University of Michigan: School of Natural Resources and Environment

Master's Practicum:

Six Points Property Master Plan: <u>A vision for the future home of the</u> <u>Wyandot of Anderdon Nation</u>

Jocelyn Wu M.L.A. 2016 John DeRuiter M.L.A. 2016

Advisor: Robert E. Grese

Client: Wyandot Tribe of Anderdon Nation (Gibraltar, MI.)

Abstract:

The Wyandot of Anderdon Nation have recently acquired a 15 acre parcel of land which sits on their ancestral grounds. This tract of land is called "Six Points" and is located near the Detroit River, in Gibraltar, MI. This Master's Project developed a master plan for this property that enhances the use and aesthetics of the site. This project involved culturally sensitive landscape architecture; site programming; and ecosystem management and restoration.

The design focuses on developing space for education, social events, and tribal ceremonies. The design concept creates two spaces on the property: one half is reserved as a sacred ceremonial space, exclusive to the Wyandot, and the other is a social and educational space for both the tribe and the general public. This allows the Wyandot of Anderdon to have a sacred home for burials and spiritual activities, as well as a more public place to share their culture.

The tribal half of the site will include a traditional rustic longhouse; a healing medicine walk; a council ring for storytelling; and several outdoor gathering spaces for ceremonies. The public half of the property will also have traditional buildings, but they will be dedicated to education rather than ceremony. There will also be an indoor museum, and a large community center.

The property is dominated by a wetland, and presents an opportunity to be a key piece in an already strong network of high quality habitat in the region. Six Points is very close to The Detroit River International Wildlife Refuge, Lake Erie Metro Park, and a regional greenway system. The ecological design at Six Points will be in line with those organizations and will help to further enhance the region.

The final product of this project is a master plan that describes all desired aspects for future development at Six Points. The ultimate goal is to deliver a site design that makes future engineering and construction possible, but most importantly inspires funders and the community.



Table of Contents

Page 5: Acknowledgments

Page 6: Goal

Page 7: Wyandot History

Page 8: Wyandot Culture

Page 9: Location

Page 10: Site Analysis

Page 11: Wetland Analysis

Page 12: Design Concept

Page 13: Master Plan

Page 14: Circulation around the site

Pages 15 - 29: Description and Renderings of Educational Space

Pages 30 - 41: Description and Renderings of Tribal Space

Pages 42 - 50: Planting and Ecological Design

Page 51: Process

Acknowledgements

This Master Plan has taken over a year to produce, on top of many years of planning by The Wyandot of Anderdon Nation. The designers would like to pay special thanks to the following individuals for their knowledge and support:

Bob Grese. - Project Advisor

Director, Matthaei Botanical Gardens and Nichols Arboretum Professor, School of Natural Resources and Environment Theodore Roosevelt Chair in Ecosystem Management

Wyandot of Anderdon Nation:

Ted Roll: Grand Chief

Susan Warrow: Second Chief

Tom Lowler: Gronda Family Chief

D'Arcy F. Tammaro: Pidgeon Family Chief

Catherine Tammaro: Pidgeon Family;

Tribal expert on symbolism and history

Tom Lowler: Gronda Family Chief

Danny Schultz

John Hartig. - Ecological Consultant

Manager: Detroit River Wildlife Refuge

Jack Goodnoe. - Burial Consultant

Cemetery Planning and Design - Ann Arbor, MI.

Goal

The purpose of this practicum was to create a master plan for a proposed Wyandot Tribal Heritage Center. This space will be called Six Points, and is located on the Detroit river, near the mouth of Lake Erie.

The site is a fifteen acre forest swamp. The property will serve as a home for the tribe's cultural and educational practices. The site has enough space for a Wyandot Museum, Community Center, Educational Circuit, as well as many private ceremonial spaces.

The goal of this Master Plan is to design a compelling site which will meet all of the requirements of the Wyandot.

This Master Plan document is meant to be used for fundraising, and to guide the future construction of the site. The site plan presented is very strong, and should make future design easy. Given a lack of data, such as a contour survey, this site plan may be subject to change once new information is available. However, the design elements are the most important, and if their layout changes a bit, Six Points will still be successful.

The goals for the design of Six Points are to:

- Create a spiritual home for the Wyandot of Anderdon Nation.
- Develop a rich center for education on Wyandot history and life.
- Enrich the ecology of the site through an extensive restoration.

The design aims to be rustic in nature, to connect to the forest roots of the Wyandot, however the site will have modern amenities to make the space as efficient as possible.









History



Early 1600's

Natives from Quebec made their way to the Georgian Bay area of Ontario. Around 1600 is when these people became known as the Wyandot.

1650-1700

The Wyandot were chased around the Great Lakes region for 50 years, by the Iroquois. The eventually settled near Detroit, as allies of the French.

<u>1845</u>

The large majority of the Wyandot living in the Great Lakes and Upper Sandusky region were relocated to reservations in Kansas, and eventually Oklahoma. <u> 1845 - Present</u>

Some Wyandot stayed behind when the tribe went to Kansas, and kept their culture alive in South East Michigan. This group became the Wyandot of Anderdon Nation, and they are building their home at Six Points.

Culture

The Wyandot of Anderdon currently have a rich culture in this region. They meet regularly, and will make great use of the new development at Six Points. The space will become a home for Wyandot education, culture, and spirituality.

Needs of the Tribe:

- 1. Natural spaces for spiritual ceremonial activities.
- 2. A traditional Longhouse for spiritual and cultural gathering.
- 3. A large community center, able to host 150-200 people.
- 4. A space for repatriated ancestral remains.
- 5. A museum and building for tribal offices.
- 6. An educational village to accompany the museum.
- 7. Accessible walking routes throughout the property and connecting to the local greenway.









Location

Six Points sits on the ancestral grounds of the Wyandot, and is thus an excellent place to build their home. The development has an opportunity to add to an already impressive list of local attractions. The Detroit River International Wildlife Refuge and Lake Erie Metro Park are both great ecological resources; the improved ecology at Six Points will further benefit the wildlife already present in the area. The area also has significant cultural attractions near by, such as River Raisin National Battlefield Park. This park tells the history of the War Of 1812 in Michigan, in which the Wyandot took a major role. Six Points will tell the Native side to history in South East Michigan.







South Eastern Michigan

Gibraltar

Six Points

not to scale

Key Neighbors: Detroit River International Wildlife Refuge; River Raisin National Battlefield Park; Carlson High school; City of Gibraltar; Lake Erie Metro Park

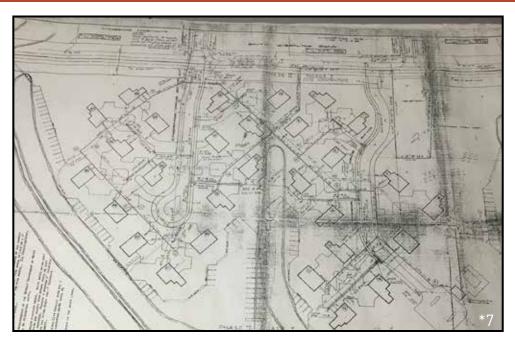
Site Analysis: Most Crucial Design Drivers



<u>Wetland</u>. Much of Six Points is a wetland. This resulted in some design challenges, but ultimately makes a great home for the Wyandot, whose name means "Turtle People."



<u>Neighborhood</u>. Ideally, Six Points would be secluded from the suburbs, and be in a rustic location. However, this is not the case, and the design of the property works to make the space feel more private.

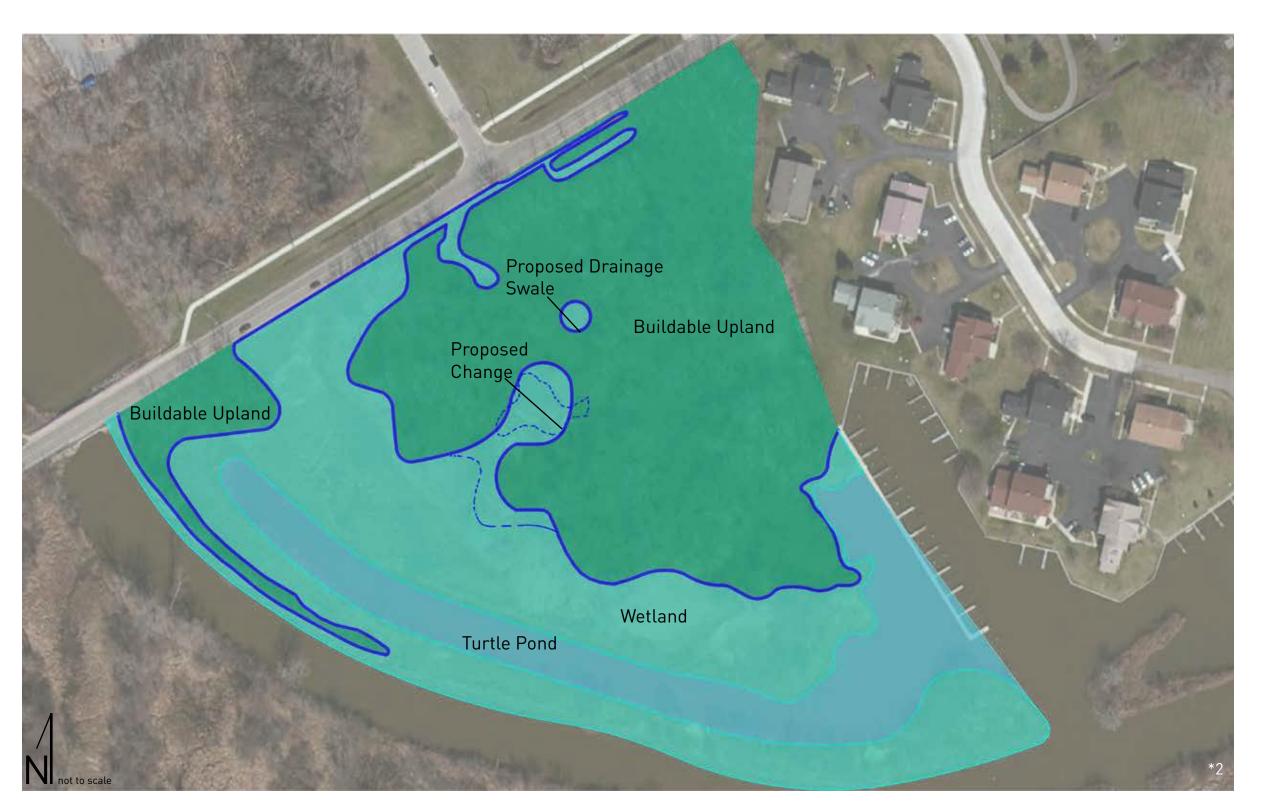


<u>Disturbed site.</u> Six Points is a heavily disturbed site, with very little plant diversity. This is the result of a planned residential development, which was started but never completed.



<u>History and Archaeology.</u> There have been many archaeological findings of Wyandot remains and artifacts within a mile radius of Six Points. This makes it clear that this land is in the heart of Wyandot land.

Wetland at Six Points



The wetland at Six Points creates a beautiful landscape. There is plenty of room on buildable upland to fulfill all of the tribes needs, and the design will work to enhance and expand the wetland.

The only major proposed work to the wetland is to smooth out the pond on site, and connect it to the larger wetland. This will allow the design to be organized around an ornamental wetland garden, while improving drainage on site.

There is not yet a grading survey of Six Points, so all drainage problems can not yet be solved. However, this fact was present throughout the design, and steps were taken to ensure that the design is flexible to any necessary engineering changes.

Wetland survey from: ASTI Environmental

Design Concept

The main concept for design at Six Points is to split the site into two distinct halves. The front half of the property will focus on education for both public visitors and the tribe. The back half of the property will be exclusive to the Wyandot, and will be a reverent and sacred space.

This allows the Wyandot to invite the community into their home, while still maintaining the spirituality of their space.



