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EXECUTIVE SUMMARY



SITE PARCELS

In Fall 2016, a consultant team led by PMA Landscape Architects was tasked with creating a master plan for Grand Avenue Park, including park design, capital strategy and recommended implementation phasing program. This included site inventory, investigation and evaluation; assessment of community needs via survey and public consultation; and the creation of conceptual vision and design guidelines for the park.

Grand Avenue Park, located near Mimico GO Station along the Metrolinx railway, is 5.0 hectare partially remediated brownfield site with unique constraints and needs both for the community and larger region. As the result of signifcant high-rise development and population growth in the last decade, there was a identified need for neighbourhood, community and destination based park that would serve a diverse and growing population. Through online surveys and public consultation, there was identified a need for a multi-use, permitted field that would serve a regional recreation purpose; a desire for a space in which community could thrive; and a potential for connection to larger systems in terms of habitat and trail. The current park site offers no programmed space but does consist of a large open lawn, a vegetated buffer from the rail and fenced naturalized areas. The community is hopeful that improvements can be made while retaining some park functionality throughout construction, though some major excavation and grading work will likely require closings for limited periods of time. As a result, multi-phased approach was adopted to meet these directives and to establish a capital strategy:

Phase 1 (\$3.7 million): grading, infrastructure, loop trail, multi-purpose field, parking, playground and picnic area and initial tree planting

Phase 2 (\$3.0 million) (contingent on acquiring Parcel H): community plaza and shade structure, multi-use court, dog off-leash area, site furnishings, ecological planting and flexible fields.

The mandate in creating this master plan was to create a fiscally, socially and ecologically responsible design that would serve as a example for similar revitalizations across the city. The result presented here takes into consideration the history of the site, community desires, environmental constraints, existing and proposed utilities, stormwater, and neighbouring and related plans and designs currently underway.

08 INTRODUCTION



INTRODUCTION

COMMUNITY SCALE

The area around Grand Avenue Park has undergone and will undergo significant highrise condominium development and population growth. With that growth comes a need for both active and passive recreation space, and a place where community can foster. A revitalized and expanded Grand Avenue Park has the potential to become a key community hub for the Mimico neighbourhood, providing play areas and community gathering spaces, while serving neighbourhood and regional recreation needs.

While the park is a not a small site, there is still an immense pressure programmatically to meet the recreational and open space needs while also providing a respite from the increasingly urbanized environment. The proximity of the park to natural areas such as Mimico Creek, Humber Bay Park, and the Lake Ontario waterfront presents an opportunity to broaden the public's awareness of the importance and sensitivity of these features through ecological restoration and interpretation within the park.

The 5.0 hectare revitalized park would consist of three amalgamated sites:

- 1. Existing Grand Avenue Park including former Mimico Sewage Treatment Plant
- 2. Former Metropolitan Toronto Incinerator site and Algoma Street
- 3. Development Parkland South of 251 Manitoba Street

The former Mimico Sewage Treatment Plant was capped in 2012; environmental assessment of the former incinerator site has been completed and it will be remediated and capped in Fall/Winter 2018-2019.

The purpose of this master plan is to provide a vision for Grand Avenue Park in collaboration with the city and community. This vision will guide a functional grading plan and initial earthworks of the waste transfer site, will inform a capital implementation strategy as well as provide a framework for detail design and eventual construction of park improvements.



Lakeshore Rd at Thimies 1907?

#206



ABOVE: FIRST NATIONS ARCHEOLOGICAL SITES OF THE ETOBICOKE AND MIMICO WATERSHEDS (From "Greening Our Watersheds: Revitalization Strategies For Etobicoke And Mimico Creeks." Etobicoke And Mimico Creek Watersheds Task Force, TRCA. 2002)

LEFT: LAKESHORE ROAD AT MIMICO CREEK (City of Toronto Archives)

HISTORY

FIRST NATIONS

Approximately 11,000 years prior to European settlement, hundreds of generations of First Nation people called the hardwood forests of southern Ontario home. During this time, between 9000 B.C. and 1650 A.D, there were 3 main periods of development of First Nations cultures, named by archeologists as Paleo-Indian, Archaic and Woodland periods.

The people of the Paleo-Indian period (9000 B.C. to 7500 B.C.) were the first human occupants of southern Ontario. They inhabited the tundra-forest and glacial ice that remained along the shores of lake Iroquois (predecessor of Lake Ontario). They led a nomadic life with seasonal migration in relation to the availability of food sources. Grand Avenue Park would have been within Lake Iroquois at that time.

During the Archaic period (7500 B.C. to 1000 B.C.), the climate warmed and the landscape changed to how we know it today. With a greater diversity of flora and fauna came larger food sources and more gathering possibilities. As a result, populations increased, mobility decreased and long distance trade began.

The Woodland period (1000 B.C. to 1650 A.D.) was defined by a village-based way of life. Food sources were more abundant which sustained large groups of up to 30 to 40 members. Furthermore, there was advancement in horticulture, clay pottery, coil pottery, weaponry and burial mounds. Around 500 A.D., when agricultural practices as we define them were adopted, the First Nations population begin to increase significantly. Despite this population growth, the impact of human habitation was so low that the negative effects on the surrounding ecosystems were temporary and localized.

