



## Report to FIG

**DATE:** May 24, 2017

**TO:** Finance and Intergovernmental Committee

**FROM:** Community Recreation Complex Team

**SUBJECT: CRCP SCOPE OF OFFSITE WORKS**

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### **EXECUTIVE SUMMARY:**

One of the more significant elements of the community recreation complex development is to ensure that the offsite works will create an attractive and inviting public realm including appropriate traffic solutions for increased volumes, pedestrian-friendly sidewalks, street trees and where possible, underground wiring. Council issued a development variance permit for the community recreation complex project to allow the scope of offsite works to be determined at a later date rather than at the time of building permit issuance, in order to avoid a delay to the start of construction. The full scope of works has now been determined, and this information report outlines the scope of work.

### **BACKGROUND AND DISCUSSION:**

As part of the capital budget for the community recreation complex project, the City budgeted for upgrading offsite infrastructure to provide any road, water, sewer, storm, power, and other related offsite upgrades that would be necessary to support the project.

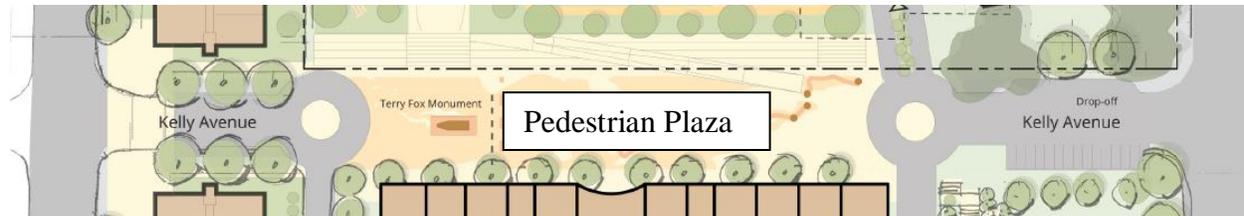
The design build contract with Ventana includes the cost of everything on the site and adjacent to the site, up to the back of the curb and gutter. This includes 2.0m wide sidewalks, street trees, and boulevard landscaping. The detail design for this work has not yet been completed, and will be brought forward later this year.

For a private developer, the offsite infrastructure needs usually are determined prior to rezoning (if applicable) or building permit issuance. However to facilitate the tight timelines for the community recreation complex project, Council issued a development variance permit for the project, which allows for the offsite works to be determined at a later date. This analysis has now been completed, including the completion of a traffic impact assessment. There are four key

areas which need to be addressed, including the re-construction of Kelly Avenue accesses, intersection improvements as per the traffic impact assessment, sanitary sewer re-alignment, and relocating overhead wiring underground.

#### Kelly Avenue:

Kelly Avenue will be re-constructed on both the east side (off Kingsway Avenue) as well as the west side (off Mary Hill Road), connected by a pedestrian plaza in between. The drawing below shows the concept, which will be modified through a detailed design and upon receipt of development permit drawings from Quantum.



#### Intersection Improvements:

A traffic impact assessment was undertaken to evaluate the long term traffic impacts of the development of the community recreation complex and the residential/mixed use developments, and is attached to this report as an appendix. The study modelled and evaluated the current operation of the existing rec complex, and then layered on overall traffic growth, the additional traffic expected to be generated by the new facility, and the additional traffic expected to be generated by Quantum's development. This future condition was then modelled and evaluated as "opening day" conditions for 2021, and then further inflated for general growth to 2026 to evaluate longer term conditions. In summary, the majority of intersections in the study area will continue to operate well under future conditions, with minor changes to lane configurations and signal timing. However two intersections were identified for more comprehensive improvements: Kingsway Avenue and Kelly Avenue, and Kingsway Avenue and Tyner Street.

Originally, the intersection of Kingsway and Kelly was identified to require signalization, and the intersection of Kingsway and Tyner was recommended to have median and line painting changes. Smart Growth Committee reviewed the draft traffic impact assessment as part of its review of Quantum's rezoning application and directed staff to investigate the option of roundabouts as an alternative to signalization for both Kingsway and Kelly as well as Kingsway and Tyner. The consultant assessed the possibility of roundabouts, and provided a detailed analysis with a pros and cons list for both signalization and roundabouts within the report. Ultimately, we will proceed with the roundabouts due to the increased safety, reduced speeds, reduced delays, improved aesthetics, and long term reduced costs.

