

GROUND TRUTH

TEAM:

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Ground Truth is a way-finding, storytelling, multi-sensory, experiential, eco-cultural artwork on the landscape; a regeneratively purposeful path exploring place, time, inspired learning and creative imagination. A number of primary elements have been combined as an integrated whole artwork. It is as much a conceptual experience as a physical work on the landscape.

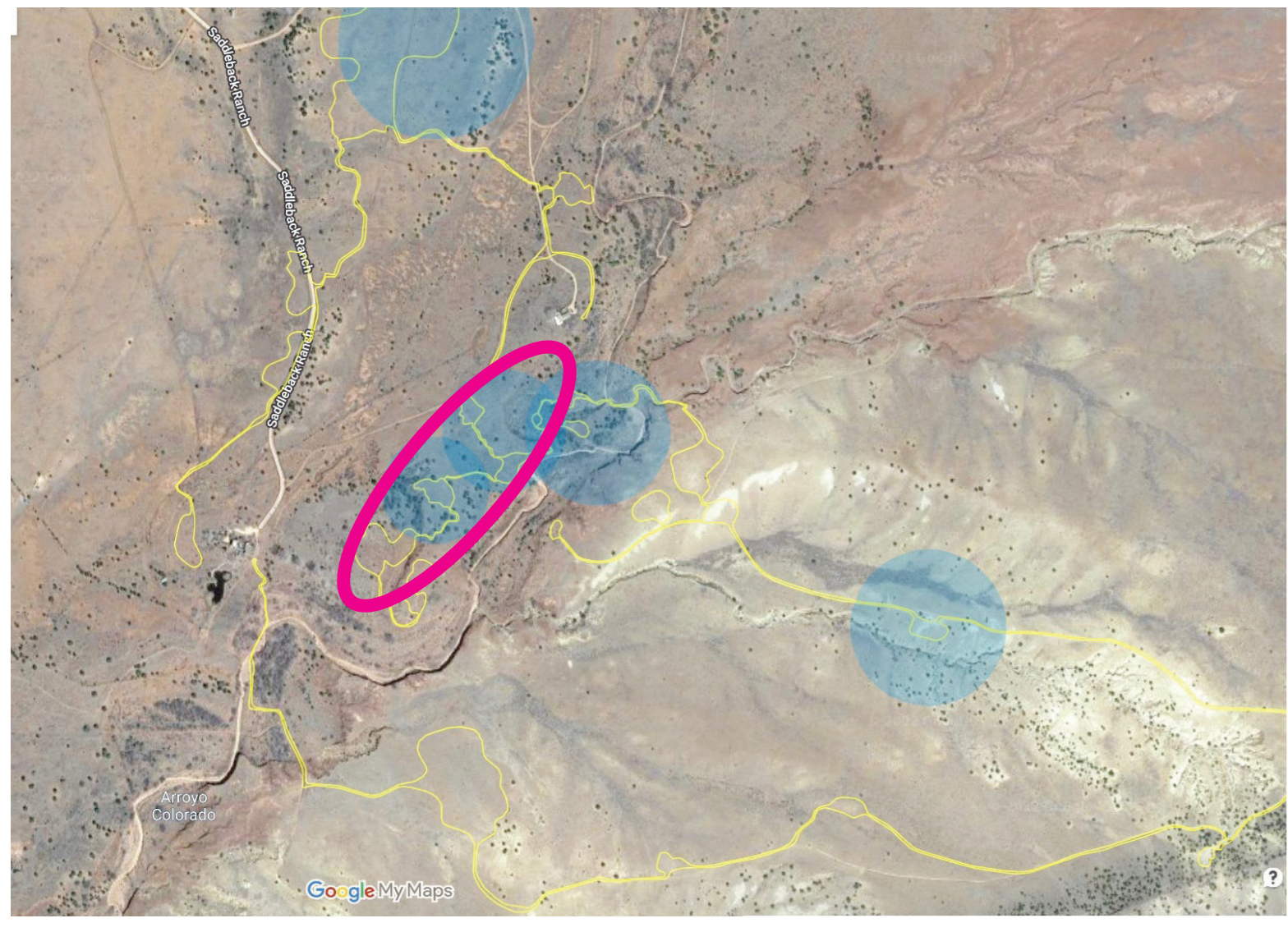
The proposed Ground Truth artwork, sited on the lower bench between the Drogheda house and the Chamisa house, provides a meandering, exploratory path with creatively inspiring, surprising

and sense stimulating encounters along the way. It is designed to extend Modern Elder Academy's mission and its learning intentions onto the ranch landscape.

Designed to join the existing dirt paths that connect the Drogheda house and the Chamisa house, a simple trail through open areas of the site follows next to the serpentine form, providing access to the Amphitheater, the Testbeds, and other installation elements. The Path consists of two primary loops, allowing for shorter or longer exploratory walks with 360 degree views of

Saddleback Ranch. The Path will be wheel-chair accessible, with slight regrading so that no steps or steep slopes will be encountered. The Ground Truth installation area is to be off-limits to equine grazing or riding.

Pathways, forms and structures in the installation, will have specially designed low-level, fiber optic, blue and UV spectrum illumination. Low-level UV illumination is a sensory attractor to many pollinators, and will also serve to guide night walks and special events amid the installation.



LAGI-proposed sites with overlay of Ground Truth location in magenta.



Concept drawing showing the rough outline of the path and color shifts



Stone and sunfired clay brick inspiration for materiality of sections of the serpentine form



Formed mud mounds develop a scaly texture reminiscent of a serpent's skin.



Rebar and wire mesh formed to create large amorphous forms



Rebar and wire mesh coated with concrete to create final form



A section of the serpent is lit from within, a steel frame elevated off the ground and covered with translucent fabric.



Concrete shell allows for detailed finishing techniques



Brightly colored lichen rocks



Roughly stacked lichen-covered and multi-colored stones will suggest the form of the serpent in some areas.



