

NO: R157

COUNCIL DATE: July 24, 2017

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **July 19, 2017**

FROM: **General Manager, Engineering**

FILE: **8740-01**

SUBJECT: **Surrey Newton Guildford Light Rail Transit
Early Work Agreements**

RECOMMENDATION

1. That Council approve entering into the two Early Works Agreements with TransLink, for the advancement of the Surrey-Newton-Guildford Light Rail Transit (“SNG-LRT”) project; and
2. That the Mayor and City Clerk be authorized to execute the Early Work Agreements.

INTENT

The purpose of this report is to present the content of the Early Work Agreements for the SNG-LRT project, as developed by TransLink and City of Surrey staff, and to recommend that Council approve the Agreements.

BACKGROUND

In June 2016, TransLink as part of the South of Fraser Rapid Transit project secured funding under the Public Transit Infrastructure Fund (“PTIF”) program, allowing continued planning, consultation and preparatory works on the SNG-LRT project. This funding has been allocated in Phase 1 of TransLink’s 10-Year Investment Plan, and is attributed to all three levels of government: the Federal and Provincial announcements in June 2016; and TransLink’s approval of funds in November of last year.

There is approximately \$58 million in funding designated to specific “Early Works” projects, which include: transit exchanges in Guildford and Newton; relocation of City water main and storm sewer utilities on 104 Avenue; replacement of the Bear Creek Bridge on King George Boulevard south of 88 Avenue; and raising BC Hydro transmission powerlines on both 104 Avenue and King George Boulevard. Completion of the Early Works will streamline the overall construction schedule of the main SNG LRT works after procurement in 2018.

While funding for the Early Works is provided by TransLink, delivery of the Early Works projects is shared between TransLink and the City. The City is responsible for the 104 Avenue utility relocations, the Bear Creek Bridge and coordination with BC Hydro on their transmission powerline relocations. The Early Works projects to be delivered by the City are listed in the following table and also illustrated on the map attached to this report as Appendix “I”.

Map Reference Number	Project #	Project Description	Location
1	1217-503	2,700 lin.m. of Feeder Water Main Relocation	104 Avenue: City Parkway to 144 Street
2	4817-303	600 lin.m. of Trunk Storm Sewer Relocation	105 Avenue: 148 Street to 150 Street 148 Street: 104 Avenue to 105 Avenue
3	1717-309	Bear Creek Bridge Replacement	King George Boulevard at Bear Creek
4	1717-804	BC Hydro Transmission Relocation/Raising	104 Avenue and 140 Street
5	1717-804	BC Hydro Transmission Relocation/Raising	King George Boulevard and 92 Avenue
6	1717-804	BC Hydro Transmission Relocation/Raising	King George Boulevard and 84 Avenue

The feeder water main and trunk storm sewer relocation involves the relocation of a large diameter water main and trunk storm sewer which services both the City Centre and Guildford communities. These utilities are located on 104 Avenue and are in conflict with the planned center running SNG-LRT track corridor alignment, thus requiring relocation. The feeder water main will be relocated off of 104 Avenue, and staff are currently evaluating alternative alignments for this relocation. The trunk sewer will be relocated on 105 Avenue near Guildford Mall within existing roads.

The Bear Creek Bridge is an existing timber trestle bridge spanning Bear Creek and was built in the 1930's. The existing bridge is too narrow to accommodate the proposed SNG-LRT corridor, nor can it support the anticipated loading of LRT. As a result, replacement and upgrading to current seismic standards is required to accommodate the planned LRT system.

BC Hydro transmission infrastructure crosses the planned SNG-LRT alignment at three locations. With the high voltages contained in the BC Hydro transmission infrastructure, adequate clearances must be achieved between the BC Hydro transmission infrastructure and LRT power supply system to prevent interference between the two power supplies.

