



BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan



Markham Centre Trail Master Plan Study
(Wards 2, 3 and 8)
Development Services Committee Meeting
November 28, 2023





Agenda

- 1. Purpose**
- 2. Background**
- 3. Public Information Centres and other Consultation**
- 4. Trail Alternatives**
- 5. Conceptual Preferred Trail Route and Project Areas**
- 6. Financial Considerations**
- 7. Implementation Phasing and Next Steps**
- 8. Staff Recommendations**
- 9. Questions**



Purpose

- To provide a summary of the report entitled “Markham Centre Trail, Master Plan Study (Wards 2, 3 and 8)”
- To obtain endorsement on the conceptual preferred trail route for the Markham Centre Trail
- To obtain authorization to Issue a Notice of Study Completion and file the Master Plan Study with the Ministry of Environment, Conservation and Parks (MECP)



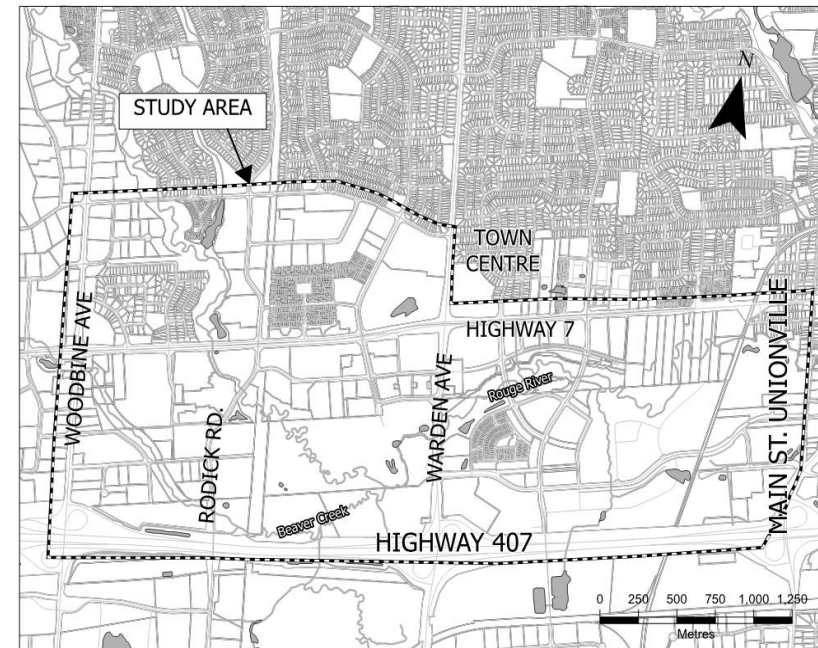


Background

- The Markham Centre Greenland Master Plan was approved by Council in 2004.
- Three trail segments (Phases 1-3) identified in that study were advanced and proceeded to design and construction.

| | From | To | Length (km) | Design | Construction |
|--|---------------------------------|-------------------------------------|-------------|-------------|--------------|
| | Warden Ave. (N. of Rouge River) | Birchmount Rd. (N. of Rouge River) | 0.85 | 2019 – 2020 | 2021 |
| | Birchmount Rd. | Sheridan Ponds | 0.35 | 2021 – 2022 | 2022 |
| | Warden Ave. (S. of Rouge River) | Verclaire Gate. (S. of Rouge River) | 0.46 | 2023 | 2024 |

- The remaining segments of the identified network (8km) from Apple Creek Boulevard to Main Street Unionville were required to follow a Schedule C Class EA, due to scope, complexity and environmental impacts.
- In October 2019, the City retained RJ Burnside to carry out the Schedule C EA study for these remaining segments.