Educational | Tribal

Public | Private

Master Plan

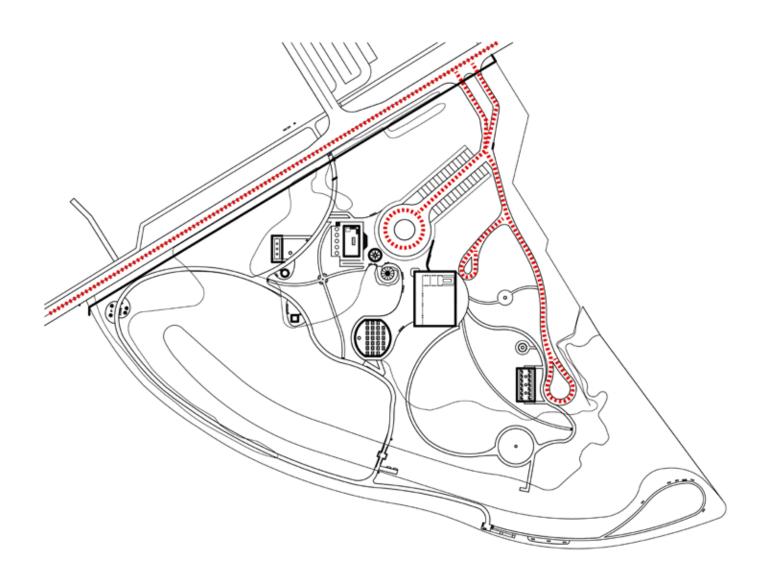


- 1. Vehicle Entrance
- 2. Greenway Entrance
- 3. Parking Lot
- 4. Wyandot Museum
- 5. Educational Village
- 6. Reflective Garden
- 7. Clan Monument
- 8. Turtle Pavilion
- 9. Community Center
- 10. Council Ring
- 11. Wyandot Longhouse
- 12. Ceremonial Area
- 13. Sacred Ancestral Space
- 14. Healing Medicine Walk
- 15. Fence
- 16. Turtle Pond Crossing
- 17. River Overlook
- 18. Educational Boardwalk

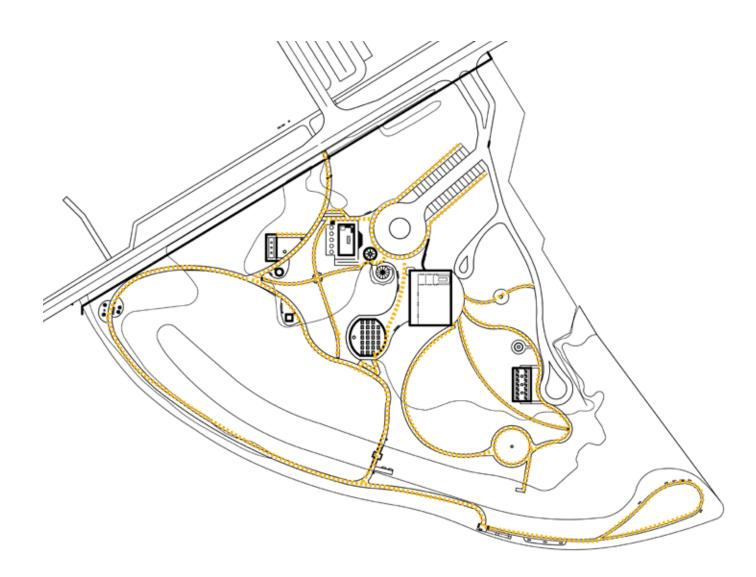
Circulation

Six Points is easily accessible by car; the design will allow buses to drop off groups, while each major building will have a van drop off for deliveries and accessibility. There will be some parking on site, with the knowledge that there is plenty of city parking across Gibraltar Road.

Pedestrians will be able to access Six Points through a connection to the local greenway. There will also be paths throughout the entire site. Much of the site is a wetland, so paths will mostly need to be on a wooden boardwalk.





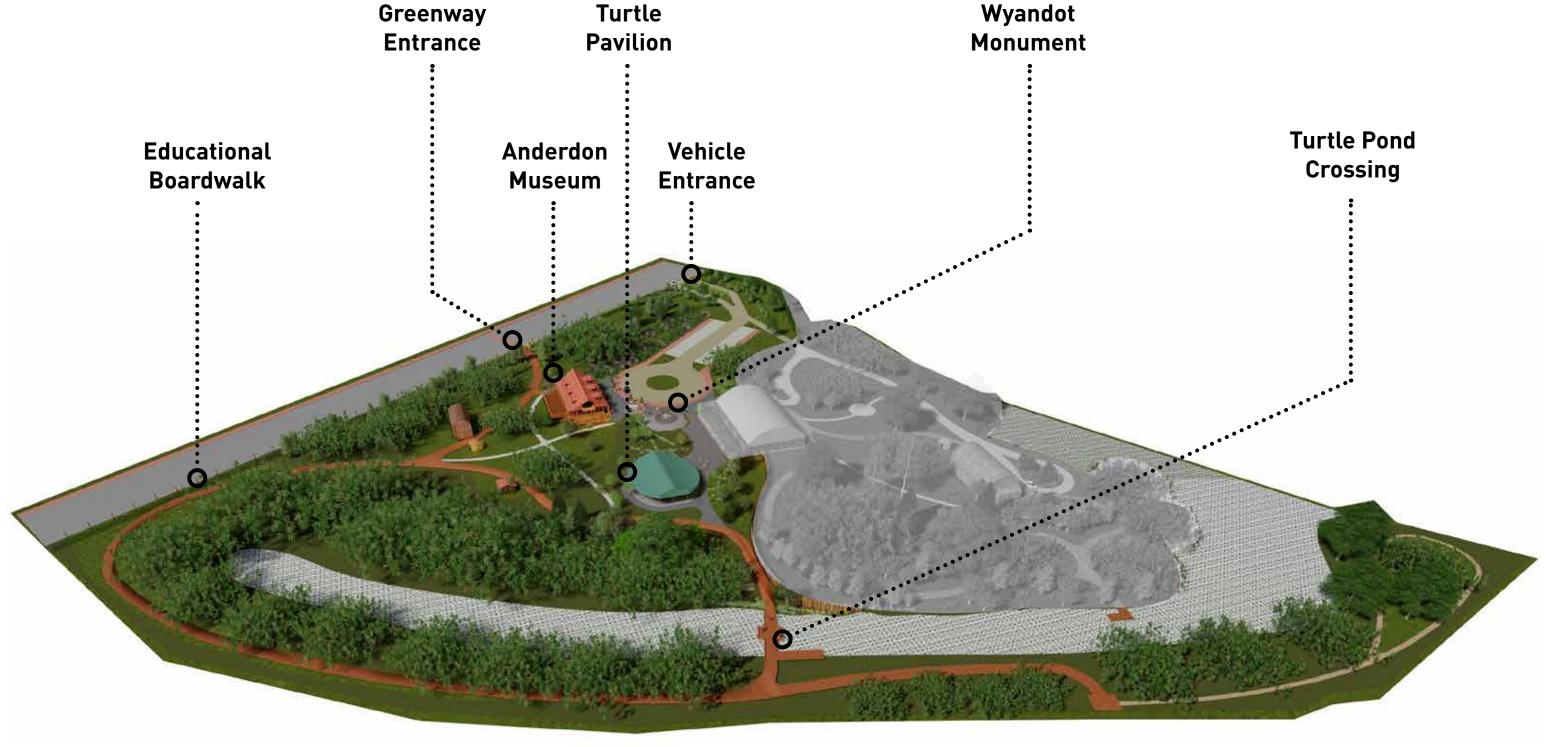


Pedestrian Circulation



Educational Space

This half of Six Points will be focused on education. Many different groups will be considered when planning the educational material including: tribal members and families; tourists on educational tours of the regional attractions; school groups (all age groups); neighbors and users of the community greenway; and any other interested person.

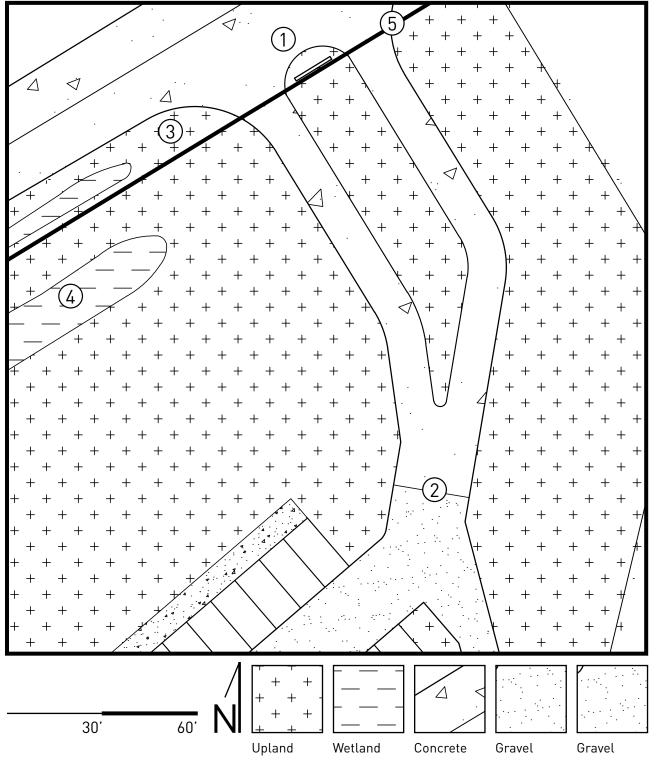


Vehicle Entrance



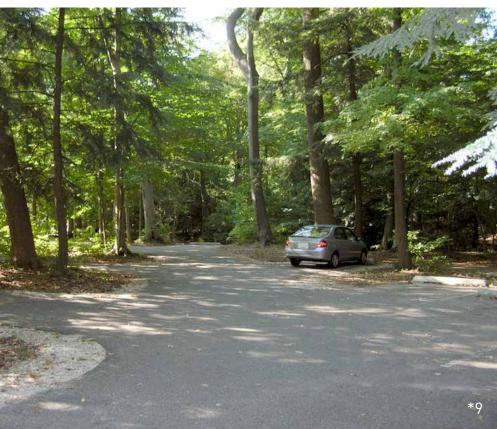
A simple sign decorated with ornamental and Wyandot specific plantings welcomes visitors to Six Points.

Vehicle Entrance



- 1. Car entrance to Six Points. Large enough to bring a school bus through for field trips.
- 2. Concrete entrance, changing to gravel parking lot. The concrete will ensure the entrance at Gibraltar road stays free of debris, and the gravel parking lot will keep the natural character of Six Points intact.
- 3. Ornamental plantings done with Wyandot specific plants, such as Cedar, Sage, Sunflower, and Sweet Grass.
- 4. The wetland along the front of the property was the main design driver for placement of the entrance. This is the only space that allows access without bridging the wetland.
- 5. Fence with gate. Fence along the front of the property should be 4' 5', high quality chain link. Fence between the neighborhood and Six Points should be 8'.





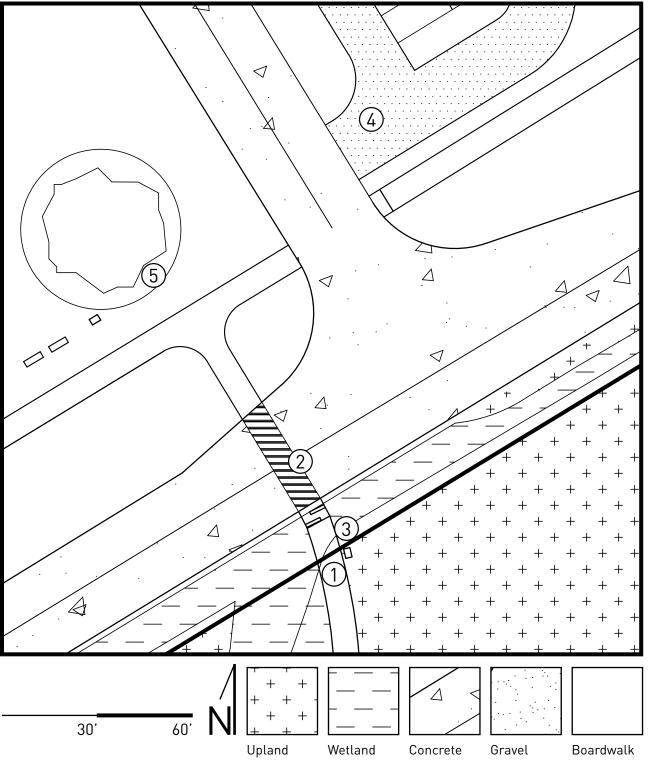
Car access at Six Points will allow easy access, but the lots and roads will be small and rustic, to maintain the natural character of the forest.

Greenway Entrance



The pedestrian entrance connects people from the greenway to Six Points. This path will welcome visitors, and remind them to be respectful.

Greenway Entrance



- 1. Greenway entrance. To easily connect into the local greenway system, a small pedestrian access will be created.
- 2. Crosswalk with flashing light. When a pedestrian needs to cross Gibraltar road from the parking across the street, they will be able to press a button which activates a crosswalk.
- 3. Bike barrier and signs. To ensure no one rides their bike on the boardwalk, a simple barrier can be installed. This checkpoint will also have signs which describe the spirituality of Six Points, and urge visitors to be respectful.

This will also have a sliding metal fence gate which allows the site to be locked at night.

