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May 12, 2014

OUR REF: E02383

Berta B. Krichker, M.Eng., F.E.C., P.Eng Manager, Stormwater Management Unit Planning, Environmental & Engineering Services Department The Corporation of the City of London 300 Dufferin Avenue, 9th Floor P.O. Box 5035, London Ontario, NSA 4L9

Dear Berta:

Re: Mud Creek Subwatershed Study Budget Confirmation

The approved budget for the Mud Creek Subwatershed Study was \$200,622.40 including \$14,113.40 contingency budget.

## Additional Budget for Oxford Street Level of Service

The total additional budget approved for the Oxford Street Level of Service Improvements work was \$23,000. This was in two ports; the first in early November for \$10k and the second in late November for \$13k.

The first approved component for \$10k was requested via email on November 4, 2013. It was to complete the assessment of road raising and culvert enlarging at Oxford Street for the 1:50 year event without climate change for the Mud Creek Subwatershed Study (all based on Alternative 2). The work included confirmation of the backwater effect from the CNR culvert under the 1:50 year event without Climate Change, determination of road level raise required to eliminate overtopping in a 1:50 year event without Climate Change (iterative with culvert re-sizing, determination of the increased size of culvert to maintain the existing hydraulic grade line upstream of Oxford Street in a 1:50 year event without Climate Change. A report was provided during a presentation meeting on November 13, 2013. The presentation provided the results of modeling, Level of Oxford Road raising and size of enlarged Oxford Street culvert for no overtopping in 1:50 year event (No Climate Change) and plot of areas of flood risk.

Following the delivery above further analysis was requested by the City and the scope of work plus required budget was detailed in an email to the City dated November 18, 2014. The proposal includes the following: Modeling of the Oxford Street road raising and culvert upgrading at 300 mm increment increases in height for the 1:2, 1:5, 1:10, 1:25, 1:50, 1:100 and 1:250 return period events without climate change as requested; Development of Class D Cost Estimates for each road raising increment; Determination of overtopping depths and velocities; Determination of frequency of overtopping; and, identification of areas of flood risk. A report was provided to the City on November 27, 2014. This was completed under the \$13k budget approved.