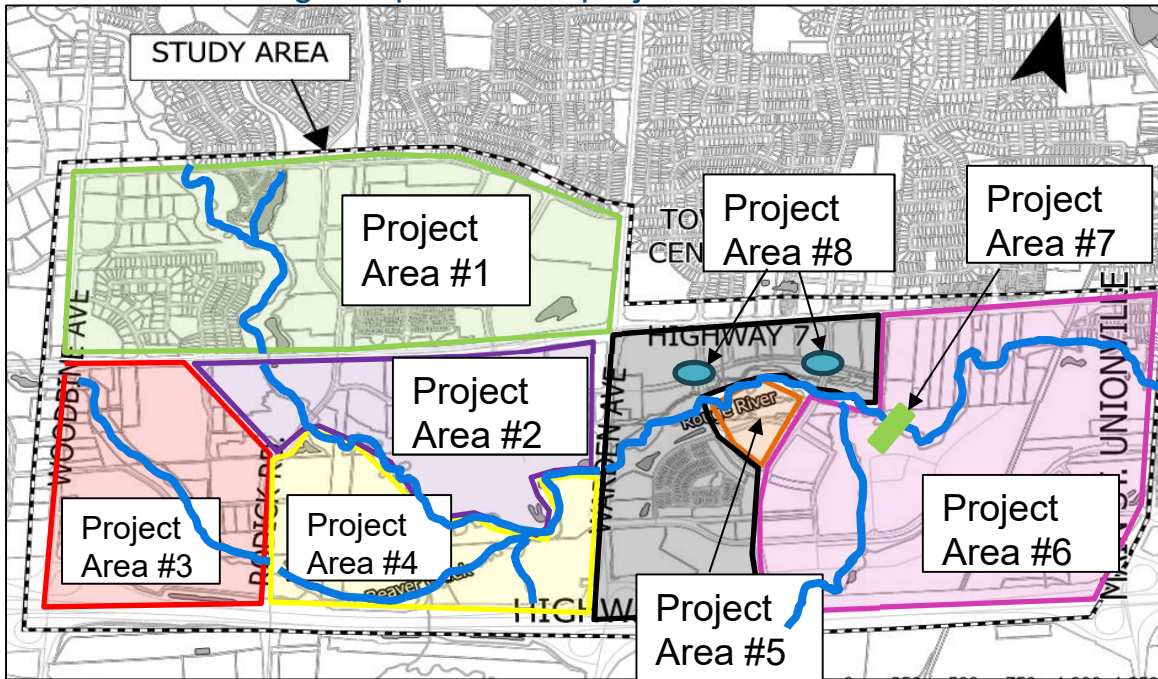
Background

- Initially** → Assessed as one large project under the detailed Schedule C Class Environmental Assessment (EA) process.
- Now** → Trail network split into separate trail project areas to more accurately reflect the phasing of trail construction. The project is now considered a Trails Master Plan with several small, separate trail segments.
- Why?** → Separate studies, in some segments of the trail, such as Markham Centre Secondary Plan were ongoing which could possibly affect the trail route. As a result the trail route could not be confirmed.
The EA Study process was changed to Master Plan Study process which permitted the City to advance the trail segments that are not dependent on separate on-going studies in phases.



