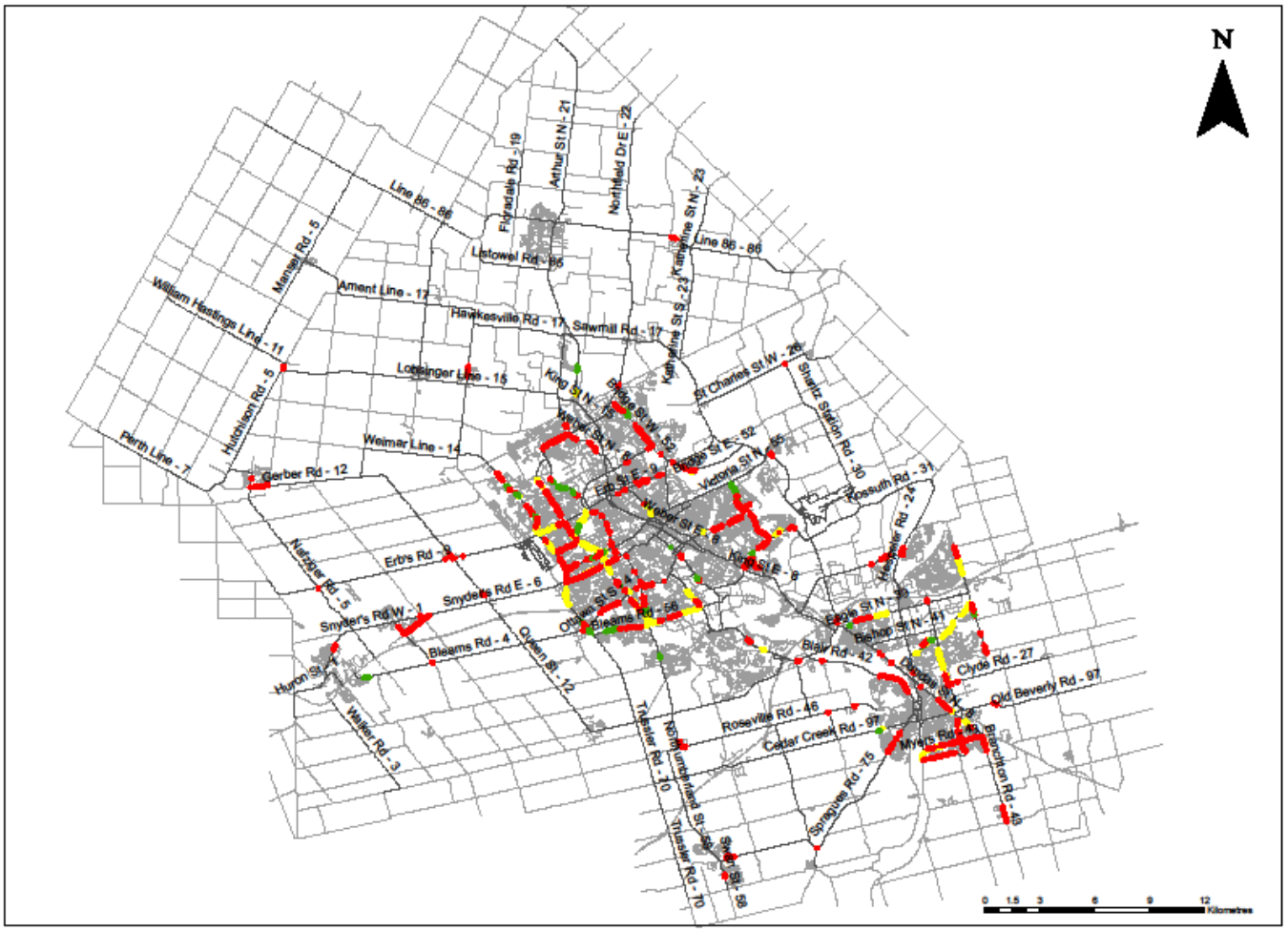
Appendix D: Feasibility and Cost Assessment for Noise Walls on all Back-lotted Regional Roads Currently without Noise Walls



Feasibility and Cost Assessment for Noise Walls on all Back-lotted Regional Roads Currently without Noise Walls.

Staff reviewed all current regional back-lotted roads currently without noise walls. There is a total of 55 km's of new noise wall required. The cost of noise wall 1.8m to 2.0 m in height = $2000.00/metre

55,000 metres noise wall x $2000.00/metre = $110,000,000 + 40% Contingency (includes items like; potential property acquisition + existing utility relocations+ grading and/or retaining wall requirements, design and project management + geotechnical and structural consulting)

The total estimated cost = $154,000,000

The installation of the 55 kilometres of noise wall would have to be phased over a reasonable period. For discussion purposes, staff assumed that this period would be ten years. Installation over a ten-year period would result in an annual cost of approximately $15.4 million. The cost of this work would need to be 100% funded from Roads Rehabilitation Reserve Fund as most of the new noise wall would not be associated with a road widening or new road and therefore could not be funded from Development Charges. This additional cost burden on the Roads Rehabilitation Reserve Fund would result in the need to:

1. Reduce the amount of annual base projects by $15.4 million; or
2. Add more funding to the Reserve Fund either through an increase to the Tax Levy or through debentures; or
3. Combination of 1 and 2.

Reductions to the current road reconstruction and rehabilitation programs would increase the current infrastructure deficit of approximately 10 million annually to over 25 million annually. This is an increase of 150% annually.

In addition to the $154 million in additional capital dollars required, the addition of 55,000 metres of noise wall to the Region's infrastructure inventory would add considerable additional maintenance costs going forward in addition to the future replacement costs of these walls, which would generally need to occur every 30 years.