According to research collected by the TRCA, there is no archeological evidence of inhabitation at Grand Avenue Park, but given the locality near Mimico Creek and the former Bonar Creek (which ran just North of the site and through the eastern portion), temporary or permanent habitation was a possibility.



MIMICO CNR STATION, OPENED 1855



CONFLUENCE OF MIMICO AND BONAR CREEK, 1889

MIMICO DIVISION PLANS



COLONIALISM

In 1615, the first Europeans visited the Toronto region and began to transform the land to aid trade routes. With the passing of the Constitutional Act of 1791 and the creation of Upper Canada and Lower Canada, came increasing pressure from the growing settlement populations for the government to secure land for agricultural purposes. This initiated the "Toronto Purchase", which is still contested today.

The land surveys for Etobicoke Creek began in 1788, however lot and concession lines were not filled in until after the 1805 treaty confirming the boundaries for the "Toronto Purchase". Settlement west of the Humber River began around this time in the early 1800s. The new settlers who purchased lots were required to build a house, clear, fence and plant 5 acres of each 100 acres granted, and clear half of the road allowance at the front of their lots within the first two years of occupancy. Within 40 years of European colonial habitation, approximately 1837, the landscape's health, including the ecosystems of Etobicoke and Mimico Creek, drastically deteriorated was transformed beyond recognition.

MIMICO

The introduction of the Great Western Railway and Mimico station in 1855 instigated the first plan for Mimico. This subdivision plan of 1856 illustrated small residential lots plotted out south of the current Algoma Street with undivided land to the north. At this time, the future location of Grand Avenue Park was also divided into residential lots oriented perpendicular he rail line (top left).

The 1890 fire insurance plan (bottom left), shows the finer grain subdivision that had occurred at the hand of the Mimico Real Estate Security Company. Streets were laid out that remain more or less as they are today, and there were fewer large lots. The subdivisions yielded to the regular north-south grid of the development north of the tracks, no longer paying service to the diagonal cut of the rail.

Though the natural area adjacent to Mimico and the now lost Bonar Creeks had been slated for development, it still remained as a largely natural recreation area for the surrounding residents, as depicted in this image (facing page, right), taken at the mouth of the two creeks, just south of the present day Grand Avenue Park.





SITE HISTORICAL USES

By the start of the twentieth century, most of the current streets were built and residential began to fill into the subdivided lots. Bonar Creek, shown in each of the images left, had been filled in at the location of the railway, but remained largely untouched.

Despite the elaborate residential subdivision plans, in 1912 the grounds of Grand Avenue Park were deemed to be the location of the Mimico Sewage Treatment Plant. It was not until the 1930's that the plant was completed and began treating wastewater. A portion of Bonar Creek was buried to allow Algoma Street to connect to LJ. McGuiness Distillery, operational between 1938 and 1988, just east of the site.

In 1947, a waste incinerator was built on the Grand Avenue park site just north of Algoma Street. Meanwhile, south of Algoma Street, the sewage treatment plant was still operational and was equipped with a mechanical room, drying beds and digester tank. Bonar Creek was filled in even further and became completely filled in or sewerized by the 1950's.

In 1975, the waste incinerator plant closed and became a municipal waste transfer site until 1986. The sewage treatment plant closed in 1960's and was finally demolished in 1990's.

By 2002 the site was dormant with all facilities and buildings removed, though the asphalt and concrete hard surfaces remained. The distillery had also closed and been demolished. Townhouses had been built opposite the park on Manitoba Street, and the neighbourhood had become mostly residential with some industry along the railway. In the following decade, the density of the area increased rapidly along with a need for outdoor recreation space.

The sewage treatment plant site was capped with a layer of soil in 2011 and 2012 in preparation for a community park; the waste incinerator and transfer site is currently under review for environmental risk assessment.

16 HISTORY

<u>GEOLOGY 1932</u>



LOST BONAR CREEK



PASSENGER PIGEON HUNT



WATERSHED & GEOLOGY

The Etobicoke and Mimico watersheds include areas of Toronto, Mississauga, Brampton and Caledon. Grand Avenue Park is located at the southern portion of the watershed in the South Slope physiographic region. The defining features of a watershed are the landforms, soils and the waterways. In regards to Mimico Creek, its waterways cut into the mantle of glacial till, stratified sand, clay and silt, which sits above ancient bedrock. According to the 1932 geological analysis of the region, Grand Avenue Park's geology consisted of a combination of silt to the east and Iroquois sand and clay soils to the west.

Landforms within the Mimico watershed can be classified into four categories. These include plains, esker, valleys and water bodies. Grand Avenue Park is in close proximity to plain and valley landforms.

Plains can be defined as relatively broad areas of land with little elevation. There are three such landscapes in Mimico Creek watershed; the South Slope, the Peel Plain and the Iroquois Sand Plain. Grand Avenue Park is located within the South Slope. It is a till plain of clay and boulders discarded by receding glaciers. Despite its soil composition, it has moderate permeability, which allows for surface water to seep into the soils and become ground water where it is stored within aquifers.

Valley and stream corridors are less distinct in landform character in the northern reaches of the watershed, but as it progresses south towards Lake Ontario, its character becomes more pronounced. The Mimico Creek valley system measures 32 kilometres in total and gradually slopes throughout to reach a total drop of 160 metres from end to end. Over time, the valleys have been filled, piped and channelized, losing their natural character and quality.

