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6.1

Ray Gibbon Drive and North St Albert Trail Funding Requests

Presented by: Dean Schick, Transportation Manager, Engineering

RECOMMENDED MOTIONS

That Community Growth & Infrastructure Standing Committee recommend to Council

1. That the budget for project #420424 (Ray Gibbon Drive Improvements based on project charter ENGS-074) be increased by a total of \$2,000,000 and that the increase in budget be funded through \$500,000 recovered from received payment from the City of Edmonton and \$1,500,000 from debt under Borrowing Bylaw 18/2019
2. That the budget for project #419421 (North St. Albert Trail Corridor Management Implementation based on project charter ENGS-070) be increased by a total of \$5,500,000 and that the increase in budget be funded through \$500,000 recovered from received payment from Landrex and \$5,000,000 from debt under Borrowing Bylaw 9/2019

PURPOSE OF REPORT

To provide the Community Growth & Infrastructure Standing Committee with a status update of the arterial network improvement projects associated with Ray Gibbon Drive and North St Albert Trail and to inform of a need for additional budget approval for the work to be completed.

ALIGNMENT TO PRIORITIES IN COUNCIL'S STRATEGIC PLAN

Strategic Priority #3: Building a Transportation Network

Activity 3.10: Implement the prioritized inventory of approved arterial network improvements.

ALIGNMENT TO LEVELS OF SERVICE DELIVERY

N/A

ALIGNMENT TO COUNCIL DIRECTION

On December 17, 2018 Council passed the following motion(s)

(AR-18-576)

"That the 2019 Consolidated Municipal and Utility Budget in the amount of \$272,292,300 detailed in

the attachment titled "2019 Consolidated Budget" be approved."

Within the approved 2019 Consolidated Municipal and Utility Budget there were approvals for specific levels of funding associated with the following projects:

- Ray Gibbon Drive (Project #420424) Charter ENGS-074 approved for \$26,714,500
- North St Albert Trail (Project #419421) Charter ENGS-070 approved for \$18,950,000

On February 18, 2020 Council passed the following motions(s)

(CB-20-022)

That the update on the North St. Albert Trail Improvement Project and proposed North St Albert Trail and LRT Alignment, contained in the report dated February 10, 2020 entitled "North St. Albert Trail Design" be received as information.

That Council rescind Council Motion C536-2015 which reads as follows:

That the LRT alignment within the approved corridor (St. Albert Trail) identified as the preferred option in the "St. Albert LRT Planning Study Phase 2 - Alignment Selection Report", provided as Attachment 1 to the November 2, 2015 Agenda Report entitled "LRT Functional Alignment - Final Recommendations", be approved. That this report be referred to the Capital Region Board for integration with the Capital Region Growth Plan Update.

On May 19, 2020 Council passed the following motion(s)

(AR-20-181)

"That a scope change of an anticipated value greater than \$250,000 be approved to Capital Project #419424, Ray Gibbon Drive Corridor Improvements (Phase 1 construction) to complete improvements to two intersections: Anthony Henday Drive at 184 Street, and Ray Gibbon Drive at old 137 Avenue."

BACKGROUND AND DISCUSSION

In 2018 the City completed a Transportation Network Improvement Strategy that performed a review of existing and forecasted conditions of the arterial road network and prioritized improvements that would best benefit mobility and reduce network delay. The top priority locations captured within the report and integrated into the 10-year Capital Plan for construction were Ray Gibbon Drive and the north segments of St. Albert Trail. Various activities were completed to develop project charters and advance work on these two segments of roadway which will be highlighted below.

1) Ray Gibbon Drive

As background on Ray Gibbon Drive, the roadway was first delivered in 2007 as a two (2) lane roadway that connects 184 Street and Anthony Henday Drive at the south City limit to Villeneuve Road at the north. The long-term plan for the corridor is that it will be a future provincial freeway (8 lanes), with interchanges and will eventually extend to connect to Hwy 2 directly. Ray Gibbon Drive's transition to a freeway will be responsive to triggers reflecting growth and development - increased traffic demands and lower levels of service requiring additional corridor capacity. The first action of change is the widening from the original two (2) lane cross section to a four (4) lane cross section.