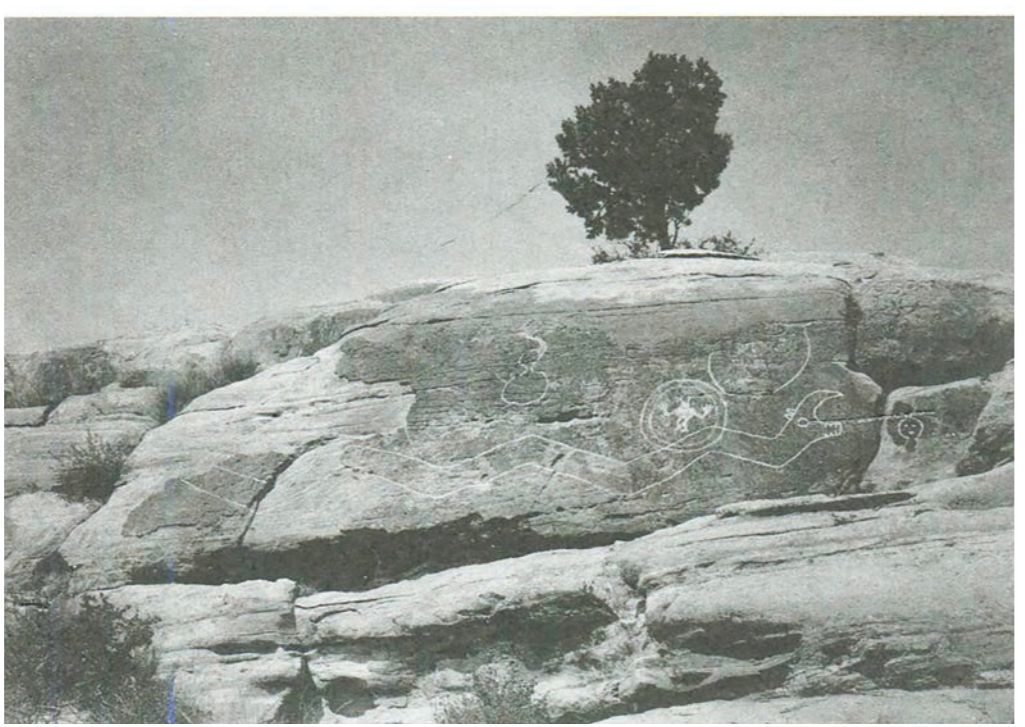
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SHAPE-SHIFTING SERPENT

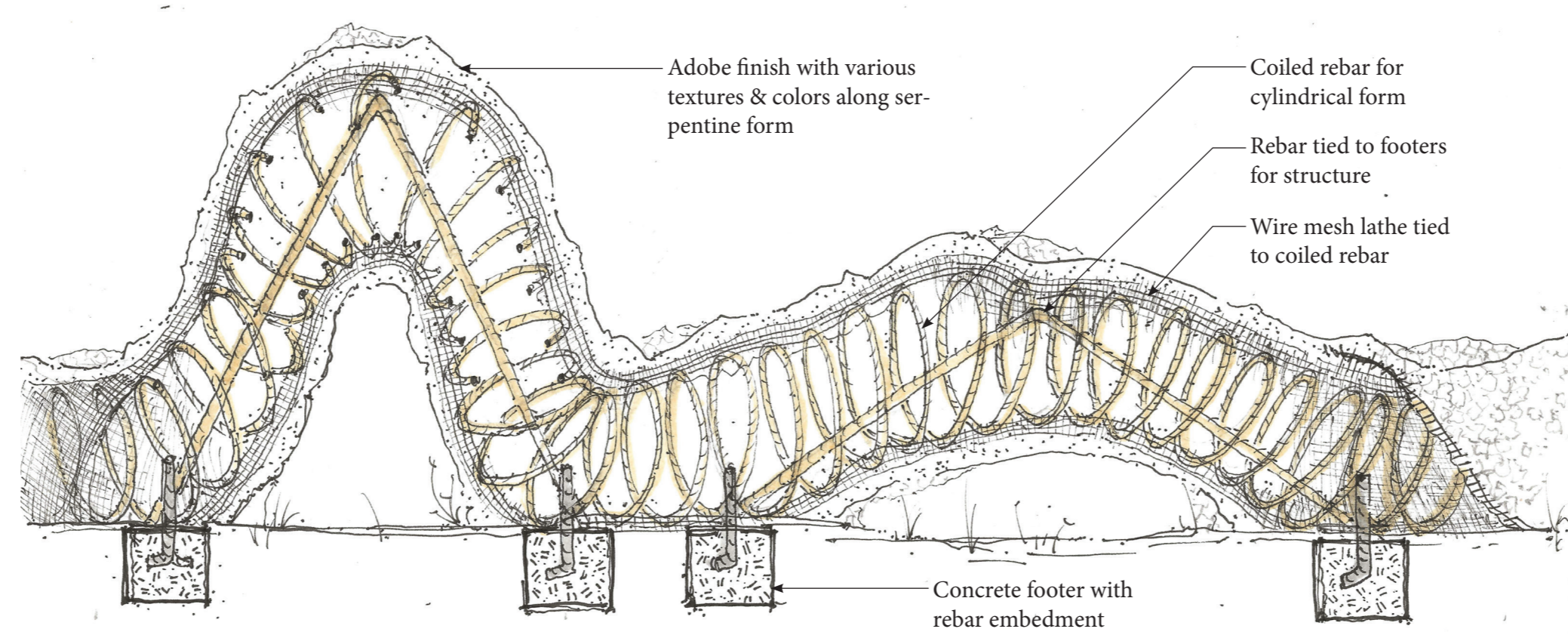
For more than a millennium, the horned or plumed serpent, known in the Tewa Pueblo language as Awanyu, has occupied a place of great importance within the culture and cosmology of the Puebloan Indians of this region. Symbolic both of earthly and supernatural phenomena; clouds, rain, lightning, bodies of water and the fusion of the terrestrial to the heavenly, its likeness has snaked itself across steep desert rock faces and sheer cliff overhangs in the high desert terrain.

The serpent also has a metaphorical reference to lightning, which bolts from its open mouth in an attempt to influence the celestial guardians to coax rain from the sky. The serpent may be associated with the four (or six) directions, the colors of which the snakes also assume.

We are not creating the Shape-Shifting Serpent as a literal serpent or snake, but rather as a sculptural work on the land, with much significance and many influences.



Giant Awanyu petroglyph in the Galisteo area.



Longitudinal section drawing showing one of the fabrication methods for the Shape-Shifting Serpent.



