The Corporation of the City of Sault Ste. Marie

Regular Meeting of City Council ;

Revised Agenda

Monday, September 9, 2024

5:00 pm

Council Chambers and Video Conference

Meetings may be viewed live on the City's YouTube channel
https://www.youtube.com/user/SaultSteMarieOntario

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Pages

1. **Land Acknowledgement**

I acknowledge, with respect, that we are in Robinson-Huron Treaty territory, that the land on which we are gathered is the traditional territory of the Anishinaabe and known as Bawating. Bawating is the home of Garden River First Nation, Batchewana First Nation, the Historic Sault Ste. Marie Metis Council.

2. **Adoption of Minutes** 14 - 29

Mover Councillor M. Scott

Seconder Councillor L. Vezeau-Allen
Resolved that the Minutes of the Regular Council Meeting of August 12, 2024 be approved.

3. **Questions and Information Arising Out of the Minutes and not Otherwise on the Agenda**

4. **Declaration of Pecuniary Interest**

*4.1* ***Councillor L. Vezeau-Allen – Property Declared Surplus – 149 Gore Street***

Board President and Founder of Grocer 4 Good

*4.2* ***Councillor L. Dufour – Reconstruction of Peoples Road and East Street – Engineering Services***

Owns property in the proposed area of work.

*4.3* *Councillor L. Dufour – Property Declared Surplus and Sale to DSSMSSAB – 60 London Street*

Employed by the District of Sault Ste. Marie Social Services Administration Board.

## 5. Approve Agenda as Presented

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that the Agenda for September 9, 2024 City Council Meeting as presented be approved.

## 6. Presentations

## 7. Communications and Routine Reports of City Departments, Boards and Committees – Consent Agenda

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that all the items listed under date September 9, 2024 – Agenda item 7 – Consent Agenda be approved as recommended.

### 7.1 Mayoral Decision – 2025 Budget 30 - 30

### 7.2 Vote Counting Equipment and Alternative Voting Methods – Municipal Election 2026 31 - 32

A report of the City Clerk is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Vezeau-Allen
Resolved that the report of the City Clerk dated September 9, 2024 concerning Vote Counting Equipment and Alternative Voting Methods – Municipal Election 2026 be received and that the 2026 municipal election be conducted with in-person voting with tabulator count, register to vote by mail, and vote from home;

Further that staff be authorized to issue an RFP for the acquisition of vote tabulators, associated supplies, and professional services.

A by-law authorizing the use of tabulators for the 2026 municipal election will appear on a future Council Agenda.

### 7.3 City Awards 2024 33 - 36

A report of the Deputy City Clerk is attached for the consideration of Council.

Mover Councillor M. Scott

Seconder Councillor L. Dufour
Resolved that the report of the Deputy City Clerk dated September 9, 2024 concerning City Awards 2024 be received and that:

1. The Community Development Award be awarded to The Train Station;
2. The Heritage Award be awarded to Dean Sayers; and
3. The Sports Hall of Fame be awarded to Reno Pettenuzzo (posthumous) and Hubert Brazeau.

**7.4 Property Tax Appeals** 37 - 39

A report of the Manager of Taxation is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that the report of the Manager of Taxation dated September 9, 2024 concerning Property Tax Appeals be received and that the tax records be amended pursuant to section 357 of the *Municipal Act*.

**7.5 Reconstruction of Peoples Road and East Street – Engineering Services** 40 - 41

A report of the Manager of Purchasing is attached for the consideration of Council.

The relevant By-laws 2024-128 and 2024-129 are listed under item 12 of the Agenda and will be read with all by-laws under that item.

Councillor L. Dufour declared a conflict on this item. (Owns property in the proposed area of work.)

**7.6 East End Wastewater Treatment Plant Settlement Mitigation Design – Engineering Services** 42 - 43

A report of the Manager of Purchasing is attached for the consideration of Council.

Mover Councillor M. Scott

Seconder Councillor L. Dufour
Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning Engineering Services for East End Wastewater Treatment Plant Settlement Mitigation Design as required by Public Works and Engineering Services be received and that Tulloch Engineering be retained at the total proposed fee of $649,079 plus HST.

A by-law authorizing signature of an agreement concerning provision of these services will appear on a future Council Agenda.

**7.7 Electric Vehicle Charging Station Infrastructure** 44 - 46

A report of the Manager of Purchasing is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning the infrastructure installation of five electric vehicle charging stations as required by Transit, Public Works and Civic Centre be received and that the purchase from S.&T. Electrical Contractors Limited at the quoted amount of $194,329 plus HST be approved with additional funding of $59,410 allocated from the Asset Management Reserve.

**7.8 Seasonal Rental of Four Loader/Backhoes – Public Works** 47 - 48

A report of the Manager of Purchasing is attached for the consideration of Council.

Mover Councillor M. Scott

Seconder Councillor L. Dufour
Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning the rental of four loader/backhoes for the 2025 and 2026 summer construction seasons, as required by Public Works be received and that the rental from Toromont CAT at their weekly rate of $1,375 plus HST per machine be approved.

**7.9 Sault Gymnastics Club Lease Renewal** 49 - 50

A report of the Deputy CAO, Community Development and Enterprise Services is attached for the consideration of Council.

The relevant By-law 2024-127 is listed under item 12 of the Agenda and will be read with all b-laws under that item.

**7.10 Trans Canada Trail Funding Agreement** 51 - 52

A report of the Accessibility Coordinator is attached for the consideration of Council.

The relevant By-law 2024-130 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

**7.11 Federation of Canadian Municipalities Brownfield Funding Approval** 53 - 54

A report of the Director of Economic Development is attached for the consideration of Council.