From approximately 2014 to 2019, the existing two lanes approached and exceeded capacity (at the south end) and the corridor faced congestion and delay. The City lobbied support and collaboration for funding of improvements from the Province and performed various operational analyses and invested in design estimates to help validate and quantify its requests. These reports and estimates were ultimately used to inform on a Cost Share Agreement with the Province, as well as a Project Charter for funding - both of which were approved in 2019.

Improvements to Ray Gibbon Drive were planned for completion in a four (4) phased and multi-year delivery, with the cost share between the City and Province splitting the total project cost estimate of approximately \$54 million in a 50/50 share (\$27 million each). Improvements included widening the roadway to four lanes, installing new trail / sidewalks, intersection improvements, new bridge expansion, and incidentals such as utilities, street lighting and landscaping from the south city limit to Villeneuve Road (or future Fowler Way). The Agreement anticipated the City would front end the funding for the first two phases (from the south city limit to the intersection of McKenney Avenue). The Province is anticipated to contribute their portion of cost share to the second half of improvements (Phase 3 and 4) from McKenney Avenue to future Fowler Way.

The City advanced Phase 1 of the project, with design approved through a separate dedicated project fund. Upon confirmation of the Provincial cost share agreement, funding for construction of Phase 1 and design and construction of Phase 2 were approved through a separate project fund. Improvements of Phase 1 (south City limit to north of LeClair Way) were completed in 2020 and are in a warranty and maintenance period. In recognition of the influence of phasing the full corridor improvements and to improve on a holistic delivery, the City advanced detailed design for Phase 2 and Phase 3, and preliminary design for Phase 4. Completing design of the broader corridor enabled improved site investigations and capturing of design influence and impacts and has enabled direct collaboration with future developments and necessary roadway improvements such as Giroux Road for the future Cherot development. Construction for Phase 2 was started in 2021 and is in progress with planned completion at the end of 2022.

During the delivery of Phase 1 and Phase 2, there have been budget impacts from additional scope of work, largely significant by the following:

- Anthony Henday Drive at 184 Street and 184 Street at “old” 137 Avenue intersections: City of Edmonton and Alberta Transportation communicated operational and safety issues and a tri-party agreement performed review and improvements to address issues. Total cost of improvements was \$1,050,000, with the value approximately split between the City of Edmonton (contribution of \$500,000) and St. Albert (contribution \$550,000). Impact to Ray Gibbon Drive budget = \$550,000
- Advanced Design investment for Phase 3 and 4: It was anticipated only Phase 2 would be completed for design (as Phase 1 design was completed through a separate dedicated project number 419424 with an approved budget of \$780,000), however, there was improved efficiencies and quality of design through investigation and consideration of the broader corridor, as well as improved collaboration with forthcoming developers (Cherot) on necessary roadway improvements impacted by Ray Gibbon Drive. The work associated with Phase 3 and 4 design is a necessary investment for completion of Ray Gibbon Drive, however, was

invested in early during the completion of Phase 2 work and is valued at approximately \$580,000.

- Existing trail work at bridge: In the past, the City has attempted to address seasonal and environmental impacts of the river and trail underpass (south side) due to high water levels which ultimately caused the trail to be shut for substantial periods of time. As the Ray Gibbon Drive improvements advanced, the opportunity to attempt to address this issue was considered as work on the bridge was planned, with the intent to redesign and raise the trail structure. Impact to Ray Gibbon Drive budget = \$420,000.

The total of the above impacts to budget are approximately \$1,550,000; however, the current project forecasts an overage of approximately \$914,500; largely due to opportunities of savings in other project delivery areas (Phase 1 construction).

