



INFORMATION REPORT

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	September 19, 2016
SUBJECT/REPORT NO:	Lincoln M. Alexander Parkway and Red Hill Valley Parkway Lighting (PW16077) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Gord McGuire (905) 546-2424, Extension 2439 Mike Field (905) 546-2424, Extension 4576
SUBMITTED BY:	Gary Moore, P. Eng Director, Engineering Services Division Public Works Department
SIGNATURE:	

Council Direction:

At its meeting of December 7, 2015 the Public Works Committee directed staff to “report to the Public Works Committee with information on the costs and process of investigating an improved lighting system on the Red Hill Valley Parkway and the Linc.”

This direction was in response to the Public Works Committee’s review and discussion of the The Lincoln M. Alexander Parkway (LINC) & Red Hill Valley Parkway (RHVP) Safety Review report PW15091.

Information:

The Lincoln M. Alexander Parkway (LINC) and Red Hill Valley Parkway (RHVP) were designed and constructed with partial illumination at the exit/entrance ramps and without continuous lighting of the mainline corridors. Lighting at interchanges and cross street overpasses provides additional inadvertent partial illumination in some locations.

The original Environmental Assessments (EA) completed for the LINC and RHVP included a review of lighting. It was identified that through the Red Hill Creek Valley, that lighting would have a detrimental environmental impact and lighting restrictions were imposed. Decisions regarding adding lighting on the LINC and/or RHVP would require renewing and updating the original EAs so that the impacts of lighting could be re-examined. It would be prudent to delay any such EA review so that it may be coupled with other proposed changes such as the widening of the LINC/RHVP to six lanes.

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OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

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**SUBJECT: Lincoln M. Alexander Parkway and Red Hill Valley Parkway Lighting
(PW16077) (City Wide) - Page 2 of 2**

Regardless of the removal of lighting restrictions through a renewal of the EA, physical challenges exist which would inhibit the installation of lighting in some locations. The RHVP bridge over the Red Hill creek was constructed without street light pole bases or conduits and adding lighting on this segment will be challenging as the structure would need to be modified to accommodate these elements.

Further constraints include Hydro One distribution over-head wiring which passes over the RHVP and Mud St/Stone Church interchange requires minimum horizontal and vertical clearances to other structures. These requirements essentially prohibit the installation of street light poles in some locations which could result in difficulties for providing adequate illumination for the mainline and ramps in proximity to the utility corridor.

Lastly, both the LINC and RHVP potentially have some sections where there is limited to no available room to install new street light poles which could negatively impact the ability to provide adequate illumination in these areas.

Excluding the above noted challenges, adding continuous lighting to the LINC and/or RHVP will require capital funding. Preliminary, high level estimates indicate that the cost to install lighting would be in the range of \$6M to \$10M depending on many factors. Operationally, the installation of lighting on the LINC/RHVP would result in increased annual operational costs of between \$100k and \$150k. Estimated capital and operating costs do not include enhancing the illumination of the LINC/RHVP exit/entrance ramps which are not currently fully lit. Ramp lighting will add another \$1-2M of capital requirements

The Lincoln M. Alexander Parkway (LINC) & Red Hill Valley Parkway (RHVP) Safety Review report PW15091 briefly discussed the safety benefits associated with continuously lighting the LINC and RHVP. The consultant review included a high-level discussion related to lighting. The high-level review is not comprehensive enough to guide any staff recommendations and in order to fully understand the benefits, risks and challenges of adding continuous lighting, a more fulsome review and business analysis would be required to be undertaken. The approximate cost of such a study would be approximately \$100k.