

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

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DATE 16 June 1997

TO/DEST. Co-ordinator
 Transportation Committee

FROM/EXP. Director Engineering Division
 Environment and Transportation Department

SUBJECT/OBJET **STREETLIGHTING - LAURIER AVENUE EAST**
 RESPONSE TO MOTION TC-20

DEPARTMENTAL RECOMMENDATION

That Transportation Committee and Council receive this report for information.

INTRODUCTION

On 22 November 1995, Regional Council approved Motion TC-20 in relation to the rehabilitation project for Laurier Avenue, Nicholas Street to Charlotte Street, as follows:

That the following Motion be referred to staff:

'That the lighting be changed from high pressure sodium to metal halide lighting, subject to the City of Ottawa's agreement to pay for the additional hydro cost for operation.'

BACKGROUND

The issue of a change to the existing streetlighting along Laurier Avenue, between Nicholas Street and Charlotte Street, evolved from citizens' concerns with respect to the aesthetic qualities of the existing 'cobrahead' light fixtures mounted on wooden hydro poles and the yellow colour of the light which emanates from the high pressure sodium bulbs in these fixtures. Some citizens are of the opinion that 'acorn' light fixtures, as have been installed recently in Toronto, would be more in keeping with the heritage atmosphere of Laurier Avenue East. As well, they have expressed a

desire for 'white' light as produced by a metal halide bulb, as opposed to the yellowish light from the existing high pressure sodium bulbs.

The level of illumination provided by the existing streetlighting system on Laurier Avenue East will meet current RMOC streetlighting policy with the addition of one fixture near Range Road.

The 'acorn' fixture used by the City of Toronto is supplied by Cooper Lighting of Mississauga, Ontario. Cooper has advised that the fixture known as the 'URBanite' (URB), manufactured by Crouse-Hinds, can be set up to work with either a Metal Halide lamp or a High Pressure Sodium bulb, and operate off of 120V, 227V or 347V power supplies. The City of Toronto application used Metal Halide in 70, 100, 150 and 250 watt units.

Since the photometrics of high pressure sodium bulbs in cobrahead fixtures differ from those of metal halide bulbs in 'URB' fixtures, the conversion of the streetlighting on Laurier Avenue will require alterations to the spacing of the lights along the street. Relocation of the existing wooden utility poles to satisfy streetlighting requirements would involve adjustments to the utility lines and service drops on these poles and thus the less disruptive approach is to introduce new streetlight poles. Approximately 35 lighting units are required, and the estimate of the cost to convert the streetlighting on Laurier Avenue to metal halide bulbs in acorn fixtures on standard concrete or metal streetlighting poles is in the range of \$170,000 to \$220,000. If heritage type poles were to be used, the capital cost could escalate 2 to 3 times.

It is estimated that the maintenance and energy consumption costs for the 35 streetlights on Laurier Avenue East would increase by \$1,250 (from \$3,050 per year to \$4,300 per year) if the change was made from High Pressure Sodium to Metal Halide bulbs.

The City of Ottawa has advised that the City will not accept the additional costs or maintenance responsibility for a Metal Halide streetlight system.

CONCLUSION

Based on the fact that the City of Ottawa will not accept the additional operational cost, the tender for Contract 97-507, for the rehabilitation of Laurier Avenue East from Nelson Street to Charlotte Street, maintains the existing high pressure sodium streetlighting system, with a minor modification at Range Road to meet Regional standards.

Approved by
J. Miller, P.Eng.

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JBT/al