The mouth of Mimico Creek has also been altered. The creek flowed directly into Lake Ontario just below Lakeshore Boulevard until 1970, when the large landfill Humber Bay Park was constructed at this location. Since the 1990's, there have been some efforts to construct wetlands, mainly south of Lakeshore Boulevard in Humber Bay Park and a community task force is attempting to create a small wetland north of Lakeshore Boulevard where the small tributary of Bonar Creek once flowed into Mimico Creek.

Over the course of 8,000 years, the forests of southern Ontario have transformed from a tundra environment to an evergreen dominated landscape and 3,000 years ago evolved into a deciduous species dominated landscape, which we recognize today. The current deciduous region of southern Ontario occupies a thin belt reaching from the shores of Lake Ontario to Lake Erie, between Port Hope and Windsor. This area is Ontario's smallest and most biologically diverse region. Since this biodiverse belt is located within the most highly urbanized areas in Canada, it also contains the most rare and endangered species in the country.

Prior to settlement approximately 200 years ago, the quality and quantity of soil,

specifically Luvisol soil, and cleanliness of the water sources was great enough to support lush deciduous forests. Over time, due to settlement and clear cutting, erosions occurred at a greater rate, washing away the rich soils, and manipulation of water features leading to the current degraded state of the creeks and their watershed.

LOST BONAR CREEK

Bonar Creek, which is a tributary of Mimico Creek, had its headwaters just north of Superior Creek and flowed in a southeasterly direction until it joined up with the main watercourse at its vast wetland at Lake Ontario. It continued to flow until about 1950, when most of it was placed in a sewer and parts of its former watercourse was filled in and topped with warehouses and a sewage treatment plant. In 1957, the operators of the McGuiness Distillery, which was located east of Grand Avenue began to fill in the remainder of the creek's ravine in order to construct a number of warehouses north of Manitoba Street. Today only the lower portion of the creek, below the CNR rail line, flows above ground though it has been channelized.

THE PASSENGER PIGEON

In the past, passenger pigeons would congregate in the mixed hardwood and evergreen forests along the banks of Mimico Creek. There they would either rest before making the flight south across lake Ontario or build nests seeing as this location was a popular nesting place for the pigeons. These forests and large gathering of pigeons inspired the names for both Etobicoke, which is an aboriginal name meaning "where the Alders grow", and Mimico, which is derived from the Mississauga Nation word omiimiikaa meaning "abundant with wild pigeons".

Passenger pigeons travelled in great flocks, millions in number, throughout the eastern and Midwestern regions of Canada and United States. Their sheer numbers was their strategy to ward off predators and to compete with other bumper crop eating species. Their appearance was rather beautiful with slate-blue plumage and copper underbelly for the males and more muted pinks and browns for the females. Though they were once the most abundant bird in North America, they became extinct in 1914, due to combination of hunting for spring protein, and mass killing by farmers whose crops the pigeons would eat. Due to their large tight clusters, they were easily shot down or trapped in nets, which attracted amateur and experienced hunters alike from around the country; other methods included burning nesting trees. After a particular massacre in 1880, Chief Pokagon of the Potawatomi people who often wrote for the newspaper named The Chautauquan, wondered what divine punishment might await "our white neighbors who have so wantonly butchered and driven from our forests these wild pigeons, the most beautiful flowers of the animal creation of North America."

In 1871, populations included 136 million breeding adults. In a span of two decades, flock sizes dwindled to dozens instead of millions. The last passenger pigeon, named Martha, passed in 1914 marking the extinction of the passenger pigeon.

CONTEXT RECREATION





SPLASH PADS AND WADING POOLS



PARK BASKETBALL COURTS



TENNIS & LAWN SPORTS (BOCCE, CROQUET, BOWLING)













HARD SURFACE TRAILS



FACILITY PROGRAMMING

SITE INVENTORY

LARGER CONTEXT

The recreational context of the park was studied in terms of programming available in the vicinity of the park, in order to reveal gaps that could be filled by Grand Avenue Park and the priority level of some of the community desires. Mapping was vetted and cross-referenced with Parks, Forestry and Recreation for accuracy and for knowledge on facility planning, use and need. Note that the Parks and Recreation Facilities Master Plan, to be completed in September 2017, should also be used a reference for this material.

The following conclusions were drawn from the facility mapping:

- 1. There is a lack of park playgrounds in the neighbourhood
- 2. There is a lack of water play in larger Mimico area
- 3. There are very few outdoor, non-TDSB basketball courts in the ward
- 4. There are very few soccer fields in the neighbourhood, ward and larger Mimico area.
- 4. There are a number of community centres within driving or biking distance, may not be a priority for this site
- 5. Area is well served for formal baseball diamonds, given space, amount of use and proximity; space may be desired for informal catch.
- 6. Ward is well serviced for ice rinks, skating loops, though these are in *driving* distance
- 7. There is a trail system to be connected to that would allow further connection to the waterfront trail and other parks; a regional connection could be made

Taking all mapping into consideration (see Facility Programming, left), there are some high service parks (high number of facilities) nearby, including nearby Ourland Park, which could take burden off of Grand Avenue Park to be a facility heavy park. Design could take into consideration alternate forms of outdoor recreation such as walking trails, community gathering spaces as well as ecological restoration / development. 20 SITE INVENTORY

FIVE HECTARE PARKS COMPARISON





PARK COMPARISON

FIVE HECTARE PARK COMPARISON

To assess both the feasibility and spatial requirements for programming within Grand Avenue Park, four parks of similar size were compared in terms a facilities (not including private or TDSB) and parking. As shown in the facing diagrams, many parks in the surrounding area do not rely on a large number of parking spots; those with large parking lots (Don Russell Memorial and Ourland Park) also had community centres that shared the lots (Gus Ryder Pool and Health Club and Ourland Community Centre). This analysis also demonstrated how facilities would fit within a similarily sized park and that there was a lack of formalized, outdoor community space in any of these parks.