- 4. Parking in field. The two empty fields across from Six Points can be used as parking on heavy volume days.
- 5. Proposed Rock of Gibraltar monument. This monument can highlight the American, British, French, and Native History that is so rich in this area.

This development would be a part of a collaborative effort between the city and Six Points.





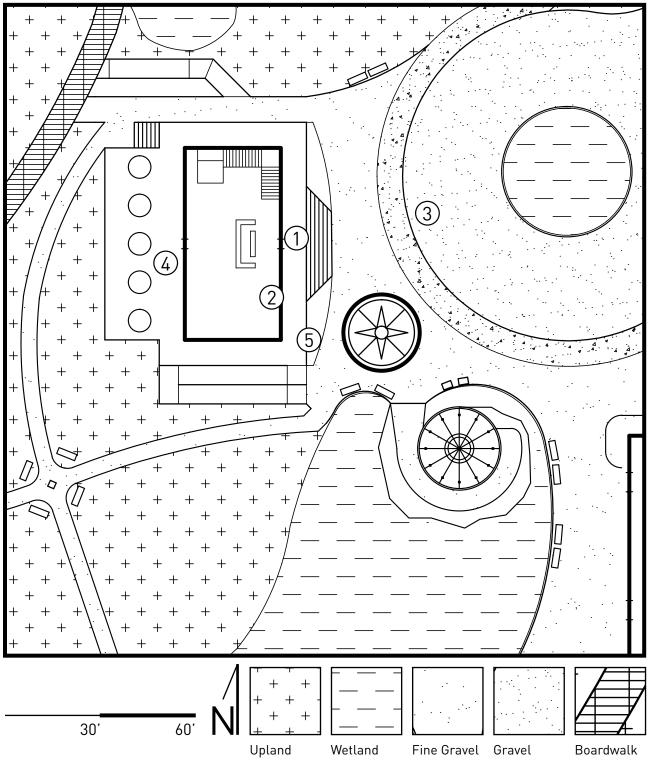
Six Points will be easily accessed by the local greenway system.

Anderdon Museum



Main plaza before museum. This space welcomes visitors to Six Points and immediately immerses them into Wyandot culture.

Anderdon Museum



- 1. This museum will be modeled after a log cabin, and will provide space for education on history and artifacts.
- 2. The approximately 3,000 s.f. building will have a museum and gift shop on the first floor, and Wyandot offices above.
- 3. Vehicle Drop Off. The gravel road will turn around at the museum which will serve as a drop off zone.
- 4. Deck. A large deck will be attached to the building as a place for outdoor classes, as well as a place for families to gather when visiting Six Points.
- 5. The building will be surrounded in an ornamental planting which uses sacred Wyandot Plants.





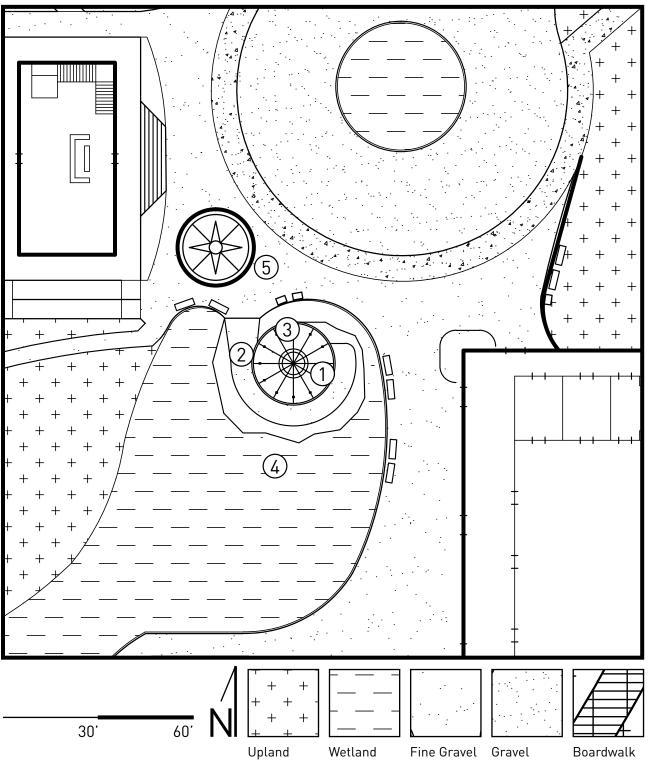
The museum will showcase Wyandot Artifacts, and describe their rich history.

Wyandot Monument



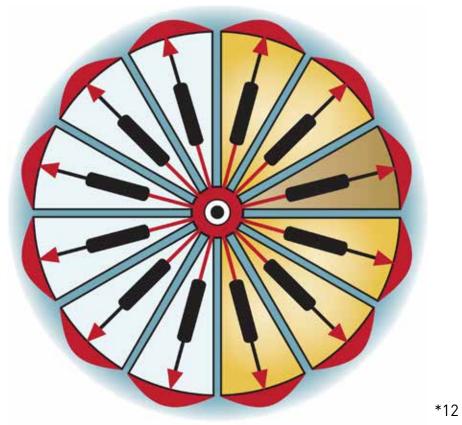
To properly organize this space, a monument which represents the Wyandot Turtle and twelve associated clans will be built.

Wyandot Monument



- 1. A large statue dedicated to the Wyandot of Anderdon, and their twelve associated clans.
- 2. The structure will allow users to walk up a short ramp and view the turtle and clan pillars.
- 3. Each pillar will tell a story and description of each of the original 12 clans.
- 4. The monument is symbolically in the wetland, so that the turtle can remain in its wetland home.
- 5. Directional Compass. To center visitors in their environment, a compass built from brick paving will be placed in the crushed granite plaza.
- 6. While the current symbology of the monument may need to change, the need for a large central fixture is needs. This elevated stage that the turtle sits on creates an exciting visual element, and can easily be filled with other aspects of Wyandot culture.





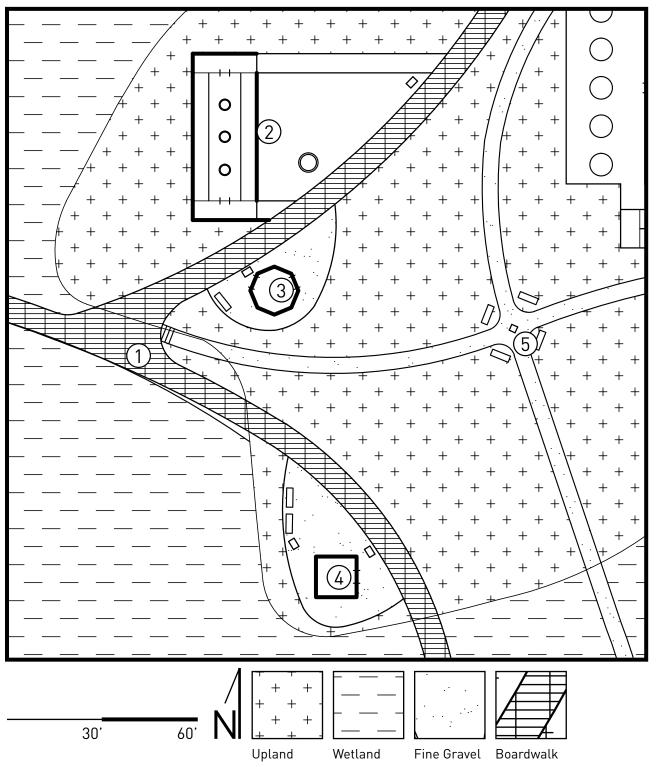
The monument will reference major Wyandot symbology, and should be crafted with care from tribal experts.

Educational Boardwalk



Wooden boardwalk with educational signs will be built throughout the entire site. This will allow easy access through the wetlands and uplands.

Educational Boardwalk



- 1. A wooden board walk will be built throughout the entire site. This will allow easy access through both the wetlands and uplands.
- 2. Educational Longhouse. This is a smaller version of the traditional Longhouse built on site. The building will demonstrate how the Wyandot lived.
- 3. Educational Building. This building will also employ native architecture, but be much smaller than the longhouse. The purpose of this building will be to house dioramas of Wyandot scenes. Six Points is attempting to emulate native conditions, so a detailed model of traditional villages will be helpful.
- 4. Wyandot Cabin. For many years, the Wyandot lived in log cabins in South East Michigan. This will be a replica of such a cabin, built from local materials.
- 5. Arboretum Loop. This area will be populated with the ornamental plants used throughout the property, each with an associated plant sign and description.





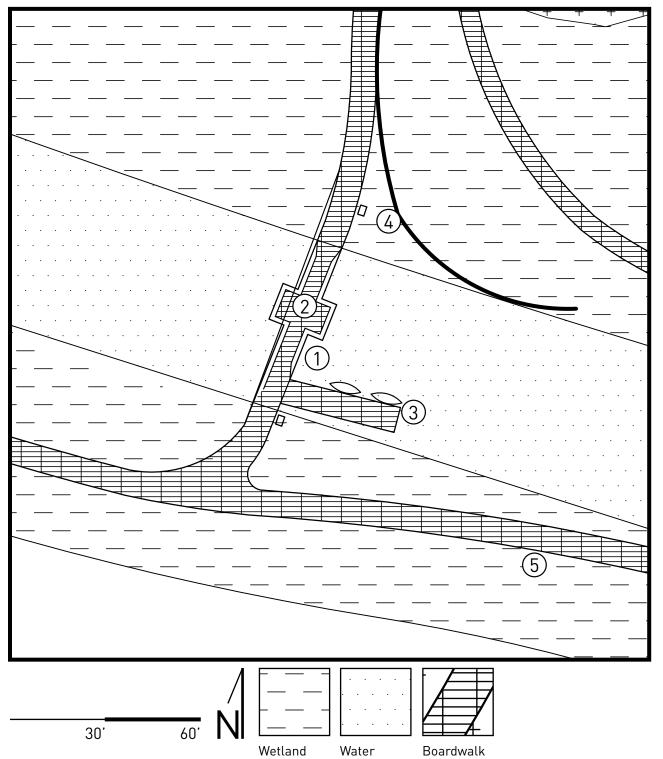
The boardwalk will be level throughout the site, and can subtly fit into the environment without major railings.

Turtle Pond Crossing



A small pedestrian bridge over the narrow pond will provide excellent views, in a relaxing space.

Turtle Pond Crossing



- 1. A small pedestrian bridge over the narrow pond will provide excellent views, in a relaxing space.
- 2. The bridge is lined with built in benches which allow people to gather on this spot.
- 3. Dock off of the bridge will allow tribal members to approach their ceremonial area in a traditional way.

Traditional canoes can be locked to the dock when not in use, as an interesting piece of native technology.

- 4. The fence will be decorated with art and time line of Wyandot History.
- 5. Path will continue down the peninsula to an overlook deck, which will provide views of the water and Lake Erie Metro park.





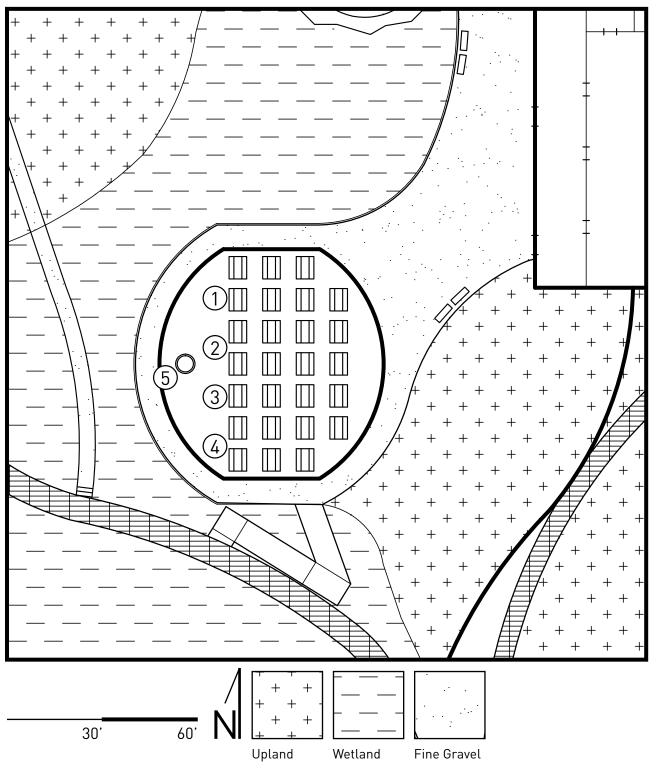
This crossing is the most beautiful spot on site, year round, and a bridge will enhance the experience of this space.

