**Fly Ranch Sweat Lodge**

The Fly Ranch Sweat lodge is a relaxation facility proposed to be located on the southern side of the fly geyser. Being centrally located, the building serves as a recharge point for visitors of Fly ranch. The building adapts itself to the surrounding arid environment through its orientation. The openings on the East-west axis and the north side of the building makes it behave as a wind tunnel channeling the cooling winds through its interiors.

Sweat lodges are an important part of native American culture, hence the art installation evolved to be one to pay homage to the Paiute tribe – the natives of Fly ranch. The two storied 2000sqft structure has a visitor’s lounge on the first floor and a Sauna at the second floor. The native American culture is also represented in the façade, the pattern and colors on the mid-section of the building was derived from Pauite culture. The juxtaposition of solids and voids makes for a distinctive pattern which is imprinted onto the interiors through a play of shadow and light.

The structure solely depends on passive strategies for cooling the building. The sauna heats up naturally through the large window placed at the center and power supply needs are fulfilled by the PV cells installed on its façade. BIPV glass is installed in the voids of façade and Solar fabric is mounted over the wood paneling through which a total output 12kw of solar energy is generated per day. The zero-waste generating building is 97’ in length, 25’ in width and 30’ high. The core of the building has two 30’ long shipping containers, they are connected on the first floor by a walkway. A series of wooden ‘A’ frames form the structure around the containers on which wooden panels are laid to form a façade. The building has openings on east, west on first floor and south side on second floor that can be accessed by the berm. The mid-section of the building opens on the north side allowing the space to expand outdoors. The total cost of the building is estimated at 100k.

The onsite prototype will be developed in three phases.

Phase I: Laying the foundation, building the framework around the shipping containers, and constructing the berm.

Phase II: Installing the façade, Doors & window.

Phase III: Installing the solar power systems & Interior finishes.

Benefits:

Hualapai is an arid location that holds both dry and cool climate patterns which assists in the sauna’s heating attributes and cooling for a meditative zone. The first level is a space where one comes to lounge in the passive winds that flows year-round through the four cardinal sides of the lodge. Both heating and cooling has benefits for sweating out toxins that depletes the body’s energy and cooling for relaxation and meditation for a calming experience. The proposed sweat lodge acts as a charging station for more than devices, yet for the mind, body, and spirit. The second level sauna utilizes one of the characteristics of heat which rises to the highest level of a built environment. The rejuvenating sauna allows the user to recharge and meditate with the physical challenges of the body.