Date: Wednesday, December 4, 2024

From: Kevin Verkindt, Manager of Engineering and Infrastructure

Subject: Award of Single Source Contract for Engineering Services for the Reconstruction of Old Beach Drive

Report DEV2024-066

This document and its attachments are public and available in an accessible format upon request.

Recommendation

THAT Council receive Staff Report DEV2024-066, titled “Award of Single Source Contract for Engineering Services for the Reconstruction of Old Beach Drive.”

AND That Council waive Section 4.1 Limits of By-Law 2019-047 Purchasing Policy to authorize a single-source contract;

AND THAT a single-source contract with the engineering firm GEI Consultants in the amount not to be exceeded of $1,320,000.00 (excluding HST) be awarded;

AND THAT the Mayor and Clerk be authorized to execute a contract for services.

Background

In 2021, Old Beach Drive was significantly impacted by a large rain and wind event combined with high water levels, which caused Georgian Bay to overflow its banks and flood the front yards along Old Beach Drive. This also led to the shifting of culverts, resulting in damage to the road base. The road, and these infrastructure items need to be replaced. In addition to these infrastructure issues, residents have expressed concerns about speeding and conflicts between vehicles and pedestrian uses of the road.

Old Beach Drive is approximately 1.3 km long and is one of several roads the Township manages that runs immediately adjacent to the shoreline road allowance. The road has limited private property to the east side (water side) and serves approximately 40 residential properties (Attachment 2).

The road is also identified as part of the Great Lakes Waterfront Trail and is an attractive alternative route, especially for cyclists and walkers, seeking to explore the coastline without having to follow Grey Road 1. It is highlighted as a cycling route within the Grey County Cycling and Trails Masterplan.

Old Beach Drive is an older road and is in an advanced state of decline and has been recommended for a full replacement for some time. Over past years, high water events in Georgian Bay have significantly exacerbated this by lifting several cross culverts under the road, causing surface discontinuities in the surface.

At the intersection of Grey Road 1 and Old Beach Drive is the Balmy Beach Convenience Store. The existing road layout is not conducive to pedestrian use and limits access to the store by non-motorized uses (walking and cycling). It would be advantageous to consider non-motorized (active transportation) improvements to access the convenience store from Old Beach Drive. The road geometrics on Old Beach Drive in the vicinity of the convenience store is complex with steep gradients and may require a retaining wall to allow an accessible activated path and intersection improvements.

Staff have received complaints regarding vehicle conflicts in respect to access to private driveways, the convenience store parking area and Old Beach Drive. A variety of potential solutions could be considered through this work, including consideration for one-way traffic on Old Beach Drive.

Washington Avenue is approximately 145 m long and is an older road in an advanced state of decline and has been recommended for a full replacement. Washington Avenue is also not serviced by municipal water and no fire suppression is available to the residents.

To address these challenges, GEI Consultants were engaged in 2021 to review the reconstruction plans and develop a conceptual design for potential improvements to the road and surrounding area (Attachment 1).

East Linton Servicing

On May 31st, 2013, Staff prepared a report for the Environmental Committee (Attachment 3) in regard to extending the East Linton Water Distribution System. In May and November of 2013 residents on Old Beach Drive, called the Township to discuss the possibility of extending municipal services south along County Road 1 and on Old Beach Drive. As a result of the resident's inquiry, a survey was taken for the watermain extension.

The survey was sent to residents in September of 2014 (Attachment 4). The results indicate there were 9 residents or 60% interest within the fifteen southernmost properties along Old Beach Drive and Grey Road 1. The remaining northerly section of 34 properties indicated interest at 54%. Five percent of the survey did not respond. If the 2 (two) non responders were assumed to be "Yes" the result is 59% (Attachment 5).

Survey summary:

- 49 properties were identified within the survey boundary.
- 23 responded with a YES.
- 22 responded NO.
- 3 did not respond at all.
- 1 was YES/NO (requested more financial info).

There is an opportunity through this work to implement aspects of the East Linton Servicing Master Plan and the survey results to enhance the system in this area alongside this work.