Turtle Pavillion



The architecture of the pavilion is modeled after a turtle shell. It will seat 150-200 people for community events.

Turtle Pavilion



- 1. Pavilion will seat 150-200 people, for community events.
- 2. The architecture of the pavilion is modeled after a turtle shell.
- 3. The pavilion can also be used as an outdoor classroom.
- 4. Maximum dimensions: 70' x 70'
- 5. Fire Pit with chimney in roof. This will allow for ceremonies to take place, and will generally create a more interesting space.

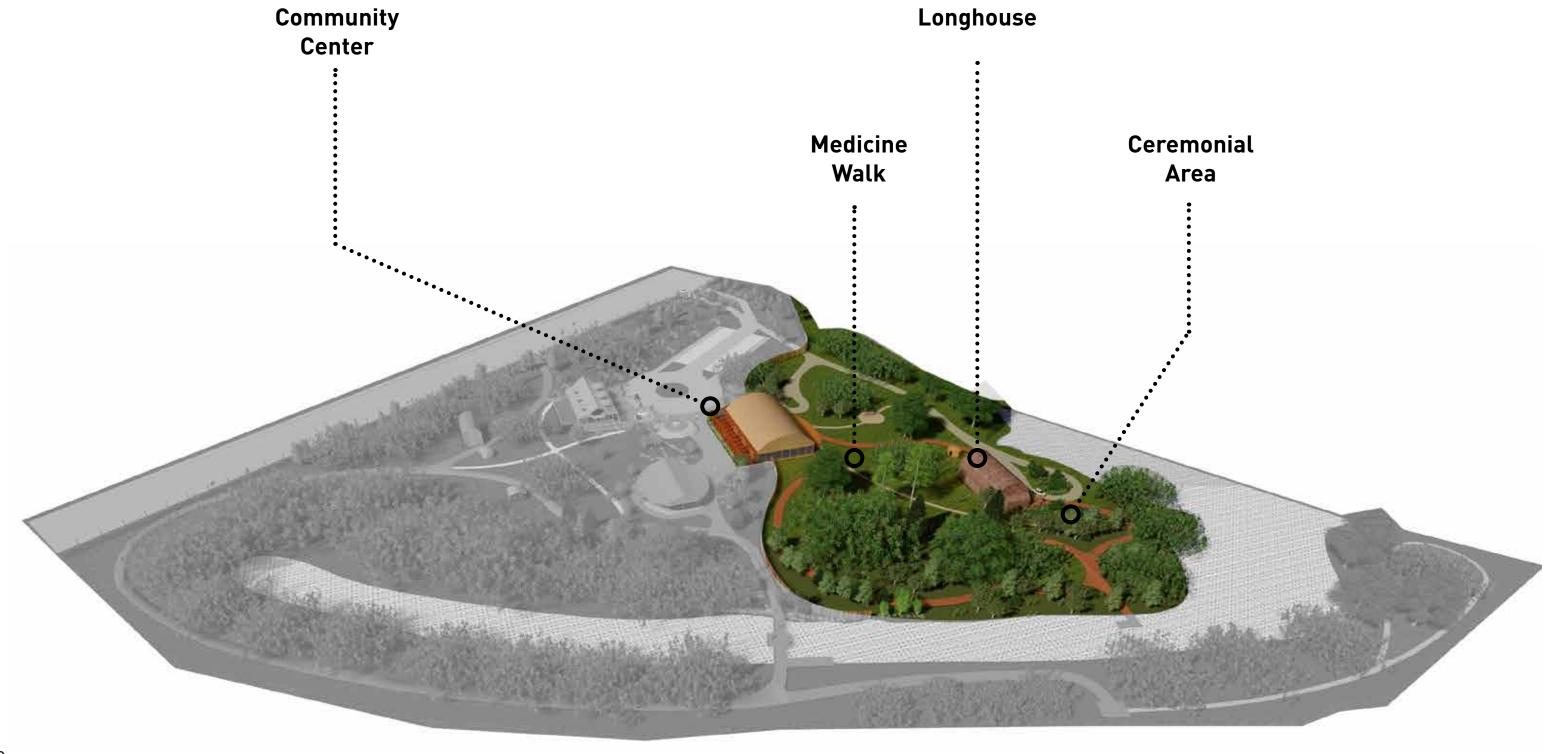




The wooden pavilion can be shaped like a turtle shell, this space will hold the entire tribe for events.

Tribal Space

This portion of the site is really the heart of Six Points. This area will serve as the tribes spiritual home, and will be a sacred and reverent space. The design calls for a large fence made from rustic pine logs to divide the site; this allows the Wyandot to have a private space for spiritual activities while feeling free to invite the public onto their property.

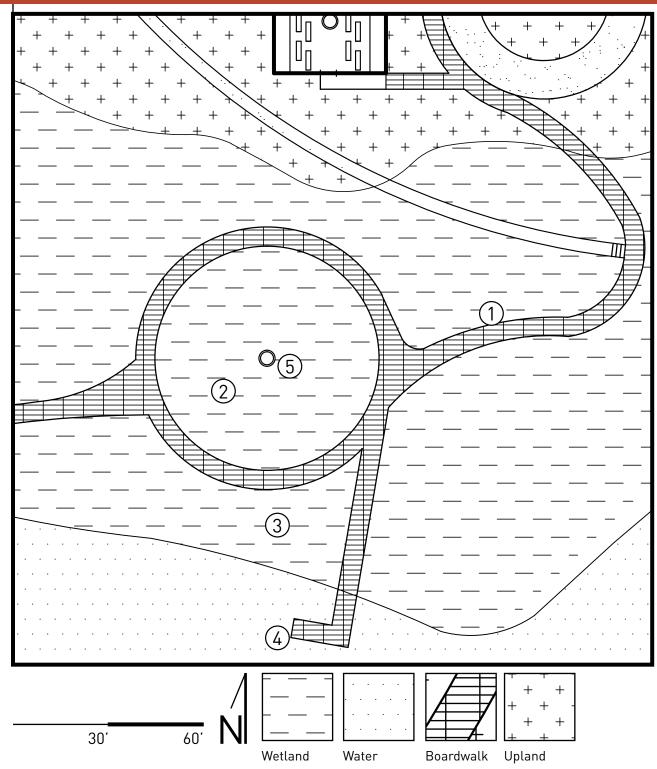


Ceremonial Area



This is the main ceremonial area on site. Sweet Grass will replace the existing invasive plants, and the boardwalk will allow year round access.

Ceremonial Area



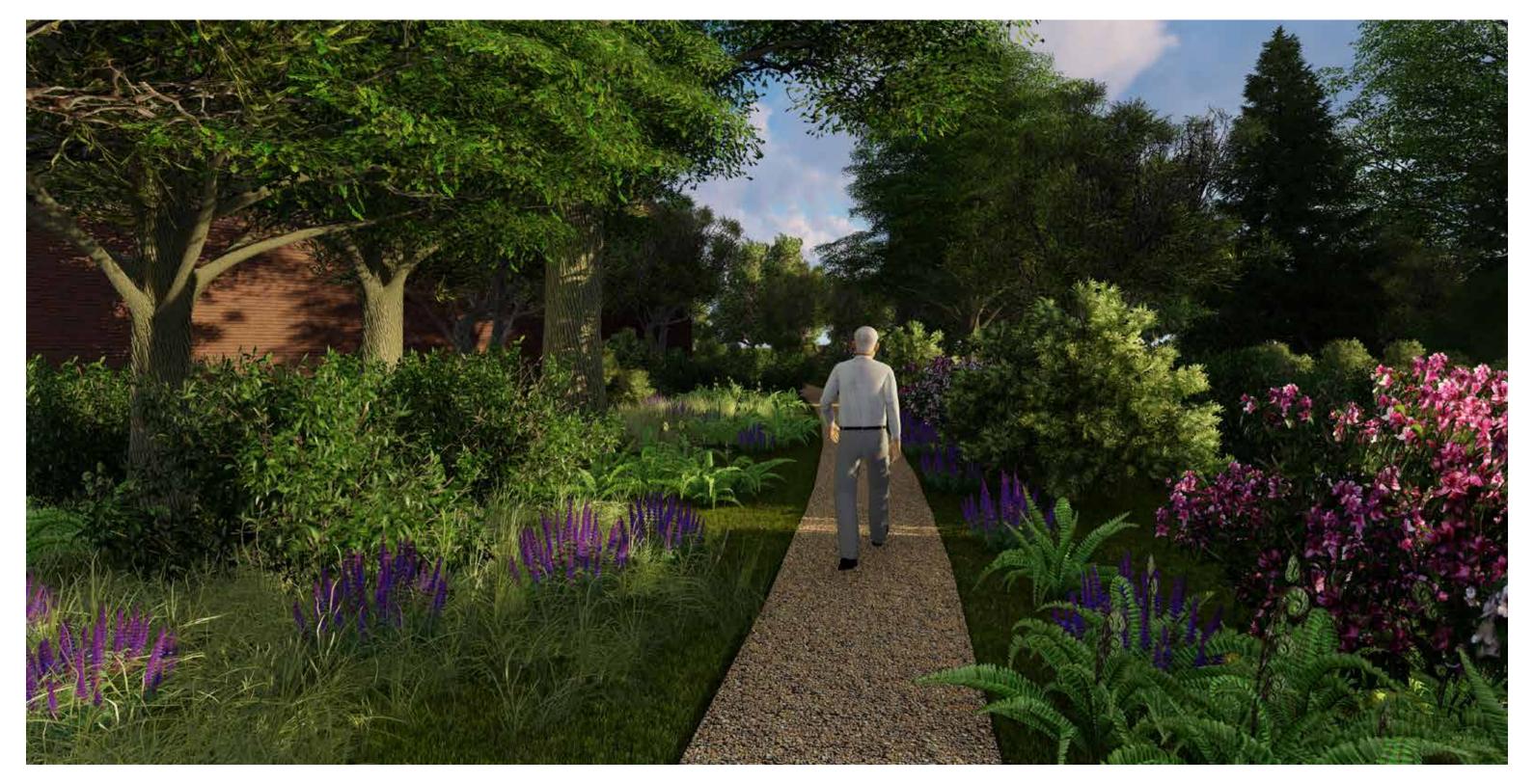
- 1. Wooden boardwalk allows access through wetland.
- 2. Invasive grasses removed and replaced with native sedges and Sweet Grass (create a test plot of Sweet Grass in the summer of 2016 clear a small area and fill with Sweet Grass plugs will tell if area is too wet or shady for the plant).
- 3. Phragmities replaced with large native shrubs, grasses, and trees to create a year round natural fence.
- 4. Dock for canoe entry and exit.
- 5. Fire pit and ceremonial pillars.





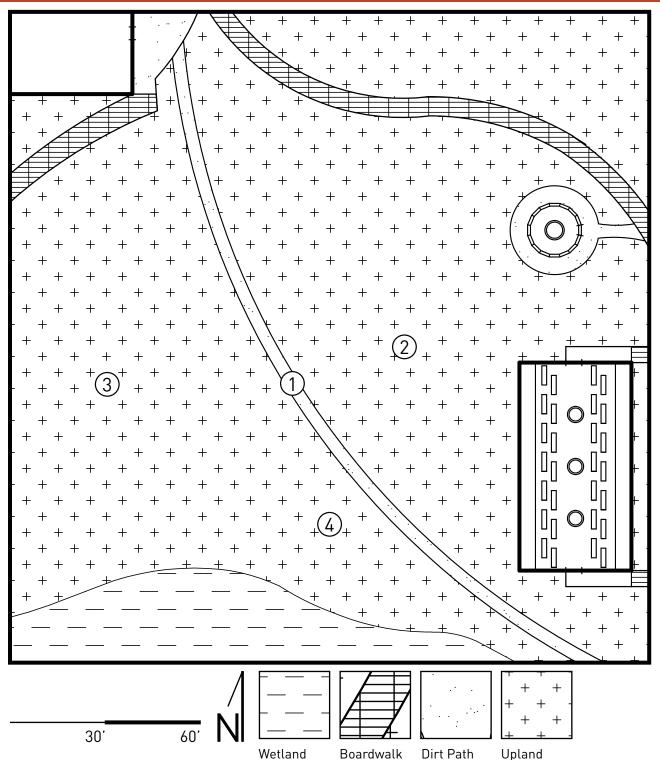
The space will be restored with Sweet Grass, and other wetland grass species.

Healing Medicine Walk



The entire Tribal half of the site will be planted with plants held sacred to the Wyandot. This path leads directly through the restored area.