IMMEDIATE CONTEXT

The site is connected to TTC by the 76B bus with service to and from Royal York Station, with the stop of Grand Avenue and Manitoba Street being a busy rush hour stop. The Mimico GO Station of the Lakeshore West Line is located southwest of the park and is also a busy commuter station for those travelling downtown. These two transit locations were considered in park circulation, entrances and address.

Though there are currently no bike lanes connected to or near the site, Grand Avenue is noted as a bike friendly route, and future trail connections listed below could provide a regional bike connection through the park.

FUTURE PROJECTS

There are a number of proposed projects underway or in preliminary stages that should be considered as they will affect both the adjacencies and connections through and to the park:

Parcel F - Development of 251 Manitoba Street: Current plans allow for a tower of 87m, a mid-rise building of 35m and a podium of 135, which may include townhouse with entrances onto a new internal street at the edges of the park. Additionally, though the strategy is to have parcel H transferred to the city, the extent of the underground garage will likely extend into parcel H; therefore should be considered as on slab. The boundaries will evolve as the project evolves.

<u>Parcel H Rubble Heap</u>: the removal of rubble heap and transfer of property to city will be dependant on the development of parcel F

Legion Road South Extension: detailed design to commence in 2017. The extension is managed by City of Toronto Engineering Services and Transportation Services, Legion road is to be extended via railway underpass connect to Legion Road south of the tracks. Grades along east side of the site will be affected (refer to grading plans for approximated elevations), as will pedestrian and bike connections depending on

ADJACENCIES AND CONNECTIVITY







design or future trail connections

Bonar Creek Watershed Stormwater Management Project: implementation in 2019. This project is managed by City of Toronto Engineering and Construction Services and Toronto Water, and will result in the creation of a large stormwater detention pond west of the Mimico Creek and south of the railway, with new storm sewer connection along the streets adjacent to the park and potentially, through the park (refer to Appendix, Drainage, Grading and Site Servicing Plans, page 102-107).

South Mimico Pedestrian Trail Project: managed by the Toronto Region Conservation Authority, the project will create a new trail network along Mimico Creek from Lakeshore Boulevard to the Gardiner Expressway and will include bridge construction and connections to adjacent neighbourhoods. A trail extension at the south end through the park will allow a connection to regional trails.

Mimico-Judson Regeneration Areas Study, Secondary Plan And Urban Design Guidelines: preliminary studies show the possibility of the extension of Grand Avenue along the railway and the construction of a greenway to Mimico Station and beyond. This has implications for a connected and continuous greenway/multi-use trail at the south end of the park, as well as potentially bringing new users to the park via bicycle and on foot.

The existing conditions of the park are a combination of inaccessible areas to be remediated and large, unprogrammed lawn space (the capped former waste treatment

- Former Waste Transfer Site: though the former waste transfer site is fenced and signed, there is evidence that it is accessed regularly by walkers. A large mound dominates the Northwest corner of the site; remnant concrete and asphalt hardscapes exist throughout the site. Pending the completion of environmental assessment, the site is to be entirely capped by 1.5m of soil
- Swales: two swales exist on site, and function as conveyance and temporary storage and infiltration
- Capped Open Lawn: capped site of former waste treatment plant; unprogrammed open space, currently used as a large dog park.
- 04 Existing Tree Canopy: as many existing trees are to remain as possible, with particular attention to community favourite weeping willow
- 05 Rubble Pile: though fenced and signed, there is evidence that it is accessed regularly by walkers; to be removed in conjunction with development at 251 Manitoba Street



ALONG MANITOBA ST



-ORMER WASTE TRANSFER SITE



SEWAGE TREATMENT SITE CAP DEPTH



DISCARDED FILL MOUND



ORMER WASTE TRANSFER SITE



GOMA ST



ALGOMA ST SWALF



PATHWAYS TO ADJACENT TOWERS

ECOLOGICAL ASSESSMENT

For full Ecological Site Report, refer to Appendix, page 94.