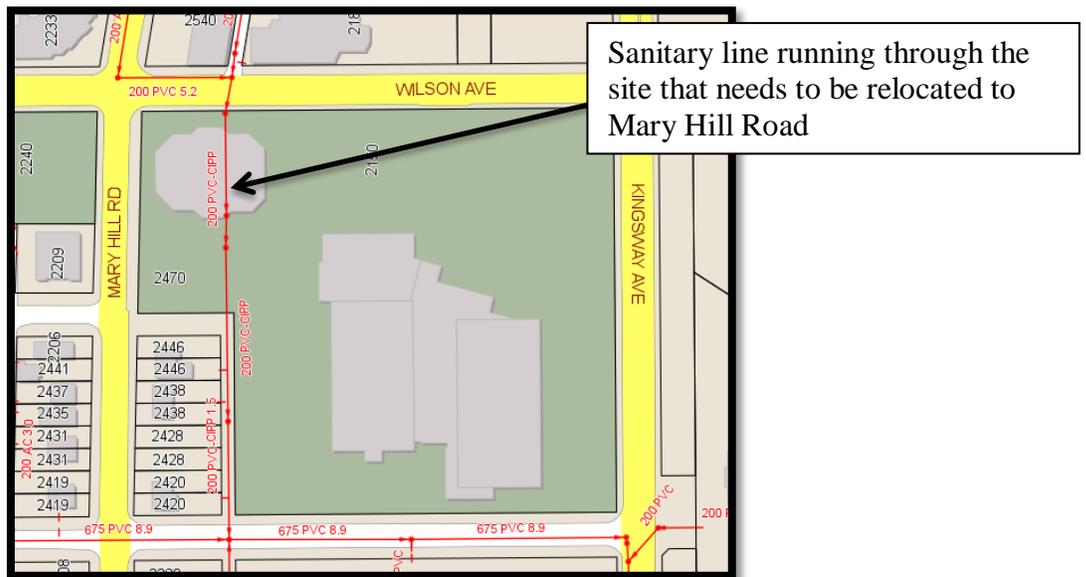
#### Utilities (Water, Sewer, Storm):

The water system in the area of the new facility is sufficient to meet the new demands, and thus no upgrades to the system are required. Depending on the final design, and in consultation with the fire department, we may relocate or provide additional hydrants to provide more strategic access to areas of the new facility such as the parkade. New water connections will also be required.

The storm system in the area is also sufficient to meet the needs of the new community recreation complex.

The sanitary sewer system is slightly more complex, in that a 200mm sanitary line that collects a good portion of the downtown sanitary runs directly through the site. This main will need to be upsized to service the aquatic facility, and re-routed down Mary Hill Road. New sanitary services will also be required.

### Sanitary Layout



### Overhead Wiring:

There are a variety of overhead wires in the road right of way, fronting the site. The City's Parking and Management of Development bylaw requires undergrounding of lines along the site's frontages with the exception that it does not require the undergrounding of the high voltage and transmission line on the Wilson Avenue frontage. To be consistent with the City's bylaw and expectations of private developers (including what will be expected of Quantum), we will be relocating the distribution lines adjacent to the site on the Kingsway frontage underground (west side only), as well as the Telus lines on the Mary Hill frontage (east side only). We will not be relocating the transmission lines on Wilson Avenue, as these high voltage lines are extremely costly and exempt from the bylaw. The lines on Kelly Avenue will be abandoned as part of the redevelopment of both adjacent sites (the community recreation complex and Quantum's development).

### Other Works:

Other miscellaneous works will include removal of driveways, curb and gutter repairs, street light improvements, offsite work to accommodate the relocation of programs (such as relocation of the kiln), parking signage adjustments, temporary services (such as power), line painting and signage changes to accommodate increased turn lanes as outlined in the traffic report, and other miscellaneous works that may be required. A review of the road conditions adjacent to the new complex was also undertaken, and no pavement rehabilitation works are proposed outside the repairs that will be required for the utility trenches and the various intersection improvements.

The project budget is sufficient to fund all of the recommended works described in this report.

*Prepared by Community Recreation Complex Team*

Attachments: Traffic Impact Assessment