



Rouge Park Draft Trails Master Plan Review

Town of Markham, Development Services Committee



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Presentation Outline

- Draft Vision for the Rouge Park Trail System
- Rouge Park Goals and Objectives
- Trail Alignment Design Principles Related to Natural Heritage
- Framework for the Trail System
- Approach to Ecological Assessment
- Summary of Findings of the Ecological Assessment
- Draft Trails Master Plan
- Catalogue of Trail Types
- Cultural Heritage Resources and Interpretation
- Summary of Comments – Public Meetings
- Process Going Forward

Proposed Draft Vision

The vision for the Rouge Park Trail System is proposed to be as follows:

The Rouge Park trail system will serve as a means to understand and appreciate the unique natural and cultural attributes of the park through heightened visitor experiences and immersion in the landscape.

The system will offer a range of experiences and recreational opportunities to assist in meeting the needs of users of all ages and physical abilities.

The trail system will support the protection of the outstanding natural features, agricultural landscapes and diverse cultural heritage of the park by managing appropriate public access and patterns of use while providing a rewarding experience of nature.

Goals for the Proposed Trail Network

1. Protect important natural heritage features

- Protect existing natural heritage features and functions
- Enhance habitat connectivity, diversity and function where possible
- Avoid fragmentation
- Generally avoid steep slopes and areas prone to flooding or erosion where possible

2. Provide a continuous north-south and east-west linkage

- Provide for a multi-use trail connection from the Waterfront to the Oak Ridges Moraine
- Provide key linkages to connect neighbourhoods adjacent Rouge Park
- Provide a multi-modal trail network that maximizes accessibility and is integrated with public transit

3. Protect, respect and celebrate significant cultural heritage resources

- Capitalize on interpretive opportunities
- Avoid sensitive cultural heritage features and landscapes

Objectives for the Proposed Trail Network

Key Objectives for the Trail Network:

- Ensure public safety
- Protect and enhance natural features and functions
- Enhance experience of Rouge Park for trail users
- Provide access for a range of users of varying abilities
- Afford a broad range of user experiences and recreational opportunities
- Provide facilities to support trail use (i.e. parking)
- Make the connections to regional trails, bikeways and transit

The Objectives will be achieved by:

- Developing a catalogue of trail types
- Utilizing the road network/ internal neighbourhood street fabric
- Linking open spaces
- Optimizing walking distances
- Utilizing corridors of opportunity i.e. hydro easements

Trail Alignment Principles as They Relate to Natural Heritage

Natural Heritage

Trails will be aligned to:

- Minimize disturbance to areas of 'high ecological sensitivity'
- Allow for the expansion of the natural heritage system
- Utilize existing trails where deemed appropriate from an ecological perspective
- Minimize fragmentation of existing woodlands and habitats
- Minimize interference with:
 - Natural hazards: steep slopes, floodplains, wetlands, seepage areas
 - Habitats for Species of Concern and Species at Risk

Trail Alignment Principles as They Relate to Natural Heritage

Recreation

- Trails will offer a range of experiences and challenges
- Trails within the park will be primarily used for hiking, snow-shoeing, cross-country skiing and nature appreciation
- Specific areas within the park may be designated to accommodate cycling
- Bicycle routes will be located predominantly along road rights-of-way, unopened road allowances and utility corridors
- Joint use/ cycling trails may be designed to link cycling routes and destinations within and outside of the park
- Motorized vehicles will be prohibited on all trails (with the exception of maintenance/service vehicles)
- The range and type of recreational use permitted within the park must be consistent with the park goal and objectives and the carrying capacity of the ecosystem.
- No recreation activity will be allowed which adversely impacts the health of the park ecosystem and its special habitats and cultural features.
- Any recreational park use must not adversely affect residents and local neighbourhoods within or adjacent to the park.

Framework for the Trail System

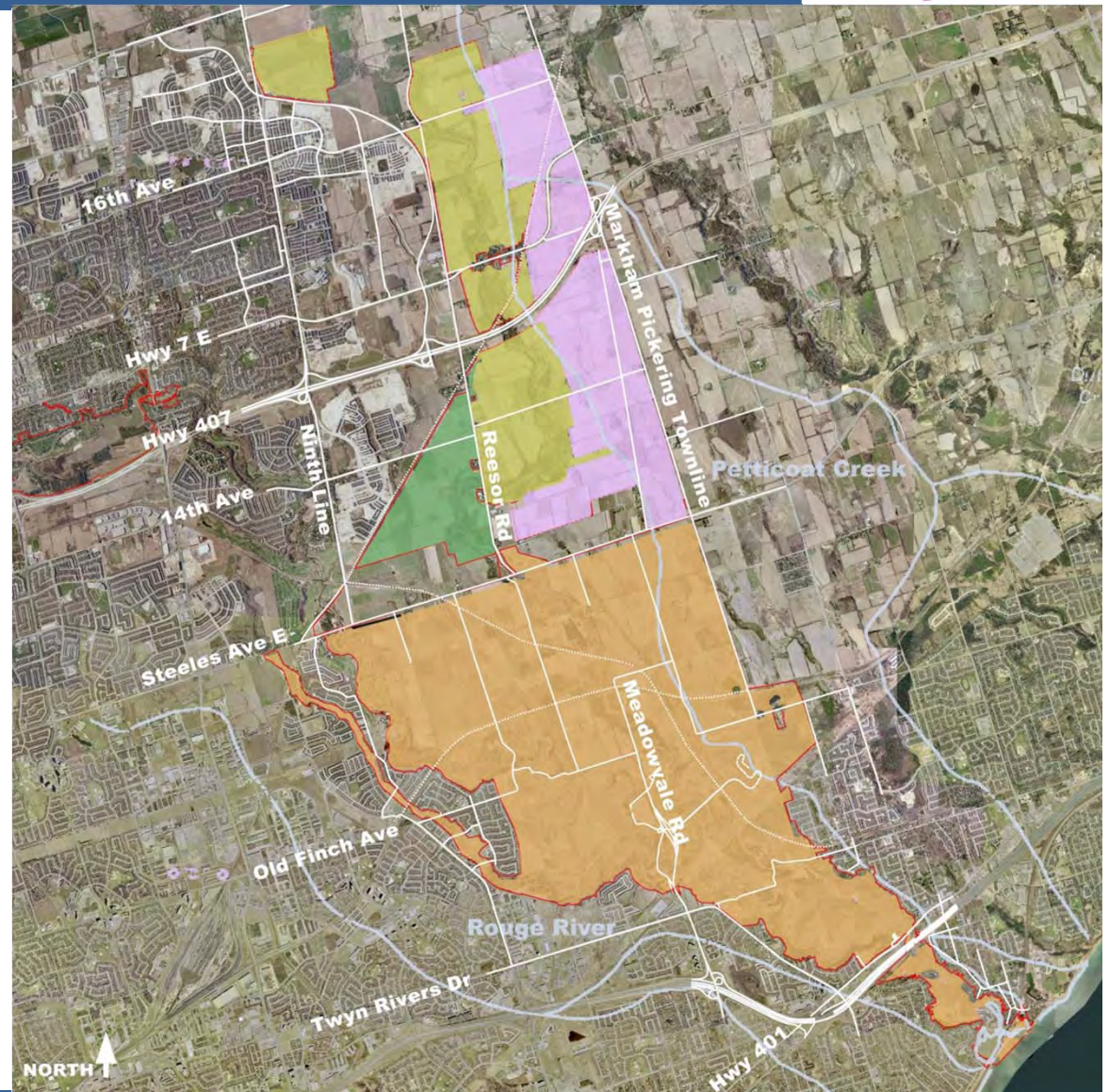
- The trail system will consist of a **catalogue** of trails comprised of a 'base' trail configuration with a subset of variants that are intended to address **site-specific conditions** or the implications of patterns of use.
- The catalogue of trail types proposed to comprise the overall trail system is founded on an approach that emphasizes the **natural over the structural**, with structural solutions proposed to overcome site-specific conditions with the objective of mitigating potential impacts on the natural and cultural heritage resources of the park.
- Bicycle routes are generally proposed to be located within the road rights-of-way that traverse the park.
- Multi-use and special use trails are confined to specific defined areas within the park.
- The approach is aimed at minimizing the footprint of trails while at the same time achieving a level of resiliency that is sufficient to mitigate the impact on the Park.

