Introduction

Project Description

What: This project is the development of a wholesale nursery in Nipomo, California, with accompanying residence. Phased project additions include planting display gardens, expanding the nursery into retail, installing the necessary facilities to accommodate weddings, establishing a natural adventure playground, and opening a Bed & Breakfast. The display gardens will not only teach about ecology, plant communities, and planting design but serve as a lovely outdoor venue for special events and as especially attractive backdrops for photography. Part of the site will also be set aside for wildlife habitat restoration.

How: I will make this project a reality by designing: 1) a nursery which utilizes the rolling topography and tree cover of the project site, 2) display gardens which exemplify Mediterranean climate plants in creative designs, and 3) a wedding venue area with views of the natural beauty of Nipomo. Included in the designs will be designated spaces for a private residence for my own family and a Bed & Breakfast able to offer visitors rest and a beautiful, peaceful environment.

The project will begin with the residence and wholesale nursery in order to establish the business before expanding into the other roles.

The following pages hold my investigation and design process. For a quick overview of the project, see the video to the right.
Nipomo is located in San Luis Obispo County on the Central Coast of California, approximately halfway between Los Angeles and San Francisco.
The Willow Road Extension site is located on Agriculturally zoned land, and is adjacent to residential rural zones and additional agricultural zones.
Nipomo is home to a variety of plant and animal life, and in particular has a large compliment of bird species. Some of the creatures that can be found on and around the site include the Ferruginous hawk, Great Horned Owl, cottontail rabbit, and California quail.

Maintaining biodiversity is an important component in keeping the ecosystem healthy. One of this project’s goals is to enhance habitat for local creatures.
sampling of local insect species

- Painted Lady Butterfly
- Monarch Butterfly
- Bees
- Black Widow Spider
- Tent Moth
- Jerusalem Cricket
- California King Snake
- Western Fence/Blue Bell Lizard
- Pacific Gopher Snake

sampling of local reptile species

- Black Widow Spider
- Tent Moth
- Jerusalem Cricket
- Western Fence/Blue Bell Lizard
- Pacific Gopher Snake

sampling of local mammal species

- Wild Rat
- Desert Cottontail Rabbit
- Pocket Gopher
- Mouse-Eared Bat
- Coyote
- CA Ground Squirrel
- Pinyon Mouse
- Skunk

The Central Coast is home to many nurseries: retail, wholesale, and contract growers. See the following for more detail.
Arroyo Grande, CA

Location
- about 8 acres on two sites off El Campo Rd.
- rural surroundings
- residence with display gardens is adjacent to nursery grounds

Business Model
- founded in 1979
- wholesale grower
- specializing in CA natives and other Mediterranean climate plants
- greenwall & greenroof design and installation, regional plant supplier of the LiveRoof modular greenroof system
- 20+ full time employees

Mission
"Native Sons is a wholesale nursery firmly rooted in the heart of California’s mediterranean climatic core. We work to provide perennials, grasses and shrubs that flourish in a climate defined by moderate winter rainfall and warm dry summers. The cyclical shortage of water here asks its gardeners to plant with a sense of responsibility, an open mind, and an air of adventure. The plants we grow are selected in an effort to reinforce this philosophy. We draw from our native California flora as well as from the other Mediterranean floras of the world; Australia, South Africa, Chile and the Mediterranean Basin. It is our hope that by offering these plants we might foster a heightened awareness of our climate and the ecological realities inherent in such an environment." (emphasis added) - nativeson.com

Take-Aways
1. Work and home can be very close together in a rural situation like Native Sons where, as a wholesale grower, visitors generally visit by appointment. This allows Dave Fross and his family a measure of privacy around their house and control over the flow of visitors.
2. Shade structures can be simple but very effective in keeping plants in the appropriate light conditions.
3. Limiting signage of the nursery reduces the flow of unannounced guests.
4. Having a clear philosophy and mission for the business can aid in directing decisions about expanding, reducing, or maintaining the activities of the nursery as new opportunities arise.
5. Gravel under/around the plant stock benches allow for water percolation and weed abatement.
6. Display gardens, when around a house, have a dual purpose of demonstrating the use of the nursery’s plants and beautifying the residence.
7. Additional land can be purchased when the nursery is ready to expand.
8. Overflow parking for open-house days, and wide roads for truck loading and unloading are beneficial.

Above: Demonstration green wall of succulents.

View from under a shade structure at Native Sons.

View toward the Fross residence from within garden.

Above: Native Sons founder and owner David Fross giving a tour of Native Sons facilities to Cal Poly students.

View toward the Fross residence from within garden.
internet and social media use by nipomo nurseries

Nipomo Nursery Use of Social Networking and Company Websites

Most Common Company Website Features

Social media use breakdown by nursery

Santa Fe Nursery - Wholesale
- Specialty: Containerized Transplants

Brassica Wholesale Nursery - Wholesale
- Specialty: Cut Flowers

C & M Nursery - Wholesale
- Specialty: Citrus and Avocado Trees

Clearwater Nursery - Wholesale
- Seasonal Living Plant Favorites

Pacific Sun Growers - Wholesale
- Specialty: Indoor Tropical Plants

Speedling Inc. - Wholesale
- Specialty: Containerized Transplants

Miners Ace Hardware - Retail
- Specialty: Variety

California Palms - Retail
- Specialty: Palm Trees & Landscape Plants

Earthly Delights Design & Landscape Nursery - Retail
- Specialty: Variety

Growers Transplanting Inc. - Wholesale
- Specialty: Transplant Tech and Operations