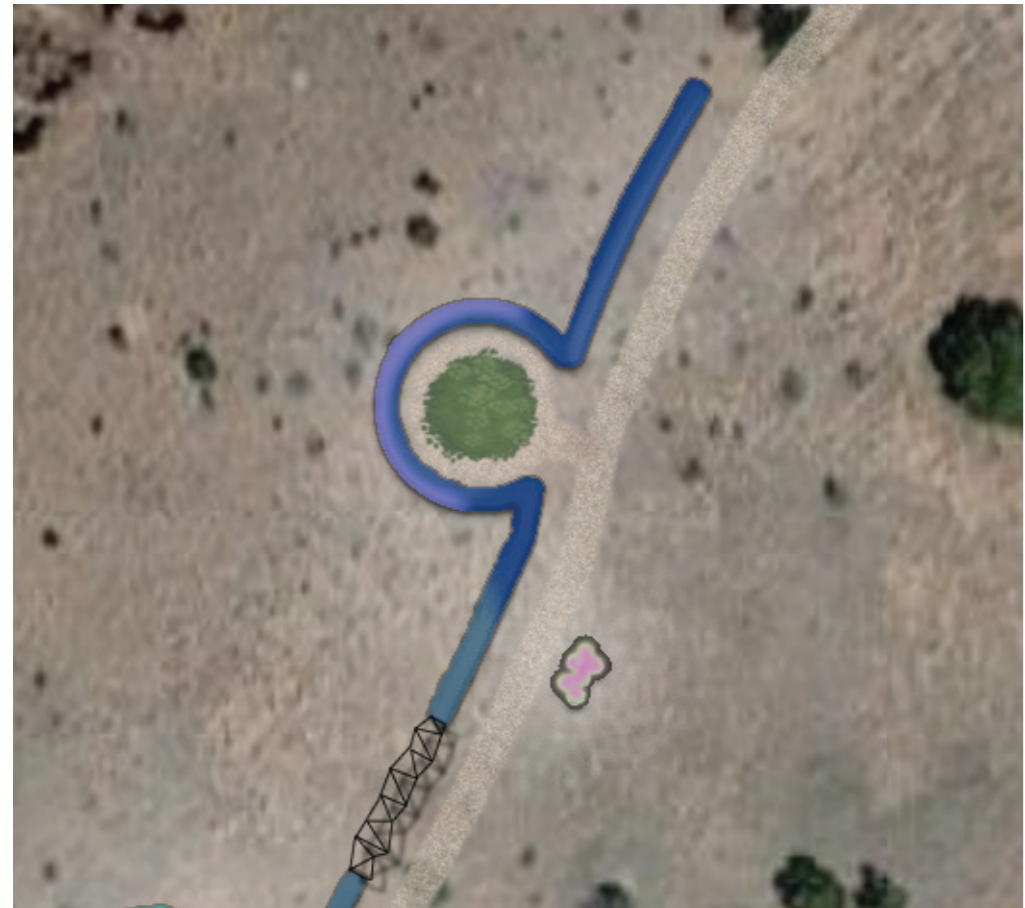
The close inspection of serpent's skin is an inspiration for material finishes at specific locations along the shape-shifting form.



Enlarged Labyrinth plan



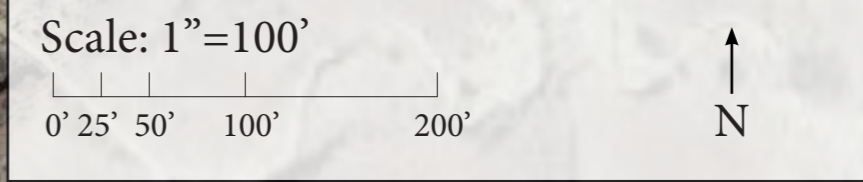
Enlarged Native Grasses Testbed plan



Enlarged Wildflower testbed plan



- LEGEND**
- 1. Shape-Shifting Serpent sections and Adjoining Path
 - 2. Labyrinth
 - 3. Native Grasses Testbed
 - 4. Wildflower Testbed
 - 5. Amphitheater
 - 6. Pollinator Testbed
 - 7. Healing Testbed
 - 8. Llaretas (five total)



Enlarged amphitheater plan



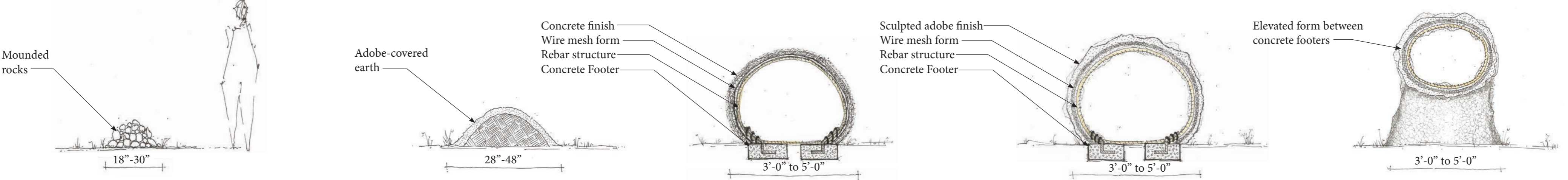
Enlarged pollinator testbed plan



Enlarged Healing Testbed plan



Enlarged plan showing Llaretas engaged with serpentine form



Cross section drawings showing construction types proposed for the serpentine form, from simple rubble demarcations on the landscape, to mounded earth covered with stucco, to sculptural forms made with rebar and wire mesh covered with artfully finished cementitious shell.

LABYRINTH

Accessible from the existing dirt road connecting the two residences, between two tall yucca plants, the Shape-Shifting Serpent's path emerges as rocky, earth mounded coils in a labyrinthian spiral pattern on the ground, low, composed of variously sized, occasionally colorful rocks, with lavender plants sprouting in between.

Painted text on the larger rocks, as it is read, leads the way along the spiral, from the entry to the exiting path.

Two Prisms strategically mounted on poles, with small solar tracking sensors, create a spectral 'light saber' effect across the Labyrinth at different times of day through changes of seasons.



Poetexts on stones along the path



Inspired by the hSun Dagger at Fajada Butte, Chaco Canyon



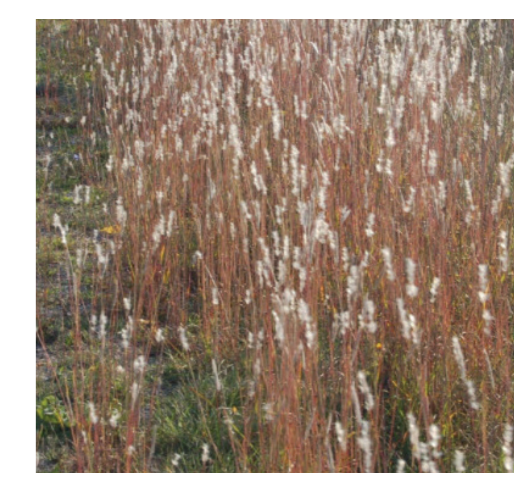
Spectral light shafts cross the ground of the labyrinth



A pair of yucca announce the entry to the Labyrinth

NATIVE GRASSES TESTBED

Testbeds are a series of regenerative eco-art (nested systems, living libraries, learning modules) gardens, to be encountered at sites along the serpentine way. Testbeds have the pragmatic purpose to serve as small experimental gardens, designed to better understand regenerative life processes and options, in ways that may be learned from and applied at larger scale on the Ranch. They demonstrate relationships among a variety of plants, climate, water use, soils, light, energy, materials, pollinators, seasons and inter-relational life processes.