Background

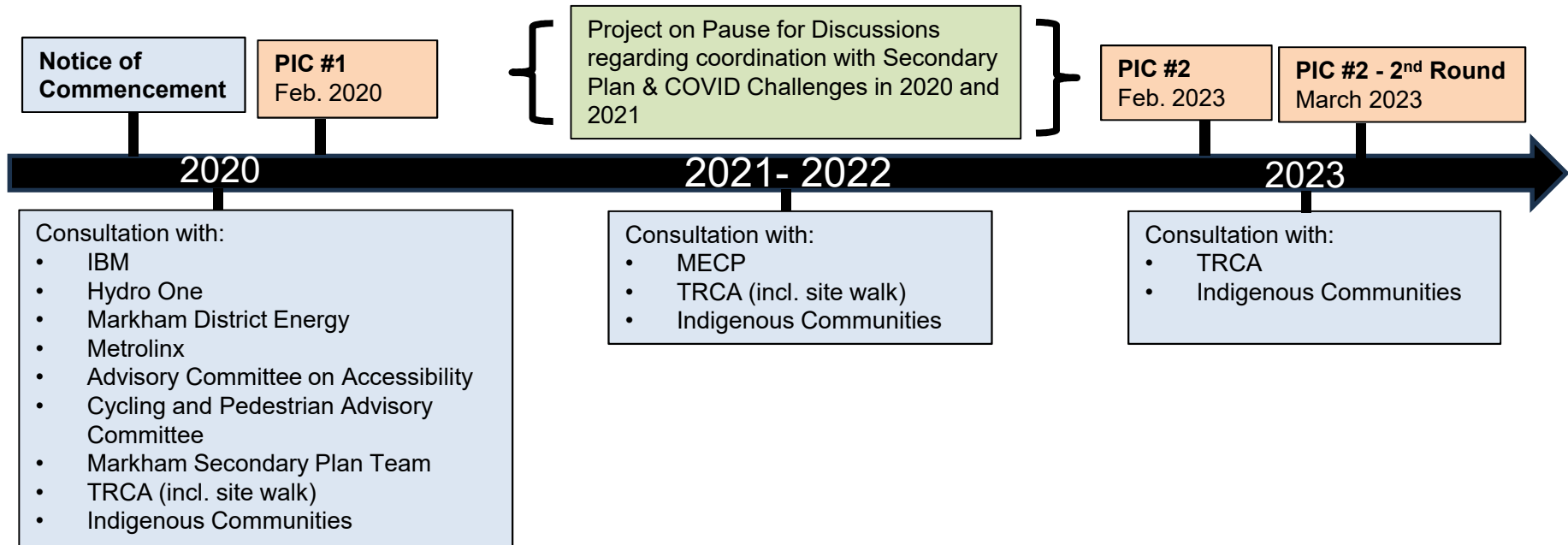
Based on the Master Plan process criteria, the Markham Centre Trail network was broken down into eight separate trail project areas.



| Project Area | From | To |
|--------------|---|--|
| 1 | Apple Creek Boulevard | Highway 7 (North of Rouge River) |
| 2 | Highway 7 | Warden Avenue (South of Rouge River) |
| 3 | Rodick Road | Warden Avenue (South of Rouge River) |
| 4 | Rodick Road | Warden Avenue (North of Rouge River) |
| 5 | Verclaire Gate | Birchmount Road (South of Rouge River) |
| 6 | Birchmount Road | Main Street Unionville |
| 7 | Signature Bridge over the Rouge River | |
| 8 | Underpasses at Verclaire Gate and Birchmount Road | |