These projects were identified as Early Works projects, given the critical and complex nature of infrastructure work required. Completion of this work in advance will reduce key project risk elements which will facilitate the successful delivery of the SNG-LRT project. The value of the Early Works projects is estimated at \$20.3 million (excluding the BC Hydro transmission work). As a condition of the PTIF program, this work must be completed prior to March 31, 2019 in order to remain eligible for PTIF program funding and to ensure timely delivery of the SNG-LRT project. The value of the BC Hydro transmission work will be established once BC Hydro has finalized their compatibility review of the two power supply systems.

DISCUSSION

Subject to Council's approval, the City has agreed to partner with TransLink in the delivery of the Early Works projects, given the City's experience in delivering similar municipal infrastructure projects, and as these projects primarily require the relocation and replacement of City assets. As well, the City supports delivering the Early Works projects as it will allow the City to ensure the

infrastructure work is completed in accordance with City standards along with the objectives of the SNG-LRT project.

The Early Works Agreements are two-way agreements between the City and TransLink. These agreements establish the respective obligations and responsibilities of the City and TransLink to complete the Early Works projects in accordance with the PTIF program. The two Early Works agreements have been prepared, one for Early Works projects requiring the relocation and replacement of City assets, and the other for the BC Hydro transmission work. Provisions in the agreements have been established based on the principles in the following two paragraphs:

104 Avenue Utility Relocations and Bear Creek Bridge Replacement Agreement

This agreement encompasses the relocation of the feeder water main and trunk storm sewer, and replacement of the Bear Creek Bridge to support the SNG-LRT project. The agreement is structured similar to other infrastructure funding agreements between the City and TransLink, which places the risk of any cost overruns to the City. Although this agreement may have financial-implications to the City, staff have reviewed the budget allowances provided for these Early Works projects and it is anticipated the projects can be delivered within the Early Works budget established in the amount of \$20.3 million.

BC Hydro Transmission Work Agreement

This agreement encompasses BC Hydro transmission work that is required to support the SNG-LRT project. Based on the City's past experience, work completed by BC Hydro comes with significant risk for cost overruns. In an effort to minimize this risk, the agreement has been structured to allow the budget for this work to be established based on BC Hydro's final cost estimate for the work, rather than establishing a budget for the work based on preliminary estimates. Once a final cost estimate has been provided, TransLink and the City will have the opportunity to review the BC Hydro cost estimate. Should the estimate appear reasonable to both TransLink and the City, the agreement will be amended to include the final cost estimate as the project budget. Should any cost overruns occur once the final cost estimate is agreed upon, TransLink and Surrey will share the risk. In the event the final cost estimate is not supported by TransLink or the City, the agreement will be terminated. Although the agreement is structured with potential financial implications to the City, the risk will be managed during review of the BC Hydro final cost estimate.

The Early Works Agreements have been reviewed by the Engineering Department and the City Solicitor. This review has found the agreements to be acceptable to the City in its terms and scope of commitments it includes.

SUSTAINABILITY CONSIDERATIONS

The approval of the Early Works Agreements supports the objectives of the City's Sustainability Charter. In particular, this work relates to the Sustainability Charter themes of Built Environment and Neighbourhoods, and Infrastructure. Specifically, these agreements support the following Desired Outcomes:

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active all-ages-and-abilities transportation infrastructure; and

