of the new plan is the series of small steps approach. By understanding that the community will develop over time within a controlled framework that is flexible, the plan will allow for a truly dynamic environment that can evolve to a truly viable community over time. This is not a process that will happen overnight but one that might take decades to fully develop.

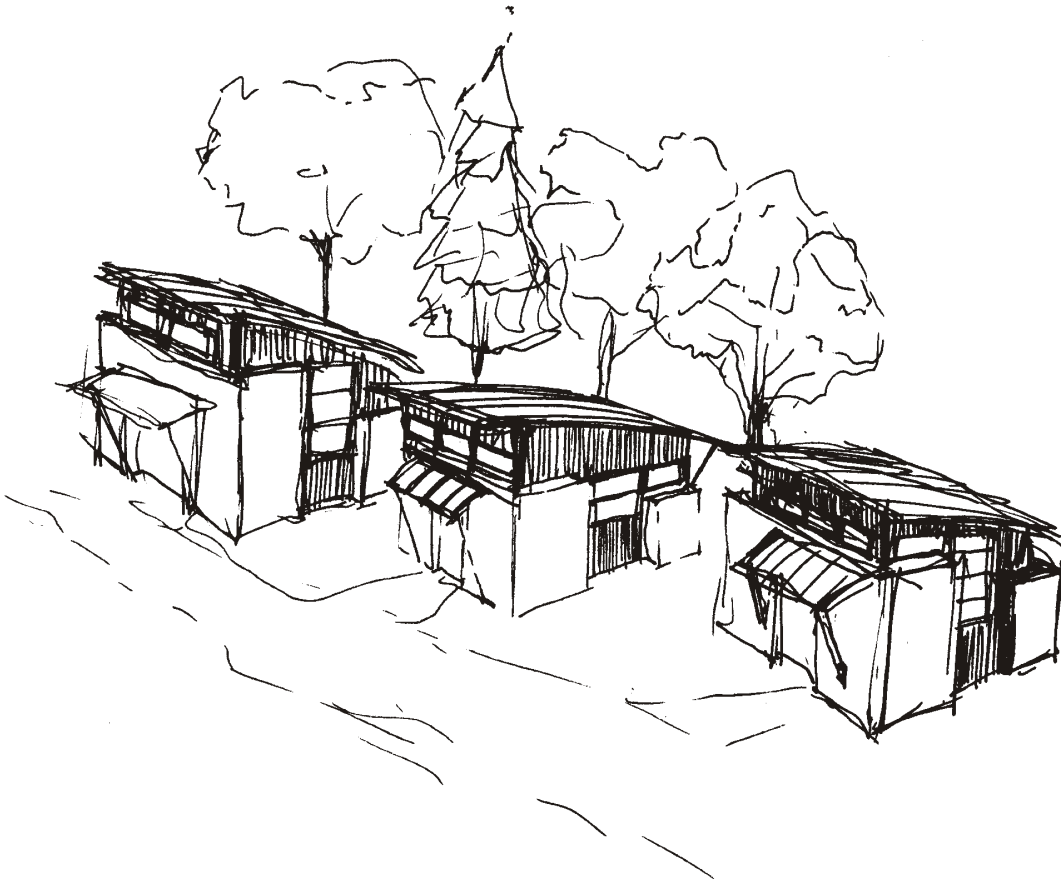


The meeting hall
Partial cut away
axonometirc

Thesis Buildings

Volunteer Building System

There is a wonderful resource available, a group of volunteers that are available now. Mid level to low skill, but free and energetic. What building systems lend them to basically unskilled labor? And the labor is volunteer.
Simple structural systems
Site built wood trusses
Easy formed concrete (large tolerances ok)
Simple assembly hierarchy
Limited hi tech needs and materials
Focus on "domestic materials"
100-mile radius
Concrete or masonry that has only simple reinforcing
Rubble walls
Wood walls
Hay bale walls
Other recycle walls (corn cob??)