Silver Beard Grass



Indian Rice Grass



Big Bluestem

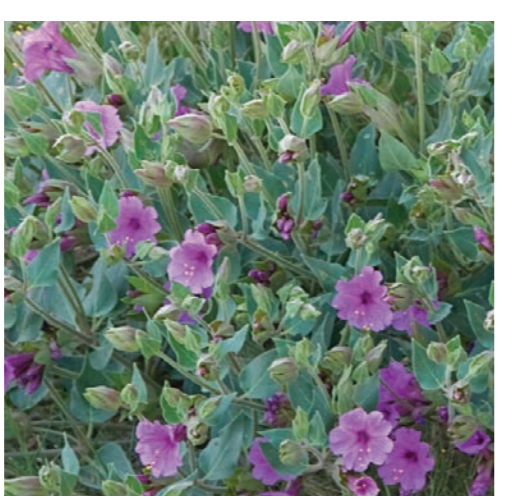


Side Oats Grama

The Native Grasses Testbed is a garden of selected seasonal native grasses, where the Labyrinth's extended path and the returning, overarching Serpent forms cross.

WILDFLOWER TESTBED

The four Testbeds shown and described in our presentation are small examples for regenerative landscape learning and understandings. Their detailed realization, with ultimate design, location, preparation, planting and watering would necessarily result from a regenerative community collaboration among selected expert advisors and caretakers. Time will be a major partner.



Four o' clocks/ *Mirabilis multiflora*



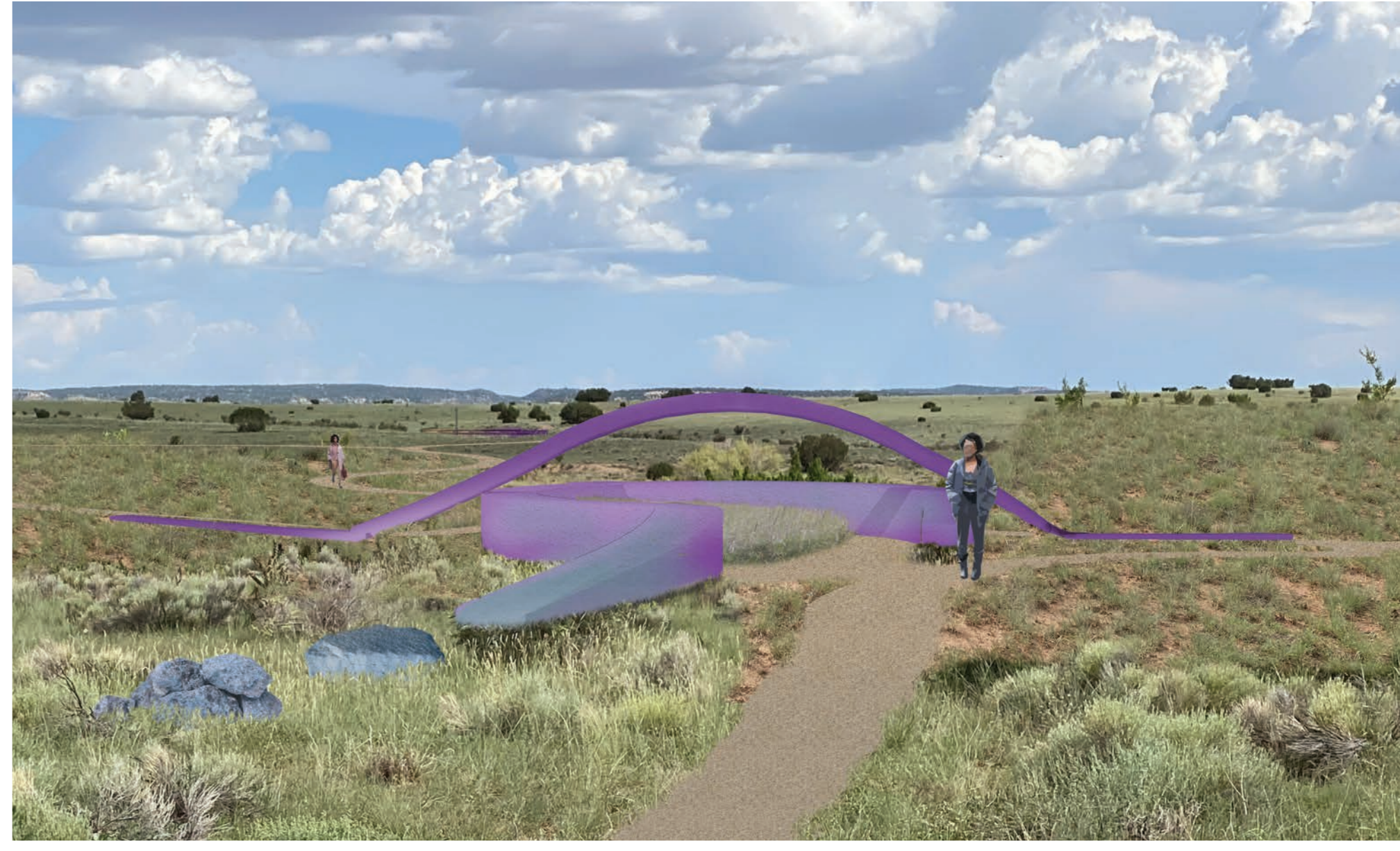
Indian Paintbrush/ *Castilleja coccinea*



