

Design Concept

The York Street Green City Hub concept prioritizes using the site's existing opportunities and improving its ecology. To achieve this it relies heavily on the idea of effective, low-impact design. The concept's main focus is to do the most with the least amount of environmental disruption. On the surface, the masterplan bears a very close resemblance to the site's existing form. But below the surface some very detailed changes are proposed in how the site's various elements function and its plant communities. The concept produces a solution that salvages the environment while providing opportunities for development, public engagement, education.

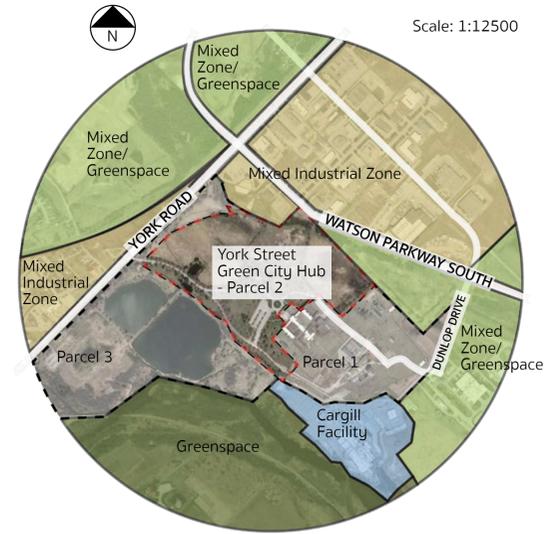
Goals

1. Complete ecological restoration of the site.
2. Promote the practice of sustainable agriculture and green urbanism.
3. Create a relief from urban stresses for local residents.
4. Protect existing cultural and historic features of the site.

Objectives

1. Educate visitors on cultural and historic features of the site.
2. Use existing building and spacial forms.
3. Provide the opportunity to engage community members in sustainable agriculture practices.
4. Create space for activity on the site.
5. Restore the site's degraded wetland, woodlot, and watershed.
6. Promote the development of wildlife habitat.

Context Map



The radius of the circle is 1 kilometre from the center of the site.

Precedent



In just a couple of decades, Evergreen turned an abandoned, degraded brownfield site into an internationally-renown site for ecological restoration and sustainable practice. Now the site is home to various community activities, sustainable businesses, and conference spaces. Part of why the final design is so successful is its design concept, which put a big emphasis on urban agricultural practices and connectivity through the site that take advantage of existing conditions.

Masterplan

1 EVENT CENTRE
Largest proposed building. Wide and open, designed for big community events, or private events for revenue.

2 VISITOR'S CENTRE
The main building for all general services offered to visitors, including bathrooms. Home of the site's administrative offices.

3 HISTORY MUSEUM
A thoughtful re-purposing of the Supervisor's House as a historical exhibition.

4 GREENHOUSE
Proposed so community agricultural programs can continue throughout the winter.

GREEN CITY COMPLEX
The Green City Complex consists of 4 buildings: the Event Centre, the Visitor's Centre, the History Museum, and the Greenhouse. These buildings are densely placed near vehicle parking for easy accessibility and to limit ecological disruption. Their form and application take inspiration from multi-functionality of the Evergreen Brickworks' Future Cities Centre.

REWORKED WATERSHED
The current watershed consists of three ponds that connect with the in-line ponds and Clythe Creek. The site will be regraded to more evenly distribute runoff across the expanded wetland marsh. The ponds will remain, but will their connections be redirected around the man-made culverts to improve their ecological value.

PLANTED FOREST ECOSYSTEMS
An upland deciduous forest ecosystem will be planted at all the high, dry points of the site. The naturalized ecosystem will serve to improve soil conditions, enhance wildlife habitat connectivity, and act as a buffer between the site and adjacent land use.

EDUCATIONAL TRAIL
Consisting of both footpath and boardwalk, the educational trail will lead visitors through the site to various places with historic, cultural, or ecological significance. Some examples are the heritage tree, the stone walls/culverts, and the ponds. The trail will use the existing road for its boulevard of trees, and as emergency vehicle access.