Rouge Park Trails Master Plan



Background - Rouge Park Components

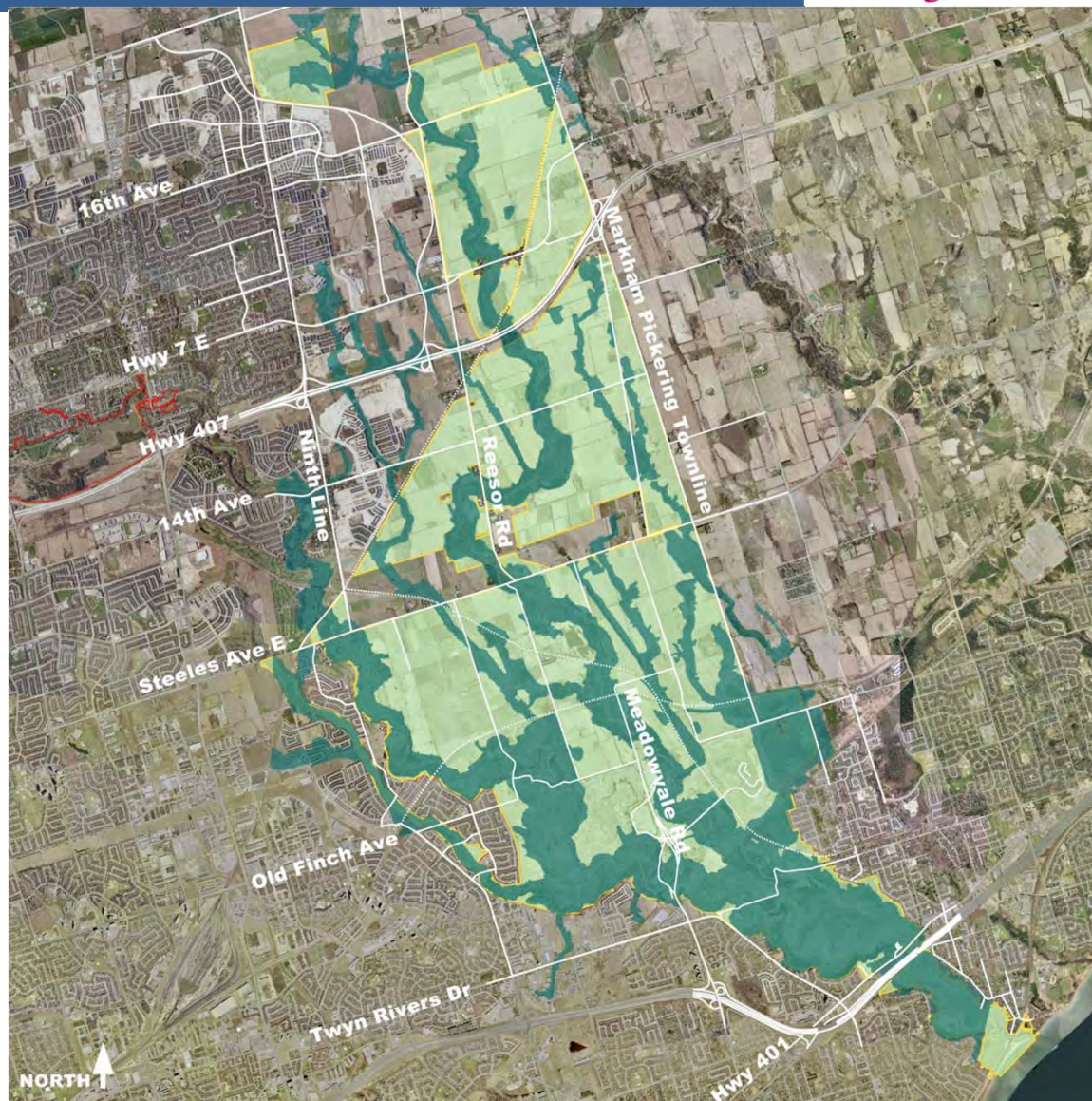
- Watershed
- Bob Hunter Park
- Little Rouge Corridor
- Markham East Lands
- Rouge Park South
- Rouge Park Boundary



Rouge Park Trails Master Plan



Background - Floodplain



Rouge Park Trails Master Plan



Background - Natural Heritage System Context

-  Seaton Natural Heritage System
-  Natural Heritage System Designation (Central Pickering Development Plan)
-  Rouge Park







This map is for discussion purposes only. Information shown on this map is compiled from various sources, representing data collected at different times and, therefore, may not be most up to date

Rouge Park Trails Master Plan



Background - Woodlands and Restoration Sites

-  Restoration Sites
-  Open/ Farmland
-  Woodlands
-  Rouge Park



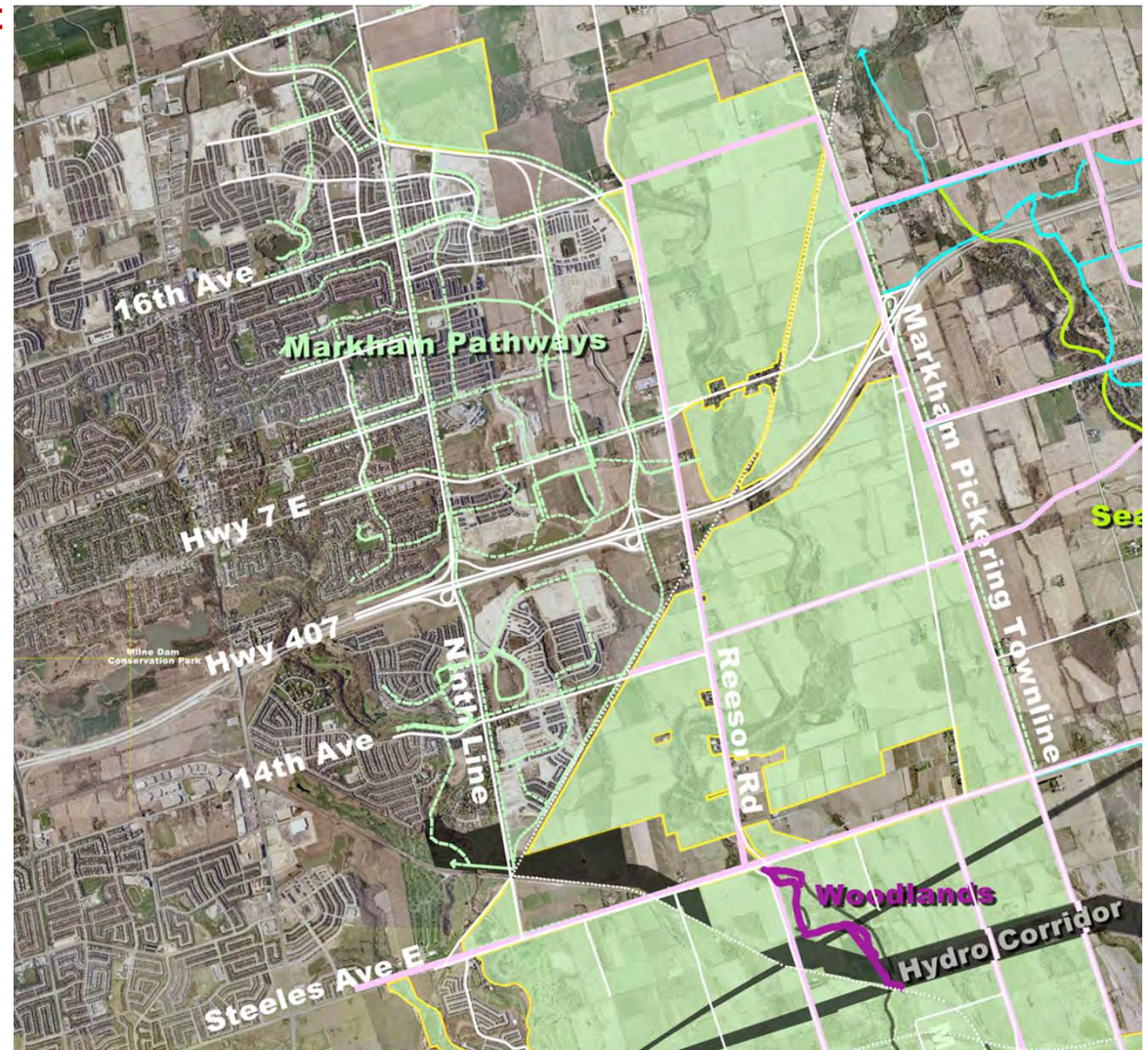
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Rouge Park Trails Master Plan