Tickseed/ *Coreopsis tinctoria*



Blanketflower/ *Gaillardia pulchella*



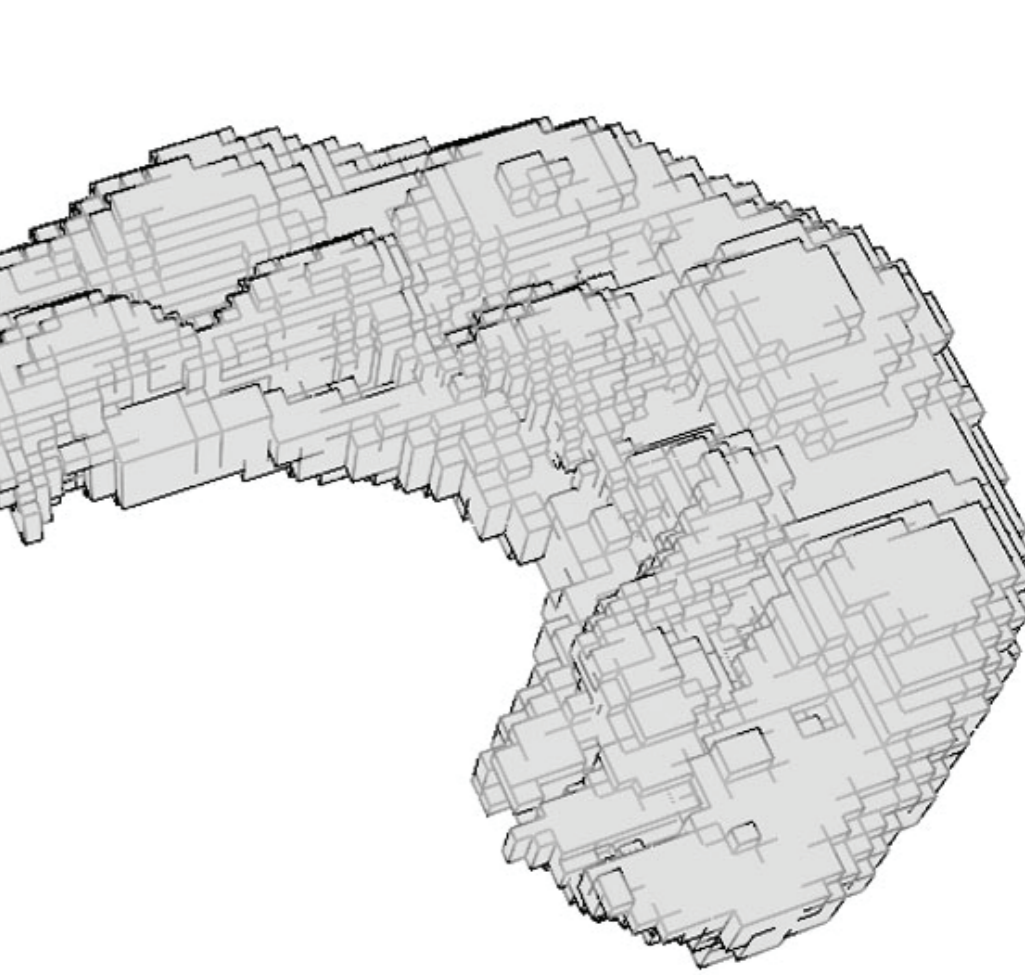