Public Information Centres and other Consultation

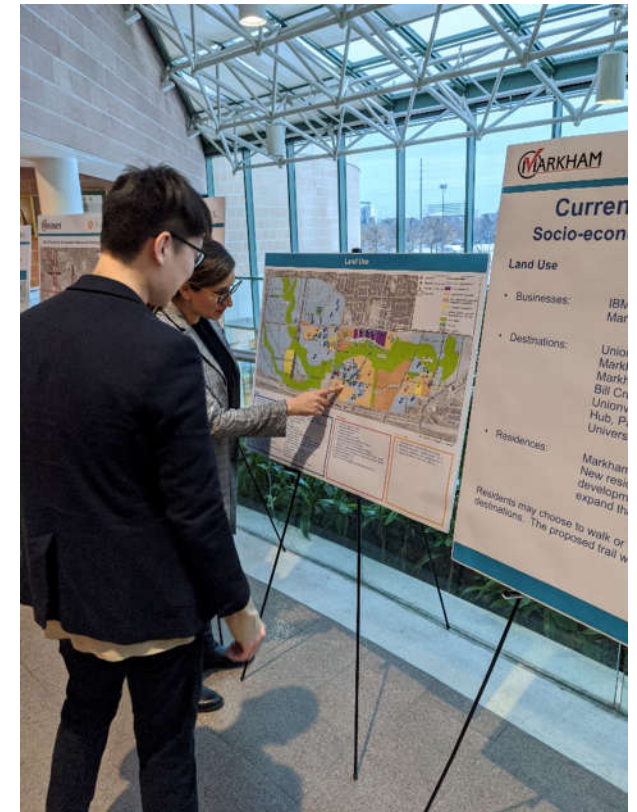




General Response from the Public

Key Comment Themes

- Strong support for a more connected network (Alternative 2).
- Proceed from east to west to connect with Mildred Temple Park and the Rouge Valley Trail.
- Ensure trail is wide enough for cyclists and pedestrians.
- Design to AODA standards. If not possible, provide clear information on trail surface, grade etc.