In recognition that Phase 2 work is still underway and higher risk construction activities inclusive of the bridge structure and intersection of McKenney Avenue remain for completion, Administration is requesting Council's additional consideration for a value of contingency to be approved, for a total approved value of funding of \$2.0 million. This value will address the additional costs identified above and remaining (contingency) which would not be applied to the project unless required. Approving the contingency value enables field and project decisions to be made in an expedited fashion to continue progress of the project.

Next steps involved with the Ray Gibbon Drive corridor will focus on completion of Phase 2 in 2022 (to the intersection of McKenney Avenue), finalize detailed design of Phase 3 (from McKenney Avenue to Giroux Road), finalize preliminary design of Phase 4 (Giroux Road to Fowler Way), and continued communication and confirmation of funding from the Province in accordance with the Cost Share Agreement that will enable construction of Phase 3 in 2025 and construction of Phase 4 in 2028.

2) North St Albert Trail

In 2018, St. Albert Trail existed from the north City limit to the intersection of Boudreau Road / Giroux Road as a four (4) lane divided arterial, with a rural (highway) cross section that did not accommodate for pedestrian movements through most areas and utilized overland drainage for storm management. This area was prioritized for improvement to increase capacity by adding additional travel lanes to make it a six (6) lane divided arterial (similar to the roadways cross section south of Boudreau Road), improve intersection and commercial accesses, and address network gaps of sidewalk and trail to improve mobility and accessibility to new development sites.

The project of improving St Albert Trail was first developed from conceptual context within the Transportation Network Improvement Strategy (2018), with high level cost estimates developed from general anticipated improvements required. These cost estimates identified a value of \$18,950,000 to widen the corridor, improve intersections and accommodate sidewalk / trail and incidental work (utilities, street lighting and landscaping) and were used to inform on the final approved project charter (ENGS-070); however, because of the conceptual nature of the estimate, a contingency of approximately +/-35% was identified and applied to the approved Borrowing Bylaw (9/2019) at a value of \$26,000,000.

Approved funding in 2019 was used to advance detailed design and anticipated a delivery of the corridor from just north of Boudreau Road to immediately north of Neil Ross Road / (future) Fowler Way in a three (3) phased multi-year project delivery from 2020 to 2024. Immediately into progressing the design work, it was identified that long-term consideration of the corridor alignment would influence, or be influenced by, potential of future advancement of Light Rail Transit - LRT (recognizing St Albert Trail as the approved LRT corridor). The roadway alignment had to be addressed to ensure any future placement of infrastructure would not result in redesign, removal or elimination of the investment of this immediate project. The result of the review recommended a realignment of the southbound lanes by maintaining the northbound lanes to accommodate the LRT on the west side of St Albert Trail. This alignment was approved, and design advanced under those conditions; however, the realignment of the roadway versus simply adding travel lanes influenced overall project scope. The project advanced through design of Phase 1 and into construction of this first phase in 2020 without immediate amendment to budget.

During the delivery of Phase 1 design and construction (north of Boudreau Road to north of Coal Mine Road), and detailed design of Phases 2 (north of Coal Mine Road to north of Jensen Lakes Boulevard / Everitt Drive North) and 3 (north of Jensen Lakes Boulevard / Everitt Drive North to north of Fowler Way / Neil Ross Road) there have been budget impacts by the project being informed through detailed design and project delivery requirements:

- Corridor Alignment: As noted above, the influence of realignment of the roadway is estimated to have impacted costs by approximately \$6,000,000. These upfront costs will ultimately reduce future capital costs in the event LRT is advanced and have protected the right of way of St Albert Trail.
- Storm Water Management and Utility Design Changes: The north St Albert Trail was anticipated to be transitioned from a rural surface drainage corridor to a stormwater management system that collects and drains through a minor storm system. With findings of very minor elevation differences, substantial areas of utilities required shallow placement and thus required necessary insulation to protect from seasonal impacts. The cost implications to the project resulted in approximately \$2,000,000 of additional cost consideration.
- Villeneuve Road: Although improvement to Villeneuve Road was included within estimates, the application of a roundabout design resulted from further analysis and level of service review of the two existing accesses to the commercial areas; where one most immediate access in proximity to St Albert Trail will be redesigned to a right in/ right out only and the resulting traffic shift required improved consideration at the west access which resulted in a roundabout design. Impact to budget is approximately \$1,000,000.
- Coal Mine Road Intersection: The Coal Mine Road intersection was adjusted to better service increasing northbound left turn movements by accommodating a dual left turn versus an initially planned single turn. Impact to budget is approximately \$200,000.
- Additional Engineering and Construction Management costs: The project plan was adjusted in recognition and response of timelines for completion of construction of Phase 1