Healing Medicine Walk



- 1. Rustic dirt path. This will allow for ceremonial and meditative walks through the forest.
- 2. Entire forest restored to remove invasive species and create new wildlife habitat.
- 3. Forest replanted with native forest species. Use a large plant palette to create a diverse ecosystem.
- 4. Whenever possible, use plants held sacred to the Wyandot. (Sage, Cedar, Sweet Grass, Tobacco, and Sunflowers). This will invigorate the spirit of the forest and create a natural healing walk.





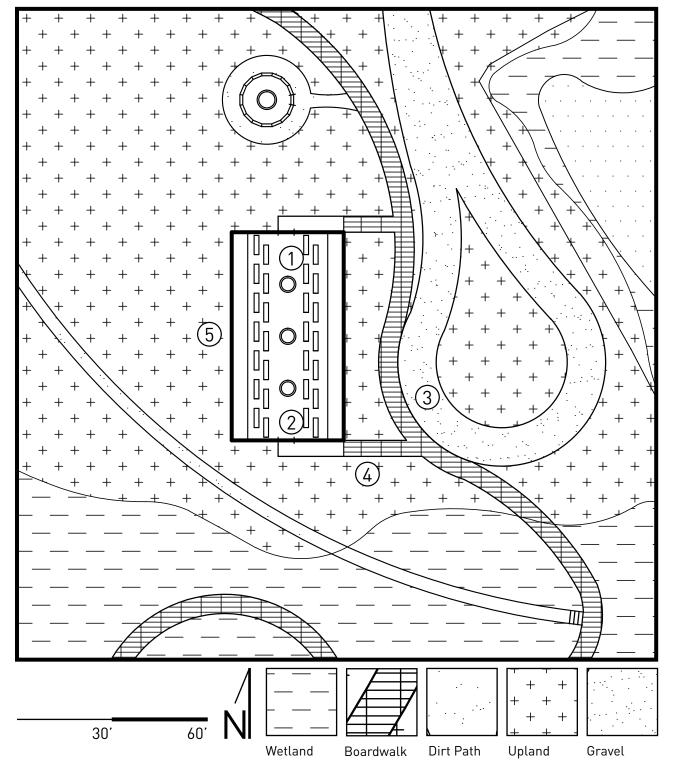
The spirit of the forest will be restored with spiritual plants.

Long House



The Longhouse on site will be built in a traditional manner. The building will also be accissible by a wooden boardwalk, and rustic gravel road.

Long House



- 1. Wyandot Longhouse. A traditionally built longhouse, given a traditional name, This will be the home for many spiritual activities for the Wyandot.
- 2. Interior of long house will be lined with seating and storage for traditional pieces. Three fire pits in the center with chimneys above. The building should hold about 150 people for a large ceremony,

Size: 65' x 35'

- 3. Car drop off. This will be a rustic gravel path through the forest which will allow vehicle access. This is necessary to accommodate all tribal members, as well as emergency vehicles.
- 4. Wooden boardwalk gradually ramps down onto the dirt floor of the Longhouse.
- 5. Surround the building with Wyandot specific plantings. The healing medicine walk will culminate here.





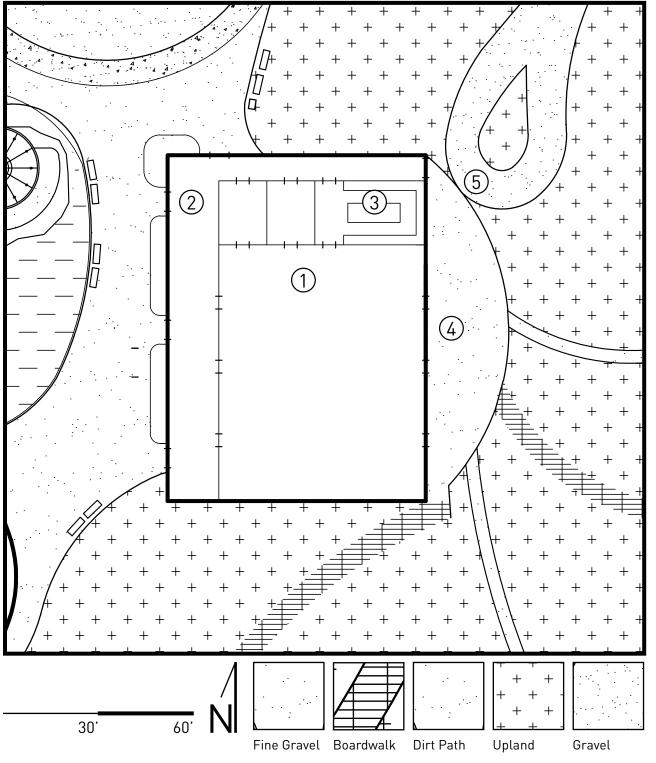
The Longhouses will be built in a traditional way.

Wyandot Community Center



The Wyandot Community Center will seat 150-200 people for private tribal ceremonies, as well as public banquets, events, and classes.

Wyandot Community Center



- 1. Community hall able to seat 150-200 people. This will allow the tribe to hold all actives on site. 7500 s.f. 10,000 s.f.
- 2. Glass atrium. This space will give tribe member an indoor space to retreat. Each person on the tribal list can have access to this space throughout the day with a key card. The space will have comfortable sitting rooms, and be filled with Native American art and literature. The space will enforce the notion that Six Points is a home for the Wyandot.

Access to this building will also allow passage to the spiritual gardens behind the building and fence.

3. Interior of the building will be simple yet efficient. This will provide a kitchen and other necessary facilities.

The building can be programmed with many uses, and once completed will be used several times a week.

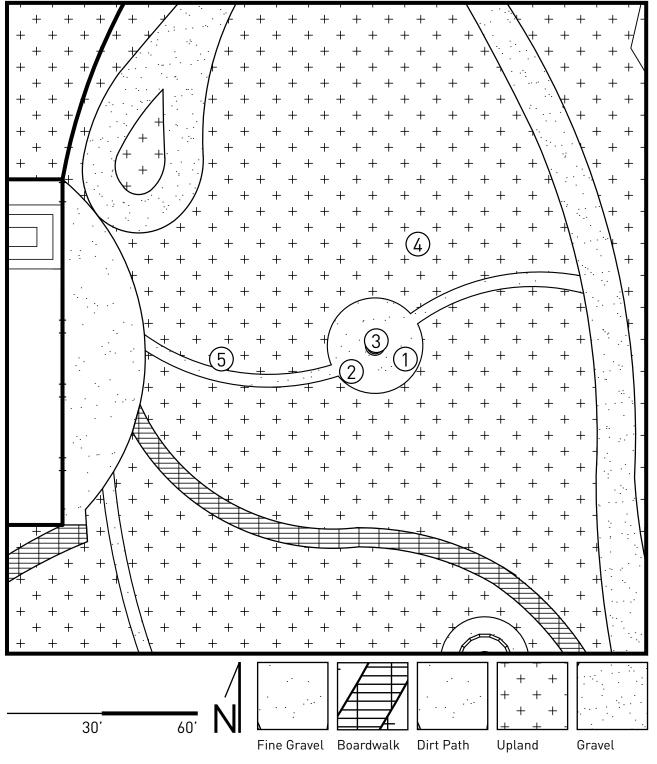
- 4. Large patio. Behind the community hall is an outdoor space to hold events and ceremonies. The space will also be the trail head to the system of paths through the forest.
- 5. Vehicle drop off. Accessed by authorized personal by a gate in the wooden fence.





This building will be a space for private and open events.

Council Ring



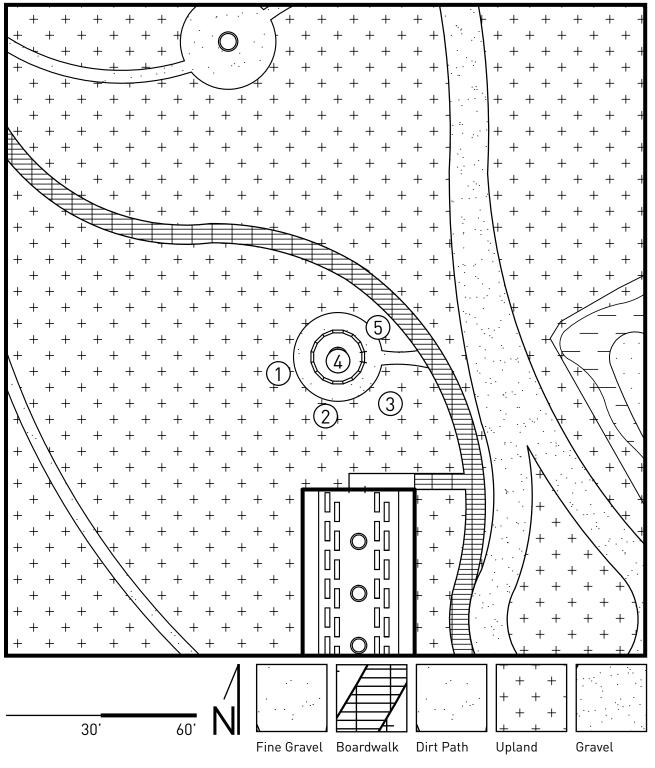
- 1. Space for storytelling and ceremonies. Fits about 50 people.
- 2. Seating for storytelling around the outside of the circle. Enough space in the center for ceremonies, which may require more open space.
- 3. Fire pit in the center.
- 4. Surround the space with a thick planting to create a secluded ceremonial space.
- 5. Dirt paths lead into the space. The area is well within the upland, and should remain dry most of the year. However any flooding in the area is not a problem, as ceremonies can still be held in the building.





This space will be for tribal education and ceremony.

Sweat Lodge

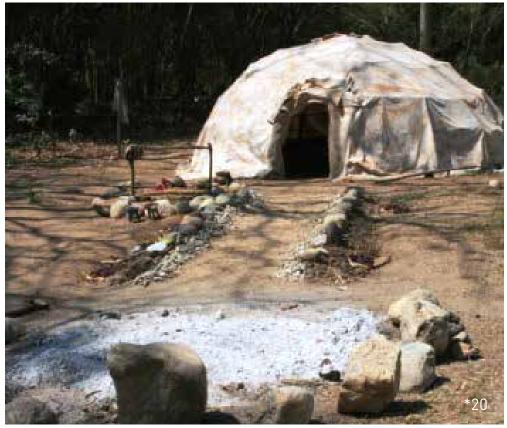


1. Sweat lodges are not a traditional Wyandot activity, but the spiritual practice can been adapted.

This cleansing ceremony can help both the individual and the tribe grow,

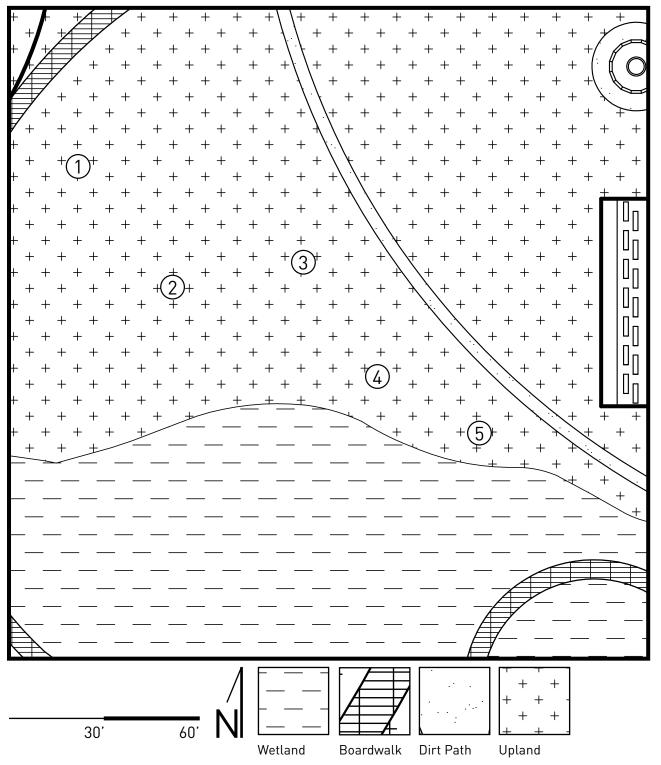
- 2. Small wooden structure built to traditional specifications from other tribes.
- 3. Sixteen posts to create a nearly circular structure.
- 4. Fits 10-20 people, seated on the ground.





The sweat lodge will build community as a spiritual event.

Burial Area



- 1. This space will give the Wyandot a home for Ancestral remains which were dug up very near to this site.
- 2. The actual burial space will be kept confidential, to ensure the safety of reburied remains.
- 3. The forest will be planted with many conifers and thick trees, to create a natural barrier to the space.
- 4. Access paths to the actual burials are not needed.
- 5. While not on the current plan, there is still an option for this to become an active burial site for current tribal members.





