

# CAPITAL PROFILE REPORT

PROFILE NAME:	<b>WASTE SERVICES FACILITIES &amp; INFRASTRUCTURE PROJECT DELIVERY</b>	<b>FUNDED</b>
PROFILE NUMBER:	<b>CM-81-2047</b>	<b>PROFILE STAGE: Approved</b>
DEPARTMENT:	<b>Utilities</b>	<b>PROFILE TYPE: Composite</b>
LEAD BRANCH:	<b>Waste Management Services</b>	LEAD MANAGER: <b>Michael Labrecque</b>
PROGRAM NAME:		PARTNER MANAGER:
PARTNER:		ESTIMATED START: <b>January, 2019</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2022</b>

<b>Service Category:</b>	<b>Utilities</b>	<b>Major Initiative:</b>
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<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>16,365</b>
<b>50</b>	<b>50</b>	<b>BUDGET REQUEST:</b>	<b>-</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>16,365</b>

## PROFILE DESCRIPTION

Waste Services assets include a number of facilities such as Eco Stations, employee workspaces, equipment facilities, administration buildings, waste processing facilities, and research and development facilities. These facilities contain heating, ventilation, air conditioning equipment, fire protection systems, plumbing, electrical distribution, and other building systems. In addition to these facilities, Waste Services owns and operates a series of specialized assets required to meet the branch mandate of efficient and environmentally sound waste management operations, such as those found at the Edmonton Waste Management Centre and Kennedale sites., Waste Services is responsible for a variety of infrastructure including roads, buildings, material processing equipment, buried utilities and mobile equipment.

In order to deliver sustainable waste management services, maintain optimal service levels, and have an asset management program in place as recommended by the Office of the City Auditor, capital funds are required to carry out capital maintenance, renewal, and upgrade of Waste Services assets. This will result in safer and more reliable facilities and infrastructure while maintaining high levels of customer service. Without this funding in place, facilities and infrastructure will be at increased risk of failure as the waste collection and processing systems age. Emergency situations caused by unforeseen facilities and infrastructure failures will result in expensive unplanned repairs and interruption to operations.

This profile requires funding for the capital maintenance, renewal, and upgrade of these assets due to new or increased waste streams, safety concerns, and design improvements that increase efficiency of Waste Services' operations. As the assets age, their performance declines, thus replacing, rehabilitating and upgrading them is necessary to continue managing waste effectively and efficiently. In addition, carrying out operational improvements will further enhance operational efficiencies within the facilities and infrastructure

In order to ensure adequate levels of funding are available for the capital maintenance, renewal, and upgrade of these assets, Waste Services is adopting a new budgeting approach. For the 2019 - 2022 capital budget cycle, Waste Services will allocate capital budget to these activities as a targeted percentage of the asset replacement value, on an annual basis

## PROJECT LIST

The following table shows example projects anticipated to be undertaken for this budget cycle:

- Project: GORE Rebuild and Improvement  
 Scope: Engineering assessment and report. As-built drawings. Refinished Gore pad with pony walls.
- Project:Transformer Drainage Improvement  
 Scope: Engineering assessment of drainage post-ADF
- Project: Paving and Site Improvement  
 Scope: Operational efficiency
- Project: EWMC Site Fire Protection  
 Scope: address issues identified by consultant in their review of Waste Services operations with respect to fire risks

## PROFILE BACKGROUND

Waste Services (WS) has an extensive infrastructure inventory which include facilities such as Eco Stations, admin buildings, facilities for waste processing, equipment; and research & development. These facilities are equipped with mechanical, electrical, fire protection & other systems. Infrastructure includes the EWMC and Kennedale site utilities, roadways, drainage, communications, hardware, software & specialized systems.

This profile requests funding of approximately \$20.5 million for the maintenance, renewal, and upgrade of these assets due to new or increased waste streams, safety concerns, and design improvements that increase efficiency of Waste Services' operations.

## PROFILE JUSTIFICATION

This initiative will provide funding for maintenance, renewal, upgrades, and efficiency improvements for Waste Services facilities and infrastructure. The main factors are the age of the infrastructure and facilities, existing safety issues, increasing demand and needed improvements to increase operational efficiency and effectiveness.

### Urgency of Need

The need to effectively manage Waste Services' assets is of high priority to achieve its commitment of providing sustainable waste management services. This is also to address the issues raised in the auditor's report calling for Waste Services to manage its assets, including a sound maintenance program, in a more effective way. To carry out its commitment, assets must be managed for their entire life cycle including the provision of funds to acquire, maintain, operate, rehabilitate and replace them. The proper management of assets is fundamental to Waste Services operations, and will help to ensure continued delivery of uninterrupted services, and the optimal level of capital investment required to sustain reliable assets. Spending on this profile will be spread out over the four-year period based on priority, cost savings, safety factors, legislation compliance and other branch requirements.

### Anticipated Outcomes

Better information to make capital investment decisions: Through a structured and integrated process, administration will ensure that projects identified as priorities by Waste Services receive robust evaluation of alternatives and scope identification.

Improved project schedule and budget estimates: Following industry best practices, a control budget and schedule is established on the basis of a completed design to ensure realistic expectations are aligned with Asset Management Plan prior to tendering and construction.

Reliable facilities and infrastructure that enable sustainable waste management in a cost effective manner.

High levels of customer service delivered in both an efficient and effective way through leading-edge waste processing facilities that use current and emergent technology to enable high rates of diversion of waste from landfill.

### Scope

The scope of this profile encompasses capital maintenance, renewal, and upgrade work for Waste Services facilities and infrastructure. This is including but not limited to site improvements, new process equipment, changes in existing facilities and infrastructure, upgrades to building systems, and upgrades to the current transaction data collection systems..

