Faerie Camp Destiny

THE BATH HOUSE PROJECT

If you have built castles in the air, your work need not be lost; that is where they should be. Now put foundations under them.

Henry David Thoreau
“This is a public benefit corporation. The purpose of the corporation shall be:
to manage a Faerie sanctuary which would operate as a cultural learning
center and spiritual oasis for those who call themselves Radical Faeries,
to foster stewardship of the land of the corporation, and
to honor our natural environment as we do our own sacred Faerie natures.”

From the Faerie Camp Destiny Mission Statement

INTRODUCTION

As we fae plan our first permanent buildings for Faerie Camp Destiny, it is crucial that we act mindfully and in keeping with our mission. FCD’s first two mission points are about nurturing the land we’ve rescued from logging. Our slice of the mountain is to be a refuge, not a wildlife refuge, but a refuge for wild living. So it makes sense that our founding sisters laid a path for us through the forest that is dainty, careful and nurturing.

Over the past twenty-five years or so, as concerns about deforestation, erosion and global warming increased, so did the push among architects and planners for construction practices with lower resource impact and design of structures which give the land more than they take away. This movement has become known as sustainable design.

Specific proposals set forth a site for the bathhouse, a few sustainable design specifications and a couple of alternative construction styles for our consideration. Nothing contained herein is meant to be final or complete. I only hope to offer a clear starting point. This document does not address costs or fundraising. These proposals are subject to compliance with our with our existing Act 250 permit.
SITE PROPOSAL*

Downhill from the meadow, between a large maple and a grove of hemlocks there is a small cliff. The rock stands about five feet above the ground about 35’ from the end of the road, if memory serves.

For insulation purposes, I suggest we build against this cliff, whether or not excavation is permitted or possible. The cliff will provide a natural windscreen from the mountaintop, keeping the building warmer in winter and reducing our heating costs or resource usage. The construction projects described below are site-specific and depend on this bluff for their creative integrity.

LIMITED SUSTAINABILITY SPECIFICATIONS

1. Use lumber from the site cured and milled locally. Otherwise use Forest Sustainability Council certified wood (widely available for purchase).
2. Avoid petroleum products since most release toxic fumes, even in their inert states. Flexible PVC leaches toxic plasticizers. When incinerated, PVC, releases cancer-causing dioxins, and it’s a health nightmare for the workers who produce it. [http://www.watoxics.org/content/pdf/Vinyl.pdf]
3. Use low-toxicity paints, sealants and solvents. Not only do these contaminate the soil and eventually the water, more toxicity products continue to give off contaminants even after they’re dry.
4. Avoid impermeable pavements
5. Full spectrum lights promote plant and human health
6. Insulate with earth.
7. Sustainable Plumbing maximizes incidental heat and may be used to globalize the heat from a central heater or stove.
8. Open plans and air exchange between rooms equalize interior temperature and minimize heating costs/resource usage.
9. Allow for modification of plumbing and heating systems in original design so that innovations can be applied as they become available and permits become accessible.
10. Avoid products which come from mining including gypsum sheetrock. Alternative products are available, including recycled products.
11. Sustainable electricity: A number of alternatives provide electricity to buildings off the grid. Solar is a very expensive option, and counterintuitive for a low structure in the forest. Wind power is much more efficient, but the aesthetics and potential damage to habitat make windmills a nuisance at FCD. Anaerobic Digesters compost food and release methane in a controlled way, like your gas line at home. The methane can be used for heat, or in an electricity generator like the one we use to run the kitchen pump for gatherings. Anaerobic Digesters are slated to be installed in New York City schools under an EarthPledge EPA grant. Read more at [http://www.earthpledge.org/foodwaste2.html].
12. Recycling old buildings could be a major bonus to a neighbor who needs a barn removed or a building gutted, allowing us to reclaim some good lumber at no cost to the community.

*to be conformed with actual site analysis
BATHHOUSE PROPOSAL ONE

The first proposed building approach was inspired by a visit I made in 1990 to Mt. Subasio, Italy, the Eremo Delle Carceri. The refectory and retreat house are built on the face of the cliff, and the stone cliff face is exposed to the interior hallway of this 16th Century hermitage.

This proposed bathhouse utilizes a central sauna to heat the entire space, and relies on a green roof, an open plan and geothermal warmth to ensure energy efficiency and maximum comfort. This structure is a five-sided plan with organically shaped surrounding roofed deck.

The sauna will be constructed around an energy efficient stove. An octagonal room with its own wood ceiling, the sauna will give off adequate heat when warm to heat the entire building. In addition, coils of copper pipes in the walls could heat water for showers, sinks and bathing.

Depending on successful excavation, the building could have two levels, one constructed of stone excavated at the site and the other of milled or unmilled lumber. The structure is supported by seven concrete piers and 12"x12" wooden beams. Flooring on the top floor should be wide local boards, with wooden slat drainage platforms for showers and sink areas. The bottom floor could be made of poured cement or gravel with open wooden decking for drainage.

In my imagination, walls on the main floor are double-paned glass, but traditional frame walls could suffice for some panels. A progressive replacement of walls with windows would allow us to experiment with available light while protecting the warmth of the space. Sliding glass doors are easier for wheelchairs and save space as well.

An open cistern could be installed over the cliff wall to feed a small waterfall, a useful way to moderate heat in the summertime. The Cistern would collect water from the roof, including melting snow. An open cistern/pool would also be an attractive landscape element near the kitchen garden.

The state-of-the-art green roof will represent a model Vermont project and hopefully garner some attention in funding circles. Green Roofs consist of a traditional roof, whether wood frame or poured concrete, a roof membrane, a root-proof barrier, ultra-lite expanded chirt for drainage and, in our case, regular forest hummus with plenty of fern and trillium and moss. 840 sq. ft. of green roof at a cost of $25/sq. ft. will set us back $21,000, but expanded fundraising efforts may be able to attract discounts from manufacturers, and a competitive contract will cost much less. Our contractor will benefit from the model and may be able to attract funds for his education as a green roof installer.
BATHHOUSE PROJECT TWO

This proposal is obviously less developed than project one. It consists of a more complex structure with two levels. This project also relies on a central sauna for heating, and would use concrete piers, milled lumber and stone for basic materials. Walls would be wood frame with some stone outside and turf covering the entire structure, much like a hobbit hole, except for all the digging.

Lights would be limited to a few windows and skylights. Some kind of membrane, probably rubber or PVC (yuck) would be necessary to insulate the wood structure from water and some further barrier against roots would be necessary. Since these structures are more successful in grasslands, care should be taken to ensure the bathhouse does not become a haven for mildew and rot. Sod or turf structures are very successful at maximizing warmth in winter.