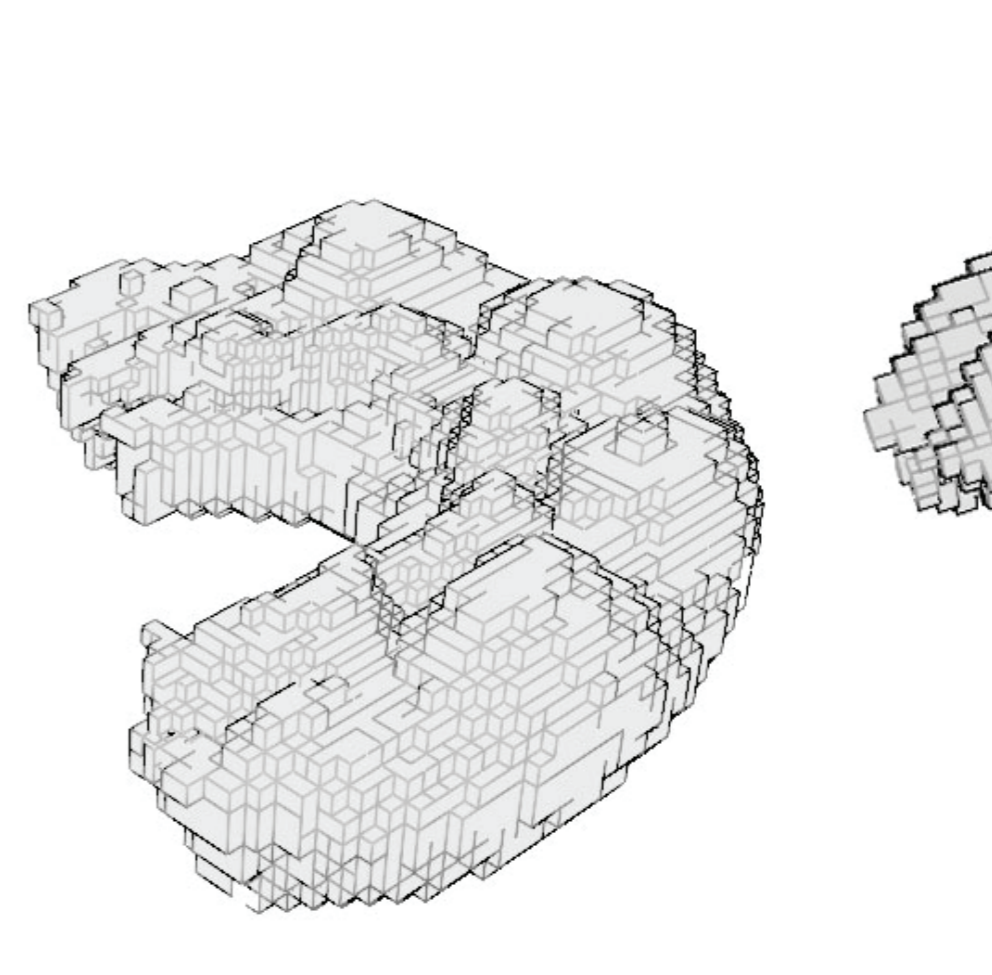
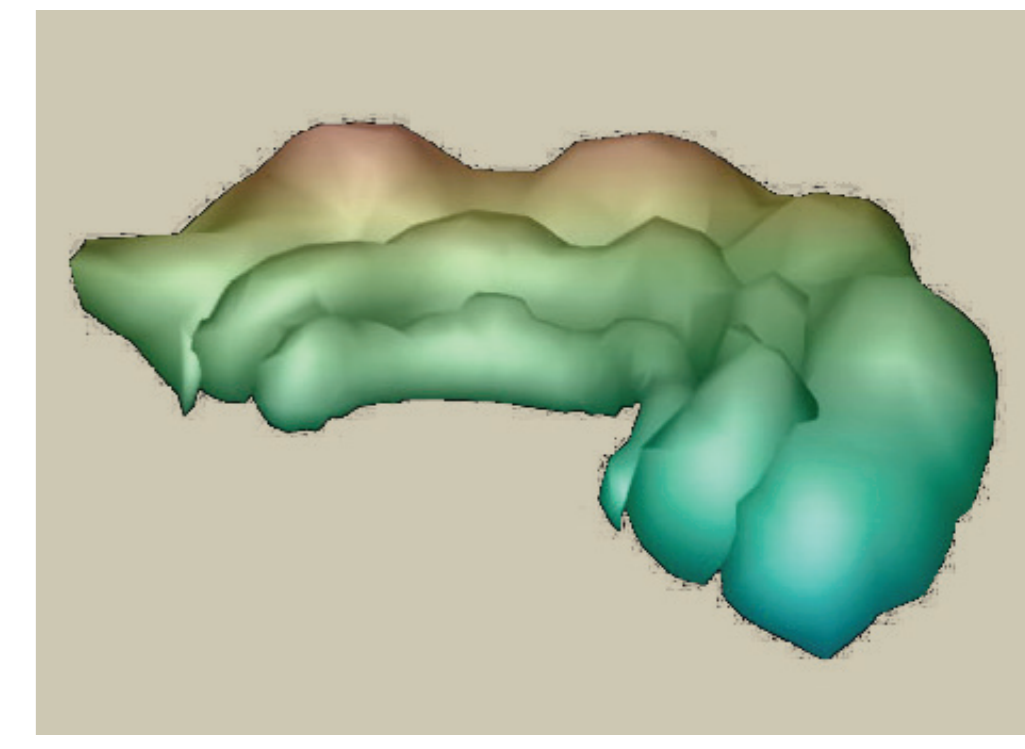
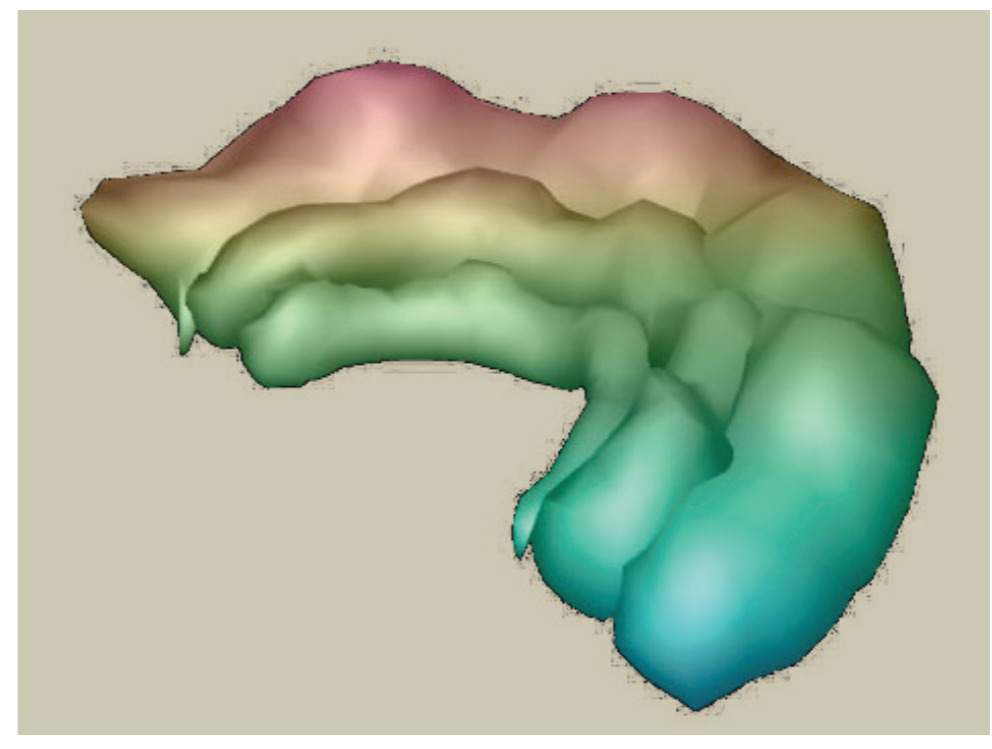
AMPHITHEATER