Background - Regional Trail Context

- Proposed Cycle Routes
- Proposed Seaton Trails
- Proposed Markham Trails
- Existing Rouge Trails (official and unofficial)
- Existing Seaton Hiking Trail
- Rouge Park



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Information shown on this map is compiled from
various sources, representing data collected at
different times and, therefore, may not be most
up to date*

Ecological Assessment – Summary of Process

Initial tasks:

- Assemble and summarize background data;
- Provide input to inform potential trail locations
- Data were summarized to locate “sensitive areas”

Ecological Assessment – Summary of Process

Generally, the sensitivity analysis involved:

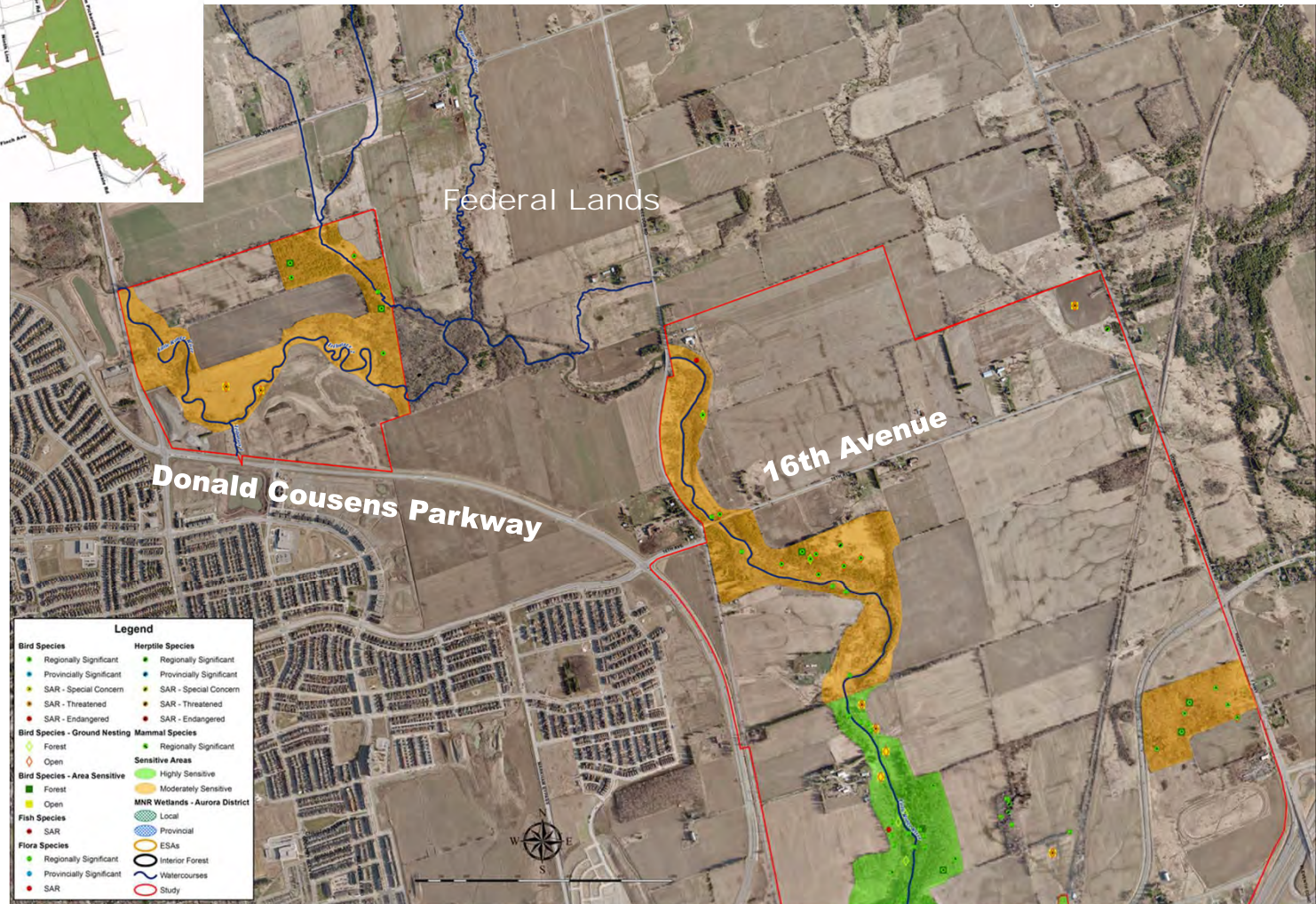
- Plotting the location of nationally, provincially, and regionally rare plant and animal species;
- Identifying sensitive habitats such as wetlands;
- Identifying important breeding and nesting areas for wildlife; and
- Evaluating the significance and sensitivity of each.