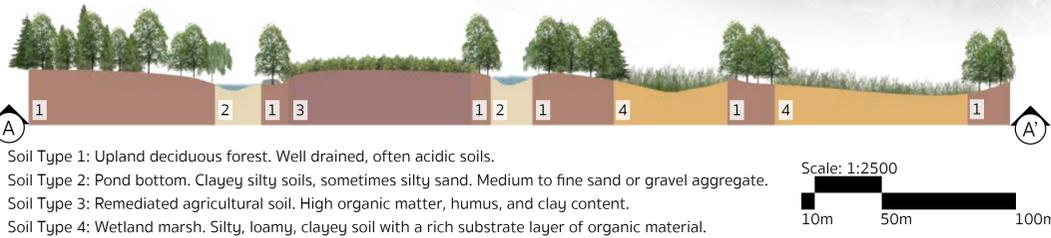
SUSTAINABLE URBAN AGRICULTURE
This area will be dedicated to an urban farm. Currently the soils suffer from severe mineral degradation and will require intensive thermal remediation and bioremediation. When the soil is safe to plant, the farm will serve as both a community farm and a demonstration of a sustainable urban farm.

REHABILITATED MARSH ECOSYSTEM
Through grading, planting, and the removal of invasive species (like phragmites) the existing wetland will be expanded and restored to a more natural state. By doing so, it will provide a beautiful ecological feature for visitors, and improve the ecosystem services provided to the area.

ACTIVITY GREEN
The activity green takes advantage of the existing lawn on the site. The green presents the opportunity for a communal space that is already surrounded by mature canopy cover, and adjacent to the parking lot and proposed buildings. It also acts as a develop-able space for future buildings that would help avoid the removal of other, more valuable ecosystem

EXISTING ROADWAY AND PARKING
The plan proposes to keep the parking lot and part of the existing roadway. It provides vehicle access off of Dunlop Drive to both the on site buildings and the off-site prison complex. By keeping the parking lot in its current location it avoids eliminating the environmental impact of moving it.

Section A - A'



Perspective B

View of three important elements interacting with each other: the educational trail network, watershed, and historic wall. It becomes apparent how fundamental the site's naturalization is to the visual impact it can have on visitors.



Deciduous Upland Forest Ecosystem

The Deciduous Upland Forest is the primary ecosystem chosen to be planted on the site. Focusing on the reforestation of the site will provide the greatest increase in ecosystem services like canopy cover, habitat, and soil stability. The plant species listed to the right are chosen for their native classification, and their ability to create a mature forest ecosystem through successional planting and nucleation.

<p>Edge Herbs/Vine/Grasses</p> <ul style="list-style-type: none"> Elymus trachycaulus (Slender Wheat Grass) Trillium grandiflorum (White Trillium) Clematis virginiana (Virgin's Bower) Campsis radicans (Trumpet Creeper) Koeleria macrantha (Prairie Junegrass) 	<p>Edge Shrubs</p> <ul style="list-style-type: none"> Aronia melanocarpa (Chokeberry) Cornus florida (Flowering Dogwood) Sambucus nigra (Common Elderberry) Morella pensylvanica (Bayberry) 	<p>Edge Pioneer Trees</p> <ul style="list-style-type: none"> Populus tremuloides (Trembling Aspen) Populus balsamifera (Balsam Poplar) Pinus strobus (Eastern White Pine) Prunus pensylvanica (Pin Cherry) 	<p>Upland Herb/Fern/Grasses</p> <ul style="list-style-type: none"> Gymnocarpium dryopteris (Oak Fern) Asplenium trichomanes (Maidenhair Spleenwort) Osmorhiza claytonii (Sweet Cicely) Elymus hystrix (Bottle-brush Grass) Carex rosea (Rosy Sedge) 	<p>Upland Shrubs</p> <ul style="list-style-type: none"> Hamamelis virginiana (Witch Hazel) Cornus alternifolia (Pagoda Dogwood) Carpinus caroliniana (American Hornbeam) 	<p>Upland Trees</p> <ul style="list-style-type: none"> Fagus americana (American Beech) Acer saccharum (Sugar Maple) Quercus alba (White Oak) Juglans nigra (Black Walnut)
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