Rubbed concrete floors
Glass
Steel (as available)
Passive solar (use existing southern exposure for heat gain. Use good insulation techniques.
Active solar for hot water if available
Non-complicated finish details. Let materials be themselves.
Wood
Metal
Concrete
Rock
Components that can be mass-produced with varying levels of help. And pre-built prior to need.
Easily available materials that can be easily stored on site for use as needed. Keep it simple.

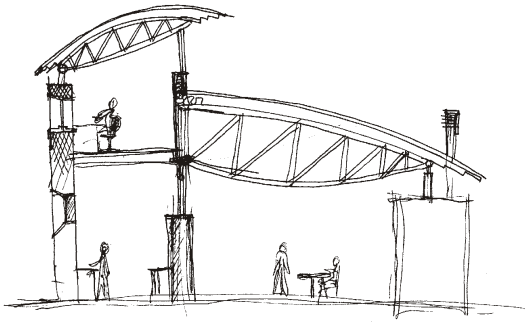
Main building
It is simply a place for meeting, eating and meal preparation. Opening to a courtyard, to make the outside become an extension of the inside. Facing the south, not just for solar gain, but also to allow the sun to shine deeply into the space.

A freeform concrete shell will hold the structure tight. An open curving roof. Uplifting, with hand built truss structure visible. A fun light feeling. An upper floor with clerestory to allow the sunlight to stream into the back of the building. A building that the basic structure, materials and method are repeated in the other buildings. A building of rock and concrete, wood and glass, sun and air.

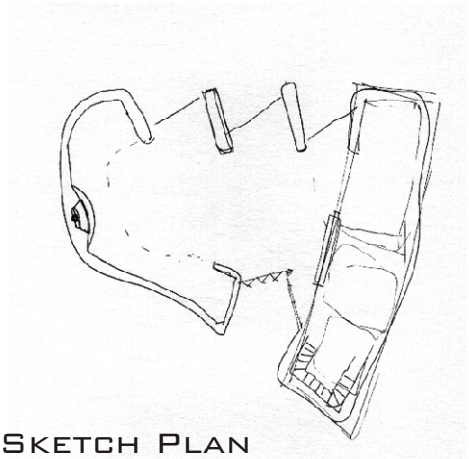
A welcoming space.

Core Sleeping Buildings

Buildings that have a simple but flexible structure.
Originally I started with the idea of a fully connected large structure of rooms and support areas. Over time I allowed the rooms to break away in to single or double units that would allow consistent development and would allow them to come online and be functioning, as each unit is finished.



Section of the meeting hall showing trusses and clerestory window



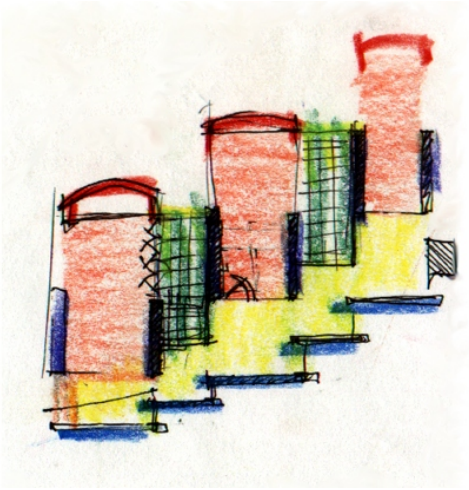
Sketch Plan meeting hall

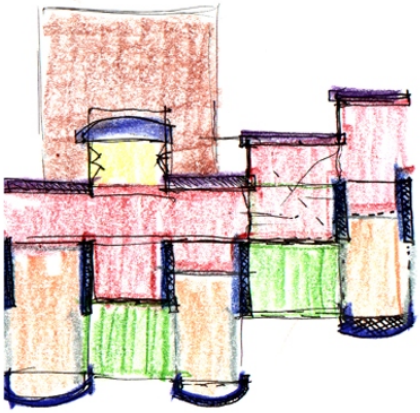
The shape of the units changed over time becoming less rigid and allowing for more movement and adaptability to the site and to the particular group of workers on each set of units.
The units will use the same basic language as the main building, notably heavy masonry anchor walls (low-tech, with many options available) and lightweight infill walls and truss roofs.
Sited two together with room around for personal gardens and reflective space they can be adapted over time as the community grows and changes.

