

Appendix 1: Structures description and rehabilitation scopes

1.0 Bartley Bull Parkway Road Bridge over Etobicoke Creek (G4RBWTE085)

- The Bartley Bull Parkway Road Bridge over Etobicoke Creek is a three spans pre-stressed box girder bridge located on Bartley Bull Parkway, approximately 150m East of Main Street and constructed in 1969.
- At present the bridges has substandard parapet wall of height only 0.55m and Canadian Highway Bridges Design Codes (CHBDC) requires minimum 1.05m for pedestrians only to 1.37m for pedestrians and cyclists combined. Also, the bridge contains sidewalk only on one side (West side).
- Rehabilitation of the bridge was initially considered using deck overlay and parapet wall top up only. However, the detailed deck condition survey and engineering evaluation of the bridge revealed that the total superstructure components (deck, girders, parapet walls, railings etc.) require replacement and the substructure components (abutments, piers, wingwalls etc.) require rehabilitation.
- The new deck will be widened to accommodate 1.5 m bike lanes and sidewalks on both sides along with CHBDC recommended parapet wall height.
- The full closure construction will expedite the construction process and the full rehabilitation construction will be completed in 18 to 22 weeks (subject to weather).
- With the adoption of the Vision Zero framework and embracing Council Priority 4.2 (Streets for People), Public Works and Engineering staff have been developing strategies for the implementation countermeasures to address traffic safety concerns throughout the City.
- As the City continues to grow there will inevitably be a steady flow of construction projects on our road network that will cause inconveniences to all road users. Despite best efforts to detour traffic to the nearest arterial roads during road closures with the use of signage, motorists tend to discover perceived shortcuts on local residential roadways.
- Because some of these projects can last for a long period of time, it can have a significant impact on the quality of life through some of these neighborhoods in the form of increased non-local traffic. Not only is the non-local traffic not familiar with the neighborhood, but they are also often already frustrated from delays on the associated with the construction. This frustration can potentially lead to a number of traffic safety concerns through aggressive driving. That being said, where possible, applicants requesting full road closures will now be required to work with Public Works and Engineering staff to implement countermeasures on local streets, adjacent to the project, to deter non-local

traffic. The installation of detour signage alone is no longer considered an acceptable or effective mitigating countermeasure.

- With the above in mind, the installation of temporary countermeasures of Bartley Bull Parkway will be implemented to deter non-local traffic from accessing the road. Staff are currently assessing the roadway to determine the most appropriate countermeasures like speed cushions
- Rehabilitation work will start this summer 2021 and expected to be completed by the end of the year 2021, subject to weather.
- This rehabilitation of the bridge will extend its service life for another 40 to 45 years.

2.0 Joyce Archdekin Park Pedestrian Bridge over Etobicoke Creek Replacement (F4FBOWE032)

- The Joyce Archdekin Park Pedestrian Bridge over Etobicoke Creek is a single span RC T-beam structure located approximately 50m West of Main Street and constructed in 1945.
- This bridge was closed for vehicular traffic for its poor structural condition.
- In the past City received many complaints related to this bridge. The bridge is located on the active transportation route. However, the parapet walls are very low, bridge approaches have no guide rails and there are other substandard components.
- At present, the parapet wall height is only 0.985m and Canadian Highway Bridges Design Codes (CHBDC) requires minimum 1.37m for pedestrians and cyclists combined.
- The detailed deck condition survey and engineering evaluation of the bridge revealed that the total structure require replacement
- The replacement of the Joyce Archdekin Park Pedestrian Bridge over Etobicoke Creek is coordinated with the Community Services and Park Operations.
- According to them, as the existing bridge requires complete replacement and the bridge is located very close to the downtown gateway, their recommendation is to put an architecturally and aesthetically enhanced bridge in that location. This will enhance the beauty of the park as well as the neighborhood and surrounding areas.
- City has applied for COVID Funding for this project. However, the outcome of the COVID funding is not known at this time. City needs to proceed with the project. If the COVID funding is received for this project, the funds from the original budget can be returned to the source.
- This pedestrian bridge replacement will be carried out with the full closure of the trail and detour of the trail will be provided.
- This replacement of the bridge will last for another 45 to 50 years.
- The project is anticipated to be tendered in May, 2021 and expected to be completed by the end of 2021 subject to weather.