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<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 27, 2013</b>
<b>FROM:</b>	<b>EDWARD SOLDI, P. ENG. DIRECTOR, ROADS &amp; TRANSPORTATION</b>
<b>SUBJECT</b>	<b>BRADLEY AVENUE PEDESTRIAN TUNNEL ILLUMINATION</b>

<b>RECOMMENDATION</b>
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That on the recommendation of the Director of Roads & Transportation **NO ACTION BE TAKEN** with respect to replacing the lighting in the vicinity of the Bradley Avenue pedestrian tunnel.

<b>BACKGROUND</b>
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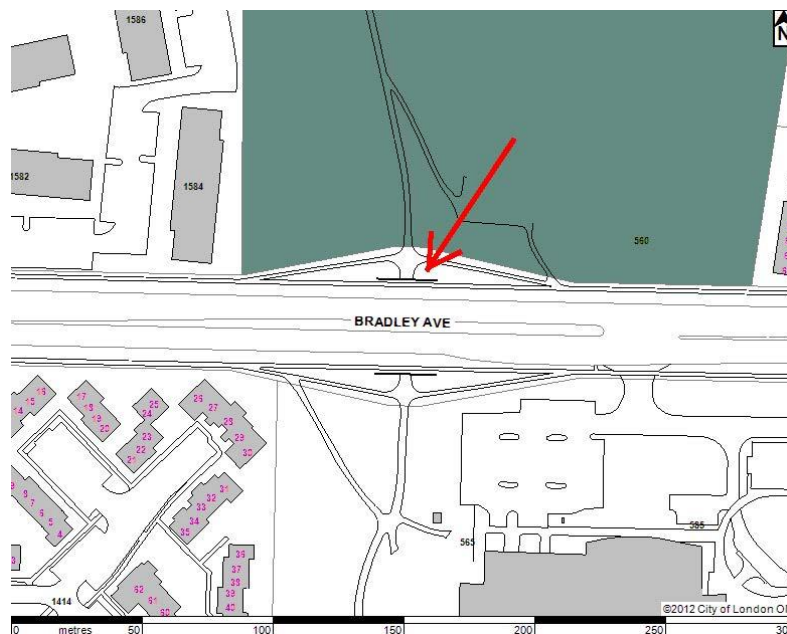
At the July 24<sup>th</sup>/25<sup>th</sup>, 2012 session, Municipal Council resolved the following:

*“That the Civic Administration **BE REQUESTED** to review and report back to the Civic Works Committee with respect to the cost of installing new lighting and/or increasing the wattage to the existing lighting in the Bradley Avenue underpass tunnel, and to also share their findings with M. Fenton, 30-700 Exeter Road; it being noted that the CWC heard a verbal delegation from Mr. Fenton, with respect to this matter”*

The following report summarizes the history of the Bradley Avenue Tunnel and lighting levels.

<b>DISCUSSION</b>
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The Bradley Avenue Pedestrian Tunnel is located east of Ernest Avenue and connects the White Oaks Public School and the Rick Hansen Public School via the White Oaks Park as shown on the following drawing:



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The pedestrian tunnel was constructed in 1976 with recessed lighting in the roof and post-top fixtures at either end of the tunnel. Even though the roof lights are recessed they are still within easy reach and are subject to frequent vandalism requiring replacement of the entire fixtures.



The White Oaks Public School, the Rick Hansen Public School and the neighbouring community have recently completed murals at each end of the tunnel. Concern was expressed that the lighting levels need to be increased in order to deter vandalism. On the evening of September 18<sup>th</sup>, 2012 a meeting was held on-site with staff, Mr. Fenton, the Public Health Nurse and the two school Principals to review the lighting levels in and around the tunnel.

Appendix "A" shows the lighting levels within the tunnel and at either end. The American National Standard Practice for Roadway Lighting (RP-8-00) recommends the average horizontal illuminance to be 4.0 lux for walkways/bikeway in Medium Density Residential areas with low conflict, such as in parks. The recommended lighting levels for pedestrian tunnels are 40.0 lux for nighttime hours and 100.0 lux for daytime hours. All lighting readings (4.0 to 9.2 lux outside the tunnel and 140.5 to 190.8 lux inside the tunnel) meet or exceeded the RP-8-00 recommended level.

Increasing the lighting levels at either end of the tunnel may help discourage vandalism; however, the area of the murals cannot be seen from Bradley Avenue. Vandals may not be deterred if they know they cannot be seen regardless of the increased lighting levels. The estimated cost of increasing the lighting levels at either end of the walkways is \$20,000.

<b>CONCLUSION</b>
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The measured lighting levels in and around the tunnel exceed the RP-8-00 standard and increasing the lighting levels may not deter vandalism of the murals because this area is hidden from Bradley Avenue. It should be noted that graffiti artist/taggers typically respect the work of other artists and will not paint over murals; therefore, this should help mitigate vandalism concerns. A recent review of the murals confirmed showed no sign of graffiti.