and also design of further improvements of North St Albert Trail in alignment with new growth and development occurring which extended the north boundary beyond Neil Ross Road; with an impact to the budget of approximately \$500,000.

The overall cost implications for Phases 1 and 2 result to approximately \$9,700,000 and Administration is requesting necessary additional funds to complete Phase 2 construction which would see improvements completed up to (inclusive of) the intersection of St. Albert Trail at Jensen Lakes Boulevard / Everitt Drive North.

The \$5,500,000 of additional funding is being requested on top of the remaining budget for completion of project #419421 (North St Albert Trail Corridor Management Implementation), with the recommendation that it be funded through debt under the already approved Borrowing Bylaw (9/2019). The requested value is anticipated to address the current forecasted additional budget requirements of \$4,203,000; however, provides contingency in recognition that Phase 2 construction is currently in tendering and actual contract costs are unknown. The project is also anticipating a recovery \$500,000 from a cost share agreement with Landrex for performed improvements to Coal Mine Road. There is a 50/50 Cost Share Agreement between the City and Landrex for funding of the work that was front ended by the City; to which Landrex's portion will be payable back to the City when a development permit for the lands on the northeast corner of St Albert Trail and Coal Mine Road are applied.

The above funding, if approved, will allow for the completion of Phases 1 and 2, however, additional funding will be required to complete Phase 3 (from Jensen Lakes Boulevard to Neil Ross Road) and any consideration further north as development continues. The current project has completed detailed design work to a limit of St Albert Trail at Ernest Boulevard (just north of Neil Ross Road / (future) Fowler Way). These updated design costs are being used to propose a new / updated Project Charter for North St Albert Trail Improvements, that will allow for timed completion of Phase 3 (from Everitt Drive North / Jensen Lakes Boulevard to Neil Ross Road / (future) Fowler Way) in 2023 / 2024. The timing of advancing improvements in 2023 is to ensure safe and efficient accessibility and connectivity to the proposed Fire Hall 4 site, located on the northwest corner of St Albert Trail at Fowler Way; to which it is expected to be accessed and serviced from Fowler Way. Construction costs for Phase 3 are estimated to be \$13,000,000 with future planning being proposed to deliver further north corridor improvements. Such consideration of improvements further north are beneficial to be identified and delivered prior to high volumes and demands that are triggered with development, as occurred with Phase 1 and 2. Completing improvements in a timed and beneficial period that supports development but does not become a substantial disruption will be important considerations moving forward. Currently a new "Phase 4" is captured in the updated project charter and is projected for construction in 2030 at a cost estimate of \$14,600,000, which reflects 2022 construction dollars with a 30% contingency due to timeframe of anticipated delivery.

Next steps associated with North St Albert Trail Improvements will involve:

- Completion of construction of Phase 1, inclusive of Villeneuve Road improvements to the commercial areas and intersection improvements on St Albert Trail and accommodation of sidewalk, trails and associated landscaping. Planned completion in 2022.
- Subject to Council's approval of funds, completion of construction of Phase 2, from north of

Coal Mine Road to north of Everitt Drive North. Planned completion in 2022, however, pending confirmation of schedule and work plan from the contractor, some work may be performed in 2023.