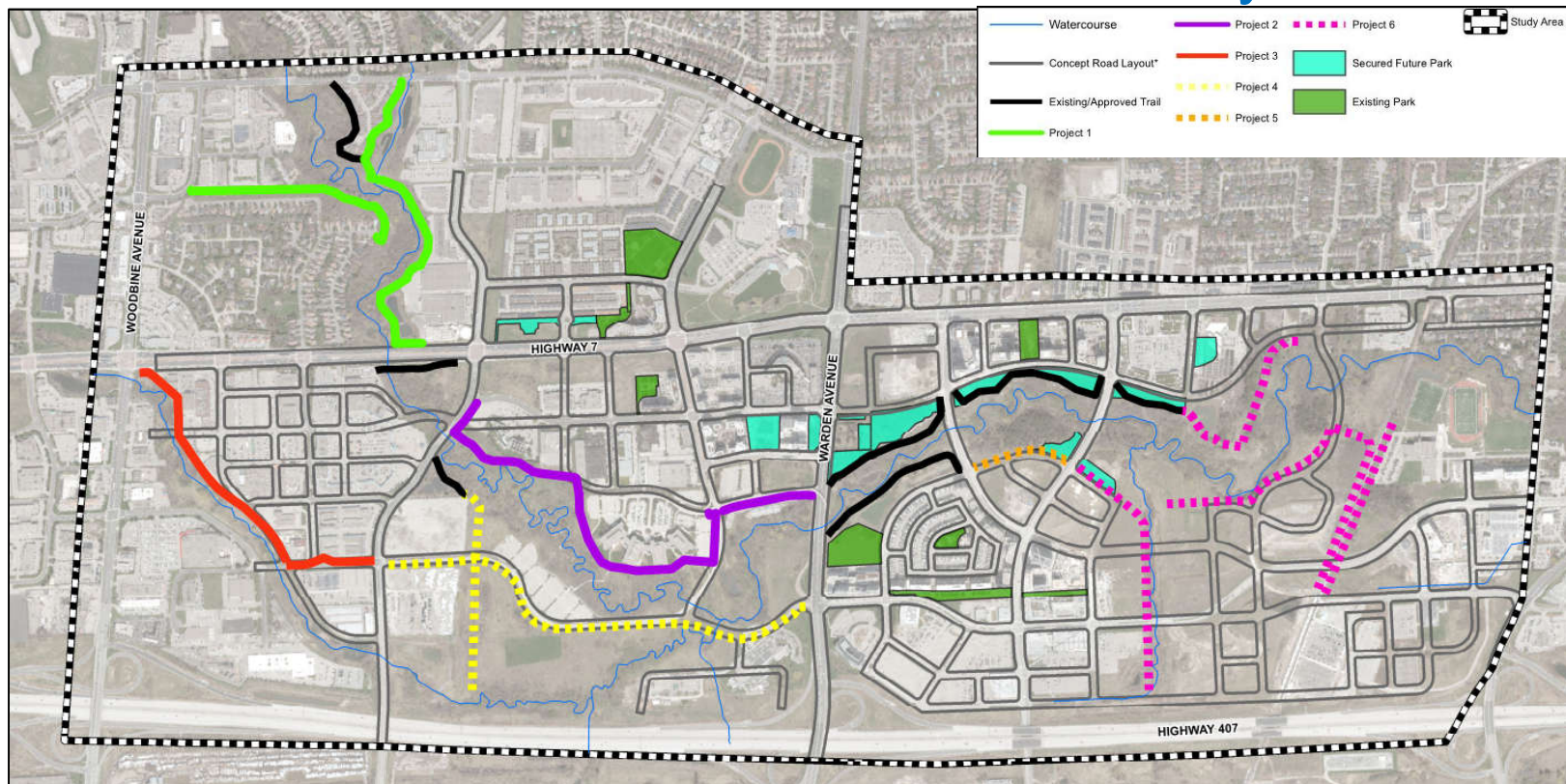
Trail Alternatives

For each individual trail project within the Master Plan, two alternative trail routes were identified, and an option to do nothing was included as the baseline.

| Alternative Trail Network | Description of Alternative Solutions for Each Trail Project |
|--|--|
| Do Nothing | No trail will be developed. This Alternative serves as a baseline against which the impacts of other Alternatives can be measured. |
| Alternative 1: Minimal Trail Connectivity | Includes off-road trails with connections across roads and rivers using planned and existing road bridges and road intersections only. Portions of the trail need to be supplemented with sidewalks and bike lanes in order to cross Markham Centre. |
| Alternative 2: Maximum Trail Connectivity | Includes off-road trails with new pedestrian bridges and underpasses to cross major barriers. Some minor roads are crossed at-grade but interactions with traffic at major roads are avoided. The off-road trail crosses Markham Centre without the need to use sidewalks or bike lanes. |

