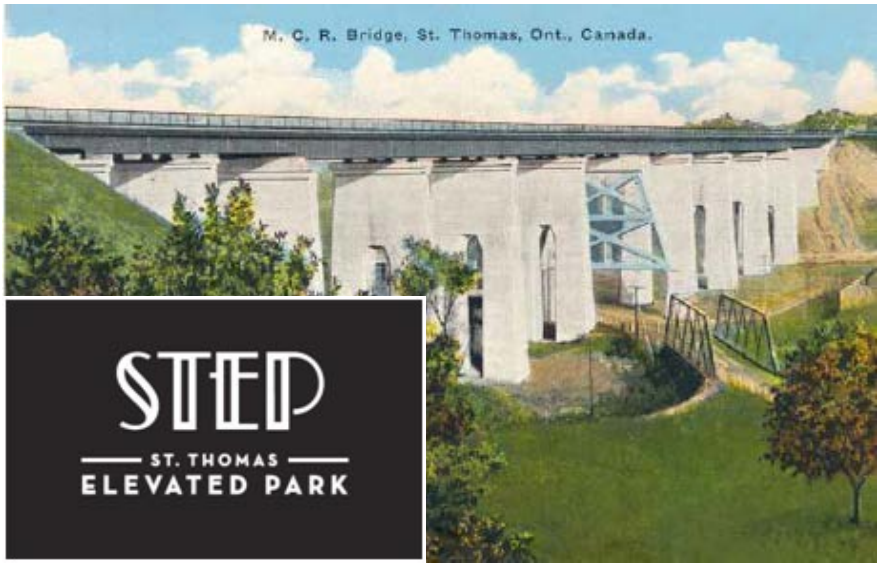

Management Master Plan

EXECUTIVE SUMMARY

April 2016

PURPOSE

The purpose of the STEP Management Master Plan is to develop a program and strategy for the development of an elevated park on the former Michigan Central Railway Bridge. The park is to be Canada's first elevated park. The management master plan outlines an achievable process to design, construct and manage the St. Thomas Elevated Park. Additionally, the plan defines the concepts and costs for the park to guide its creative design. It also considers visitor impacts, programming and the potential of the park to contribute to branding St. Thomas as the Railway City and as a tool for community and economic revitalization.

VISION

The St. Thomas Elevated Park should be a monumental and sculptural structure, a unique world-wide attraction like the Promenade Plantee in Paris or the New York City's High Line while maintaining the integrity and heritage of what it once was. The iconic structure will become a centerpiece of and benefit to the identity and character of the entire community.

Ontario Trillium Foundation / Fondation Trillium de l'Ontario
An agency of the Government of Ontario
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GOALS AND OBJECTIVE

PROMOTE AN ICONIC SIGNATURE ATTRACTION

- To develop a unique signature attraction that supports an international identity
- To maintain the integrity of the bridge's function, heritage and landscape
- To animate and diversify the park experience as a destination

PROMOTE A PARK FOR COMMUNITY USE

- To promote a walkable and healthy recreation destination
- To celebrate the views and unique experience
- To develop facilities that offer diversified recreation

PROMOTE LOCAL & NATIONAL HERITAGE

To offer a broad interpretive program telling a variety of stories

To integrate interpretive facilities that support bridge function and design

To celebrate both the trestle and the bridge crossing

PROMOTE THE CITY OF ST. THOMAS & ELGIN COUNTY

- To promote quality urban design and exiting facilities
- To link all the attractions within the community physically and economically
- To offer and enhance local economic opportunities that support the park

PROMOTE THE SURROUNDING NATURAL ENVIRONMENT

- To develop an economically and environmentally sustainable elevated park
- To naturalize, preserve and propagate native plants in the landscape
- To preserve, enhance and interpret the area under the bridge including Kettle Creek

BEST PRACTICES IN INTERNATIONAL ELEVATED PARKS

A review of best practices outlines similar developments worldwide to the St. Thomas Elevated Park (STEP) and what can be learned from each including: programming, administration, funding, cost, and design issues and opportunities. Elevated parks on former rail lines or viaducts are a recent phenomena. Three constructed elevated linear parks have been researched and are outlined in the full report.

- *Promenade Plantee*, Paris France
- *Walkway Over The Hudson*, Poughkeepsie, NY
- *The High Line*, New York, NY

PUBLIC INPUT & POLLING

- Meetings and an August 19, 2015 vision session with the On Track Board
- Two September 30, 2015 focus group sessions:
- Representatives of local and regional municipalities
- Representatives of trails and recreation groups
- A September 30, 2015 public open house and workshop
- An online survey open from early September through mid-October 2015

LESSONS LEARNED

The following outlines lessons learned from completing a best practices review:

- The project can be phased
- A wide range of events can occur
- A wide range of amenities can be developed
- There are opportunities for surrounding facilities, interpretive centre and commercial uses
- Planting design is from minimalist to verdant but should address micro climate, high winds and severe desiccation
- Functional criteria include snow removal and storage, emergency access
- There is a unique lighting opportunity due to the monolithic form of the structure

DESIGN GUIDELINES

Design Guidelines help establish a common understanding of the design principles and control the development process. They reinforce the goals and objectives. Overall, they help ensure the development of the elevated park will result in the highest design quality.

