Key Features
• Outdoor Amphitheater with seating for 500+  
• Stage for nature-based programming, storytelling, presentation and demonstrations, picnics, graduation ceremonies, field trip orientations  
• Interpretive signage for visiting public

Performance Area
• Terraced seating for 500+  
• Stage  
• Steps  
• Gardens  
  • Terraced gardens  
  • Entry plaza gardens  
  • Stage gardens  
• Scenic backdrop  
• Natural setting  
• Hillside overlook  
• Trails and walkways, with connection to existing Arboretum trails, exhibits, displays & facilities

Facilities
• Restrooms and pavement  
• Concession & maintenance  
• Building, pavilion  
• Entry kiosk  
• Pond overlook pavilion  
• Parking  
• Service and infrastructure

Possible Events
• Lectures/seminars  
• Casual gatherings  
• Concerts  
• Theater & dance  
• Plays  
• Musicals  
• Weddings  
• Leisure/relaxation  
• Movie nights  
• Seasonal celebrations

Education Audiences
• Adult class participants, especially plein-air programming (e.g. painting, photography)  
• Orientation for visiting groups  
• Summer day camps  
• School field trips

(Note: The Woodland Performance Center will always require an inclement weather backup or alternate rain date.)
A number of very different sites were considered before the Wood Duck Pond location was selected as the most appropriate site at which the Tree Top Canopy Walk might be located. Factors included views, topography, vegetative cover, vehicular and services access, parking, pedestrian accessibility, utilities and proximity to ancillary structures.

There are layers of animal life in the forest, and they differ from one layer to another. Tree varieties, too, differ from each other and can be identified via their bark, buds, flowers, leaves and shapes. From the ground into the canopy, a walkway will feature non intrusive spaces for visitors to study these differences and to observe birds and other animals up close. The pathway will be heated, preventing snow and ice build-up, for year-round visiting. Above the treetops, visitors will have a broad overview of the Arboretum’s ecosystems: woodlands, marshes, ponds, prairie, collections and gardens. Visitors will learn concepts like seasonal bird migration, study the evolving forest, and learn to identify trees and other woodland plants. Viewing the forest from ground to treetop will give visitors a unique perspective on the Arboretum, its changes throughout the year, and the varied, fascinating ways plants and animals have adapted to living at different elevations.
Key Features
• Habitat-sensitive, non-intrusive bird blinds, listening devices, feeder stations, binocular stations
• Space for camera tripods and easels
• Heated pathway
• Side platforms for groups
• Interpretive signage on history, biomes, plants, animals for all visitors

Education Audiences
• Adult ed. classes
• Children’s camps and field trips
• Birders
• Painters
• Photographers

Facilities
• Canopy walkways
• Elevated steel platforms
• Rope netting play area suspended 50’ above ground between trees and platforms
• Birds nest interpretive area
• Interpretive panels
• Story of tree and wildlife in the canopy
• Arboretum overlook projecting out from the canopy with views of the aboretum and regional lake

• Gateway/entry pavilion
• Pathways and trails linking the arboretum trail network
• Restrooms
• Concessions
• Interpretive opportunities

Sustainable Design
• Sustainable/recycled materials
• Tree protection/engineering
• Lightweight structure
• Prefabricated and moveable structure

Events/Activities
• Education
• Formal and informal learning
• Field trips
• Guided tours
• Recreational opportunities (play areas)
• Photography
• Resting place
• Rental Venue
The Chinese Garden will be a respite, a refuge, respectful of the balance between man and nature and responsive to the landscape, view, and vistas that will define it. In a Chinese Garden there are many subtleties, but the five primary representative components include architecture, plants, stone, water, and art and literature. A truly successful garden will never give the appearance of having been structured.

The Chinese Garden will attempt to imitate nature in a manner that avoids all strict geometrical layouts that would remind us of man’s ordering hand. Rather, characteristics of freedom and irregularity will take precedence.

