The Red Barn represents an important component of the rural Minnesota homestead and is an iconic structure on the University of Minnesota Arboretum’s property. It can become a 21st century hub around which future interactive exhibits and experiential opportunities occur.

It is imagined that this updated existing facility and new eco friendly facilities will demonstrate the latest in green building technology, sustainable landscaping and horticulture, modern farming techniques and interactive gardens showcasing residential and urban food production. As a venue, the traditional farmstead can become a Suburban Ecology Center with displays and exhibits for the 21st century.

Teaching classrooms, inside and out, conference facilities, rest rooms and concessions can make this a vibrant and freestanding facility able to be used year round as a jumping off point for visitors, school groups and tours. An interpretive kiosk at the top of the hill near the parking area and entrance will provide an overview of the mission of The Red Barn as well as showcase current events.
Facilities
- A living farm, a sustainable agricultural center, a retail nursery, and a multifunctional/rental facility. Parking, concessions, and restrooms will be needed at this site.
- Barn Store
  - Fresh produce
  - Honey and wax products
  - Flowers and flower arrangements
  - Gifts, books and souvenirs
  - Gardening equipment and tools
  - Sandwiches, salads, snacks and beverages
  - Restrooms
- Meeting space, event space, outdoor classroom, adventure playground
- Farm house
  - Ecological principles of sustainable living
  - Alternative power sources, solar, wind, geothermal
  - Green building materials
  - Residential composting
  - Water conservation
  - Recycling
  - Water treatment
  - Free range chickens
  - Honey production

Bee Discovery and Pollinator center
Nature based therapy

Parking/Access and Infrastructure
- 100 space minimum capacity

Demonstration Gardens
- Vegetables and fruit crops suitable for residential and urban gardening
- Perennials and annuals for cutting and display

Events
- Planting and harvesting crops
- Seasonal holidays and celebrations
- Educational sessions
- School field trips
- Corporate events, teambuilding
- Cooking demonstrations and classes
- Weddings and receptions
- Gardens and facility tours
- Educational sessions on gardening
The Arboretum’s Farm Garden project will realize a vision, long dreamed of, to put all the Arboretum elements together into a unique facility: research station, education programs, seasonal beauty, horticultural training, foods for good health, animal husbandry, creative opportunities, and a wide variety of nature-based therapies. In addition to programming components for specific audiences, all features will include interpretive signage for the visiting public.

Key Features

- Research demonstration plantings
- Annual and perennial food production gardens & demonstration areas, with emerging plant production techniques
- Indoor-outdoor kitchen teaching facility
- Food preservation center
- Animal barn for urban/suburban animal husbandry and nature-based therapy
- Creativity space for art and interpretation
- Bee center – apiary with pollinator gardens
- Dog trail
RESEARCH DEMONSTRATION PLANTINGS | apples, grapes, prunes and small fruits

THE UNIVERSITY OF MINNESOTA Horticultural Research Station at the Arboretum has introduced many well-known fruit-bearing plants for Minnesota. The farm garden will showcase a living exhibit – a “Hall of Fame” for these plants. From doctoral students and elementary students to casual visitors, everyone will have the chance to watch food growing through all seasons of the life cycle, gain new skills in food production techniques, enjoy samplings of fruit as each cultivar ripens, and understand more deeply the connection between plants, place, and ourselves.

Each grouping of fruit-bearing plant will have interpretive signage that includes yield per tree, diseases and insects, spacing, hardiness, and vigor. The site will be easy to access on foot from a classroom and include space to gather around the plants for hands-on instruction.

Key Features
A four-seasons, living laboratory of fruit producing plants, to see in one visit, at one place. Plant collections and interpretive signage demonstrate locally grown-and-harvested concept.

Education Audiences
• Adult students, all visitors
The Farm Garden
University of Minnesota Landscape Arboretum

FOOD PRODUCTION GARDEN | best growing practices and demonstration area

THIS STATE-OF-THE ART GARDEN will integrate educational and horticultural programming into a public demonstration site, giving Arboretum gardening staff the opportunity to demonstrate their considerable skills and the most up-to-date practices for growing food in a small, local setting.

Participants in gardener-apprentice programs will have the chance to work side by side with staff and learn to mix soil, water, wash pots, harvest, process, care for plants, fix lunch from the garden, take produce home. This garden will also enable nature based therapeutics staff to offer similar hands-on programs to various client groups seeking therapeutic and vocational rehabilitation.

This garden will be large enough to plant and harvest significant quantities of produce, teach a wide range of planting methods, and cater to specific interests like growing hops and brewing beer. Numerous social service agencies have expressed interest in partnering with the Arboretum on this garden.

Key Features
• Demonstrates best practices to grow food plants at home/community/school/business; seed-saving as history
• Best plants to grow in Minnesota

Education Audiences
• Nature-based therapy programs
• Work-rehab participants
• Gardener apprentices
• All visitors
ONE DOESN'T NEED a large yard to grow food. Many new state-of-the-art devices exist to help people grow food plants in all manner of small spaces. Vegetables and fruits alike can be grown in urban settings so that neighbors and passers-by don’t even notice the utilitarian nature of the plantings. Small plots, pots, walls and balconies can be beautiful and well designed as well as functional.

This section of the food production garden will feature the latest in vertical walls, moveable planters, pop-up gardens, edible fencing, grow-bags and the like and demonstration best place and practices for using them at home or in a community setting. Small-space, season-extending, high-tunnel models will also be used and displayed.

