

Region of Waterloo

Engineering and Environmental Services

Design and Construction

To: Planning and Works Committee

Meeting Date: August 15, 2023

Report Title: C2023-01 - Waterloo Landfill Waste Transfer Station Renewal, Waterloo, Ontario, Consulting Award for Detailed Design and Construction Services

1. Recommendation

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with HDR Corporation for the Waterloo Landfill Waste Transfer Station Renewal, Waterloo, Ontario, in the amount of \$11,958,177.00 plus all applicable taxes, as outlined in report EES-DCS-23-006, dated August 15, 2023.

2. Purpose / Issue:

Purchasing by-law 22-034 Section 2 item 2c requires Council approval for Proposals in excess of \$10,000,000.

3. Strategic Plan:

The renewal of the Waterloo Landfill Waste Transfer Station will support the 2019-2023 Corporate Strategic Plan, Focus Area 3 - Environment and Climate Action to direct more waste away from the landfill, improve recycling and better manage organic waste; protect our water resources; reduce greenhouse gas emissions; and improve resilience to climate change and/or severe weather, through providing a better customer experience when visiting the public drop off by reducing line ups on Erb Street West and wait times by improving vehicle movement through the site. This project will also support Strategic Focus Area 5 - Responsive and Engaging Public Service.

4. Report Highlights:

The Waterloo Landfill Waste Transfer Station Renewal project is a re-design of the entire Waterloo site to support more customers and manage traffic flow due to growth and development in the area. This project is complex, with four phases including three construction assignments and will take many years to complete, concluding in 2030. The Region requires a consulting engineering firm to complete the detailed design and construction services for this project.

The renewal of the Waterloo transfer station is required to accommodate current and

future growth, and replace aging infrastructure. Due to population growth, the existing Waterloo transfer station currently does not have enough capacity for efficient use during peak times, and by 2028 will severely interfere with traffic along Erb Street West.

As part of asset management planning, the project includes replacing the infrastructure which is nearing end of life, which will ensure that waste services provided at the Waterloo transfer station will continue to meet visitor expectations.

Four (4) proposals were received and evaluated using pre-determined technical criteria. Following the qualitative evaluation, two (2) proposals were shortlisted and the price submissions were opened. HDR Corporation received the highest overall score.

List of Shortlisted Proposals:

Associated Engineering	Markham, ON
HDR Corporation	Richmond Hill, ON

The upset fee limit proposed by HDR to complete the detailed design and construction services is \$11,958,177.00 plus all applicable taxes. The fee provided is within the expected range of fees for this type of multi-year assignment.

5. Background:

In 2018, the Region initiated an operational review, master plan and preliminary design for the Waterloo Waste Transfer Station Renewal. This involved a thorough review of the aging infrastructure, configuration, layout and operational practices within the front portion of the site considering current and future service levels, and a conceptual design for upgrades. The study was completed in 2022 and focused on addressing vehicle processing capacity, space restrictions, temporary infrastructure and safety concerns. This work was programmed into the 10 Year Capital Plan.

This project includes:

- 1) A unified scale system (inbound and outbound) for all customers serviced from the Gate 3 access to allow for operational efficiencies as well as improved customer wayfinding which will improve traffic flow;
- 2) A two-level Waste Transfer Station building that services waste, recyclables and source separated organics which will improve odour and pest control, increase operational efficiencies, maintain separation between public and operational/commercial vehicles and allow flexibility for restricting tip face operational hours;

- 3) Various Diversion Bunkers and Diversion Areas that service various diversion items and programs and brush, leaf and yard waste. This will allow for expansion and flexibility of diversion services;
- 4) A Household Hazardous Waste Facility; and
- 5) All sanitary and water services, stormwater facility, road network, power and communication infrastructure to meet the increased service level for current and future growth.

In support of the Region's long term community climate action strategy (TransformWR), this assignment includes investigating opportunities to incorporate climate action strategies (solar panels, fleet electrical charging stations, etc.) into both design and construction. The work under this assignment is an opportunity to assist the Region in obtaining target greenhouse gas emissions (GHG) reduction by 2030.

6. Communication and Engagement with Area Municipalities and the Public

Area Municipalities: The area municipalities were not consulted on the award for the detailed design and construction services for the project but will be engaged throughout the project implementation.

Public: The Region has established a Landfill Liaison Committee for the Waterloo Landfill Site. The committee includes members of the public, consultants and regulatory bodies. The committee meets four times per year to identify operational problems that affect local residents such as litter, odour and noise and to resolve those issues in a cooperative manner. The committee has been informed of the results of the Renewal Plan, and will be kept informed as detailed design and construction proceed.

7. Financial Implications:

The approved 2023-2032 Waste Management Capital Program includes a budget of \$700,000 in 2023 and \$59,975,000 in 2024-2032 for the Waterloo Transfer Station Upgrade (project #01192) to be funded from property tax supported debentures (87.0%, \$52,815,000), development charge supported debentures (10.5%, \$6,395,000), the Waste Management Reserve (2.2%, \$1,307,000) and the Waste Management RDC Reserve Fund (0.3%, \$158,000). There is sufficient budget to cover this agreement.

Planned investment as set out in the 2023-2032 capital program:

\$Million	2023	2024	2025	2026	2027	2028	2029	2030-2032	10 Year Total
Budget	0.7	1.6	1.0	10.0	16.9	23.7	6.0	0.8	\$60.7

8. Conclusion / Next Steps:

Subject to Regional Council's approval of this consultant assignment, the proposed schedule for this project is as follows:

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| • Project initiation | September 2023 |
| • Detailed design and approvals applications | Fall 2024 |
| • Tender ready Contract 1 | Fall 2025 |
| • Contract 1 construction | 2026 |
| • Tender ready Contract 2 | Fall 2026 |
| • Contract 2 construction | 2027-2028 |
| • Tender ready Contract 3 | Fall 2027 |
| • Contract 3 construction | 2028-2029 |

Contract 1 involves construction of the new Gate 3 main scales area. Contract 2 involves construction of the new transfer station and household hazardous waste area, and Contract 3 involves construction of the diversion area. The Region will continue to offer waste transfer services to the public at the Waterloo location for the entire duration of the three construction contracts.

9. Attachments:

None.

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