### Out of Scope

Renewal projects exceeding \$5 million are out of scope for this capital funding request. For any renewal project with a total budget that meets this threshold, a separate capital funding request will be prepared.

Operational maintenance activities.

Vehicles and equipment. These are included in the Waste Services Vehicles and Equipment Business Case (Profile Number CM-81-2048 Composite).

Projects to be managed by Integrated Infrastructure Services. These are included in the Waste Services Planning and Design-Composite (Profile Number CM-81-0005) and Waste Services Project Delivery (IIS Managed) Composite (Profile Number CM-81-2045).

### Critical Success Factors

Adherence to asset management framework and plan

Proper design and programming of space to meet the needs

Timely execution of projects

Regular check-ins with the Waste Services Leadership team to ensure alignment with the strategic direction and branch goals

Accurate and sufficient data and cost analyses to support high level budget estimate and informed decision makings for the projects

## STRATEGIC ALIGNMENT

Waste Services aligns with the following strategic goals of City of Edmonton:

Healthy City/Urban Places/Regional Prosperity/Climate Resilience

City of Edmonton's Waste Management Policy C527 and Waste Management Utility Fiscal Policy C558A as well as the Capital Project Governance Policy C591. This profile also aligns with Waste Services integrated 25-year strategic outlook that will help to ensure Edmontonians receive maximum economic and environmental benefits while minimizing the cost increases of managing solid waste..

## ALTERNATIVES CONSIDERED

This is a capital funding request and does not present any alternatives for consideration.

## COST BENEFITS

### Tangible:

Improved operational efficiency

Reduction in safety-related incidents

Long term savings due to reduction in repair costs

Improved productivity due to better access to facilities and equipment, and increased availability due to reduced down time.

### Intangible

Increased employee morale due to better working conditions

Safer working environment for staff and customers

Increased or maintained customer satisfaction.

## KEY RISKS & MITIGATING STRATEGY

Risks : Higher project costs due to imposition of higher US tariff

Mitigation Strategy : lock in prices prior to effectivity of new imposition; source required parts and equipment outside US

Risks : Procurement delay for specialized equipment

Mitigation : start early looking for vendors to supply the specialized equipment

Risks : Health issues if numerous small value projects are not implemented on time

Mitigation Strategy : Prioritize projects and ensure timely implementation

Risks : Changes in processing equipment brought about by future waste initiatives to increase diversion rate

Mitigation Strategy : Develop asset management strategic plan incorporating required process equipment to address future waste initiatives

## RESOURCES

The projects will be led internally by Waste Services project managers. Once designs and equipment specifications have been finalized, these will be issued for public tender, and the authorized project managers will manage and administer the contractors during the construction/installation phase.

## CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This profile will provide capital funding for maintenance, renewal, upgrade, and improvement projects for the Waste Services valued at less than \$5 million. This funding will ensure assets provide overall improvement in operating efficiency, effectiveness, and safe working conditions.

Recommendations

It is recommended that this profile be approved to assist Waste Services to meet its commitment of delivering sustainable waste management services. This would ensure capital maintenance, renewal, and upgrade of the assets due to new or increased waste streams, safety concerns, and design improvements that increase efficiency of Waste Services' operations.

# CAPITAL PROFILE REPORT

PROFILE NAME: **Waste Services Facilities & Infrastructure Project Delivery**

**FUNDED**

PROFILE NUMBER: **CM-81-2047**

PROFILE TYPE: **Composite**

BRANCH: **Waste Management Services**

## CAPITAL BUDGET AND FUNDING SOURCES (000's)

		Prior	2020	2021	2022	2023	2024	2025	2026	2027	2028	Beyond	Total
		Years										2028	
APPROVED BUDGET	Approved Budget												
	Original Budget Approved	5,603	4,201	4,352	4,290	-	-	-	-	-	-	-	18,446
	2019 Cap Administrative	-628	-158	-94	90	-	-	-	-	-	-	-	-790
	2019 Cap Carry Forward	-2,301	2,301	-	-	-	-	-	-	-	-	-	-
	2020 Cap Council	-	-	-	-1,292	-	-	-	-	-	-	-	-1,292
	Current Approved Budget	2,673	6,345	4,258	3,088	-	-	-	-	-	-	-	16,365
	Approved Funding Sources												
	Self-Liquidating Debentures	2,673	6,019	4,172	2,998	-	-	-	-	-	-	-	15,863
	Waste Mgt Retained Earnings	-	326	86	90	-	-	-	-	-	-	-	502
	Current Approved Funding Sources	2,673	6,345	4,258	3,088	-	-	-	-	-	-	-	16,365

BUDGET REQUEST													
Budget Request	-	-	-	-	-	-	-	-	-	-	-	-	-

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	2,673	6,345	4,258	3,088	-	-	-	-	-	-	-	16,365
	Requested Funding Source												
	Self-Liquidating Debentures	2,673	6,019	4,172	2,998	-	-	-	-	-	-	-	15,863
	Waste Mgt Retained Earnings	-	326	86	90	-	-	-	-	-	-	-	502
Requested Funding Source	2,673	6,345	4,258	3,088	-	-	-	-	-	-	-	16,365	

## CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior	2020	2021	2022	2023	2024	2025	2026	2027	2028	Beyond	Total
		Years										2028	
	Construction	2,673	6,019	4,172	2,998	-	-	-	-	-	-	-	15,863
	Design	-	326	86	90	-	-	-	-	-	-	-	502
	Total	2,673	6,345	4,258	3,088	-	-	-	-	-	-	-	16,365

## OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-