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**ACKNOWLEDGEMENT:**

This report was prepared by a team within the Roadway Lighting & Traffic Control Division comprised of Doug Bolton and Shane Maguire with input from Andrew Macpherson, Manager of Parks Planning & Design.

<b>PREPARED BY:</b>	<b>RECOMMENDED BY:</b>
<b>SHANE MAGUIRE, P. ENG. DIVISION MANAGER ROADWAY LIGHTING &amp; TRAFFIC CONTROL</b>	<b>EDWARD SOLDO, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>
<b>REVIEWED &amp; CONCURRED BY:</b>	
<b>JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>	

October 25, 2012

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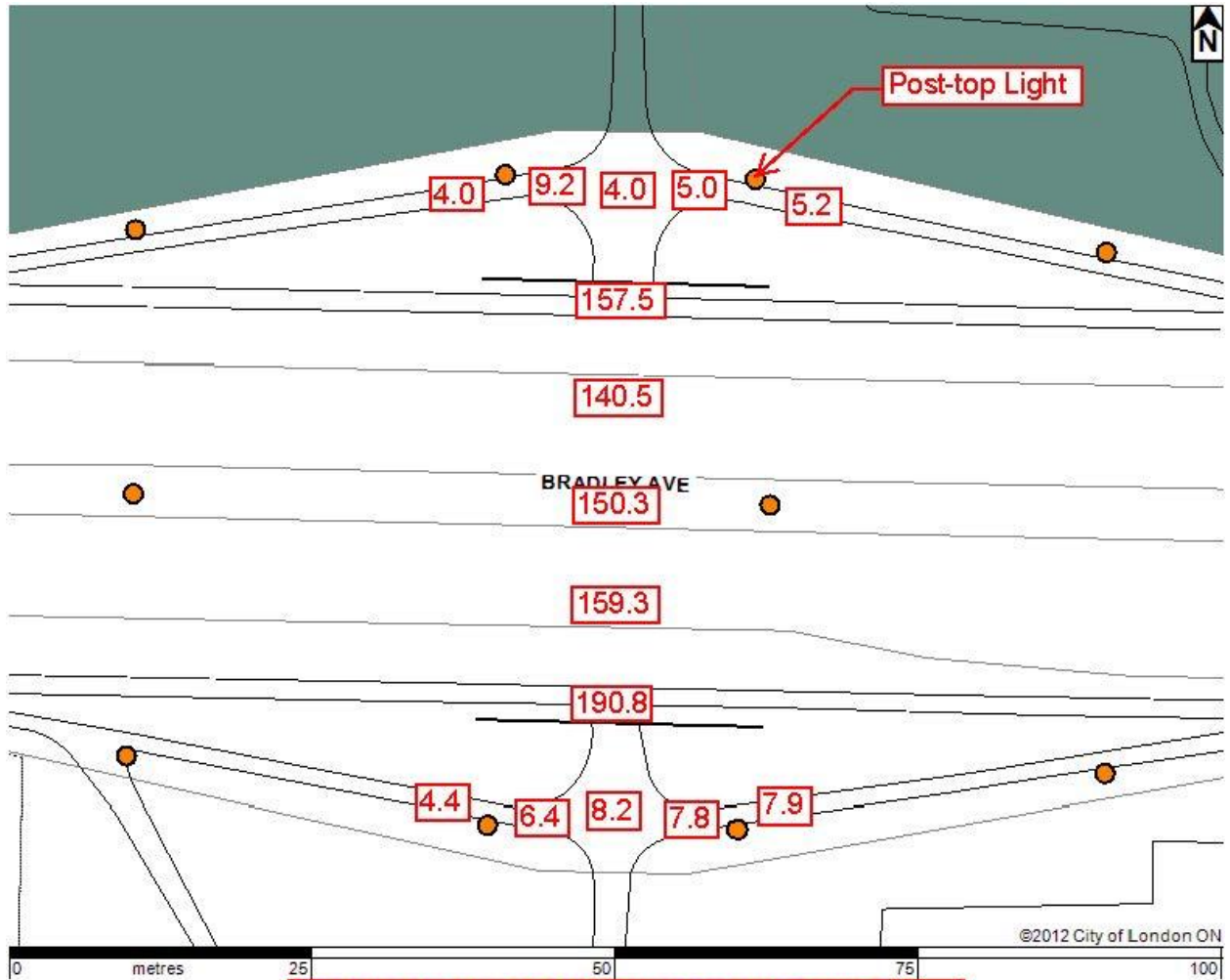
Attach: Appendix "A" Bradley Avenue Tunnel Lighting Levels

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- c.c. J. Braam, Managing Director, Engineering and City Engineer
- A. Macpherson, Manager of Parks Planning & Design
- M. Fenton, 30-700 Exeter Road, London ON N6E 1L2

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### Appendix "A" Bradley Avenue Tunnel Lighting Levels



RP8-00 Standard for Medium Density Residential  
with Low Pedestrian Conflict  
Ave. illuminance = 4.0 lux  
Pedestrian Tunnels  
Nighttime Ave. illuminance = 40.0 lux  
Daytime Ave. illuminance = 100.0 lux