- Transportation DOI: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

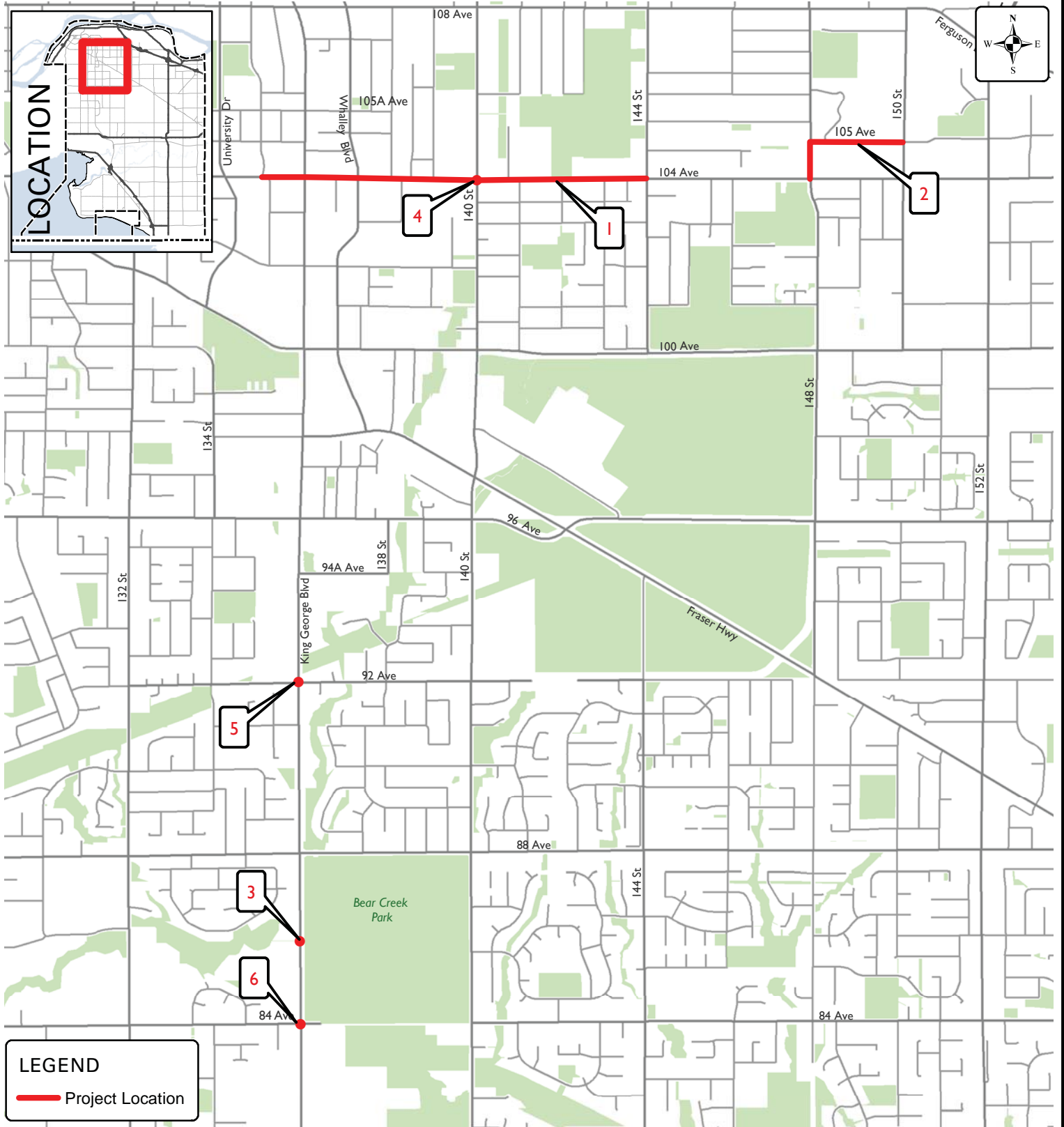
CONCLUSION

Based on the above discussion, it is recommended that Council approve entering into the two Early Works Agreements. Funding for the 104 Avenue Utility Relocations and Bear Creek Bridge Replacement Agreement Early Works agreement in the amount of \$20.3 million is committed as part of the PTIF program for the Early Works Agreements, with the funding for the BC Hydro Transmission Work being established once a final cost estimate is provided by BC Hydro.

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Appendix "I" – SNG-LRT "Early Works" Project Locations



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Scale: 1:25,000 0 230 M



SNG LRT "Early Works"

ENGINEERING
DEPARTMENT