The following are a sample of the guidelines found on pages 34-35 of the full report.

WALKWAYS/TRAIL: Walkway across the bridge should be a minimum 4 m wide. Pedestrian connections should be provided between the trail on the bridge and the street network to the east, the intersection of Talbot Street and Sunset Drive and the at-grade park, the existing trail network.

LIGHTING: Use energy efficient LED lighting. Consider the use of solar lighting. Cast lighting downwards to avoid glare and light pollution.

PLANTING/PLANTERS: Native and hardy plant materials should be used in all cases.

SITE FURNISHINGS: Incorporate pedestrian amenities such as seating, interpretive panels and public art. Provide bike racks.

APPROACH: Gateways should be developed approaching the bridge from the east (downtown) to announce arrival and tie into the City's railway heritage sites and to enhance the safety and security of the park.

UNDER BRIDGE: Gateways should be developed at the intersection of Talbot Street and Sunset Drive to announce arrival and acknowledge the significance of the historic bridge.

BRIDGE STRUCTURE: Maintain the feel, character, symbolism and integrity of the bridge to highlight its uniqueness. Incorporate features to ensure the safety and security of park users.

VIEWS & SITELINES: Maintain sightline along former railway tracks in both directions. Monumentality of the perspective should be maintained or enhanced. Create viewing areas for views into the valley from the elevated park.

SAFETY AND SECURITY

STEP is a unique park because it is elevated and is a destination. Safety and security becomes an utmost consideration in the design and future maintenance of the park to guarantee its perception of an extremely high quality facility and attraction in the City of St. Thomas

BRIDGE BALLAST MATERIAL

An expansion joint runs down the centre of the bridge the entire length and it is possible for ballast and other materials to fall through this opening. A plate should be installed the entire length of the bridge to minimize this risk. The report concludes that all of the ballast can be removed, isolated or covered.

BRIDGE FENCES & RAILINGS

Measures can be taken to prevent people from falling off the bridge. Railings should exceed the Building Code: the top rail should be set higher than the dimension prescribed in the Building Code of a typical dimension of 1.37 m for railings adjacent to bicycle paths.

Fences and or overhead fences (traffic guards) may be used to minimize the potential hazards. However, large structures can be visually and psychologically intrusive and uninviting.

Access to the bridge could be controlled and restricted to certain hours, primarily during the construction phases. Once the elevated park is developed the existing access fence and gateway should be replaced with security measures that incorporate into the bridge in a more aesthetically pleasing manner.

LIGHTING

The lighting program for the bridge should be developed to enhance the design and user experience, as well as to ensure the safety and security of the bridge for users.

STEP desires to provide a safe and secure park experience for all users through the design and maintenance efforts and supports the principles of Crime Prevention Through Environmental Design (CPTED) which supports natural surveillance by taking steps to increase the perception that people can be seen. In the STEP this would include

DESIGN FOR SAFETY

STEP desires to provide a safe and secure park experience for all users through the design and maintenance efforts and supports the principles of Crime Prevention Through Environmental Design (CPTED) which supports natural surveillance by taking steps to increase the perception that people can be seen. In the Elevated Park this would include

- Increase pedestrian and bicycle traffic
- Use passing vehicular traffic as a surveillance asset (from below)
- Use landscape materials that do not block views
- Use the lowest, least sight-limiting fence
- Use transparent shelters/structures
- Use pedestrian lighting avoiding blind-spots
- Ensure potential problem areas are well lit
- Use lower level luminaires to control glare.

VISITOR ANALYSIS

Future studies will include a visitor analysis to determine who would visit an elevated park and in which contexts: as a trail user, a rail enthusiast or a heritage tourist. This will be important in determining the final design of the elevated park.

Analysis of the elevated park should include the area around the park and the linkages to the attractions and potential attractions in the surroundings.

Passive and Active Uses

Passive uses are those that can be done on a solo basis such as hiking, biking, cross-country skiing and also running, jogging and just quiet contemplation.

Active uses are those uses that involve groups using traditional venues such as sports fields and play structures as well as more extreme examples including zip lines and bungee jumping.

As an active trail segment in proximity to the Trans Canada Trail, the elevated park is an exciting attraction, with potential to generate significant visitor expenditures. Trail users can be expected to be overwhelmingly represented by hikers, cyclists and cross-country skiers.

MASTER PLAN FEATURES

1. Trailhead and parking where railway corridor meets Lyle Rd.
2. Trailhead and small parking area where railway corridor meets Munro Avenue
3. Asphalt trail connecting west end of Elevated Park with proposed cross county rail trail
4. Elevated Park on former MCR bridge
5. Park underneath railway bridge with access to Kettle Creek
6. Interpretive museum close to Pleasant St. with trailhead and parking
7. Concrete trail/sidewalk from railway bridge to interpretive centre and continuing parallel to Centre St. into downtown.