**Key Features**
- Vertical walls
- Moveable planters
- Pop-up gardens
- Edible fencelines
- Gro-bags and the like
- Interpretive signage

**Education Audiences**
- Horticulture and custom classes
- All visitors
THE NEW INDOOR-OUTDOOR teaching kitchen will give Arboretum staff the ability to grow, prepare, serve and preserve food in the same location on Arboretum grounds. Targeted for a site near the beloved old Red Barn, staff will be able to harvest food and prepare it for visitors the same day. You just can’t get it fresher than that!

From cooking classes to corporate team-building events, guests will have the opportunity to make wine, prepare a harvest meal and learn the science behind the healthful benefits of plants. Arboretum staff can offer samples of fresh, locally grown food at a tomato festival, corn feed, grape stomp or fall beer fest.

The kitchen will be accessible to cars, wheelchairs, pedestrians and schoolbuses. It will operate year round, seat 50 adults easily, and offer clear views of the demonstration gardens. The indoor and outdoor facilities will make it possible to bake, braise or barbecue the freshest produce according to the season.

Key Features
- Commercial-grade stoves and dishwashers
- Canning equipment
- Composting system
- Dining/demonstration/teaching/outdoor cooking areas

Education Audiences
- Adult class participants
- Corporate groups
- Visitors to events
- Beekeepers
AN INCUBATOR KITCHEN is a licensed, commercial grade facility that individuals and groups can rent to develop a food product that will meet official food safety standards. Small-scale entrepreneurs can gain access to spaces and equipment not otherwise available; local bee keepers in particular will benefit from the honey extractor. Families will be able to celebrate a commemorative event by preserving generous quantities of fresh fruits or vegetables, facilitated by an expert.

In addition, the Arboretum will use this facility to develop its own honey retail sales operation, similar to the existing maple syrup and fruit preserves production facility. This operation offers educational programs in addition to sales of Arboretum-grown and -produced food products. Further, participants in the Urban Garden Youth Employment program can develop new food product ideas in a dedicated facility that is connected to gardens and classrooms.

**Key Features**
- Access to the commercial kitchen
- Food preservation area with honey extractor
- Conveyor belt for food production

**Education Audiences**
- Small-scale and start-up food producers: caterers, growers, manufacturers
- CityFresh program participants
- Honeybee keepers
- Adult class participants"
THERAPISTS AROUND THE WORLD are observing profound benefits for patients who interact with animals in a guided setting – including the Arboretum’s Nature-Based Therapeutics (NBT) staff. Taking advantage of our expansive acreage, our NBT staff plan to incorporate animals as “co-therapists” into therapeutic programming at the proposed farm garden at the Arboretum. The animal barn will be in close proximity to the gardens and kitchen, where it makes sense to include it – horses, chickens, dogs and cats belong on a farm! These animals will, of course, be highly trained to interact with people, especially with the sensitive individuals and groups who are clients of the Arboretum’s NBT programs.

**Key Features**
Animal barn to house an assortment of horses, chickens, rabbits, dogs and cats

**Education Audiences**
1) Nature-Based Therapeutics for patient groups with
   a wide range of issues, including:
   • Veterans and others with PTSD
   • Parkinson’s and other disabilities
   • Mental health issues
   • Occupational and vocational rehabilitation
2) Professionals seeking training in NBT
DOG OWNERS REPORT that concern for their animal’s health gets them out for at least one vigorous walk a day – in other words, the human-animal bond promotes healthful exercise for all concerned! This designated trail addresses a long hoped-for desire on the part of members who are dog owners.

**Key Features**
- For-members-only trail will require a canine membership in the Arboretum

**Audience**
- Member visitors with a member dog
THE ARBORETUM OFFERS a near-perfect setting for anyone interested in creative activity inspired by nature. The Arboretum is not an art center, but it offers a natural attraction to anyone who seeks inspiration and instruction. Further, creative inspiration is often a pathway to advocacy and conservation. The Arboretum has excellent exhibit spaces, but lacks dedicated creative space for adults. In the new facility, photographers, painters, potters, papermakers, writers, and anyone engaged in occupational or vocational therapy will have a dedicated working space for learning and creating, with a water source for a range of media, and ready in-and-out access to gardens and trails through the grounds. The creativity space will connect to the kitchen-demonstration area and make it easier for Nature Based Therapeutics clients and adult education participants – including a large group of amateur photographers – to take classes and easily complete their creative projects.

Key Features
- Studio space to accommodate 30 adults at once
- Expansive, durable work surfaces
- Easy access to a water source and to gardens and grounds

Education Audiences
- Nature-Based Therapeutics clients and contract groups
- Participants in adult education programs
**GREEN BUILDING AT A GLANCE**

**Key Features:**
- Indoor-outdoor kitchen
- Incubator kitchen
- Bee center
- Classrooms
- Creativity space
- Interpretive center
- Research area
- Maintenance facilities

THE FARM GARDEN will not only offer a new site for horticultural research and educational opportunities, but it will also be a state-of-the-art green building that will incorporate the latest energy-conservation, environmentally friendly technology. To develop this building, we will look to the Phipps Conservatory Center for Sustainable Landscapes as a model. In addition to its programming components, our new green building will include:

- Reception area
- Offices for NBT, Adult Ed, beekeepers, head gardener
- Communal work space for up to 6 staff
- Conference room for 10 people
- First aid-respite-adult-care room
- A desk and room for cleaning supplies and storage
- 200 sq.-ft. apartment for overnight animal care, instructor-in-residence, security for special vents
- Work stations for researchers
- Dedicated maintenance building for larger storage and maintenance needs.

**Key Features**
- Indoor-outdoor kitchen
- Incubator kitchen
- Bee center
- Classrooms
- Creativity space
- Interpretive center
- Research area
- Maintenance facilities