The Amphitheater is a simple traditionally understood semi-circular place of social gathering, for classes, for events, for contemplation and for considering a purpose-filled life, in the round, on the land. It provides colorful tiered undulating formed seating for 24+, with a small stage area.

Amphitheater seating faces to the south-east, in direct line-of-site with the distant 'saddleback'.

A fire bowl may be located at the Amphitheater's center, for evening gatherings around the warm glow of contained firewood flames and embers.

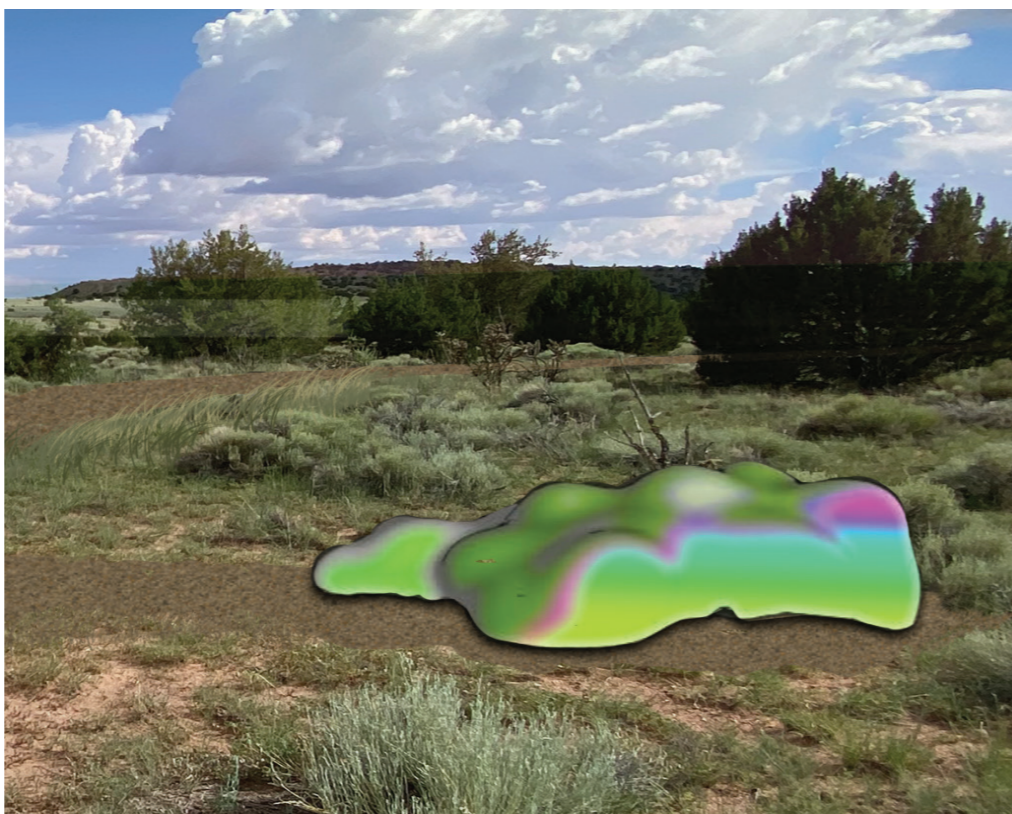
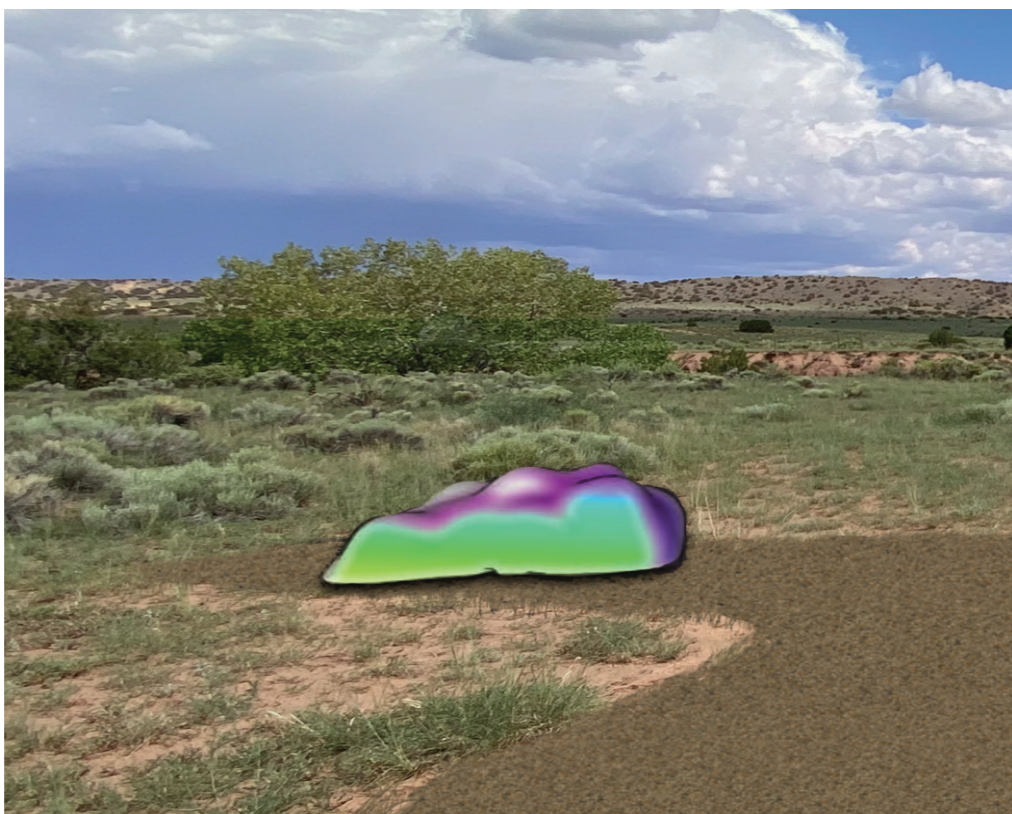
The Amphitheater is only a five-minute stroll down the existing path from the Drogheda house, past the large cottonwood trees (with hammocks), and around the rise. It can easily be accessed during daytime or evenings without the need to walk the entire serpentine path.



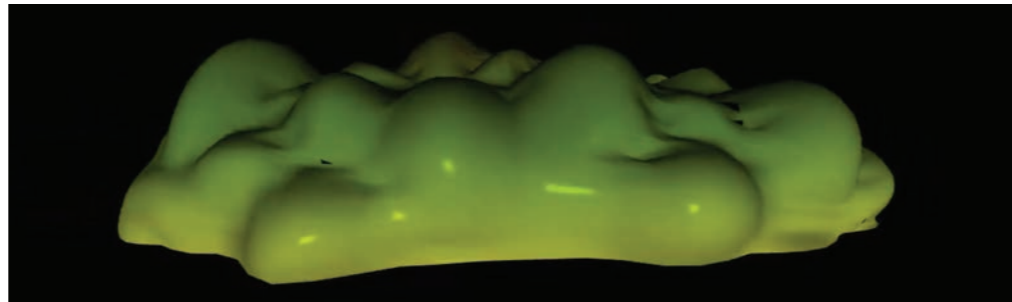
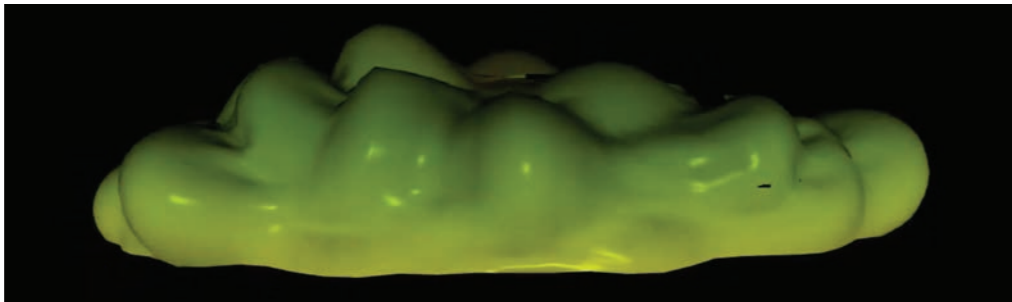
Digital explorations of the amphitheater seating forms to mirror the llaretas in the landscape

LLARETAS

Llaretas are a velvety, chartreuse plants native to the high desert grasslands of the South American Andes, at altitudes from 10,000 to 17,000 feet, growing slowly, almost imperceptively, over thousands of years. We propose creating five Llaretas-like sculptures that are large, unusually bulbous, colorful forms that surprisingly appear near and sometimes merge with the Serpentine form and Testbed sites. The Llaretas may be climbed and sat upon by one or more. Their surprising forms and spectral colorations mimic the undulating Amphitheater seating area and certain bulbous areas of the proximate Serpentine form.



Renderings showing example of form and coloration for the Llaretas, which are constructed using a rebar and wire mesh frame under a hand-formed finish layer of micaceous stucco.