The sensitivity mapping involved:

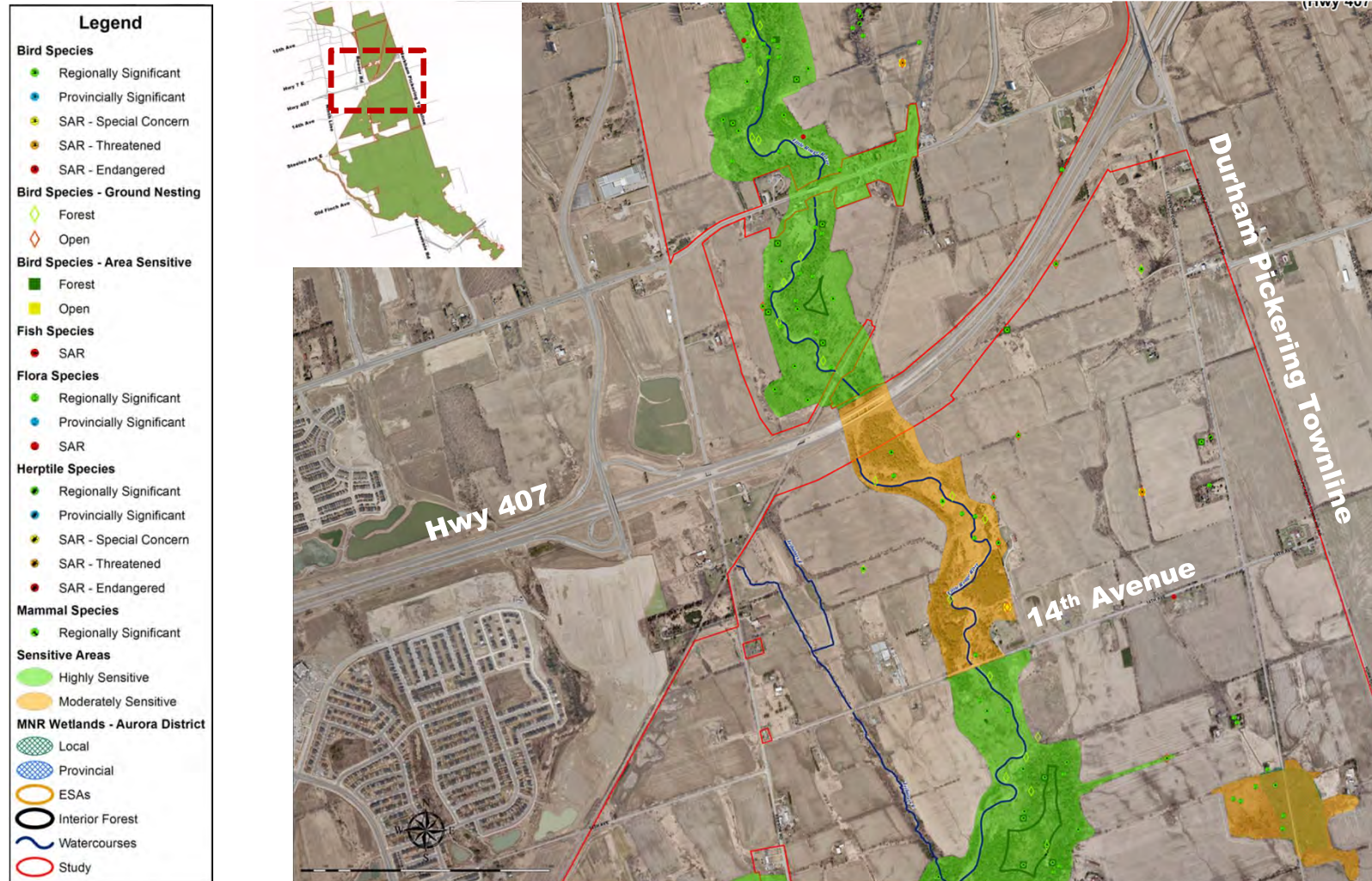
- The use of geo-referenced ecological data from various sources including the MNR, TRCA, and Rouge Park.
- Using GIS software the data were mapped onto digital aerial photographs of Rouge Park in order to provide the specific locations of sensitive species and habitats.
- These data include vegetation communities, flora and fauna occurrences, Environmentally Significant Areas (ESAs), Provincially and Locally Significant Wetlands, and interior forest habitat.



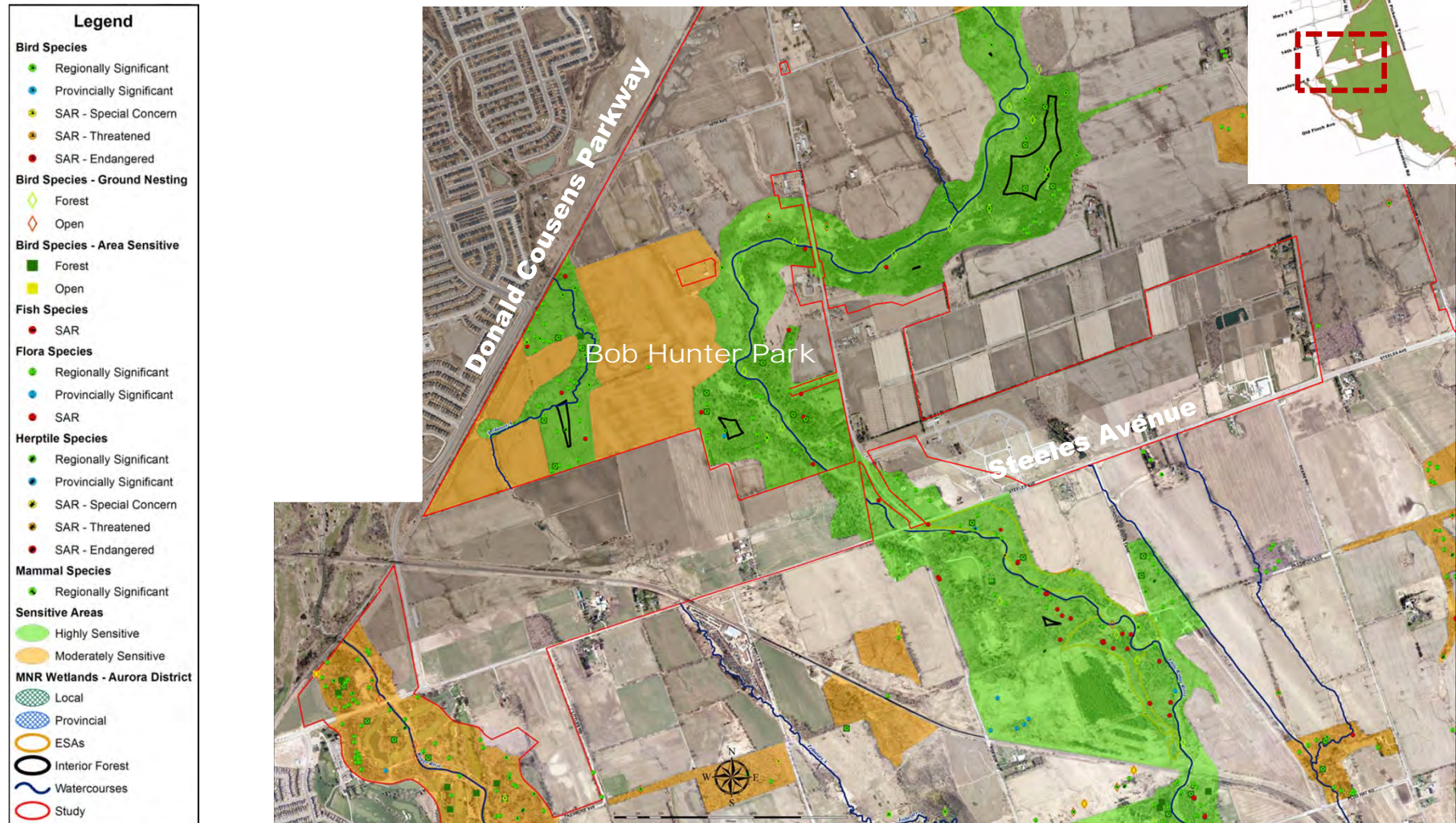
Sensitivity and Significant Species Map 1



Sensitivity and Significant Species Map 2



Sensitivity and Significant Species Map 3



Rouge Park Trails Master Plan



Natural Heritage Sensitivity Zones

- Areas of High Sensitivity
- Areas of Moderate Sensitivity
- Areas of Low Sensitivity

Areas of High Sensitivity

- High concentrations of rare, area sensitive, and ground nesting species
- Provincially Significant Wetlands
- Large native interior forest areas

