



THE CORPORATION OF THE
DISTRICT OF SUMMERLAND
REQUEST FOR DECISION

DATE: November 22, 2021
TO: Graham Statt, Chief Administrative Officer
FROM: Joe Mitchell, Director of Works & Infrastructure
SUBJECT: Giants Head Road Upgrades – Project Options

FILE: 5330-144

STAFF RECOMMENDATION:

That Council pass the following resolution:

THAT Council direct Staff to initiate the process of debt financing for Option 'A' as outlined in the November 22, 2021 Giants Head Road Upgrades – Project Options Report to Council from the Director of Works & Infrastructure.

STRATEGIC PRIORITY:

Infrastructure Investment – This project combines various infrastructure improvements into one full reconstruction project which is ultimately more cost effective in the long run. An optional item to only complete road upgrades is provided as a lower capital cost option, although there will be higher costs over time.

Active Lifestyle – Cycling Master Plan recommendations are included in the scope of this project to extend the active transportation network along Giants Head Road.

CULTURAL IMPACT STATEMENT:

Quality of Life – A well-founded cultural community is inclusive, accessible and affordable. This project will improve physical connections and flows around the community.

PURPOSE:

To select one of the proposed design options for the Giants Head Road Upgrades.

BACKGROUND and DISCUSSION:

Giants Head Road – Harris Road to Hillborn Street

The detailed design of Giants Head Road Upgrades from Harris Road to Hillborn Street has been completed to a 'tender ready' stage in order to confirm the overall cost of the project in the event that an applicable funding program becomes available or the District decides to proceed with a borrowing bylaw to secure funds for construction. The various components of the project are as follows:

- Roadway Reconstruction & Pathway / Shoulder Bike Lanes
 - The District's Transportation Master Plan identifies Giants Head Road as a collector roadway therefore the travel lanes have been widened to at least 3.7m.

- The District's Cycling Master Plan recommends the extension of the separated pathway from Harris Road to Gartrell Road and the construction of a secondary bike route (i.e. shoulder bikeways) from Gartrell Road to Hillborn Street.
- Drainage Improvements
 - The District's Master Drainage Plan identifies several improvements within the Giants Head Catchment Basin that will assist with the increased stormwater anticipated with climate change.
 - Improvements along Giants Head Road at White Street, near Fenner Street and at the intersection of Gartrell Road are included in this project.
- Watermain Replacement
 - Replacement of the existing asbestos cement and cast iron watermains along the corridor are required, as the majority of the domestic system was installed in the 1930s. New watermains will be installed, abandoning the existing watermain in place.
 - Upgrading of the existing 100mm diameter mains to at least 150mm diameter will be completed in order to increase capacity to the distribution system.
- Water System Separation
 - The Water Treatment Plant (WTP) has the hydraulic treatment capacity of 75ML per day; but demands during the summer months can push this as high as 85-90ML per day. In order to reduce the amount of water requiring treatment, separating the irrigation system from domestic water system wherever possible is recommended.
 - The District's Water Master Plan identifies that separating the Giants Head Road area will reduce the demand on the WTP by approximately 5ML per day.

The approximate quantities for these various components are summarized below:

- 2,600m of Giants Head Road reconstruction;
- 5,000m of separated domestic and irrigation water main installation;
- 100 water service disconnections and reconnections;
- 1,500m of 3.0m shared use path extension;
- 1,100m of 1.5m wide shoulder lanes construction; and,
- Drainage improvement installations at White Street, near Fenner Street and at the intersection of Gartrell Road

Giants Head Road – Upstream Water System Separation

There are five locations between the Water Treatment Plant and Giants Head Road that require additional work in order to fully separate the water systems supplying water to this project. This upstream work currently has budget for design only. The Giants Head Road project can proceed with construction, including system separation, however the infrastructure for system separation within Giants Head Road would utilize treated water until such time that the upstream works are completed. It is recommended that Council proceed with the upstream works within the scope of this project to maximize system separation benefits. While detailed design has not been completed, it is estimated that these costs will be in the range of \$2,000,000.

LEGISLATION and POLICY:

- Community Charter s. 179
- Community Charter s. 180

FINANCIAL IMPLICATIONS:

The total cost estimate of this project is \$7,700,000; \$5,700,000 for the full reconstruction of Giants Head Road from Harris Road to Hillborn Street and \$2,000,000 for the upstream water system separation works. Note that the detailed design of the upstream works may change the estimated cost.



Table 1 provides a cost breakdown for the full reconstruction of Giants Head Road from Harris Road to Hillborn Street. The table includes a separate cost for each major component of the project assuming that portion was to proceed independently of the other components. This includes an alternate option for the roadway improvements that assumes the existing asphalt is pulverized in place with new asphalt installed on top at the current road width. The table also includes an estimate for a reduced scope project to include construction from Harris Road to Gartrell Road only. The cost for the reduced scope to Gartrell Street only is \$3,423,000, plus \$2,000,000 for upstream works.

Table 1: Cost Breakdown for Giants Head Road from Harris Road to Hillborn Street

| Option | 1 | 2A | 3 | 4 | 2B |
|---|---------------------|----------------------|---------------------|----------------------------|---|
| | Full Project Cost | Road & Drainage Only | Watermains Only | Active Transportation Only | Alternate Road Option - Pulverize/Pave Existing Width |
| General | \$ 280,000 | \$ 130,000 | \$ 150,000 | \$ 70,000 | \$ 60,000 |
| Site Works | \$ 1,674,000 | \$ 1,240,000 | \$ 640,000 | \$ 430,000 | \$ 230,000 |
| Utilities (Water/Storm) | \$ 1,660,000 | \$ 200,000 | \$ 1,470,000 | \$ 0 | \$ 0 |
| Road Works | \$ 950,000 | \$ 570,000 | \$ 540,000 | \$ 390,000 | \$ 580,000 |
| Subtotal | \$ 4,564,000 | \$ 2,140,000 | \$ 2,800,000 | \$ 890,000 | \$ 870,000 |
| Engineering & Contingency (25%) | \$ 1,141,000 | \$ 535,000 | \$ 700,000 | \$222,500 | \$ 217,500 |
| Total | \$ 5,705,000 | \$ 2,675,000 | \$ 3,500,000 | \$ 1,112,500 | \$ 1,087,500 |
| Estimate for Harris to Gartrell Only | \$3,423,000 | \$1,605,000 | \$2,100,000 | \$667,500 | \$652,500 |

Note: Does not include land acquisition or power pole relocations.

