

Tender Proposal for Hot In-Place Recycling Pilot Project

Background

At the Council meeting of September 8, 2020, Council passed a resolution to issue a new tender for the Hot In-Place Asphalt Recycling (HIR) Pilot Project in 2021. The reasons that the 2020 HIR Pilot Project was cancelled included concerns with the amount of ancillary work included (culvert and curb replacements, structure adjustments), the tight schedule provided to complete the work, and that the contract was over budget. The revised tender will reduce the amount of ancillary work to approximately 1% of the estimated total contract value, reduce the overall scope of the work, and be tendered earlier in the year. Staff has reviewed the previously proposed road sections in preparing the revised tender.

In 2019, through a Council resolution, a total of \$1,511,000 was designated to be used for a Hot In-Place Recycling Project. Staff used project funds to retain a Geotechnical Consultant with experience in HIR to assist in determining suitable road sections, perform asphalt material testing, and provide recommendations for roads to be treated and provide specifications for tender documents. The remaining budget available for construction is approximately \$1,390,000.

Analysis

The pilot project tender document issued in July 2020 included requirements for ancillary work including culvert replacement, curb replacements and structure adjustments as typically included in contracts. The proposed road sections indicated in the 2020 tender document are indicated in the following table. HIR work limits within the road sections were dependent on HIR unit prices.

| Road | From | To |
|--------------------|-------------------|---------------------------|
| MR 35 | Clarabelle Road | Big Nickel Road (MR 34) |
| Kingsway | Falconbridge Road | 800m East of Third Avenue |
| Radar Road (MR 85) | Skead Road | Pine Ridge Street |
| Bancroft Drive | Kingsway | Bellevue Avenue |

Staff reviewed these road sections to determine where ancillary work items could be removed from the contract while minimizing risk.

MR35: The limits proposed for this section of road will require only rumble strip ancillary work. This road section is recommended for the 2021 tender.

Kingsway: The curb within this road section is generally in acceptable condition. Ancillary work will be limited to structure adjustments. This road section is recommended for the 2021 tender.

Radar Road: Ancillary work on this section of road included a culvert replacement, which can be excluded from this tender and the culvert replaced following HIR. This road section is recommended for the 2021 tender.

Bancroft Drive: The curb is generally in poor condition and structure adjustments will be required to reset some structures for the new road surface on this section of road. Inclusion of this section in the tender could place the HIR schedule at risk due to the reliance of completion of a separate curb and structure contract, and require some duplication of work. This may prevent completion of the HIR work during the most desirable months. This road section is not recommended to be included in the 2021 tender.

The road sections recommended to be included in the 2021 tender are indicated in the following table.

| Road | From | To |
|--------------------|-------------------|---------------------------|
| MR 35 | Clarabelle Road | Big Nickel Road (MR 34) |
| Kingsway | Falconbridge Road | 800m East of Third Avenue |
| Radar Road (MR 85) | Skead Road | Pine Ridge Street |

The final extents of the HIR work within the limits noted above will be determined by staff based upon the receipt of tendered unit prices. The amount of ancillary work has been reduced to approximately 1% of the estimated contract cost.

Conclusion

The proposed road sections in the 2021 revised tender for the Hot In-Place Recycling Pilot Project include the Kingsway, MR35 and Radar within the limits indicated in the table above. When the tender is awarded, the limits of the HIR within the proposed road sections will be identified to maximize the use of the remaining project budget of approximately \$1,390,000.

Resources Cited

City Council Meeting, July 7, 2020, Hot in Place Asphalt Recycling Pilot Project, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=13&id=1473>

City Council Meeting, July 7, 2020, Hot in Place Asphalt Recycling Pilot Project Presentation, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=30687.pdf>

Operations Committee Meeting, October 21, 2019, Hot In-Place Recycling Asphalt Pilot Project, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=2&id=1346>

Operations Committee Meeting, October 21, 2019, Hot In-Place Recycling Asphalt Pilot Project Presentation, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=27808.pdf>

City Council Meeting, June 11, 2019, Federal Gas Tax Additional Funding, Accessed online:

<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1324&itemid=17075&lang=en>