City of Toronto Official Plan:

Although the site is not within a Natural Heritage System (NHS), it is adjacent to the Mimico Creek NHS. The City's Official Plan identifies policies related to the conservation and improvement of natural heritage resources across the City (see City of Toronto Official Plan Section 3, pages 3-33 to 3-38). Applicable policies for this project include:

1. To support strong communities, a competitive economy and a high quality of life, public and private city-building activities and changes to the built environment, including public works, will be environmentally friendly, based on:

a) protecting, restoring and enhancing the health and integrity of the natural ecosystem, supporting biodiversity in the City and targeting ecological improvements, paying particular attention to:

i) habitat for native flora and fauna and aquatic species

ii) water and sediment quality

iii) landforms, ravines, watercourses, wetlands and the shoreline and associated biophysical processes

iv) natural linkages between the natural heritage system and other green spaces

SITE IMPLICATIONS: The park's location adjacent to the Mimico Creek NHS means that it has the potential to support the ecological features and functions of the NHS. The replacement of existing vegetation with native species will be beneficial to native flora and fauna, as the existing vegetation on the site is dominated by exotic invasive species. Maintaining the treed corridor along the rail line to the south of the site will allow for a tree canopy linkage between the site and the Mimico Creek corridor, which will facilitate the movement of wildlife.

b) preserving and enhancing the urban forest by:

i) providing suitable growing environments for trees

ii) increasing tree canopy coverage and diversity, especially of long-lived native and large shade trees

iii) regulating the injury and destruction of trees

SITE IMPLICATIONS: The existing trees on the site form a part of the City's urban forest. As the majority of trees on north of Algoma Street will be cut to facilitate the capping of the contaminated lands, the overall tree cover on the site will be reduced. Therefore efforts should be made to preserve trees on the remainder of the site and increase canopy cover wherever possible given the soil limitations.

2. All proposed development in or near the natural heritage system will be evaluated to assess the development's impacts on the natural heritage system and identify measures to mitigate negative impact on and/or improve the natural heritage system, taking into account the consequences for:

a) terrestrial natural habitat features and functions including wetlands and wildlife habitat

b) known watercourses and hydrologic functions and features

c) significant physical features and land forms

d) riparian zones or buffer areas and functions

e) vegetation communities and species of concern

f) significant aquatic features and functions including the shoreline of Lake Ontario.

Humber Bay Park Terrestrial Biological Inventory

This report is an in-depth biophysical inventory of Humber Bay Park which was conducted in 2013 by Toronto Region Conservation Authority (TRCA) staff. The study was conducted fully within Humber Bay Park and so the findings are not directly applicable to the Grand Avenue Park site, however the report can provides an understanding of the general flora and fauna in the vicinity of the park.

A vegetation community of high conservation interest identified in this report is a prairie planting associated with the Humber Bay Butterfly Habitat project. There could be an opportunity at Grand Avenue Park to use this garden as a template for the creation of a similar feature in the park.

The report includes four recommendations aimed at enhancing and protecting ecological features and functions of the Humber Bay Park study area. The recommendations which are applicable to Grand Avenue Park are paraphrased below:

1. Enhance and Protect Existing Features:

- A general increase in natural cover (especially wetland and thicket) will improve natural features and functions
- The Humber Bay Butterfly Habitat planting is the highest priority for Humber Bay Park, with an emphasis on maintenance. Maintenance will involve removal of invasive species and woody vegetation.
- Plantings should focus on generalist, urban-tolerant species, with maintenance to prevent exotic invasion.
- Monitoring of plantings should be undertaken every 2 years and recommendations based on the findings should be provided after each monitoring visit
- Provide artificial nest structures for birds, creating opportunities for local stewardship (barn swallow, purple martin and chimney swift).

2. Manage Public Use

 Public use should be controlled in naturalization and restoration areas in order to achieve successful establishment of plantings and to keep spread of invasive species to a minimum

• A stewardship program could be developed to engage local residents and park visitors in natural heritage restoration activities including removal of invasive species, planting, and maintenance.

3. Control Invasive Species

• Invasive species should be monitored and controlled, especially woody invasive that produce prolific seed (e.g. Manitoba and Norway maple: shrub honeysuckle, Siberian elm, buckthorn, and European alder) and understory plants such as garlic mustard, hedge parsley, and dog-strangling vine.





FGETATION ALONG RAIL LINE



ALE ON CAPPED PORTION

MIMICO CREEK CORRIDOR



ES ALONG GRAND (TO RETAIN IF POSS.)



CAPPED AREA



ECOLOGICAL SITE INVENTORY

Area 1: Site to be Capped

This portion of the site has the highest proportion of tree and shrub cover on the study site. Species present are largely opportunistic non-native species which would have regenerated following the cessation of activates on the site. Species observed include:

Trees: Hybrid Poplar (Populus sp.), Manitoba Maple (Acer negundo), Norway Maple (Acer platanoides), Sugar Maple (Acer saccharum)*, Ash sp. (Fraxinus sp)*, Crack Willow (Salix fragilis), Basswood (Tilia americana)*, White Spruce (Picea glauca)

Shrubs: Common Buckthorn (Rhamnus cathartica), Russian Olive (Elaeagnus angustifolius)

Herbaceous Vegetation: Dog-strangling Vine (Cynanchum rossicum), Lance-leafed Aster (Symphyitrichum lanceolatum)*, Queen Anne's Lace (Daucus carota), Common Milkweed (Asclepias syriaca)*

Native species are indicated with an asterisk (*). The best quality native species on the site are the row of mature White Spruce which run parallel to Grand Avenue, north of Algoma. However, we understand that this site will need to be capped and retention of these trees is not be possible. There may be some trees along the Grand Avenue property line which are close enough to the edge to be preserved; the feasibility of this will depend on the extent of the capping and its impacts on the trees' root zones. Any natural heritage constraints present in this area of the site are superseded by the need to contain the contamination present in the soils.