- Administration will draft a new project charter associated with updated funds and schedule for delivery of further St Albert Trail corridor improvements, reflective of work from a south boundary of just north of the Everitt Drive North intersection to a location north of the Neil Ross Road intersection. This charter will be shared for Council's consideration during budget deliberations.
 - Note: It is anticipated that the next priority phase (Phase 3 from North of Everitt Drive North to Neil Ross Road) will be recommended for completion in 2023 / 2024.

Attached to this Agenda Report is a map highlighting the boundaries of Phase 1 and Phase 2 project limits on St Albert Trail.

STAKEHOLDER COMMUNICATIONS OR ENGAGEMENT

No formal engagement has occurred in direct relation to the specific recommendations of this report (requesting additional funding).

The two projects have had various stakeholder and public engagements:

1) Ray Gibbon Drive: Public engagement occurred with the regard to the original "West Bypass Road" alignment, as well as direct engagement with the Province and Alberta Transportation on the function and short to long-term plans for the corridor as well as the formal cost share agreement, staging of improvement, changes to Anthony Henday westbound off ramp and the old 137 Avenue intersection and project delivery of Phase 1 and 2 improvements. Specific stakeholder engagement has also occurred on this project with the BLESS organization.

2) St. Albert Trail: Public engagement occurred during conceptual corridor planning, and engagement with key stakeholders, both internal with city departments and external with UDI members occurred during detail design of improvements. Direct stakeholder engagement has also occurred to surrounding businesses and stakeholders during construction of St Albert Trail work.

IMPLICATIONS OF RECOMMENDATION(S)

Financial:

1) Ray Gibbon Drive:

Approval of the recommended motion will increase the total anticipated project costs to \$28.7 million. The current Borrowing By-law (BYLAW 18/2019) established to support the project is set at \$36.6 million and is adequate to cover the required increase in budget. All debt secured to support this project is approved to be serviced through taxes.

2) North St. Albert Trail

Approval of the recommended motion will increase the approved project costs to \$24.45 million. The current Borrowing By-law (BYLAW 9/2019) established to support the project is set at \$26 million and

will therefore cover the required increase in budget. All debt secured to support this project is approved to be serviced through the City Off-site Levy Recovery Fund Reserve and therefore there is no anticipated impact to taxes

Legal / Risk:

If the proposed recommendations are not approved, Administration would have to reduce scope of the projects Ray Gibbon Drive and North St Albert Trail that will result in both projects not completing their applicable "Phase 2" work plans. In terms of St Albert Trail, it is likely that Phase 2 work would not be able to advance under the current approved budget.

Program or Service:

Approving the additional funding will allow the projects, Ray Gibbon Drive Phase 2 and North St Albert Trail Phase 2 to advance for completion.

Should funding not be approved, scope adjustments would have to be considered and portions of work not completed. In the case of St. Albert Trail, it would be anticipated that Phase 2 work (from Coal Mine Road to north of Everitt Drive North) would not be completed.

Organizational:

As these projects are in process, appropriate staff resources are already applied and assigned to project delivery - no impacts are anticipated.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

If Council does not wish to support the recommendation, then Administration would review current budgets of the projects and investigate targeted scope to eliminate from the current work plans. This would result in the projects not being completed and actions being pushed to future project delivery and funding, as it is not anticipated that current scope can be reduced and deliver the same intent or needed improvements of the corridors.

Council could also direct Administration to postpone the North St Albert Trail Phase 2 project and cancel the tendering of construction and defer work for Phase 2 and 3. The implications of this are negative impacts to the levels of service and intersection operations as a result of continued growth and increased demand, and larger disruption in the event construction is postponed and the area is servicing a larger development area (ie: Jensen Lakes / Erin Ridge North).

Report Date: April 11, 2022
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JENSEN LAKES BOULEVARD

STALBERT TRAIL

EVERITT DRIVE NORTH



COAL MINE ROAD

VILLENEUVE ROAD

ERIN RIDGE ROAD

GIROUX ROAD

BOUDREAU ROAD

-  Phase 2; Approx. 359m, 2022 / 2023
-  Phase 1; Approx. 1km, 2021 - 2022