As one passes through the traditional Chinese entry pavilion, into the courtyard, through a moon gate and into a gallery visitors will experience landscape through twisting pathways leading to a Reception Pavilion. Guests to the Chinese Garden will encounter a journey into a culture most non-Asians can only imagine.

The Chinese Garden interprets the transition from the outside world to a tranquil and harmonious environment. The garden becomes a sequence of sensory qualities as we move from veranda to walking gallery to pavilion to courtyards The aspect of space based upon solidness and voidness or Yin/ Yang.

There is an elegance and simplicity, a subtlety as we celebrate our four seasons, experience the integration of site and structure, appreciate intimate views and long borrowed vistas, contemplate art and enjoy the serenity of the central lake with its sacred rocks.
Educational Programming

- Opportunities to learn about Chinese approaches to art, gardening, medicine (with many healing plants), cooking, literature, and other nature-inspired cultural issues
- Interpretive signage for visiting public
- Opportunities for children to learn about the elements of a traditional Chinese garden and what they signify: architecture, plants, stone, water, and the arts and literature
- Opportunities for art-education programming in collaboration with the Minneapolis Institute of Arts and its Chinese collections curator

Education Audiences

- Adult/youth art education class participants
- Art practitioners, students and patrons
- Children’s field trips

Structures

- Reception pavilion
- Gateways structure
- Covered walkways
- Pavilions
- Teahouse
- Food service
- Scholars house
- Garden wall
- Bridges

Landscape

- Trees, shrubs, and perennials
- Sculptural Rock
- Art/Sculpture
- Stream
- Waterfall
- Decorative paving
- Courtyards
- Fish pond
- Lake
- Stone paths
- Gravel paths
- Parking, concessions and restroom facilities

Events

- Traditional ceremonies
- Meetings
- Lectures, seminars & educational sessions
- Guided walks/tours
- Chinese gardening classes
- Weddings/receptions
- School trips
- Cooking and writing classes
- Fund raising events
- Seasonal celebrations
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 multi-functional/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
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

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**RESEARCH DEMONSTRATION PLANTINGS | apples, grapes, prunes and small fruits**
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
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 events
- 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

**Essential Components of the New Green Farm Garden Project Building**

- Natural day lighting
- Natural ventilation
- Passive solar energy
- Geothermal heating and cooling
- Green roof
- Sustainable building materials
- Building management system
- Permeable paving
- Sustainable landscaping
- Rain gardens and bioswales
- Rainwater harvesting
- Integrative design process
The Bee Discovery Center at the Minnesota Landscape Arboretum will be a unique bee exploration experience. It will function like a bee hive, efficiently combining research and public educational space to showcase the importance of bees to agriculture and to human nutrition, health and food safety.

Visitors will be invited into a unique destination, the Discovery Center, which will have great potential for capacity building, increasing the university's reputation as a leader in environmental and agricultural research and education. This will be an exciting new public attraction, providing a portal to explore the tangible benefits of university research.

The Discovery area will include informative exhibits on current research projects. The range of exhibit topics will include:

- Human health benefits derived from bees and bee products (honey, propolis, venom)
- Biology of the fascinating social behaviors of bees
- Ecosystem services provided by bees as key pollinators of our fruits, vegetables and flowers
- Cultural importance of bees throughout the world and history
- Bees as a portal to sustainable stewardship of our environment

In addition, the Discovery area will be a place for the public to safely experience bees and beekeeping and to appreciate the importance of bee welfare. The center will contain a large viewing window where school and public tours can view a beekeeper handling colonies in a garden setting. Visitors will view live, seasonal demonstrations of how honey is harvested and extracted in a food grade facility.

The Center surroundings will be artfully landscaped with bee-pollinated trees, shrubs and gardens. Here the public can experience floral landscapes from the perspective of a pollinator and appreciate how pollinators, in turn, shape our environment. Landscape designs will teach how everyone can help to improve habitat and promote bee health and diversity.

The new Bee Discovery Center will be a unique bee centered experience, connecting research with a public educational space.