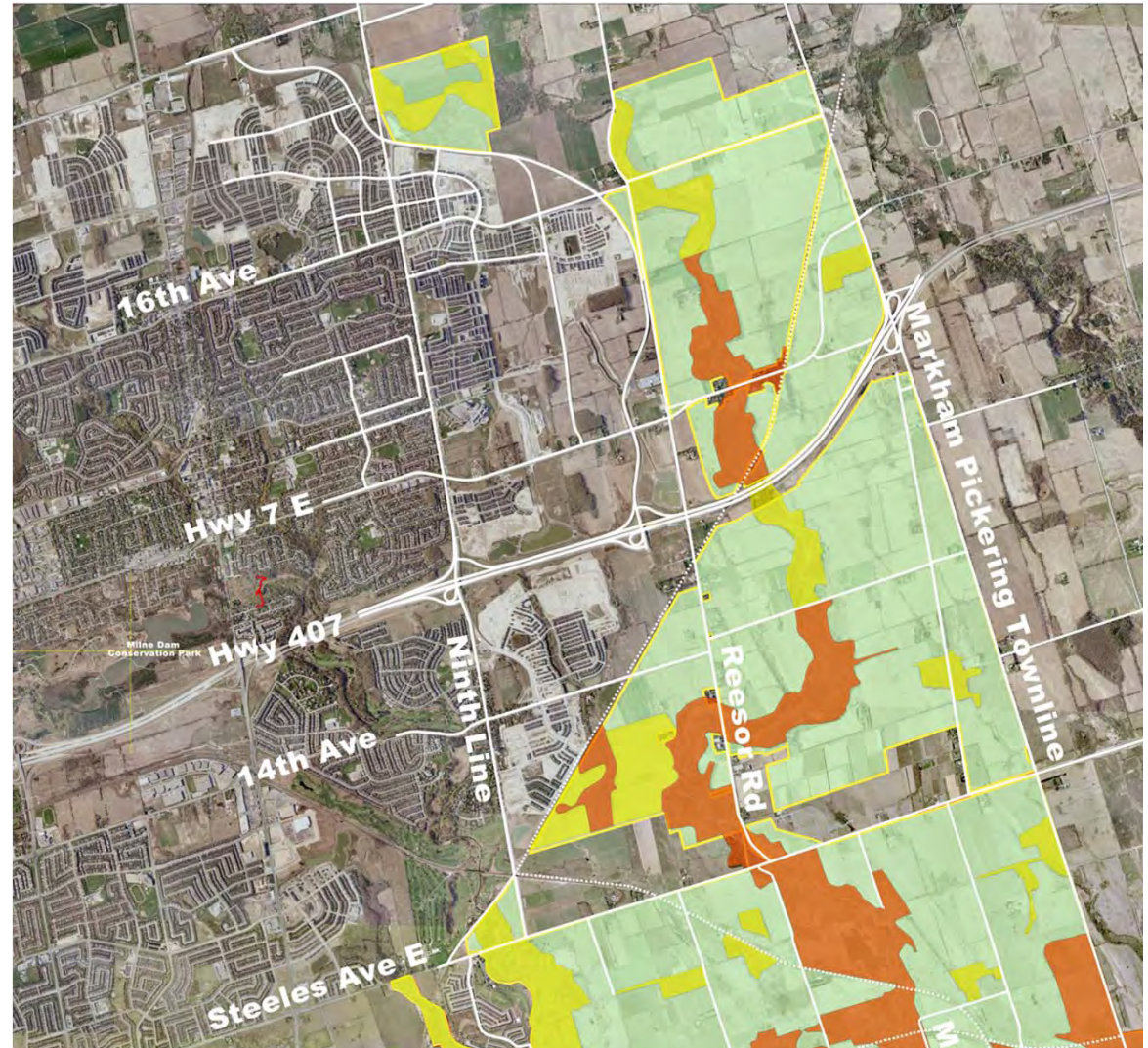
Areas of Moderately Sensitivity

- Medium concentrations of rare, area sensitive, and ground nesting species
- Less disturbed forested valley system
- Restoration areas

Areas of Low Sensitivity

- All other areas within Rouge Park

* ***This map was used to inform trail types***



Rouge Park Trails Master Plan



Hiking Trails - Primary Trail (H-1)

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Main trails providing principal linkages within the park ■ Low to moderate challenge	Hiking Running X-Country Skiing Snowshoeing	Tread Width: 1.0–2.0m Cleared Width: 2.0–3.0m Cleared Height: 2.5m Trail Surface: Earth/Mown	Slope Gradients: > 5% / < 8% and /or areas with poor drainage/erosion prone soils	Slope Gradients: > 5% / < 8% and /or areas subject to periodic flooding or traversing intermittent	All slope gradients in areas traversing intermittent swales	Slope gradients exceeding 8% Areas exhibiting impact from high levels of use	Slope gradients exceeding 15%	Slope gradients exceeding 10% In conjunction with stairs	Orientation Signs Marker Posts Log/Rock Edges (when required) Blazing



Hiking Trails - Secondary Trail (H-2)

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provides secondary linkages and/or alternate routes form part of looped systems. ▪ Low to moderate challenge	Hiking Running X-Country Skiing Snowshoeing	Tread Width: 0.75-1.2m Cleared Width: 2.5m Cleared Height: 2.5m Trail Surface: Earth/Mown	Slope Gradients: >5% / <8% and /or areas with poor drainage/erosion prone soils	Slope Gradients: >5% / <8% and /or areas subject to periodic flooding or traversing intermittent drainageways on unconsolidated soils	All slope gradients in areas traversing intermittent swales	Slope gradients exceeding 8% Areas exhibiting impact from high levels of use	Slope gradients exceeding 15%	In conjunction with stairs	Orientation Signs Marker Posts Blazing



Rouge Park Trails Master Plan



Hiking Trails - Low Impact Nature Trail (H-3) ●●●●●

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provide access in moderate to high sensitivity environments for experiential, viewing or interpretive purposes ▪ Low to high challenge	Hiking Snowshoeing	Tread Width: 0.5-1.0m Cleared Width: 0.5-1.0m Cleared Height: 2.5m Trail Surface: Earth/Mown	Slope Gradients: >8% and /or areas with poor drainage/erosion prone soils	Slope Gradients: >8% and /or areas subject to periodic flooding or traversing intermittent drainageways on unconsolidated soils	All slope gradients in areas traversing intermittent swales	N/A	Slope gradients exceeding 15%	In conjunction with stairs	Orientation Signs Blazing



Rouge Park Trails Master Plan



Multi-Use Trails– External/ Aligned with Roads (MU-1)

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provide connectivity throughout park and linkages to local/regional cycling routes ▪ Low challenge	Hiking Running Rollerblading Cycling	Tread Width: 3.0m Cleared Width: 4.0m Cleared Height: 3.0m Trail Surface: Pavement	N/A	N/A	N/A	All	N/A	N/A	Orientation Signs Marker Posts



NOTE:
TRAIL TYPICALLY LOCATED WITHIN UTILITY
CORRIDOR OR ROAD ALLOWANCES.