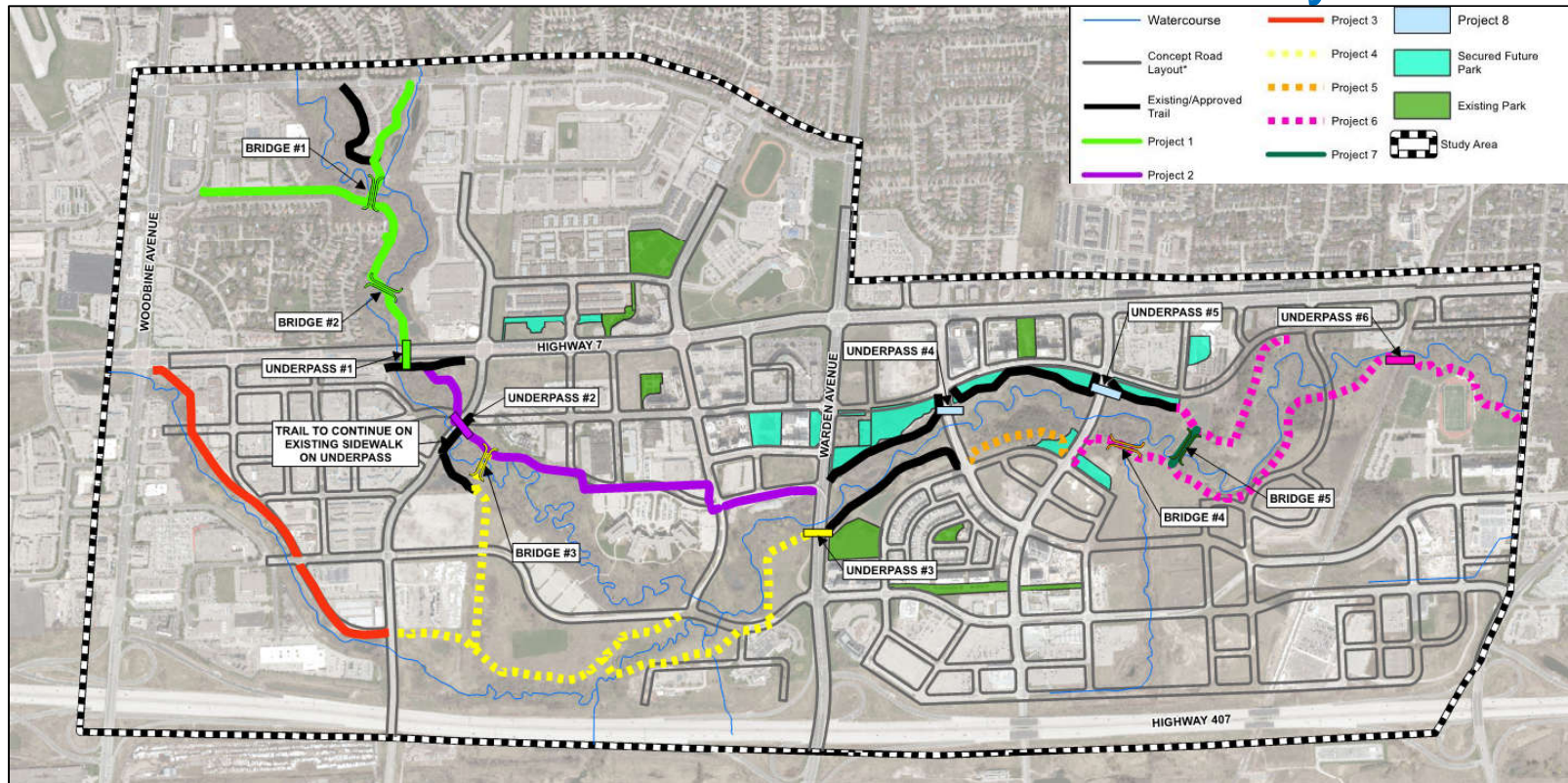


Alternative 1: Minimal Connectivity



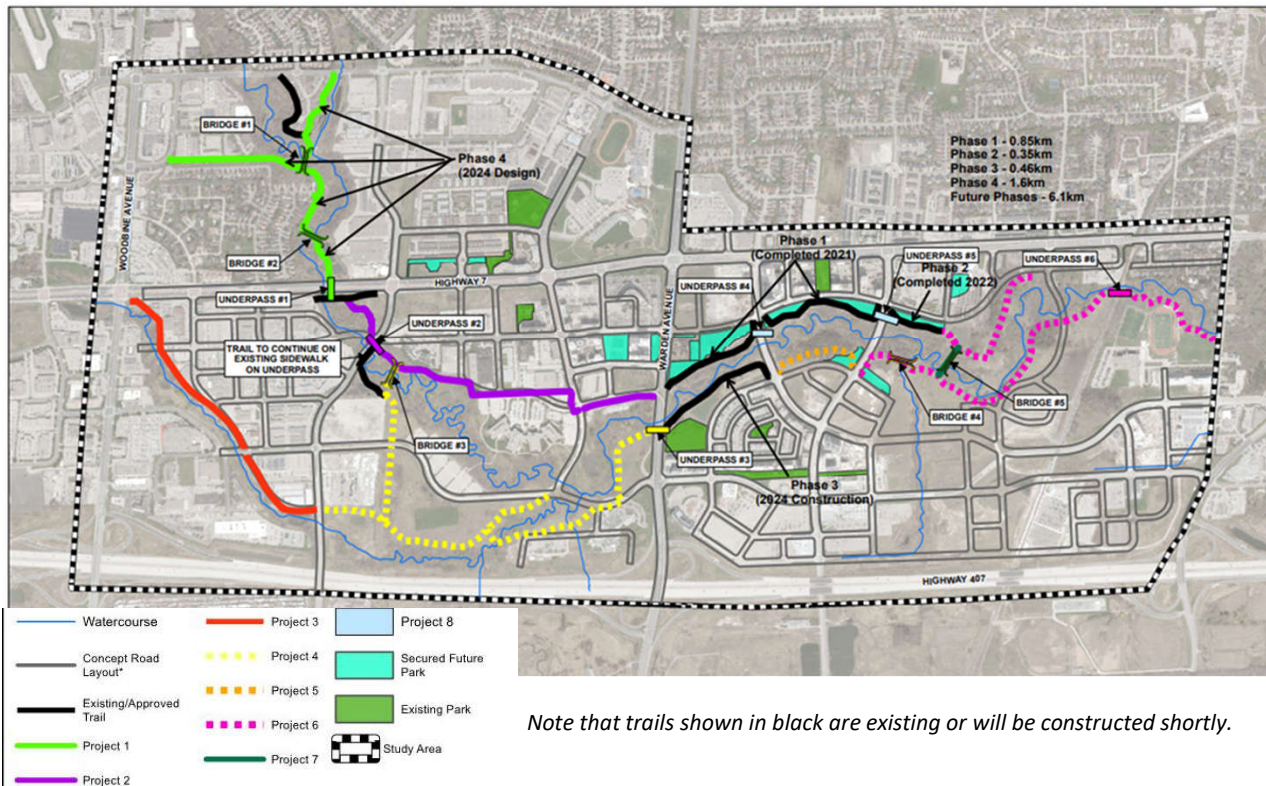


Alternative 2: Maximum Connectivity





Conceptual Preferred Trail Route



Note that trails shown in black are existing or will be constructed shortly.

- The trail route alternatives were evaluated within the following categories, using an objective criteria:
 - Natural Environment;
 - Social Environment;
 - Cultural Environment;
 - Economic Environment; and
 - Consistency with Problem Statement.
- Based on the evaluation matrix Alternative 2 was recommended as the conceptual preferred trail route.



Project Areas

| Project Area | EA Studies Required | Next Steps | High Level Cost Est. |
|--|---|--|--------------------------|
| Project 1: Apple Creek Blvd. to Hwy. 7. | Schedule B EA completed within this Master Plan. | Detailed Design and Construction (Detailed Design budget requested for 2024) | \$4.3-4.9M |
| Project 2: Hwy 7 to Warden Ave. (N. side of Rouge River) | No EA study required. | Detailed Design and Construction | \$2.4-3.0M |
| Project 3 Hwy 7 to Rodick Rd. | No EA study required. | Detailed Design and Construction | \$2.0-2.6M |
| Project 4: Rodick Rd. to Warden Ave. south of Rouge River | Schedule B EA requirements to be completed in Yorktech Dr. EA | Separate Schedule B EA to be completed at a future date | \$6.4-7.0M |
| Project 5: Verclaire Gate to Birchmount Rd. | No EA study required. | Detailed Design and Construction once future road alignment is determined | \$1.1-1.7M |
| Project 6: Birchmount to Main St. Unionville | Schedule B or C EA to be completed once a trail route can be confirmed. | Carry out Schedule B or C EA depending on potential cost of pedestrian bridge structures | \$5.4-6.1M |
| Project 7: Signature Bridge over Rouge River East of Birchmount Rd. | Pre-approved or Schedule B EA to be confirmed. | May require Schedule B EA dependent on cost of pedestrian bridge structure | <\$2.0M |
| Project 8: Underpasses below Verclaire Gate and Birchmount Rd. | No EA study required. | Detailed Design and Construction | ~\$200,000 per underpass |