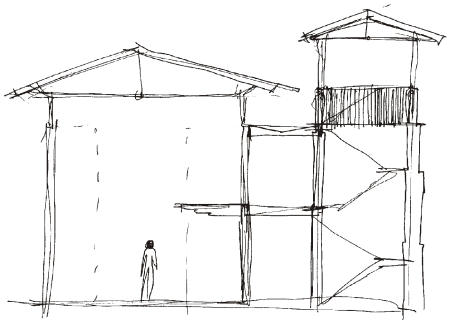
They will be flexible to allow them to function both as living quarters for the long term staff and volunteers and also could be evolve into treatment rooms for those in need of long term care.

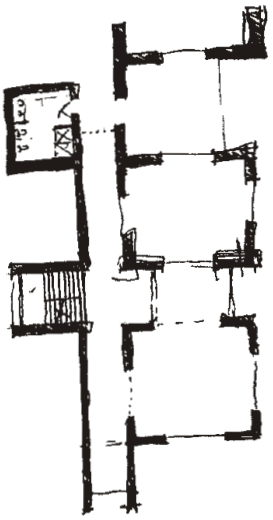
Constructed by a small group of volunteers on a regular basis. They require no unusual materials or complex building techniques. Parts can be pre-assembled as needed. Generally oriented with an open glass wall facing south with summer shading overhang.

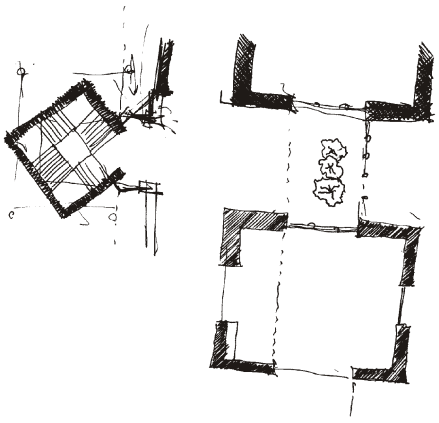
Plan color studies of plan massing



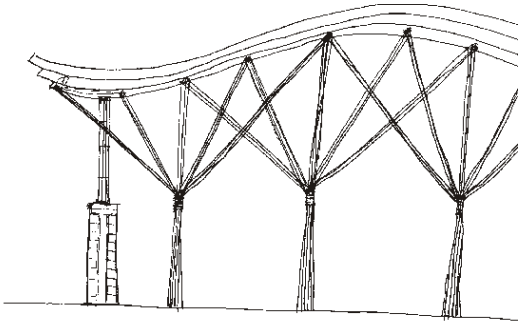


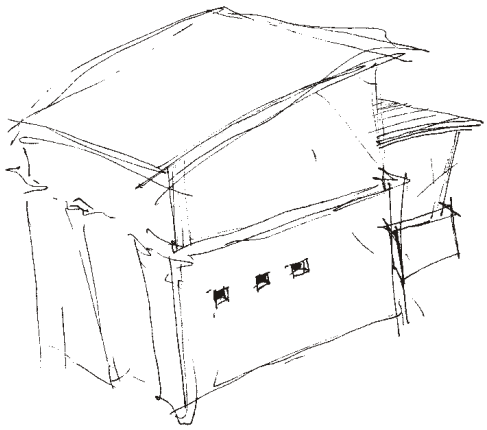


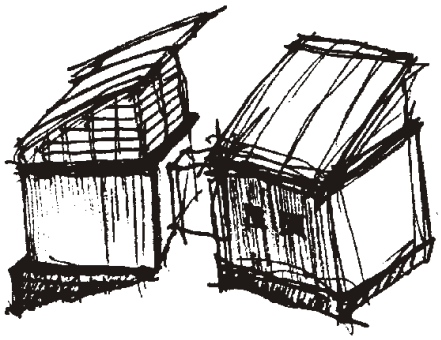




Early sketches, showing development of mass and frame concepts in original thoughts on a sleeping building.







Development sketches,
sleeping units and
meeting hall