The burial will be hidden in the forest.

Planting Design at Six Points

The Wyandot are natives of the forest, and the design of Six Points aims to recreate a woodland similar to what would have existed around the time of European settlement. This will create an excellent space for native wildlife in the area, while creating an authentic home for the Wyandot of Anderdon Nation.

Six Points is a large space with many different types of planting environments. The planting design is divided into five plant groups, each with an associated plant list.

Ornamental Plantings

Plants used to decorate specific site elements.

Ecological Restoration Plantings

Plants used to restore the forest at Six Points.

Wyandot Specific Plantings

Plants that were used by the Wyandot for food or spiritual purposes.

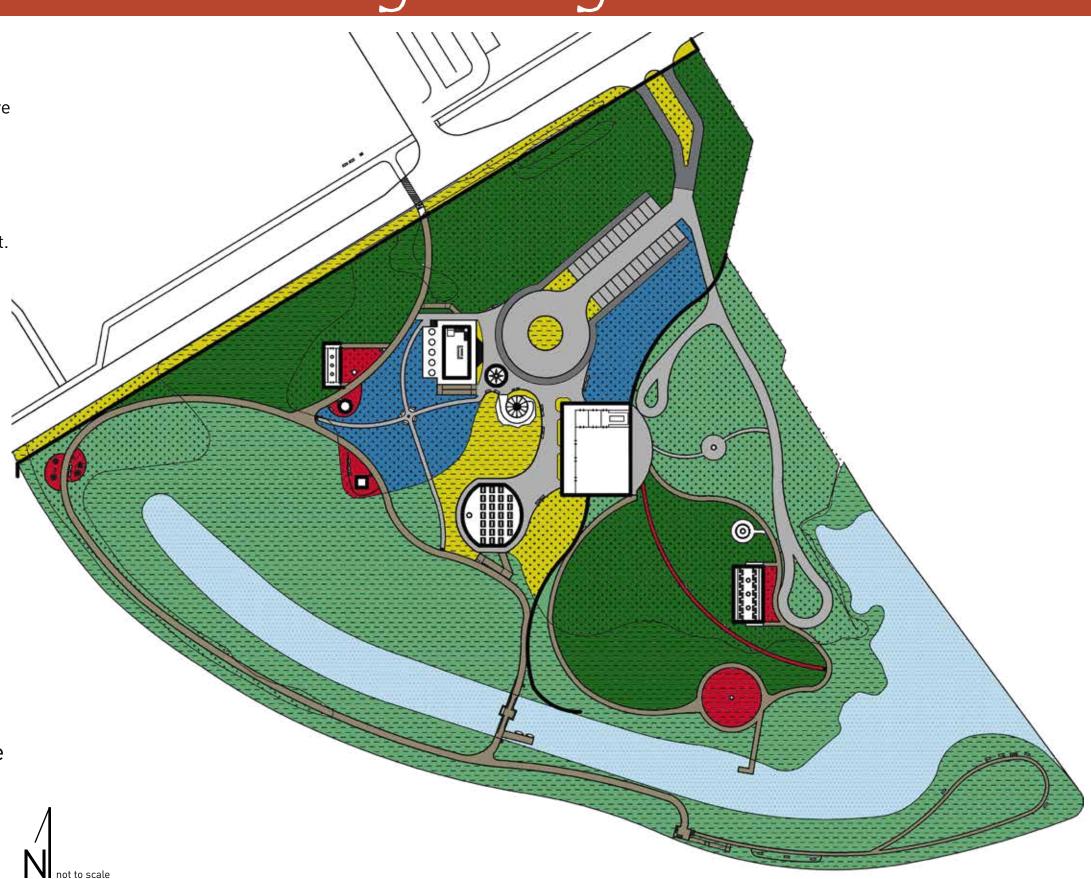
Educational Plantings

Plantings created to educate the tribe and the public about ecology and Wyandot Spirituality

Buffer Plantings

Plants which serve as a visual barrier.

Plant groups may overlap, but each may be presented in a different way depending on the planting site.



Plant List

To adequately reestablish a native forest in this space, a large plant palette is necessary. This list provides many great examples of plants that will thrive at Six Points, but is in no way exhaustive.

The restoration of the site will aim to improve the ecosystem at Six Points. This space currently suffers from a lack of native plant diversity, which does not provide adequate habitat for wildlife.

Criteria for the plant list include:

-Plant Nativity.

Each plant should be native to the Great Lakes region. Or, if the plant evolved elsewhere, but was brought to the region through Native American trade. (i.e. no European, Asian, or African plants). Using a native palette will be better for the environment and wildlife, while also serving to make Six Points look more similar to how the ancestors would have seen the forest.

-Sun Needs.

There is currently a layer of tall poplars on the site, with a thick layer of shrubs on the ground layer. Many of these shrubs will be removed during construction, or due to their invasiveness. Once these areas are cleared, Six Points will have pockets of full sun, but most space on the property will be in part-sun.

-Soil.

Six Points is a heavily disturbed site, due to preparation for a residential complex that was never built. This has potentially resulted in a mix of soil types, from basic to acidic. To ensure the right plants are chose, spot testing will need to be done on the soil to check pH.

LATIN NAME+O20B46B4:N20BB4:J32		COMMON NAME	Groups	SUN	MOISTURE	BLOOM TIME	FIOWER COLOR	SEEDS/ WILDLIFE USE	HEIGHT	DRAW WIDTH
Flowering Perennials										
Arisaema dracontium	AD	Green Dragon	R	Part-Shade	Average-Wet	May-Jun	Green	Bright Red Seed Cluster in Late Summmer	1'-3'	1'
Artemisia ludovicana	AL	White Sage	W,O,E	Full-Part	Dry	Jun-Aug	Silver/White		1'-3'	1.5'
Asarum canadense	AC	Wild Ginger	R	Part-Shade	Average	May	Brown	Edible (spice)	1'	
Asclepias incarnata	Al	Swamp Milkweed	R,	Full-Part	Average-Wet	Jul-Aug	Pink	Larval host for butterflies; good nectar source	1.5'	3'-4'
Asclepias verticillata	AV	Whorled Milkweed	R	Full-Part	Dry-Average	Jun-Aug	White	Larval host for butterflies; good nectar source	1'	2'
Caltha palustris	СР	Marsh Marigold	R, O	Full-Part-Shade	Average-Wet	Apr-Jun	Yellow		1.5'	1.5'
Cucurbita moschata	СМ	Squash	W, E	Full-Part	Dry-Average	Aug-Oct	Orange	Edible	2'	2'
Eupatorium perfoliatum	EF	Boneset	R, B	Full-Part	Average-Wet	Jul-Sep	White		3'-5'	2'
Eupatorium purpureum	EP	Joe-Pye Weed	R, B	Full-Part	Average-Wet	Jul-Sep	Pink-Red	Good nectar source	4'-6'	1'
Fragaria virginiana	FV	Wild Strawberry	R	Full-Part-Shady	Average	April-May	White			
Gentiana andrewsii	GA	Bottle Gentian	R	Full-Part	Wet (Constant)	Aug-Sep	Blue		1'-2'	1'
Helianthus divaricatus	HD	Woodland Sunflower	W,O, E	Full-Part	Dry-Average	Jul-Aug	Yellow	Edible	3'-5'	2'
Helianthus giganteus	HG	Tall Sunflower	W,O, E	Full-Part	Average-Wet	Aug-Oct	Yellow	Edible	5'-8'	2'
Iris virginica	IV	Blue Flag Iris	R	Full-Part	Average-Wet	May-Jul	Blue		2'-3'	1.5'
Lilium michiganense	LM	Michigan Lilly	R	Full-Part	Average	Jun-Aug	Orange		3'-4'	1.5'
Nicotiana tabacum	NT	Tobacco	W,O, E	Full-Part	Dry-Average-Wet	Aug	Pink		2'	2'
Peltandra virginica	PV	Arrow Arum	R	Full	Wet	May-Jul	Green		2'-3'	1.5'
Phaseolus vulgaris	PH	Common Bean	W,E	Full-Part	Dry-Average	Aug-Sep	Pink	Edible	vine	
Phlox divaricata	PD	Woodland Phlox	R	Part-Shade	Average	May	Blue		1'-2'	1'
Podophyllum peltatum	PP	May Apple	R	Part-Shade	Average	May	White		1'-2'	1'
Polygonatum biflorum	PB	True Solomon Seal	R	Part	Average	May-Jun	Green		1'-3'	1'
Rudbeckia hirta	RH	Black Eyed Susan	R, O	Full Part	Dry-Average	Jun-Sep	Yellow	Persistent seed head	1'-3'	1'
Sagittaria latifolia	SL	Common Arrowhead	R	Full	Wet	Jul-Aug	White		2'-3'	2'
Saururus cernuus	SC	Lizard's Tail	R	Part-Shade	Wet (Constant)	Jul	White		1'-2'	1'
Solidago caesia	SC	Bluestem Goldenrod	R	Full-Part-Shade	Dry-Average	Aug-Oct	Yellow	Edible	2'-3'	1.5'
Solidago patula	SP	Swamp Goldenrod	R	Full-Part	Average-Wet	Aug-Oct	Yellow	Edible	3'-5'	2'
Syphyotrichum cordifolium	AC	Heart-Leaved Aster	R, O	Part-Shady	Dry-Average	Aug-Sep	Blue-Violet		1'-3'	1'
Syphyotrichum novae-angliae	AN	New England Aster	R	Full	Average-Wet	Sep-Oct	Purple		1'-3'	1'
Thalictrum dioicum	TD	Early Meadow Rue	R	Part-Shade	Average	Apr-May	White		2'-3'	1'
Tradescantia ohiensis	то	Spiderwort	R	Full-Part	Dry-Average	May-Jul	Purple		2'-3'	1.5'
Zea mays	ZM	Corn/Maize	W, E	Full	Dry-Average	Jul-Aug	Yellow	Edible	7'-9'	2'

Groups:

- 0 Ornamental
- R Ecological Restoration
- E Educational
- W Wyandot Specific (same as educational, but different presentation)
- B Buffer

Plant List

-Bloom Time.

To keep interest in the woodland year round, a mix of bloom times were selected for the flowering perennials. This will result in interest throughout the growing season. A wide mix of conifers and evergreen species will keep the space decorated throughout the year.

-Flower Color.

Similar to having a mix of bloom times, the plants were also selected to have a variety of colors. This will ensure a beautiful space, that is natural and varied.

-Moisture.

Six Points is a fairly wet site. There are areas which are consistently wet, while the great deal of the property has average to wet soils. There are a few dry spaces on the property as well. Plants will need to be chosen thoughtfully for each site.

-Seed/Seed head Color.

When applicable, plants with beautiful seed heads were selected. These parts of the plant dry out and are ornamental during the winter months. Plants with persistent seed heads also help to provide a long feeding season for wildlife.

-Edible Fruit.

The Wyandot grew a great deal of their food, but would have certainly foraged for fruit and nuts in the forest. To honor that tradition, plants which produce edible fruit were selected. This will allow for fruit gathering with visitors and the tribe. The edible fruit will be throughout the property.