As part of the East Linton Master Servicing plan, it is proposed to enhance the system by adding a new main along Old Beach to increase the number of loops in the system providing system wide benefits. This would also enable residents on Old Beach to upgrade water services to municipal water. Adding a main during road reconstruction is a cost efficient and effective way to improve this service and start addressing infrastructure upgrades required in the East Linton system.

If a new watermain is the preferred alternative by the residents, the Township could consider cost recovery mechanisms to recover all or part of the cost of the Project through local improvement charges on properties that benefit from the work. Therefore, a comprehensive understanding of O. Reg 586/06: *Local Improvement Charges – Priority Lien Status* is required.

East Linton Drainage

About 1991, Gamsby and Mannerow Limited prepared a Stormwater Management Study (SMS 1991) for the former Township of Sarawak in support of an Official Plan process. The SMS 1991 mapped 34 catchment areas across the Township, modeled peak runoff flows at each outlet, and reviewed existing culvert outlet sizes, with consideration to growth potential envisioned at that time. In 2016, the Township of Georgian Bluffs retained WSP to prepare an update to the SMS 1991 with specific review of Catchments A17 through A27, and with consideration to more recent growth potential opportunities.

Old Beach Drive is part of the Balmy Beach Drainage catchment area A17 and part of A18, as identified by the East Linton Stormwater Management Plan. Catchment A17 consists of the southernmost portion of the East Linton catchment area and includes areas spanning from Maple Ridge Crescent and the Indian Acres Subdivision. Catchment A18 is a small catchment located close to the shoreline.

Through updated work completed by GEI and presented to Council in October, the need to consider stormwater on Old Beach Drive and water movement from upstream areas to the bay was highlighted with the importance of public input and consideration for road cross sections needed.

Old Beach Drive is a rural cross section and relies on natural drainage away from the road. Up-gradient lands have denaturalized and hardscaped their lands leading to increasing amounts of surface drainage. Through redevelopment of many properties along Old Beach Drive, total roofed areas have increased as buildings have become larger, driveways and landscaping has become less permeable as properties upgrade from gravel to asphalt and concrete solutions.

Along much of this area, there is little or no designed stormwater infrastructure and in some locations, the road itself can be a barrier to water movement to the bay. Where they exist, culverts may be old, blocked or damaged, further disrupting flown.

Analysis

Staff engaged GEI Consultants in November 2024 for a Single Source Request for Quotation for engineering services for the reconstruction of Old Beach Drive and Washington Avenue, including the installation of new stormwater infrastructure, full depth road reconstruction, active transportation trail, and to pursue public interest for the installation of a new municipal supplied watermain complete with water services.

In addition, Staff have engaged GEI to complete the East Linton Stormwater Study Report to review catchment areas in the East Linton area, and to provide recommendations to address on-going drainage issues and concerns through to Georgian Bay. Generally, the recommendations of the East Linton Stormwater Study Report are to replace undersized culverts to accommodate the 100-year design storm event, upgrade existing outlets to Georgian Bay and to reestablish the roadside ditch network, or a more urban-style drainage system, consisting of curb and gutter and storm sewers.

Staff approached GEI for a Single Source Request on the basis of the previous work that GEI had been engaged in in the area including elements of background work and design, as per Attachment 1. If an alternative firm was engaged, this work would require to be re-completed by a new firm. By seeking to sole source this work, this repeat cost would be avoided.

The scope of work includes engineering services as they relate to the reconstruction of Washington Avenue, including the installation of new stormwater infrastructure, full depth road reconstruction, active transportation trail, and to pursue public interest for the installation of a new municipal supplied watermain complete with water services.