Tie-in to the Cycling Master Plan

In September of 2014, all Elgin St Thomas municipalities adopted the **Elgin St. Thomas Cycling Master Plan**. That Master Plan includes the creation of a rail trail along the abandoned Canada Southern Rail Line from the edge of the bridge property running through Southwold, Dutton-Dunwich, West Elgin and continuing into Chatham-Kent. The *Healthy Communities Partnership* which includes elected officials and municipal staff are committed to implementing the Cycling Master Plan and significant progress has already been made.

Three concepts illustrate how the Design Guidelines could be applied

The following are three artist's concepts of how the broader design guidelines could be applied, depending on proposed uses and probable budgets. Final designs will be developed during the planned International Design Competition.

For planning purposes, each of these concepts has been costed in the accompanying table *Summary of Estimated Construction Costs*.

The Minimalist Approach

A functional walkway that maintains the four-metre concrete walkway introduced in the approach to the elevated park. It runs across the bridge with low-level solar lights, reminiscent of railroad fixtures, facilitating nighttime use. Simple galvanized steel railings adjacent to the walkway would maintain a separate and somewhat transparent railing from the existing railing.

Outdoor Garden Rooms

In this concept, the natural elevated park is more than a walkway across the bridge but a series of outdoor garden rooms delineated by groves of trees and seating areas, with a boardwalk passing through. This concept removes all of the existing bridge characteristics and replaces them with a park-like environment.

The Sculptural, Monumental Approach

In this concept, the sculptural elevated park is monumental in form both from the elevated park and from the park underneath. It would offer a significant attraction and destination of unique visual interest and quality. The elevated park reflects the heritage context of the original trestle and is conceptually a trestle within the existing bridge.

A PARK UNDERNEATH THE ELEVATED PARK

Land owned underneath the elevated park is also proposed to be redeveloped as a park with the aim to promote the elevated park above. Besides its promotional value the at grade park is an outdoor interpretive centre telling the story of the history of the bridge and its environment.

The at-grade park offers improved pedestrian circulation and safety at street level It also accents the bridge as a gateway with prominent signage. A trail destination at Kettle Creek, trail access to the elevated bridge interpretive centre and overflow parking for events are also key features of the at-grade park.

THE EASTERN APPROACH

The approach to the elevated park begins with a walkway parallel to Centre Street through the city. The walk terminates at an interpretive centre which is the entrance to the elevated park and offers museum space, administration offices, restrooms, gift shop etc. To minimize any impacts on the powerful sight line it should be constructed as an earth sheltered building into the railway bed. Angle parking would be aligned along Centre Street with access to the museum along a four-metre wide concrete sidewalk.

CONSTRUCTION COST ESTIMATES

The following tables provide order-of-magnitude cost estimates for the various phases of the project. The costs are summarized by option as well.
In addition to the three options detailed in the report, cost estimates include a Basic Option. The structural assessment prepared for On Track in 2012 identifies base structural repairs and a basic work program that would be required before opening the bridge to the public for use as a multi-purpose trail.

The base structural needs and basic work program together represent the minimum amount of work required to facilitate use of the bridge as a multi-purpose trail for pedestrians, skiers and cyclists. The cost of the base structural needs is considered in the cost estimate of each of the three design concept options.

SUMMARY OF ESTIMATED CONSTRUCTION COSTS

	VERY BASIC OPTION	OPTION 1 FUNCTIONAL	OPTION 2 NATURAL	OPTION 3 SCULPTURAL
Base Structural Needs	213,000	213,000	213,000	213,000
Basic Work Program	365,000			
Phase 1, Elevated Park		1,280,000	1,850,000	2,380,000
Phase 2, West Trailway		162,000	162,000	162,000
Phase 3, Eastern Approach		1,125,000	1,125,000	1,125,000
Phase 4, At-grade Park		745,000	745,000	745,000
TOTALS	**578,000**	**3,525,000**	**4,095,000**	**4,625,000**

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OUR IMMEDIATE COMMITMENTS

1. The Management Master plan provides On Track with a road map for the various phases of the Elevated Park project. The entire project will take several years to complete and the identified phases will be undertaken as funds become available.

2. In the interests of sharing the Elevated Park with residents as quickly as possible, On Track aims to open a basic version of the park and trail in time for Summer 2017, in celebration of Canada's 150th birthday. This will include:
   a) preparation of the Eastern Approach to the bridge to make it fully accessible;
   b) the possibility of opening the Western Trailway to connect with trails proposed in the Elgin Cycling Master Plan;
   c) basic improvements to the bridge deck itself to make it safe from unintentional mishaps.

3. At the same time, On Track will prepare for an International Design Competition to achieve a final Elevated Park design consistent with the principles in the Management Master Plan.

4. To achieve the above, On Track is setting a Phase One fundraising goal of $900,000.