Grasses										
Acorus calamus	AA	Sweet Flag	R	Full-Part	Wet	Jun-Jul			2'-4'	2'
Andropogon gerardii	AG	Big Bluestem	R, B	Full	Dry-Average-Wet	Jul-Aug			5'-7'	2'
Carex muskingumensis	CM	Muskingum Sedge	R	Full-Part-Shade	Ave-Wet	May-Jun			2'-3'	2'
Carex pensylvanica	CM	Penn Sedge	R, O	Part	Average-Wet	Apr-May			.5'-1'	spreading
Carex sprengelii	CS	Sprengel's Sedge	R	Full-Part-Shade	Average-Wet	Apr-May			1'-2'	1'
Elymus hystrix	EH	Bottlebrush Grass	R	Part-Shade	Dry-Average	Jun-Jul			3'-5'	1.5'
Hierochloe odorata	НО	Sweetgrass	R,W, O, E	Full-Part	Wet	May-Jun		Many uses	2'3	1.5'
Schizachyrium scoparius	SS	Little Bluestem	R	Full	Dry-Average	Aug		·	2'-4'	1.5'
Sorgrastrum nutans	SN	Indian Grass	R, B	Full	Dry-Average	Aug			3'-5'	1.5'
Spartina pectinata	SP	Prarie Cordgrass	R	Full-Part	Wet-Average	Jul-Aug		Competitive with phragmities	5'-8'	2'
Vines										
Lonicera dioca	LD	Red Honeysuckle	R	Part Sun - Shade	Average	May-Jun	Red	Red; good nectar source	vine	vine
Menispermum canadense	MC	Moonseed	R	Full-Part-Shade	Average	Jun-Jul	Green	Deep Blue (poisionous to humans, good for birds, looks similar to grapes wild grapes)	vine	vine
Parthenocissus quinquefolia	PQ	Virginia Creeper	R	Full-Part-Shade	Dry-Average-Wet	Jul-Aug	Green	Deep Blue (poisionous to humans, good for birds)	vine	vine
Ferns										
Athyrium filix-femina	AF	Lady Fern	R, O	Part-Shade	Average-Wet				2'	1.5'
Dryopteris marginalis	DM	Marginal Woodfern	R	Part-Shade	Average-Wet				2'	1.5'
Onoclea sensibilis	OS	Sensitive Fern	R	Full-Part	Wet (Constant)				2'	1.5'
Shrubs										
Betula pumila	BP	Bog Birch	R	Full-Part	Average-Wet	May-Jun	Brown		5'-12'	1'
Cephalanthus occidentalis	CO	Buttonbush	R	Full-Part	Average-Wet	Jun-Aug	White	good nectar source	6'-15'	3.5'
Corylus americana	CA	American Hazelnut	R	Full-Part	Dry-Average	Mar-Apr	Yellow	Edible	5'-9'	3'
Decodon verticillatus	DV	Swamp Loosestrife	R, O	Full	Wet	Jul-Aug	Pink	Edible	2'-4'	3.5'
Gaylussacia baccata	GB	Huckleberry	R	Full-Part-Shade	Dry-Wet	May-Jun	White		2'-4'	3.5'
Hamamelis virginiana	HV	Witch-Hazel	R	Part-Shade	Dry-Wet	Sep-Nov	Yellow		10'-30'	8'
llex verticillata	IV	Michigan Holly	R, O, B	Full-Part	Average-Wet (acidic)	Jun	White	Red (persistent into winter)		
Lindera benzoin	LB	Spicebush	R, B	Part-Shade	Average-Wet	Apr-May	Red-Yellow	Edible (spice)	5'-10'	5'
Physocarpus opulifolius	PO	Ninebark	R, O, B	Full-Part	Average-Wet	May-Jun	White		3'-9'	5'
Ribes americanum	RA	Wild Black Currant	R	Full-Part	Average-Wet	Apr-May	White	Edible	2'-4'	3'
Rosa setigera	RS	Michigan Rose	R	Full-Part	Average-Wet	Jul-Aug	Rink		4'-6'	3'
Rubus spp.	RS	Raspberry	R	Full-Part-Shade	Dry-Average	Jun-Jul	White	Edible	3'	3'
Sambucus canadensis	SC	American Elder	R	Full-Part	Average-Wet	Jun-Jul	White	Edible	5'-12'	6'
Staphylea trifolia	ST	American Bladdernut	R	Part-Shade	Average	Apr-May	White		8'18'	5'
Vaccinium angustifolium	VA	Lowbush Blueberry	R	Full-Part-Shade	Dry-Average-Wet	May-Jun	White	Edible	1'-2'	1.5'
VIburnum acerifolium	VA	Maple Leaf Viburnum	R, O	Part-Shade	Dry-Average	May-Jun	White	Edible (not good raw, but may have potentially been used as a sauce for meat)	4'-6'	3.5'

Groups:

- 0 Ornamental
- R Ecological Restoration
- E Educational
- W Wyandot Specific (same as educational, but different presentation)
- B Buffer

Plant List

-Wildlife host.

To ensure Six Points has an authentic natural experience, plants which provide good sources of food for insects and birds were selected. This allows for a vibrant ecosystem, with a well established food chain.

-Wyandot Specific Plants.

They Wyandot lived off the land, and their lively hood was closely related to the plants that surrounded them. Where possible, these specific plants will be used for ornamental purposes, as well as populating the ceremonial and healing areas of the site.

Trees										
Acer saccharum	AS	Sugar Maple	R	Full-Part	Average	Apr-May	Yellow-Red		10' - 80'	5'
Amelanchier sp.	AA	Serviceberry	R	Full-Part	Dry-Average	Apr-May	White	Edible	10'-25'	6'
Betula papyrifera	BP	Paper Birch	R, O	Full-Part	Average	Apr-May	Brown		30'60'	6'
Carpinus caroliniana	CC	Musclewood	R, O	Full-Part-Shade	Average-Wet	Apr-May	Green		up to 30'	
Carya cordiformis	CR	Bitternut Hickory	R	Full-Part	Average-Wet	May-Jun	Yellow		up to 80'	6'
Chamaecyparis thyoides	СТ	Atlantic White Cedar	R, , B	Full-Part	Dry-Average-Wet				up to 50'	10'-20
Juniperus virginiana	JV	Eastern Red Cedar	R, B	Full	Dry				up to 40'	5'-20'
Larix laricina	LL	Tamarack	R	Full-Part	Average-Wet				up tp 75'	5'
Picea glauca	PG	White Spruce	R, B	Full-Part	Dry-Average-Wet				up to 50'	5'-20
Picea mariana	PM	Black Spruce	R, B	Full-Part	Dry-Average-Wet				up to 60'	5'-20'
Picea pungens	PP	Colorado Spruce	R, B	Full-Part	Average				up tp 60'	5'-20'
Pinus strobus	PS	Eastern White Pine	R, O, B	Full-Part	Average-Wet				up to 60'	5'20'
Platanus occidentalis	PO	Sycamore	R	Full-Part	Dry-Average-Wet	May	Green		up to 75'	5'
Prunus americana	PA	Wild Plum	R	Full-Part	Average-Wet	Apr-May	White	Edible	up to 25'	5'
Quercus alba	QA	White Oak	R, O	Full-Part-Shade	Average	May-Jun		Edible (processed)	up to 80'	5'-20'
Quercus bicolor	QB	Swamp White Oak	R	Full-Part-Shade	Average-Wet	May-Jun			up to 80'	5'-20
Quercus macrocarpa	QM	Bur Oak	R,	Full-Part-Shade	Dry-Average-Wet	May-Jun	Green		up to 85'	5'-20
Salix exigua	SE	Sandbar Willow	R	Full	Wet	Apr	Green		5'-15'	5'
Salix nigra	SN	Black Willow	R	Full-Part	Average-Wet	Apr	Green		up tp 65'	5'
Thuja occidentalis	ТО	Northern White Cedar/Eastern Arborvitae	R, W, O, E, B	Full-Part	Dry-Average-Wet				up to 50'	5'

Groups:

- 0 Ornamental
- R Ecological Restoration
- E Educational
- W Wyandot Specific (same as educational, but different presentation)
- B Buffer

Wyandot Plants

This mix of plants all hold special meaning to the Wyandot. Some of the species are used for food, while others are grown for their sacred properties. These plants will serve a spiritual purpose, and can also be a part of the ornamental plantings around the property.



White Sage (Artemisia ludovicana)



Sunflowers (Helianthus spp.)



Cedar (Thuja occidentalis)



Butternut Squash (Cucurbita moschata)



Tobacco (Nicotiana tabacum)



Corn (Zea mays)

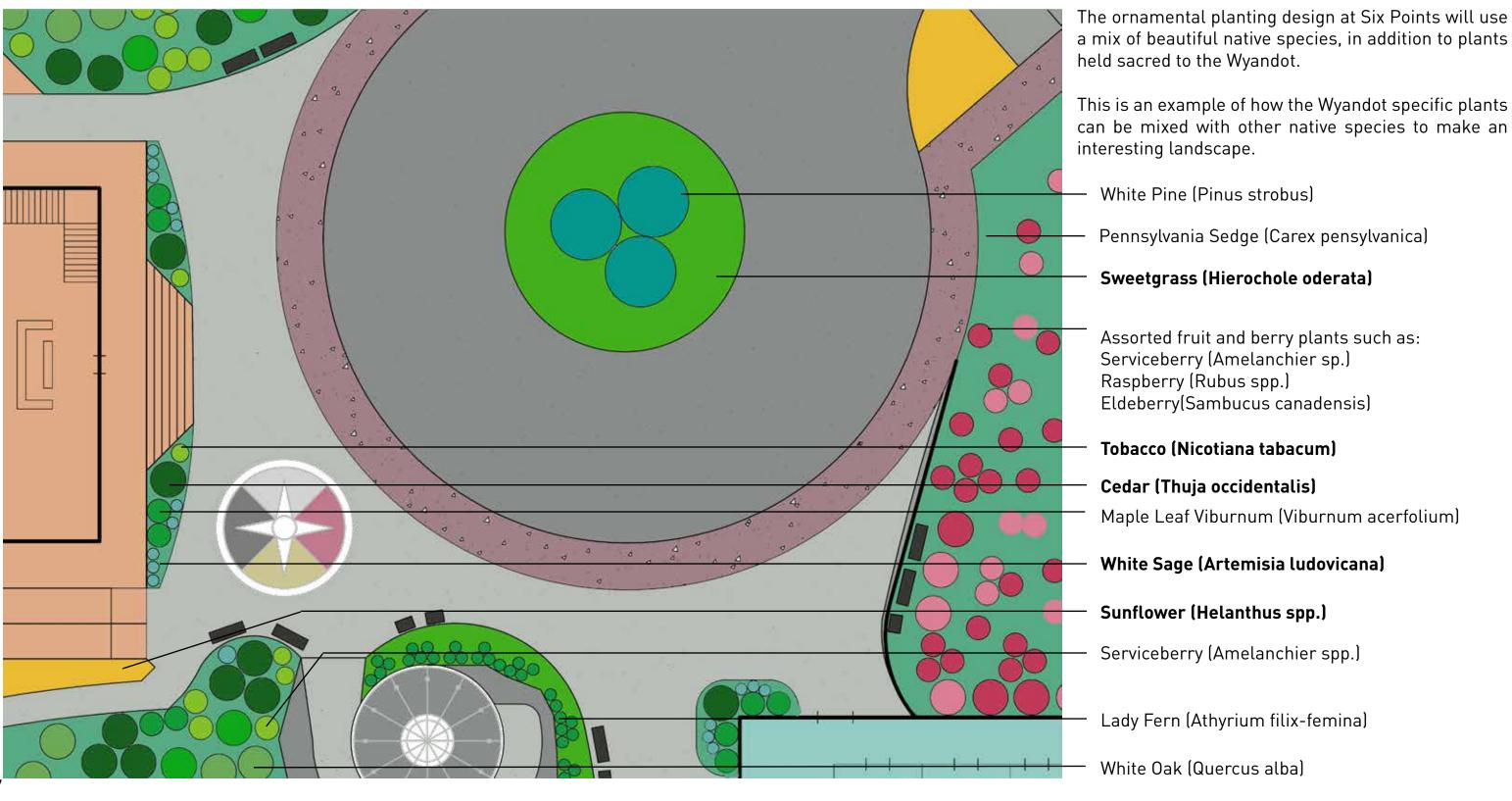


Sweet Grass (Hierochloe odorata)



Common Beans (Phaseolus vulgaris)

Ornamental Plantings

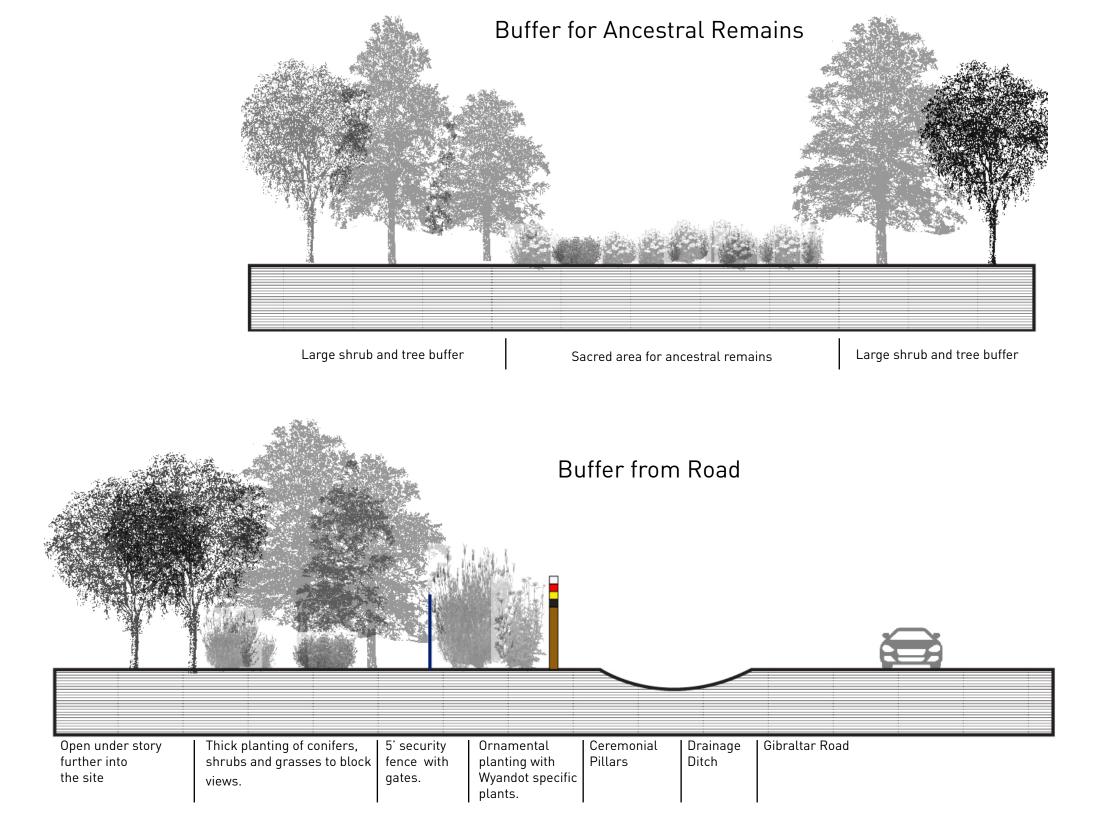


Buffer and Screen Plantings

Six Points is a beautiful space, but is ultimately still in a suburban environment. This presents a need for a visual barrier, which will be provided with a mix of conifers, grasses, and other evergreen shrubs.