Recommended Options:

Option A: Full Project including watermains, Active Transportation and Upstream Works from Harris Road to Hillborn Street: \$7.705M

Option B: Full Project including watermains, Active Transportation and Upstream Works from Harris Road to Gartrell Road: \$5.423M

This project is currently shown in the 2020-2024 Financial Plan but is contingent upon either receiving a grant or borrowing for the full project amount. In addition, capital reserves are insufficient to fund this project.

Funding Options:

1. Postponement of Approved Capital Projects.

Council could resolve to postpone or defer a significant portion of capital projects within the approved 5-year capital plan in order to free up enough reserve funds to fund this project. This approach is not recommended by staff as although it may fund the reconstruction of Giant’s Head Road, it will leave a significant gap over a two to three year period where there will be no funding to do any further capital projects.

2. Debt Financing.

The following tables provides Council with estimated debt repayment schedules as well as the estimated financial impact on property owners and rate payers.

| Option A: | | | |
|---|------------------|--|---|
| Debt Borrowing | 7,785,000 | | |
| Estimated Interest Rate | 2.5% | | |
| <i>20 Year Borrowing Scenario</i> | | | <i>25 Year Borrowing Scenario</i> |
| Annual debt payments - Water | 268,704 | | Annual debt payments - Water 227,842 |
| Annual debt payments - Roads | 238,427 | | Annual debt payments - Roads 202,170 |
| | 507,131 | | 430,012 |
| Water rate increase required | 6.49% | | Water rate increase required 5.50% |
| Property tax increase required | 2.55% | | Property tax increase required 2.16% |
| <i>Estimated Cost to Property Owners & Rate Payers</i> | | | <i>Estimated Cost to Property Owners & Rate Payers</i> |
| Entire portion as a parcel tax | 88.74 | | Entire portion as a parcel tax 75.24 |
| Roads portion as a parcel tax and water portion as a rate increase | 95.49 | | Roads portion as a parcel tax and water portion as a rate increase 80.95 |
| Roads portion as a property tax increase and water portion as a rate increase | 91.63 | | Roads portion as a property tax increase and water portion as a rate increase 77.15 |

| | | | | |
|---|------------------|--|---|--------------|
| Option B: | | | | |
| Debt Borrowing | 5,480,000 | | | |
| Estimated Interest Rate | 2.5% | | | |
| <i>20 Year Borrowing Scenario</i> | | | <i>25 Year Borrowing Scenario</i> | |
| Annual debt payments - Water | 213,608 | | Annual debt payments - Water | 181,125 |
| Annual debt payments - Roads | 143,371 | | Annual debt payments - Roads | 121,568 |
| | 356,979 | | | 302,693 |
| Water rate increase required | 5.16% | | Water rate increase required | 4.37% |
| Property tax increase required | 1.54% | | Property tax increase required | 1.30% |
| <i>Estimated Cost to Property Owners & Rate Payers</i> | | | <i>Estimated Cost to Property Owners & Rate Payers</i> | |
| Entire portion as a parcel tax | 62.46 | | Entire portion as a parcel tax | 52.96 |
| Roads portion as a parcel tax and water portion as a rate increase | 67.84 | | Roads portion as a parcel tax and water portion as a rate increase | 57.48 |
| Roads portion as a property tax increase and water portion as a rate increase | 64.35 | | Roads portion as a property tax increase and water portion as a rate increase | 53.94 |

If Council chooses to move forward with debt financing, the District will be required to follow the provisions of the *Community Charter* to ensure the process is legal and provides residents with an opportunity to provide their input. The borrowing process is extremely prescribed and detailed and can take up to three to six months to complete in its entirety. A summarized process is as follows:

- Description of work, amount to be borrowed, term of borrowing and how debt payments are to be collected from residents are incorporated into a loan authorization bylaw and read three times.
- Loan authorization and back up documents are sent to the Minister's office for approval and signoff of on the bylaw.
- Once approved by the Minister, voter assent is required and can be obtained through either a referendum or an alternate approval process.
- Upon voter assent, Council can approve the bylaw; however, a 30-day quashing period exists in case there is a bylaw challenge.
- After the quashing period, the Corporate Officer signs off and a certificate of approval is received.
- Council then needs to approve a municipal security issuing resolution, which is forwarded to the Regional District (along with all other documents), who are required to adopt their own security issuing bylaw.
- The Regional District has a 10-day quashing period, after which a certificate of approval is issued.
- All documents are sent to the Municipal Finance Authority who will issue the funds as part of their spring or fall borrowing.

SUPPORTING DOCUMENTS:

N/A

CONCLUSION:

The purpose of this report is to provide an update on the reconstruction details planned for Giants Head Road. Should Council want this project to proceed in 2022, direction will need to be provided regarding financing options.

OPTIONS:

1. Move the motion as recommended by staff.
2. Refer to staff for other options.

Respectfully submitted,



Joe Mitchell P.Eng.
Director of Works & Infrastructure

Approved for agenda,



Graham Statt
Chief Administrative Officer

Presentation: Yes No