Rouge Park Trails Master Plan



On-Road Routes – Signed (OR-1) ●●●●●

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provide connectivity throughout park and linkages to local/regional cycling routes on roads within and outside of the park	Cycling Walking Running Rollerblading	Tread Width: N/A Cleared Width: N/A Cleared Height: 3.0m Trail Surface: Pavement	N/A	N/A	N/A	All	N/A	N/A	Orientation Signs Marker Posts Designation Signs

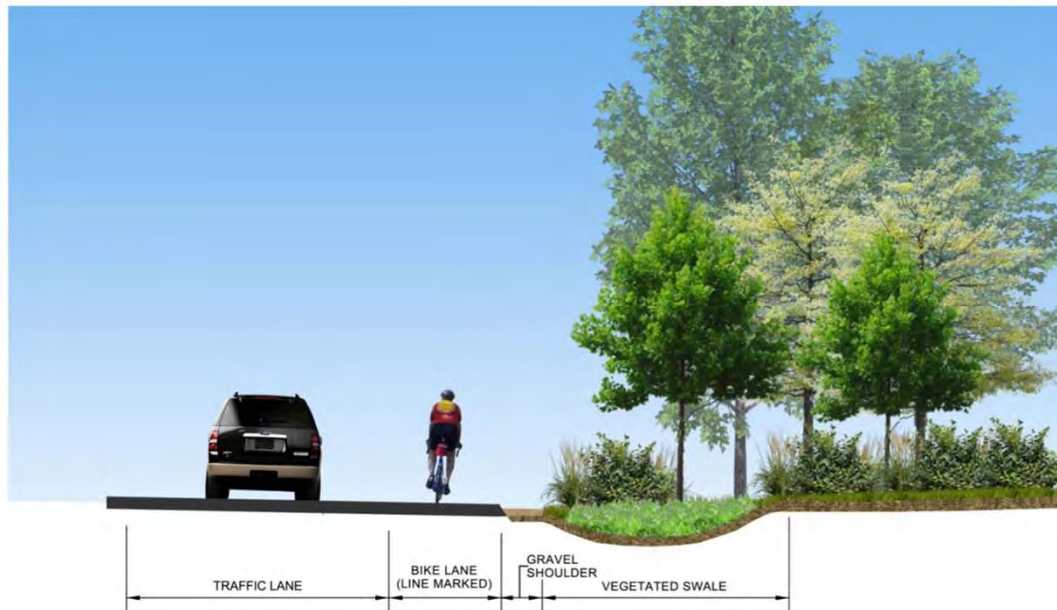


Rouge Park Trails Master Plan



On-Road Routes – Marked (OR-2) ○○○○○○

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provide connectivity throughout park and linkages to local/regional cycling routes on roads within and outside of the park	Cycling Walking Running Rollerblading	Tread Width: 1.0-1.5m one direction Cleared Width: N/A Cleared Height: 3.0m Trail Surface: Pavement	N/A	N/A	N/A	All	N/A	N/A	Orientation Signs Marker Posts Pavement Marking – Symbol



Rouge Park Trails Master Plan



Accessible Trails A

Description	Permitted Uses	Base Condition	Granular Free Drainage	Granular Course Graded	Granular Culverts	Pavement Surface	Stairs	Handrails	Trail Delineation
Provide barrier-free access for users of all abilities ▪ Low challenge	Walking Wheelchair access	Tread Width: 1.5-2.0m Cleared Width: 2.5-3.0m Cleared Height: 2.5m Trail Surface: Compacted granular or pavement Maximum Slope: 8%	In areas with poor drainage/erosion prone soils	In areas subject to periodic flooding or traversing intermittent drainageways on unconsolidated soils	In areas traversing intermittent swales	Where warranted by high levels of use/demand	N/A	All slopes exceeding 5%	Orientation Signs Marker Posts Designation Signage 'Accessible'



Rouge Park Trails Master Plan



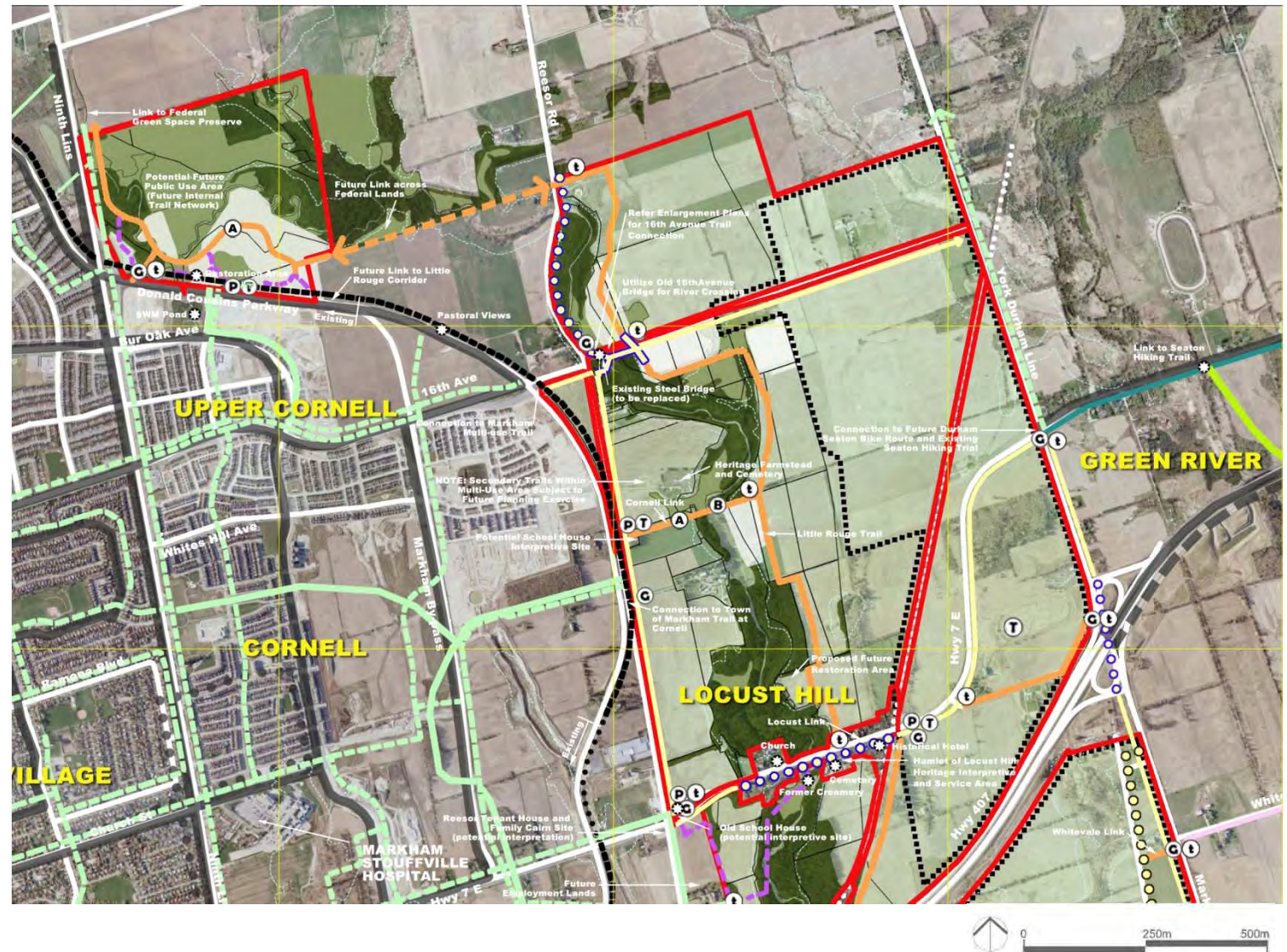
Proposed Rouge Park Trail Facilities

- Primary Trail (H-1)
- Secondary Trail (H-2)
- Low Impact Trails (H-3)
- Mountain Bike Trails (MTB-1)
- Multi-use External Aligned w/Roads(MU-1)
- Multi-use Internal Trails (MU-2)
- On-Road Signed(OR-1)
- On-Road Marked(OR-2)
- On-Road Dedicated Lane(OR-3)