Area 2: Swale South of Algoma Street

A naturalized area has formed along the south side of the closed portion of Algoma Street within the study area. This area is lower than the surrounding portions of the site and shows some indication of wet soils, including Common Reed (Phragmites australis). Other vegetation present includes:

Trees: Siberian Elm (Ulmus pumila), Norway Maple (Acer platanoides)

Herbaceous Vegetation: Goldenrod (Solidago sp), Lance-leafed Aster (Symphyitrichum lanceolatum)*, Heath Aster (Symphyitrichum pilosum)*, Common Reed (Phragmites australis), Queen Anne's Lace (Daucus carota), Common Milkweed (Asclepias syriaca)*

Native species are indicated with an asterisk (*). No significant vegetation or trees of a substantial size were observed in this part of the site; in our opinion it does not contain any natural heritage constraints.

Area 3: Capped Portion of Site

The majority of the site is a grassed field over capped contaminated lands. Some mature trees are present adjacent to Grand Ave, and a small swale (area 3a) is present along the south edge of the cap. The swale is has a similar vegetation composition as Area 2 and does not present a natural heritage constraint. The trees along Grand Ave are:

Trees: Manitoba Maple (Acer negundo), Weeping White Willow (Salix alba 'triste'), Black Maple (Acer saccharum ssp. nigrum)*, Ash sp. (Fraxinus sp)*, Slippery Elm (Ulmus rubra)*, Norway Spruce (Picea abies)

Native species are indicated with an asterisk (*). Although the trees present are predominantly non-native, D&A believes that they should be preserved to maintain their canopy function and some structural diversity on the study site. These trees had metal tree tags and may have been surveyed as part of previous work on this site; this information should be available from the City of Toronto and may be useful for the Grand Manitoba Park master planning process.

Area 4: Treed Area South of Site

At the site's south property line a treed area consisting of both planted and opportunistic vegetation is present. The tree canopy is dense and provides visual screening from the rail line and some microclimate mitigation on the site through shading and wind reduction. Vegetation observed includes:

Trees: Austrian Pine (Pinus nigra), Manitoba Maple (Acer negundo), Norway Maple (Acer platanoides), Black Walnut (Juglans nigra)*, Silver Maple (Acer saccharinum)*, Siberian Elm (Ulmus pumila), Blue Spruce (Picea pungens)

Area 5: Fill Pile

The piece of land east of Area 2 and north of the rail line currently consists of large piles of fill and some opportunistic vegetation. This area has no natural heritage value and presents no constraints to the master planning process.

Adjacent: Mimico Creek Corridor

Although the Mimico Creek corridor is not on the Grand Manitoba Park study site, it is included here to present vegetation that may have naturally occurred on the site and to present what constraints may be present for a future trail connection. The creek corridor is fully fenced, so observations were made from an existing trail at the east side of the iLoft condominium building. Vegetation observed includes:

Trees: Manitoba Maple (Acer negundo), Red Oak (Quercus rubra)*, Norway Maple (Acer platanoides), Silver Maple (Acer saccharinum)*, Ash sp. (Fraxinus sp)*, Crack

Willow (Salix fragilis), Basswood (Tilia americana)*, White Spruce (Picea glauca)

Shrubs: Common Buckthorn (Rhamnus cathartica), Chokecherry (Prunus virginiana)*

Herbaceous Vegetation: Poison Ivy (Toxicodendron radicans)*, Goldenrod (Solidago sp), Garlic Mustard (Aliaria petiolata)

The overall quality of the creek corridor that was visible from the fenceline was poor, with many non-native species and low understory diversity. The slopes to the creek were very steep, and the creek banks which were visible from the fenceline were channelized (i.e. concrete). However, the native canopy vegetation observed which includes Red Oak, Silver Maple, and Basswood could help to guide the recommendations of planting choices for Grand Manitoba Park. Any trail connection proposed from Grand Manitoba Park to the future trail on the east side of Mimico Creek would have to be designed with the constraints of the steep slopes and associated soil instability in mind.

NATURAL HERITAGE CONSTRAINTS

The background investigation and site visit found few natural heritage constraints on the Grand Manitoba Park site. In general, the quality of the habitat present is low and the vegetation species observed are largely non-native exotic species. However, given the urban nature of the site the value of these features cannot be fully discounted. The main natural heritage constraints of the site are thus:

- Mature trees along Grand Ave which are not part of the contaminated site to be capped
- Linear trees feature along the rail line to the south of the site.

These treed features provide forage and shelter for generalist wildlife species and serve to improve the site's microclimate. D&A believes that the Master Plan for the park should be designed to minimize impacts to these treed features. This can be accomplished by:

- Avoiding grading or disturbance within the canopy of the trees
- Protecting the trees during construction activities through installation of tree preservation fencing according to the City of Toronto's guidelines
- Planting more trees on the site, where possible due to soil limitations, to allow for continuation of the canopy in the long term as existing trees mature and decline.

ONLINE SURVEY

In anticipation of the master plan process, a survey was designed and launched online by City of Toronto staff. The purpose of the survey was to profile potential park users, solicit recreation and leisure preferences and identify community and park design issues to be addressed in the Master Plan. Key results are represented left; for full report, refer to Appendix, page 74.