Halloway’s Farms - Retail
- Specialty: Christmas Trees

Old Town Nursery - Retail
- Specialty: Variety

Muranaka Bonsai Nursery - Retail
- Specialty: Bonsai

Euphoria Flowers - Retail
- Specialty: Cut Roses

Skyline Flowers - Retail
- Specialty: Cut Flowers
Nipomo’s nurseries are very diverse, growing all sorts of plants including Bonsai and Christmas trees but none of them specialize in succulents, Mediterranean grasses, or California native species.
Darker green represents the areas of greatest tree cover. This is important to determine which areas receive the most sun; a critical component for nursery placement. The tree groupings also show where the wildlife corridors will most likely be - areas that should be protected for wildlife use.

Drainage patterns are important in capturing nursery irrigation run-off for the purpose of filtering and recycling it. This is important to determine which areas are best suited for ceremony and B&B experiences that are free from traffic sounds.

Areas impacted by Willow Road traffic sound.

Areas impacted by freeway sound.

This is important to determine which areas are best suited for ceremony and B&B experiences that are free from traffic sounds.

Darker green represents the areas of greatest tree cover. This is important to determine which areas receive the most sun; a critical component for nursery placement. The tree groupings also show where the wildlife corridors will most likely be - areas that should be protected for wildlife use.

Drainage patterns are important in capturing nursery irrigation run-off for the purpose of filtering and recycling it. This is important to determine which areas are best suited for ceremony and B&B experiences that are free from traffic sounds.

Areas impacted by Willow Road traffic sound.

Areas impacted by freeway sound.

This is important to determine which areas are best suited for ceremony and B&B experiences that are free from traffic sounds.
For the purposes of organization, I divided the site into general zones of activities.

The woodland wildlife zone is an area which will be partially reforested to ease the damage done by cattle grazing, and will serve many more wildlife uses.

The hospitality and Event zone is where the Bed and Breakfast will reside and where weddings will take place. It will be planted with beautiful gardens of Mediterranean climate plants.

The grassland wildlife zone is where the most open natural space will be, functioning as a source of food and nesting materials for many kinds of animals.

The woodland wildlife zone is an area which will be partially reforested to ease the damage done by cattle grazing, and will serve many more wildlife uses.

The residence zone is where my family will live, where I will frequently foster kittens, and where I will take naps in the heat of the day before going back to work.

The nursery zone is where all the primary propagation and cultivation of plants will take place for the nursery business.

The entrance zone is meant to be a calming experience for the visitor with peaceful views and noise buffering of traffic sounds.

Each of the following concepts had to incorporate these activities.
A circular layered multi-use building designed to use gravity to pull irrigation water down into a water recycling system before re-using it. The event area would include the center atrium.

Pros: interesting form and idea

Cons: under-utilizes the site, too many potential program conflicts.
More practical nursery layout, B&B separate from the wedding venue area to provide a more isolated and natural setting, reception held separately in front of the B&B.

Pros: While the curved amphitheater gives the venue a sense of wholeness & unity.

Cons: not really a new idea, perhaps not innovative enough.
Contemporary style with more linear shapes. Bed and Breakfast serves as a launching point for the wedding venue.

Pros: Benefits include: Ease of access to utilities found in the B&B that would service wedding preparations and receptions. Ceremonies and receptions can be held in the same location with the aid of some flexible space for staging.

Cons: However, the B&B is so close to the venue it would have to be reserved for wedding use only on wedding weekends, which may not be financially feasible.
B&B's Cottage Nursery will be well integrated into online activities and resources.
Right: The wedding venue area is a multi-purpose space able to adjust to event needs. The building beside it houses dressing rooms, a kitchen, rest rooms, and storage areas for event facilitation. Parking behind the building is available to caterers, etc.
blow-up plan of retail nursery

- display gardens
- stock display area

1"=20'

perspective A: retail nursery

- seating area partially shaded by arbor
- display gardens
sample of display garden planting palette

- Echium candicans
- Limonium perezi
- Olivia minuta
- Stachys byzantina
- Erythrina cristagalli
- Phormium "Yellow Wave"
- Hemerocallis spp
- Tecoma capensis
- Ceanothus 'Ray Hartman'
- Salvia leucantha
- Fuchsia "Siskiyou Blue"
- Phormium "Bronze Ruby"
- Agave attenuata "Ray of Light"
- Phormium "Sunset"
- Ribes sanguifolium
- Salvia greggi
- Ceanothus 'Yankee Point'
- Phormium 'Guardsman'
- Erigeron karvinskianum
- Miscanthus sinensis 'Adagio'
- Muhlenbergia reverchonii
- Agave attenuata 'Ray of Light'
- Ribes sanguifolium
- Salvia greggi
- Ceanothus 'Yankee Point'
- Phormium 'Guardsman'
- Erigeron karvinskianum
- Miscanthus sinensis 'Adagio'
- Muhlenbergia reverchonii

Tables to reduce back strain for employees when working with plants in small containers and for growing green roof modules.

Mediterranean climate plants for climate-appropriate gardening.
The trails weave their way through open fields and closed groves of trees, all of which are home to local animals. The trees planted will help restore the habitat quality from the damage done by over-grazing.