- Proposed Bridge
- Existing Trail Head
- Proposed Trail Head (Major)
- Proposed Trail Head (Minor)
- Proposed Parking Area
- Rouge Park Gateway
- Potential Interpretive Site
- Accessible Trails
- Multi-Use Trail Aligned With Roads

Markham Trail Facilities

- (taken from Markham Pathways Plan)
- Existing Markham Trails
 - Proposed Markham Trails
 - Existing Markham Multi-use Pathway
 - Proposed Markham Multi-use Pathway



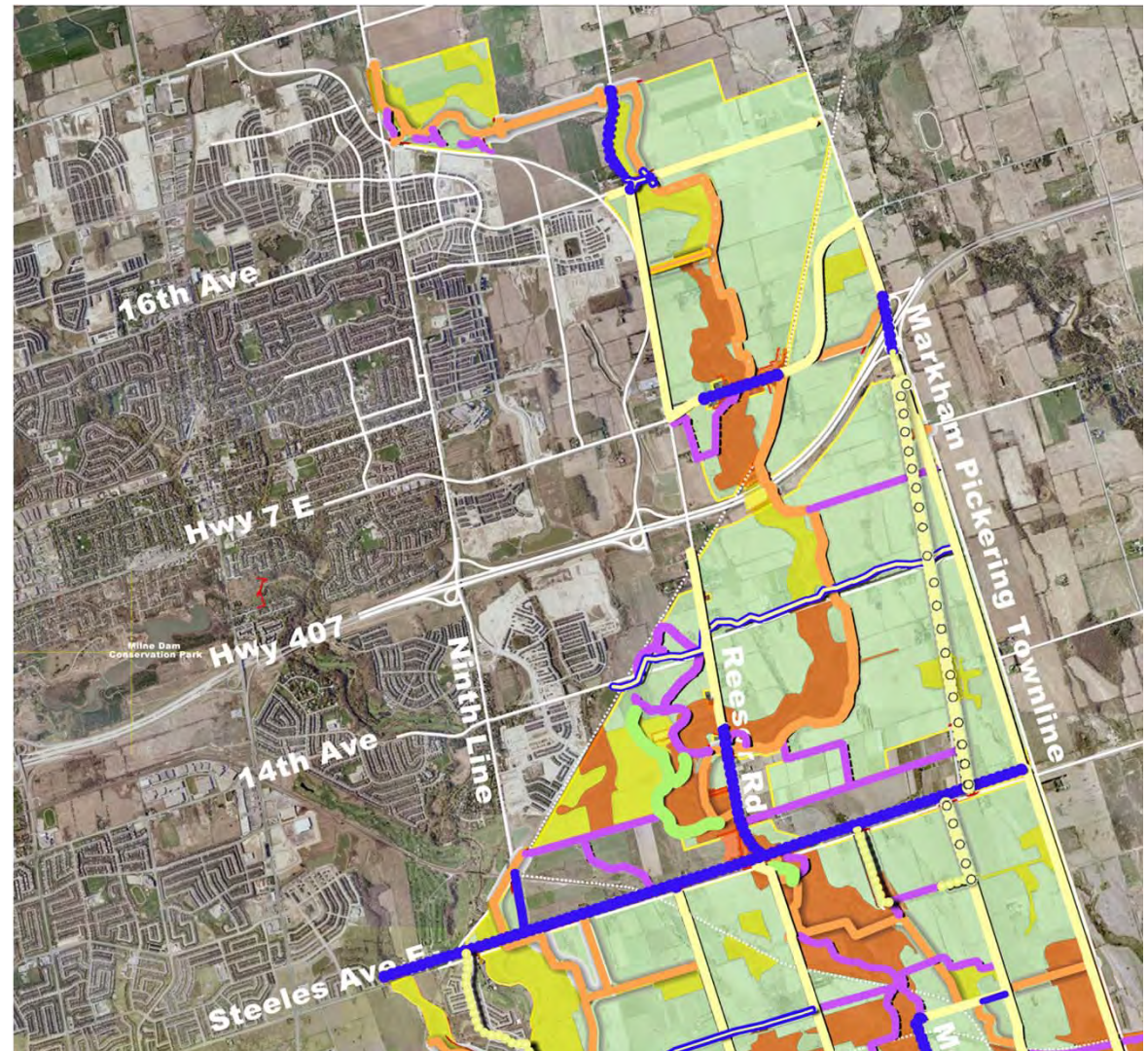
Rouge Park Trails Master Plan



Rouge Park Trails Master Plan



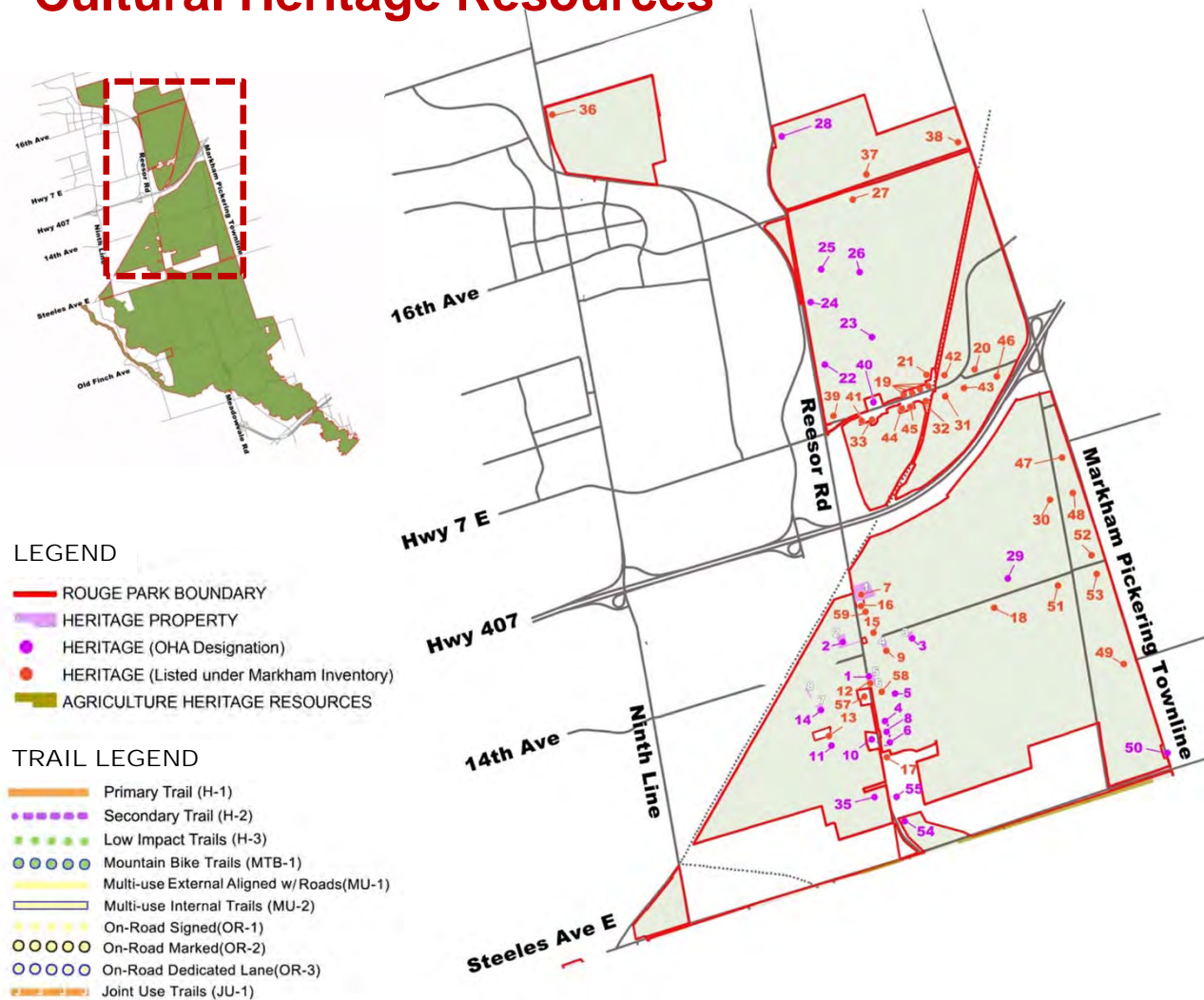
Draft Trails Master Plan in Relation to Sensitivity Zones