223 RESPONDENTS



RESPONDENT DEMOGRAPHICS



<u>#1 PRIORITIES FOR PARK VISITS</u>



40% FOR THEIR HEALTH: TO WALK, HIKE OR ENJOY NATURE

22% FOR PLAYGROUND

19% TO WALK DOG

19% VARIOUS OTHER ACTIVITIES

MOST APPRECIATED PARK FEATURES

Naturalized areas, waterfront and trees Play structures Dogs off leash areas Trails, Walkways Sports fields

<u>#1 MOST IMPORTANT PARK FEATURE FOR</u> GRAND AVENUE PARK EXPANSION

- 1 Children's play structure
- 2 Dog off-leash area
- 3 Naturalized areas
- 4 Sports fields

Other features noted: seating, multi-use trails, safety, children's water play, parking

KEY CONCERNS (FOR BOTH RESPONDENTS LIVING WITH CHILDREN OR WITHOUT)

Garbage/litter Parking & congestion Safety at night Noise

MOST IMPORTANT FEATURES IN FUTURE PARK



28%	CHILDREN'S PLAY	3%	CHILDREN'S WATER
15%	NATURALIZED AREAS	3%	PARKING
15%	OFF LEASH DOG AREA	2%	SHADED AREAS
12%	SPORTS FIELDS	2%	COMMUNITY GARDEN
5%	BENCHES AND SEATING	2%	WASHROOMS
5%	MULTI-USE TRAILS	2%	PLAY COURTS
= 0/			

PUBLIC CONSULTATION

COMMUNITY ENGAGEMENT

The community was consulted in a four stage process between the fall 2016 and spring 2017. All interested parties were invited to be fully engaged in the public consultation and planning process, including members of the public, residents and condo associations, BIA's, recreational and sports leagues, social services and civic organizations. Opportunity for public input was offered through the process, including input in person (written or verbally) and via email. Full presentations, meeting and feedback summaries were posted promptly on the <u>City of Toronto Grand Avenue Park project website</u>.

FOUR STAGE PROCESS

<u>STAGE 1</u>:

<u>Public Meeting 1 - Project Launch, October 24, 2016</u>: introduced project, the design team, public and stakeholder consultation process; identified opportunities and parameters of the master plan project; distributed and presented background materials and studies on the master plan project and planning frameworks. <u>Community Walkshop, October 29, 2016</u>: investigated the condition of the current site, ecology, and use; walked the park area to help identify opportunities and parameters

STAGE 2:

<u>Public Meeting 2 - Initial Ideas, Exploring Options, December 7, 2016</u>: reviewed the prioritization of the park programming, emerging ideas, precedents and three design options for feedback and discussion; provided an update on environmental assessment and management strategies

STAGE 3

<u>Public Meeting 3 - Testing Concepts, February 28, 2017</u>: reviewed two design concepts and precedents for feedback and discussion. Options were presented digitally and was followed by questions of clarification and small-table discussions.

STAGE 4:

<u>Public Meeting 4 - Confirming Priorities and Plans, June 8, 2017</u>: presented final design concept, confirmed design priorities and principles, gathered final thoughts and feedback. The plan was presented digitally and at the following open house stations: Master Plan & Design, The Field, Circulation and Pathways, Ecology, Phasing & Budget <u>Community Walkshop, June 12, 2017</u>: walked through design in real space, discussed adjacencies and phasing

PUBLIC MEETING 1 COMMUNITY INPUT AND FEEDBACK









KEY FEEDBACK

(refer to Appendix, page 80 for full summaries)

<u>EXISTING PARK</u>: Residents outlined a number of aspects that they enjoy about the park, including: varied topography, naturalized areas, habitat conservation, natural noise mitigation with trees *and* topography

<u>CONNECTIVITY</u>: desire for several accessible entrances into the park, to ease access and enhance safety; connectivity to existing or future regional trails and commercial areas; Cycling route through park but separate from walking

<u>SAFETY</u>: crime prevention through design including lighting on walkways and ensuring visibility into the park; traffic calming, crosswalks, sidewalk on Manitoba

<u>PARKING</u>: More Park, Less Parking; but also concern about increased street parking related to park activities; concern about misuse from condo owners at northeast and GO users at southwest; desire for parking to be situated far from facilities to minimize visual impact

<u>PLANTING</u>: maintain and/or re-introduce trees/naturalized areas, natural noise barriers to the north and south; large naturalized areas preferred over ornamental

PROGRAMMING:

- Priorities: community gathering area, seating areas, children's play area, splash pad, teen programming, dog off-leash area, naturalized areas, recreational facilities, events and festivals space, winter activities (toboggan hill)
- Sports field: concern about increased congestion and parking problems in the area, lighting at night; support for multi-use field, healthy recreation aspect of complete park; minimize visual impact
- Playgrounds: near mature trees, safe, accessible, natural
- Dog Off Leash Area: separate/far from other park facilities

IMPLEMENTATION:

- Phasing should consider delivery of community amenities in early stages of implementation
- Dogs Off Leash Area is a priority in phasing, and immediate need for waste receptacles was noted
- 'Less Ugliness Less Waiting': concerns were raised about the timing of the removal of all the greenery and trees in the northern part of the park as part of the soil remediation process, and the time until re-planting.