Stills from an animated study showing the Llaretas shifting into various forms



Llaretas sculpture study with micaceous clay (not to scale)

nm	320 - 400	400 - 450	450 - 495	495 - 570	570 - 590	590 - 620	620 - 750	Magenta	
Flowers	<ul style="list-style-type: none"> White Yellow & Violet flowers—reflect UV White prickly poppy Datura 	<ul style="list-style-type: none"> Yellow & Violet flowers—reflect UV Yellow: <ul style="list-style-type: none"> plains coreopsis nm sunflower yellow monkey flower Violet: <ul style="list-style-type: none"> rocky mt. bee plant tulip gentian desert 4 o'clock 	<ul style="list-style-type: none"> cholla cactus prickly pear cactus desert evening primrose desert purple sage lavender 	<ul style="list-style-type: none"> rocky mt. columbine blue flax blue sage 	<ul style="list-style-type: none"> desert evening primrose golden current plains coreopsis nm sunflower yellow monkey flower 	<ul style="list-style-type: none"> butterfly weed western wallflower orange mt. daisy scarlet globe-mallow trumpet creeper vine 	<ul style="list-style-type: none"> hedgehog cactus wild scarlet beebalm red cardinal flower 	<ul style="list-style-type: none"> rose of Sharon 4 o'clocks desert beard-tongue 	
Natural Pigment									

Moths	Bees	Bees	Bees	Bees	Beetles	Butterflies	Butterflies	Hummingbirds	Hummingbirds
<ul style="list-style-type: none"> Horsetail milkweed Showy milkweed tarantula hawk wasp diadema bees bumble bees honey bees solitary bees monarch butterfly queen butterfly White prickly poppy common flower beetle butterflies solitary bees flies (Datura) <ul style="list-style-type: none"> long tongue sphinx moth butterflies hummingbirds 	<ul style="list-style-type: none"> (Plains coreopsis) <ul style="list-style-type: none"> parasite wasp bees (NM sunflower) <ul style="list-style-type: none"> honey bees bumble bees mason bees (Yellow monkey fly) <ul style="list-style-type: none"> hummingbirds bees butterflies (Rocky mt. bee plant) <ul style="list-style-type: none"> bees butterflies (Tulip gentian) <ul style="list-style-type: none"> hummingbirds bees butterflies (Desert 4 o'clock) <ul style="list-style-type: none"> bees sphinx moth 	<ul style="list-style-type: none"> (Cholla cactus) <ul style="list-style-type: none"> diadema bees butterflies (Prickly pear cactus) <ul style="list-style-type: none"> diadema bees ants wasps hummingbirds (Desert even primrose) <ul style="list-style-type: none"> sphinx moths butterflies (Desert purple sage) <ul style="list-style-type: none"> sphinx moths nocturnal long-tongue moths hummingbirds hummingbirds bumble bees honey bees 	<ul style="list-style-type: none"> (Rocky mt. columbine) <ul style="list-style-type: none"> hummingbirds sphinx moths mason bees bumble bees assorted bees (Blue flax) <ul style="list-style-type: none"> bees flies (Blue sage) <ul style="list-style-type: none"> bumble bees butterflies hummingbirds 			<ul style="list-style-type: none"> (Desert evening primrose) <ul style="list-style-type: none"> sphinx moths bees (Golden current) <ul style="list-style-type: none"> monarch butterflies hummingbirds pollinator generalist (Western wallflower) <ul style="list-style-type: none"> pollinator generalist (Orange mt. daisy) <ul style="list-style-type: none"> butterflies bees (Scarlet globe-mallow) <ul style="list-style-type: none"> butterflies bees (Yellow monkey fly) <ul style="list-style-type: none"> hummingbirds bees butterflies 	<ul style="list-style-type: none"> (Hedgehog cactus) <ul style="list-style-type: none"> diadema bees hummingbirds (Wild scarlet beebalm) <ul style="list-style-type: none"> hummingbirds bumble bees specialist bees sphinx moths (Red cardinal flower) <ul style="list-style-type: none"> hummingbirds 	<ul style="list-style-type: none"> (Rose of Sharon) <ul style="list-style-type: none"> hummingbirds bees butterflies (4 o'clocks) <ul style="list-style-type: none"> hummingbirds sphinx moths (Desert beard-tongue) <ul style="list-style-type: none"> hummingbirds wasps 	

HEALING TESTBED

Testbeds are creatively intended to inspire radical (rooted) questions and thought-provoking understandings, by stimulating our senses (sight, sound, smell, touch, taste, memory +), while becoming attuned to the sensory world of other living systems. Like all gardens, Testbeds will require daily and long term care and tending. They may serve as examples for MEA site-based regenerative classes and workshops.



The Healing Testbed contains plant species native to the site and the region, including fragrant herbs, wild edible and medicinal plants which provide opportunities for learning and resilient ecological practices.



POLLINATOR TESTBED

In this wildflower site one's attention is drawn to a small domed structure with entry opening facing to the West, and amid 'wavelet' forms functioning as gardens sheltering a single-colored flowerbed. Along the top edge of each wavelet is a channel for water catchment and direction that is delineated with a single bright color, marking in the non-blooming seasons which color flower will appear. The Dome's colorful exterior mimics the white-lined sphinx moth colors, a major pollinator in the region, and with the magenta-edged opening points to one of its favorite flower colors, the Four o'clocks (Mirabilis).



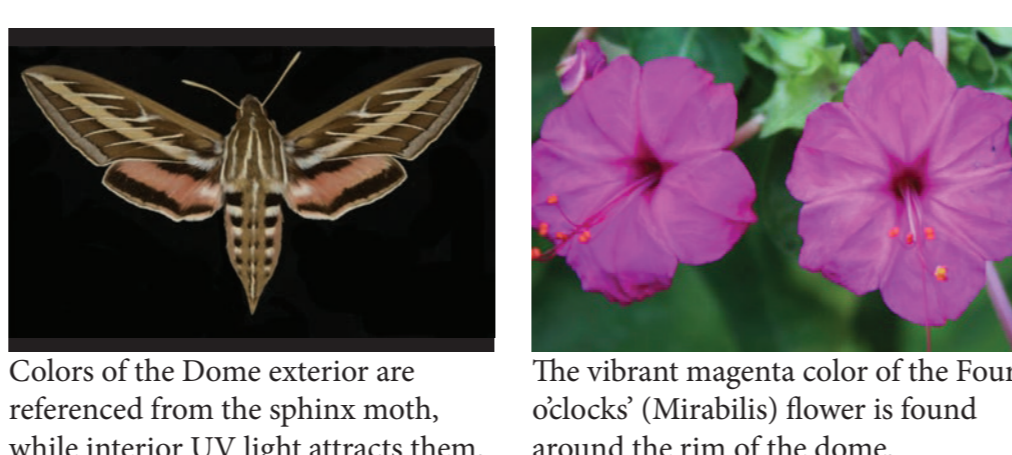
Inspiration for domed forms. Hormuz, Iran. ZAV Architects employed the adobe techniques of master Nader Khalili (1936-2008).



Pollinator dome and garden study in clay, roughly 1"=1' scale



Pollinator dome and wavelet study in clay, lit by pollinator-attracting UV light



Colors of the Dome exterior are referenced from the sphinx moth, while interior UV light attracts them. The vibrant magenta color of the Four o'clocks (Mirabilis) flower is found around the rim of the dome.



Serpentine wavelet forms with Llaretas; study for pollinator gardens



Wavelet and serpentine form studies in clay, roughly 1"=1' scale