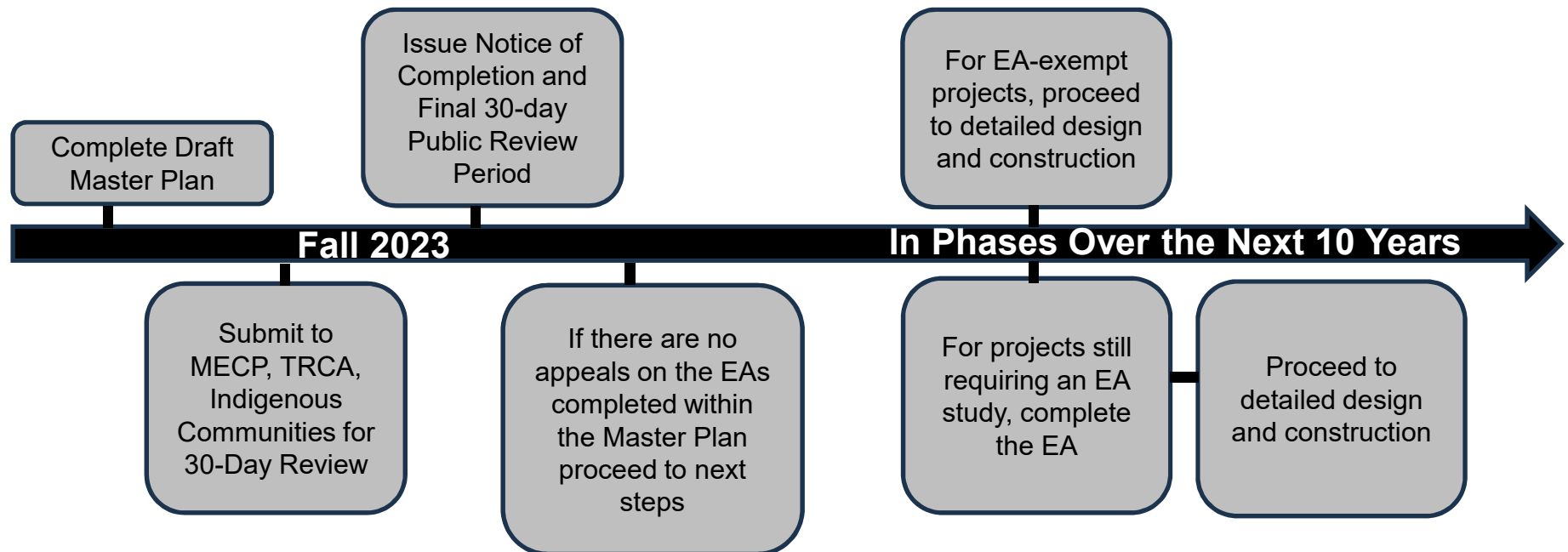


Financial Considerations

- The total cost estimate for all the project areas under the conceptual preferred route alternative, including bridge structures and underpasses, is in the range of \$24M to \$27.7M, excluding the cost for the acquisition of any necessary lands that will be identified during the detailed design stage.
 - Trails are primarily funded from development charges:
 - Trails built alongside the road network funded at 65% from the City Wide Hard and 35% from other sources;
 - Trails constructed off-road are funded 100% from the Parks reserve (City Wide Soft).
- The proposed trails identified in this report are primarily off-road in nature and therefore will require funding from the Parks reserve.
- Following the completion of the Master Plan Study for the trails, an assessment of the overall cost to complete the network will be required in order to make a determination on how to proceed, with what will likely be constrained financial resources to undertake construction.
- Staff will report back to Development Services Committee, following the completion of the Markham Centre Secondary Plan Study, the Yorktech Drive Extension EA, and the future EA studies for Project Areas 4, 6 and 7 to present the overall implementation program for the remaining section of the Markham Centre Trails, including the timelines and funding source assessment.



Implementation Phasing and Next Steps





Staff Recommendations

- That the report entitled “Markham Centre Trail, Master Plan Study (Wards 2, 3 and 8)”, be received; and,
- That the conceptual preferred trail route for the Markham Centre Trail, as set out in the Master Plan Environmental Study Report (ESR), be endorsed by Council; and,
- That City staff be authorized to issue a Notice of Study Completion and file the Master Plan Study for Markham Centre Trail with the Ministry of the Environment, Conservation and Parks (MECP); and,
- That City staff report back to Development Services Committee following the completion of the Markham Centre Secondary Plan Study and the Yorktech Drive Extension Environmental Assessment process to present the overall implementation program for the remaining sections of the Markham Centre Trails including timelines and a funding source assessment.



Questions?

Alberto Lim, P.Eng.
Senior Capital Works
Engineer
City of Markham

Tricia Radburn
Environmental Planner
R.J. Burnside & Associates
Limited