RECOMMENDATIONS OUTSIDE OF MASTERPLAN DESIGN

- Install waste receptacles especially in southern portion where dog owners tend to take dogs; consider temporary dog park to allow alternative uses of park space
- Consider interim tree planting to kick start recommended ecologies (see page 62)
- Enforcement and disincentives for long term parking is recommended in parking lot

32 APPROACH















APPROACH

The design approach for the park was an iterative process based on feedback from the Parks Forestry and Recreation, feedback through the four-stage community engagement process, and emerging site information. Resultant options and final master plan were based on community desires and needs overlaid with the necessities of site.

One of the primary desires of the public was to have a community park, though there was a need for a regional, permitted sports field. The main strategy for ameliorating between this desire and need was to create an identity for the park, drawing on specific site history to create a framework that was place-based rather than simply a functional city park that could exist anywhere in Toronto.

Three main concepts were used to guide ideas:

BRING BACK THE ROMANTICISM OF THE CREEK:

One of the most compelling historical images of Bonar Creek features a boating picnic party on the banks of the creek. At one time, the site of Grand Avenue Park was a similar gentle sloping ravine and creek bed, before Bonar Creek was buried and sewerized. Due to capping, a creek or wetlands cannot be brought back to the site, but the romanticism of the experience is a guiding concept

2. CREATE BIRD AND POLLINATOR HABITAT:

As urbanization grows, spaces of habitat value decrease. Creating both bird and pollinator habitat addresses a loss of the past (the passenger pigeon that once bred in the Mimico area) and the risk of loss of the future (the declining native pollinator population)

3. CONSTRUCT NEW ECOLOGIES:

Industrial use and remediation has left the site without remnant ecologies but with interesting topography. By creating new, resilient, fast-establishing ecologies that take advantage of existing conditions a variety of experiences and habitats can be created on site.

From these concepts, three tensions provided spatial constraints:

- 1. RECONCILIATION: between natural history and increasing development
- 2. INTEGRATION: of habitat and programming
- 3. CONNECTION: to future and existing urban fabric

INITIAL DESIGN STUDIES: THREE OPTIONS

1 CONCENTRATED

The concentrated option focussed programming on the east side of the site, taking advantage of existing trees and topography to create one consolidated ecological area. The resultant layout sheltered the main community programming at the heart of the park; left the north side on Manitoba Avenue open and permeable; while closing off Grand Avenue with vegetation.

Public response:

- was considered safest option for visibility
- some disliked adjacency of parking to playground, and location near condominiums
- large consolidated natural area was preferred
- pathways through natural areas was preferred

2 DISPERSED

The dispersed option spread program across site in a field of ecology. This created an equality of entrances and faces, and allowed program to be placed based on ideal location without consequence adjacency to each other.

Public response:

- separation between playing field and other features was favoured to provide privacy and mitigate light and noise from sports events
- two parking lots were seen as possibly increasing congestion
- playground location preferred for safety (in more open area of park) and location near existing shade
- location of dog park preferred

3 NODES

This option placed program in nodal clumps based on appropriate adjacencies across the site in a field of naturalization.

Public response:

- favoured for aesthetic appeal and integration of natural features
- location of parking lot was seen to cut off prime shade of only existing trees on site.
- one parking lot was preferred
- curved path along rail was preferred







1 CONCENTRATED





2 DISPERSED

3 NODES









INITIAL DESIGN STUDIES: GENERAL RESPONSE

There was general support of proposed programs, with a preference for a system of connected pathways, accessible entrances, openness, visibility, separation between playing field and other features, integration of natural features. Other considerations include a desire for a variety of seating, winter activities, multi-use court, and noise buffering. Residents preferred the least number of parking spots possible, but no consensus was reached on location; similarly there was strong desire to have the sports field occupy the smallest footprint and have the least visual impact possible. Preference was indicated for the dog off-leash area to be separated from the rest of the programming. There was strong support for the following: a playground with shade and visibility; a flexible, hardscape community gathering space to act as the heart of the park; a multi-use court that would provide passive and active space for teens; and large naturalized area with native vegetation and habitat for pollinators.

DESIGN EVOLUTION: TWO OPTIONS

Taking into consideration the public response to the initial studies, two refined options were presented at Public Meeting 2: The Loop and The Web. The Loop focused inwardly on the park with program placed around a interior loop, while the web reached out the neighbourhood with a series of entry plazas and program placed strategically at intersections.

DESIGN EVOLUTION: RESPONSE

General design: fluidity of the 'Loops' design for the paths and layout & programming in the 'Web' design; majority preferred parking in the south quadrant of the park; playground where parents could maintain visual contact; multi-sports field separated from community features; more space allocated to the playground; mixed opinions on the location and height of the tobogganing hill

Elements within park: support for a diversity of ecological types in the park, forests located on the edges of the park; meadows located away from play areas, due to allergies and bees/wasps; hierarchy of larger and smaller paths, with the larger paths supporting cyclists; large consolidated dogs off leash area; support for splash pad, the natural play areas recommended in the options; playground recommendations include sand pit, hop-scotch, four-square and rock climbing; adult fitness as a priority

Other elements recommended include the following: space for community gatherings, movie nights, farmers market; water fountains, washrooms and changerooms; area for skateboarding, parkour; good lighting; additional benches, especially along walkways; bike parking and air pump stations for bicycles and street crossings and stop signs on Grand Avenue



DESIGN EVOLUTION: TWO OPTIONS

THE LOOP 🕜