Rouge Park Trails Master Plan



Cultural Heritage Resources



EXISTING CULTURE HERITAGE RESOURCES

BUILT STRUCTURES

	Address	Title
1	7639 Reesor Rd	Cider Mill and Vinegar Mill
2	7784 Reesor Rd	David Reesor Tenant House
3	7667 14th Ave	Cedar Grove Schoolhouse
4	7399 Reesor Rd	William Lapp House / Barns
5	7551 Reesor Rd	George Miller Tenant House
6	7373 Reesor Rd	Cedarena
7	7939 Reesor Rd	The White Hill Mills House
8	7401 Reesor Rd	Blacksmith Shop
9	7575 14th Ave	Peter Lapp House
10	7450 Reesor Rd	Samuel Reesor Homestead
11	7273 14th Ave	Peter Reesor Homestead
12	7629 Reesor Rd	The Henry Lapp House
13	7275 14th Ave	
14	7277 14th Ave	Abraham Reesor House
15	7536 14th Ave	
16	7885 Reesor Rd	
17	7355 Reesor Rd	Nellie Lapp House
18	7933 14th Avenue	James Dimma House
19	7792, 7804, 7822, 7842, 7846	7880, 7882 Hwy 7
20	20 Locust Hill Lane	Col. William Marr Button House
21	Approximate Location	Historical Railway Station
22	8847 Reesor Rd	John Wurtz House
23		Wurtz Cemetery
24	8949 Reesor Rd	Locust Hill Schoolhouse
25	9035 Reesor Rd	Christian Reesor Homestead
26		Reesor Cemetery
27	7797 16th Avenue	William Coakwell Farmhouse
28	9529 Reesor Rd	Samuel Irving House
29	7914 14th Avenue	William Tran Farmhouse
30	8110 11th Line	James Tran Farmhouse
31	7889 Hwy 7	William Armstrong House
32	7877 Hwy 7	Nighswander Temperance Hotel
33	7661 Hwy 7	Locust Hill Cemetery
35	7218 Reesor Rd	David Whaley House
36	9829 Ninth Line	Moses Clendenen House
37	7982 16th Avenue	
38	8156 16th Avenue	
39	7632 Hwy 7	Reesor Tenant House & Cairn
40	7668 Hwy 7	Locust Hill United Church
41	7635 Hwy 7	
42	7926 Hwy 7	
43	7891 Hwy 7	
44	7819, 7831, 7847 Hwy 7	
45	7855, 7861 Hwy 7	
46	165 Locust Hill Lane	Albert Sinclair Clarry House
47	8346 York Durham Twnln	William Cornelius House
48	8200 York Durham Twnln	
49	7392 York Durham Twnln	
50	7070 York Durham Twnln	Reesor Mennonite Mtg House & Cemetery
51	8183 14th Avenue	James Boyd Jr House
52	8328 14th Avenue	
53	8331 14th Avenue	David Badgerow House
54	7111 Reesor Rd	Robert Milroy House
55	7181 Reesor Rd	The Lapp House
57	7452 Reesor Rd	Cedar Grove Mennonite Church & Cemetery
58	7607 Reesor Rd	Craftsman Bungalow
59	7833 Reesor Rd	

Cultural Heritage Interpretation

Potential themes to be interpreted along the trails:

- First Nations inhabitants
- Early settlement (timing, origin of settlers, patterns of settlement)
- Historic communities (Cedar Grove, Locust Hill, Belford)
- Transportation (roads and waterways, bridges)
- Industries (mills, distilleries)
- Businesses (stores, inns, blacksmith shops)
- Recreation (past and present)
- Agricultural (past and present)
- Early families (their cultural background and lifestyle)
- Traces of settlement and industries in the landscape (mill ponds, old lanes, stone and concrete foundations, hedgerows, orchards etc.)
- Institutions (schools, churches)
- Cemeteries and burying grounds (subject to archaeological confirmation)
- Former residents of interest (such as writers and artists)
- Heritage buildings (houses, barns, other outbuildings)
- Place names with significance (streets, streams, areas)
- Historical events (crimes, tragedies, environmental incidents- Hurricane Hazel)
- Folklore and stories, legends

Summary of Comments - Public Meeting # 1

Natural Heritage

- Preserving the ecological features of Rouge Park is imperative
- Pay close attention to ecologically sensitive environments when aligning and designing trails
- Trails should be kept natural to enhance the nature experience for trail users

Park/ Trail Use

- Minimize structural elements within the park
- Orientation signage should be improved
- The trails plan should provide experiences for a variety of users though the ecological integrity must take priority
- Exclude uses that conflict with environmental protection goals
- The impact on private property needs to be addressed; private property should be clearly marked on the plans

Trail Design

- Suggested trail realignment to preserve significant natural and cultural features
- Use natural, sustainable materials and maintenance practices
- Keep primary, higher access trails to a minimum
- Trails should have a high degree of variability

Summary of Comments - Public Meeting # 2

Community Priorities

- Protection of the natural environment is more of a priority than recreation
- Concern about the effect of new trails and additional park traffic on native species and species at risk
- Attention should be focused on grooming and maintaining existing trails
- Mountain bikers are not satisfied with the trails allotted for their use
- Suggestion to have more H3 trails at the cost of H2
- Concern about the impact of dogs and mountain bikers on the natural heritage

Location and Configuration of Trails

- Too many trails have been proposed within the park; especially in sensitive areas
- New trails should be on the park periphery
- Putting trails on Beare Road landfill will damage the natural to environment
- The catalogue of trails should include less paved trails
- Trails along the Little Rouge corridor should be located outside of the 600m-wide LRC corridor as set out in the RNMP

Summary of Comments - Public Meeting # 2

Public Consultation Process

- Public consultation sessions should be split by geographic areas
- Consultation with Mohawk First Nations is essential before moving forward
- Concern that feedback is not being seriously considered
- Location of the meeting was inconvenient and inaccessible for some
- It was difficult to comment based on the information presented; too much information

Parking lots and trail heads

- New parking facilities are not desirable
- Increasing access to trails will increase traffic and potentially damage the park
- Trailheads and lookouts should use materials that are appropriate/ reflect character of park
- The proposed 26 trail heads is too many

Construction of trails:

- Trails need to be constructed so they are sustainable over time and use
- The plan should start with 1 or 2 major trails, then wait to see how they are used
- The team should focus initial implementation on the less controversial trail segments

Process Going Forward

The work program will include:

- 'Focus Group' consultation sessions with key stakeholders
- First Nations consultation
- Refinement and supplementing of natural heritage data and assessment
- Rouge Park Alliance presentations
- Refinement of Trail Master Plan
- Additional public consultation
- Finalization of Trails Master Plan
- Submission of final report to Rouge Park Alliance