FEED & SEED

“FEED & SEED is a learning center for farm, food, and related business in the context of a working farm, market, commissary, grocery and cafe. Leveraging Upstate South Carolina’s research universities, strong private foundations, and invested business interests, FEED & SEED will serve as the nexus for improving our current farm capacity; train our next generation of farmers, food professionals, and light manufacturers in sustainable business; and use our local products as the vehicle. Invigorating the economy, providing it with trained workers, and supplying local, fresh, healthy foods to all socioeconomic sectors of our populace, FEED & SEED will serve as a model to communities across our state, region, and nation, leading the way to create a consorted effort to propel our community toward physical and economic vitality.”

Mike McGirr, Co-Founder & Executive Director, FEED & SEED

As defined by the USDA, a regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.

SERVICE LEARNING: A PARTNERSHIP BETWEEN CLEMSON UNIVERSITY AND FEED&SEED

A holistic project seeking to solve overall health issues within the community of Greenville, SC
A **FOOD DESERT** is an area where individuals do not have access to fresh, local unprepared foods. The FEED&SEED addresses the issue of food deserts in the upper 10 counties of South Carolina by providing a food hub to distribute local food and also through outreach community gardens at Spinx gas stations.
The Greenville Health System Swamp Rabbit Trail is a multi-use trail system in Greenville County. It serves as a major pedestrian connection throughout Greenville. The trail spans 18.7 miles and is used primarily by bikers and walkers. By connecting the FEED&SEED to The Swamp Rabbit Trail, individuals will have the opportunity to access fresh local food.
Cycles and Connections

- Green Wall
- Hydroponics
- Growing Cycle
- Farmer to Consumer
- Consumer
- Farmer
- Vermiculture
- Distribution
- Rainwater
- Animal Cycle
- Plant Cycle

Cycles and Connections

Clemson School of Architecture
72% of American consumers know nothing about farming or ranching.

- A laying hen lives in a space as big as a sheet of paper for the entire 2-3 years of its life.
- Growth hormones make meat chickens grow so fast they can’t stand, walk, or function properly.
- Feed lots of cows are often overcrowded and covered in mud and feces.
- Animals are eating improper food such as corn, GMO’s, and unnatural foods.
- Less than 2% of the food industry is organic.

75% of healthcare spending is on chronic diseases linked to diet.

- More than 80% of grocery food contains GMO’s (genetically modified organisms)
- GMO’s don’t have to be labeled.
- 91% of Americans are uneducated about GMO’s but would like packaging/labels that informed them of the practice.
- Processed foods make up 70% of U.S. diet.

Humans’ diets have changed more in the past 100 years than in the past 10,000.

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http://www.eatingwell.com/do_you_know_where_your_food_comes_from
http://www.farmpolicyfacts.org/index.php/real-facts/
ENVIRONMENTAL EFFECTS: SUSTAINABLE SYSTEMS

**RAINWATER HARVESTING**
- Average of 3.9" of rain each month
- Retail rooftop (13,849 SF) can collect 34,038 gallons/month
- Farm rooftop (7,123 SF) can collect 17,506 gallons/month
- Total rainwater collected off roofs is 51,544 gallons/month
- Ponds on site can hold 263,988 gallons of water
- Toilets, urinals, and showers on site average 56,738 gallons/month
- The ponds hold 4 ½ months’ worth of usable water

**PHOTOVOLTAICS**
- Retail and farm building average 13,362 kWh/week
- Greenville averages 5 hours of sunlight/day
- 250 kW system is appropriate for buildings with this consumption
- System includes 1,000 panels and costs $360,250
- System will provide 30% of the power needed
- Assuming a kWh rate of $0.10, the yearly electrical expense averages $30,586
- Photovoltaic system is paid off in 13 years

**RECYCLED MATERIALS**
- Roughly 33,500 SF of asphalt exists on site
- Reuse 100% of existing asphalt in proposed design

**NATURAL LIGHT**
- Retail building transparency increased by 34%
- Farm building transparency increased by 36%