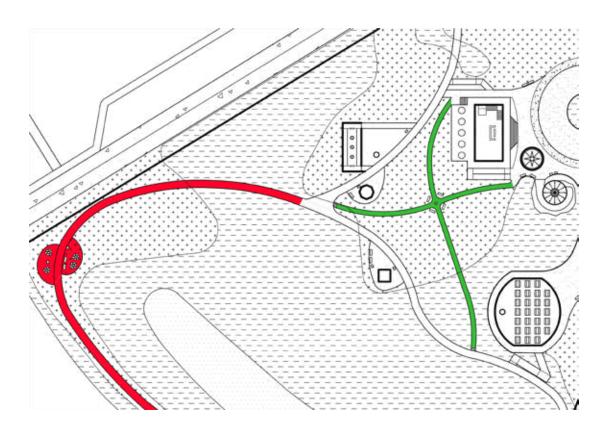


A tree buffer will provide a year round barrier between the city and Six Points.



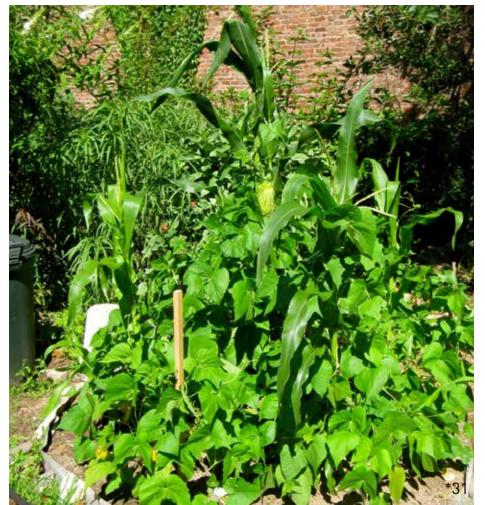
Educational Plantings

Plants are central to the Wyandot, which presents many opportunities for education. Learning will be centered on Wyandot specific plants, while species which have served in the ecological restoration of the space will also be addressed.



Wyandot Specific Plantings

The three sisters garden is a farming technique used by many native cultures. A demonstration garden with several of these plantings will be the culmination of the Wyandot plant education loop. This walk will educate visitors on the sacred properties of Cedar, Sage, Tobacco, and Sweet Grass, while also describing foods and other useful plants.



Educational Plant Loop

This garden will be restored with many native species, and small labels will describe the plants. These plants are not specific to Wyandot culture, but are still interesting and worthwhile to teach about.

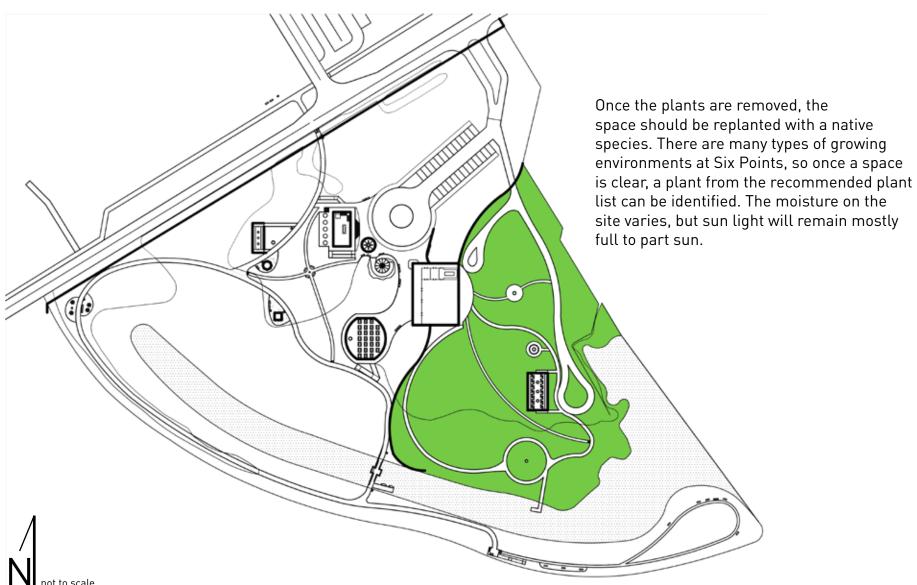


Ecological Restoration

Six Points is a heavily disturbed site, with a fairly small native plant population. This can be addressed with an aggressive invasive species removal and replacement program.

Shown below in green is an area suggested to begin the ecological restoration. This space is the heart of spiritual activity at Six Points so reinvigorating this patch of forest is a priority. The area is also clear of most future construction, so new plantings will not be disturbed.

The removal of plants in this section could be done with a coordinated volunteer effort. Many of the plants are easily removable, and present great opportunities for team building. The phragmites is not an easy plant to remove by hand, so that should be dealt with by the regional invasive species removal team.







Phragmities and Glossy Buckthorn are the two most problematic species on site, and the removal will begin by removing on them.

Process

This Master Plan is meant to assist the future planning and fundraising for Six Points. The design and layouts work well, but may need certain tweaks once more information is made available. However, the current plan thoughtfully achieves all needs of the Wyandot, so any changes to the plan should be necessary. This document was shaped after many hours of research, communication, and drawing. The Master Plan is influenced by many factors, most importantly:

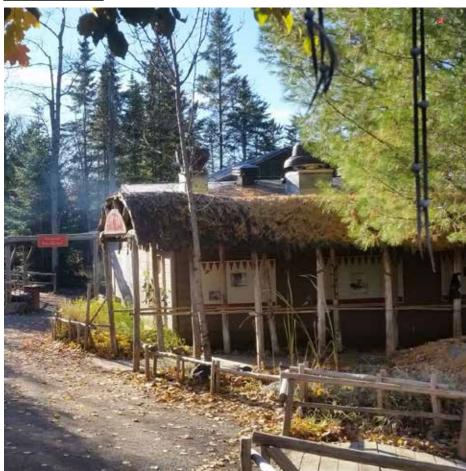
Site Visits



Six Points is a complex site, with huge potential. This water dominated site may be difficult to build on initially, but once completed will be an excellent home for the Wyandot, whose name means Turtle People.

The designers visited Six Points and the surrounding area many time over the last year. This has resulted in a deep familiarity with the site and a well informed site plan.

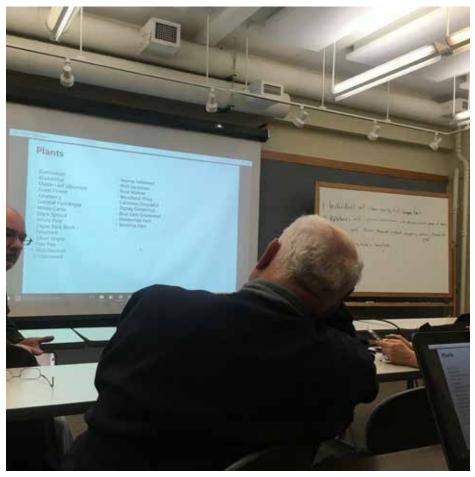
Research



Wyandot culture is complex and the design takes this into account. This project was successful because the designers were easily able to gain information from tribal members, and an easy working relationship was developed.

Many precedents were researched, including a visit to a Wyandot educational center in Wendake, Quebec.

Design Process



The concept plan for Six Points has been underway for several years. Over the last year, this master plan has been developed which gathers the previous thoughts on the site, while adding to and enhancing the vision.

Ultimately, the project was successful because of the cooperation between the tribe and designers.

The designers crafted this plan with care, and were informed by Tribal Elders at every stage of the process. The process was educational in many ways, and developed skills such as: site planning, ecological design, client interaction, and was overall a realistic demonstration of a concept development plan. It is the hope of the designers that the the vision of Six Points presented here is compelling, and that the plan will soon become reality.

Photo Sources

- *1: Danny Schultz
- *2: Google Maps
- *3: http://www.thenewsherald.com/content/articles/2015/09/12/news/doc55f312c2c3c9f429584857.jpg
- *4: http://www.thenewsherald.com/content/articles/2014/10/09/news/doc5435c35611a692468920011.jpg
- *5: http://refugeassociation.org/wp-content/uploads/2014/08/Much-to-learn.jpg
- *6: http://www.thenewsherald.com/content/articles/2014/10/09/news/doc5435c35611a692468920012.jpg
- *7: Site Plan from City of Gibraltar
- *8: http://www.wyandotofanderdon.com/wp/wp-content/uploads/2014/03/wetlands2.jpg
- *9: http://outdoormichigan.org/images/SanctuaryWoodsParkParkingLot.jpg*10:
- *10: http://www.downrivergreenways.org/_/rsrc/1321123463526/config/BIG%20MAP.jpg
- *11: https://conpm.files.wordpress.com/2009/04/artemisia-ludoviciana1.jpg
- *12: http://www.wyandotofanderdon.com/wp/wp-content/uploads/2013/11/phratrydivisionfinal1.jpg
- *13: https://seasonsflow.files.wordpress.com/2011/07/boardwalk-4-061811.jpg
- *14: http://www.goldenplains.vic.gov.au/webdata/resources/images/Teesdale Turtle Pavilion.jpg
- *15: https://www.prairiemoon.com/images/D/Hierochloe-odorata-Sweet-Grass-field.jpg
- *16: http://uhd-wallpapers.net/images/autumn-forest-road 117.jpeg
- *17: http://naxnox.weebly.com/ew-longhouses.html
- *18: http://www.eagleby.org.au/wp-content/uploads/2014/04/DSC02436.jpg
- *19: https://www.nps.gov/common/uploads/photogallery/ncr/park/prwi/2B907482-1DD8-B71C-0748FD1B5FCA5712/2B907482-1DD8-B71C-0748FD1B5FCA5712-large.jpg
- *20: http://www.apacheprayer.com/media/sweat/06.jpg
- *21: http://mediad.publicbroadcasting.net/p/michigan/files/styles/medium/public/201111/forest.jpg
- *22: https://conpm.files.wordpress.com/2009/04/artemisia-ludoviciana1.jpg
- *23: http://minnesotaseasons.com/Plants/Large/N/northern_white_cedar_05.jpg
- *24: http://www.newhopeseed.com/assets/images/tobacco/tobaccoculture/ready_plants.jpg
- *25: https://www.prairiemoon.com/images/D/Hierochloe-odorata-Sweet-Grass-field.jpg
- *26: http://www.thesleuthjournal.com/wp-content/uploads/2015/03/Sunflower.jpg
- *27: http://gardeningwithcharlie.com/wp-content/uploads/2012/01/DSCN6972.jpg
- *28: http://awaytogarden.com/wp-content/uploads/2013/12/Glass-Gem-Corn.jpg
- *29: http://www.anniesbacktoedengarden.com/images/bean%20kidney.jpg
- *30: http://www.mountainmeadowsdwarfconifers.com/Graphics/Little%20Switzerland%20Informational%20Tour%20003.jpg
- *31: http://www.visoflora.com/images/original/phragmite-commun-phragmites-australis-visoflora-55415.jpg
- *32: http://colsa.unh.edu/nhaes/sites/colsa.unh.edu.nhaes/files/media/images/buckthornfruit.jpg

If photo has no asterisk, it was taken by either Jocelyn Wu or John DeRuiter