In summary, key considerations of the engineering services include the following:

- Engineering services as it relates to the full depth reconstruction of Old Beach Drive from Grey Road 1 to Balmy Beach Drive +/- 1335 m including, new stormwater collection and pipe, new outlet(s) to Georgian Bay complete with headwalls, new watermain complete with water services and fire protection, if applicable, active transportation trail, retaining wall, new road base complete with new hot mix asphalt

- Engineering services as it relates to full depth reconstruction of Washington Avenue from Old Beach Drive to Balmy Beach Drive. +/- 145 m including, new stormwater collection and pipe, new watermain complete with water services and fire protection, if applicable, new road base complete with new hot mix asphalt.

Staff engaged GEI for a value engineering cost estimate for engineering services, including, preliminary and final detail design, tendering administration, contract administration and inspection and warranty services.

GEI submitted a cost estimate of $1,200,000.00 (excluding Contingency and HST).

Table 1 - Breakdown of the Project Costs:

Item	Engineering Services for Old Beach Drive Reconstruction ($)
Cost Estimate	1,200,000
Contingency	120,000
Non-Refundable Portion of HST (Tender Value)	23,232
Total Project Cost	1,343,232

The breakdown for the project is as follows (excluding HST):

Contingency (if required and will only be commenced upon the discretion of the Township) - $120,000.

Stage 1 – EA Phase Services (fees that are necessary to engage Council and the public and to complete necessary background studies, including a topographic survey) - $143,886.

Stage 2 - Design Phase (fees that are necessary to progress detailed designs and tendering administration) - $314,160.

Stage 3 - Construction Phase (fees that are necessary for project management, quality control and assurances, construction inspection and administration) - $451,589.

Provisional Studies (If required and will only be commenced upon the discretion of the Township once a preferred alternative is identified) - $290,000.

Financial Impact

The 2021/2022 work completed by GEI Consultants (formerly GM BluePlan) totaled $33,780.15 and was funded from annual drainage operating budget.

As part of the Budget 2024 process staff provided a Budget Request for Old Beach Drive Reconstruction that was supported by Council. This included an initial estimate of $2.64M - $6.24M depending on the agreed scope of works.

GEI costs of $1,200,000 are reflective of engineering services for full depth reconstruction of Old Beach Drive (including water), there is the potential for this cost to be lowered depending on the outcome of public consultation.

Assuming no water was being completed and Old Beach Drive was reconstructed to include new stormwater infrastructure and active transportation, the 2025 budget includes $2,640,000 (2025 - $100,000 estimated for engineering services and 2026 - $2,540,000 estimated for construction and warranty) to be funded from the Roads Reserve.

Stage 1 and Stage 2 work would total $458,046 which is an additional $358,046 over the original budgeted amount, staff recommend reallocating this portion of the 2026 allocated costs to be reflective of 2025 work. Following public engagement, a variety of options will be presented to Council for their review and direction on the scope of work to be completed with corresponding financial options of each potential construction option.

Assuming water was being completed and Old Beach Drive and Washington Avenue was reconstructed to include new stormwater infrastructure and active transportation, the cost estimates would be $6,200,000 (2025 – $578,046 estimated for engineering services and 2026 - $5,621,954 estimated for construction, construction inspection and administration and warranty)

Strategic Priorities

Improve Communication, Collaboration and Transparency

Deliver Effective and Cost-Efficient Services

Conclusion

Staff recommends that GEI Consultants be awarded a single-source contract for engineering services for the reconstruction of Old Beach Drive and Washington Avenue, in the amount not to be exceed of $1,320,000.00 (excluding HST).

Respectfully Submitted:

Kevin Verkindt, Manager of Engineering and Infrastructure

Report Approval Details

Document Title:	Award of Single Source Contract for Engineering Services for the Reconstruction of Old Beach Drive.docx
Attachments:	- Attachment 1 - Concept Drawings.pdf - Attachment 2- Engineering Services for Old Beach Drive Reconstruction.pdf - Attachment 3 - Watermain Survey Staff Report.pdf - Attachment 5 - Watermain Survey Results.pdf - Attachment 4 - Watermain Survey.pdf
Final Approval Date:	Nov 22, 2024

This report and all of its attachments were approved and signed as outlined below:

Michael Benner, Director of Development and Infrastructure

Niall Lobley, Chief Administrative Officer