The relevant By-law 2024-124 is listed under Agenda item 12 and will be read with all by-laws under that item.

**7.12 Tourism Development Fund Applications – August 2024** 55 - 59

A report of the Director of Tourism and Community Development is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that the report of the Director of Tourism and Community Development dated September 9, 2024 concerning Tourism Development Fund Applications – August 2024 be received and that the recommendation of the Tourism Sault Ste. Marie Board of Directors to allocate $15,112.39 as detailed below be approved:

- Soo Curlers Association Henderson Metal Fall Classic ($7,612.39);
- Festival of Colours ($5,000); and
- Algoma Invitational Wrestling Tournament ($2,500).

**7.13 Scope of Work Change – Lake Street Reconstruction** 60 - 61

A report of the Municipal Services and Design Engineer is attached for the consideration of Council.

Mover Councillor M. Scott

Seconder Councillor L. Vezeau-Allen
Resolved that the report of the Municipal Services and Design Engineer dated September 9, 2024 regarding Contract 2024-2E – Lake Street Reconstruction be received and that the scope of work change in the amount of $151,835 be approved.

**7.14 Lane Assumption, Closing and Conveyance – Steel Plant Subdivision** 62 - 64

A report of the Solicitor is attached for the consideration of Council.

The relevant By-laws 2024-120 and 2024-121 are listed under item 12 of the Agenda and will be read with all by-laws under that item.

**7.15 Purchase of Property at 628 Second Line West** 65 - 67

A report of the Solicitor is attached for the consideration of Council.

The relevant By-Law 2024-132 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

***7.15.1 Amended Report*** *68 - 69*

**7.16 Property Declared Surplus and Sale to DSSMSSAB – 60 London Street** 70 - 72

A report of the Assistant City Solicitor / Senior Litigation Counsel is attached for the consideration of Council.

The relevant By-law 2024-123 is listed under item 12 of the Agenda and will be listed with all by-laws under that item.

Councillor L. Dufour declared a conflict on this item. (Employed by the District of Sault Ste. Marie Social Services Administration Board.)

7.17 Active Transportation Fund Agreement 73 - 75

A report of the Junior Planner is attached for the consideration of Council.

The relevant By-law 2024-126 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

## 8. Reports of City Departments, Boards and Committees

### 8.1 Administration

### 8.2 Corporate Services

### 8.3 Community Development and Enterprise Services

### 8.4 Public Works and Engineering Services

8.4.1 Asset Management Plan Phase II – Non-Core Assets 76 - 388

A report of the Manager of Development and Environmental Engineering is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Vezeau-Allen
Resolved that the report of the Manager of Development and Environmental Engineering dated September 9, 2024 concerning Asset Management Plan Phase II – Non-Core Assets be received and that the asset management plan reports be approved.

8.4.2 Asset Management Plan Phase III 389 - 390

A report of the Manager of Purchasing is attached for the consideration of Council.

Mover Councillor M. Scott

Seconder Councillor L. Vezeau-Allen
Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning Asset Management Plan Phase III be received and the recommendation to retain AECOM Canada Ltd. at the total proposed fee of $229,000 plus HST be approved with additional funding of $33,301 allocated from the Asset Management Reserve.

The relevant By-law 2024-131 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

### 8.5 Fire Services

## 8.6 Legal

### 8.6.1 Property Declared Surplus – 149 Gore Street

391 - 394

A report of the Assistant City Solicitor/Senior Litigation Counsel is attached for the consideration of Council.

The relevant By-law 2024-118 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Councillor L. Vezeau-Allen declared a conflict on this item. (Board President and Founder of Grocer 4 Good)

## 8.7 Planning

### 8.7.1 A-11-24-Z – 418 Fourth Line West (Crimson Ridge Golf Course)

395 - 445

A report of the Planner is attached for the consideration of Council.

Mover Councillor C. Gardi

Seconder Councillor L. Vezeau-Allen
Resolved that the report of the Planner dated September 9, 2024 concerning rezoning application A-11-24-Z be received and that Council approve the application as follows:

Rezone a portion of 418 Fourth Line West, referred to as the “Area to be Rezoned”, which has approximately 64 metres of frontage along Fourth Line and a depth of 78 metres, from Parks and Recreation Zone (PR) to Estate Residential Zone (R1) with the following Special Exceptions:

- Reduce the required minimum lot area from 0.4 hectares to 0.37 hectares.
- The driveway between the edge of the road and the lot line must be paved with a hard surface, such as asphalt.
- Development be connected to both municipal water and sewer services.

And that the Legal Department be requested to prepare the necessary by-law(s) to effect the same.

#### *8.7.1.1 Correspondence Received*

*446 - 446*

## 8.8 Boards and Committees

## 9. Unfinished Business, Notice of Motions and Resolutions Placed on Agenda by Members of Council

### *9.1 Hydro One – North Shore Link*

Mover Councillor M. Scott

Seconder Councillor A. Caputo
Whereas the City of Sault Ste. Marie recognizes the importance of reinforcing transmission lines to ensure reliable electricity supply; and

Whereas the North Shore Link project proposes to reinforce these lines; and

Whereas the project offers a green coloured route option that avoids major recreational trails through Hiawatha; and

Whereas the City values the preservation of recreational areas for its residents;

Now Therefore Be It Resolved that the City Council of Sault Ste. Marie expresses its appreciation for the North Shore Link project and exclusively supports the green option as presented by Hydro One.

## 10. Committee of the Whole for the Purpose of Such Matters as are Referred to it by the Council by Resolution

## 11. Adoption of Report of the Committee of the Whole

## 12. Consideration and Passing of By-laws

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that all By-laws under item 12 of the Agenda under date September 9, 2024 be approved.

### 12.1 By-laws before Council to be passed which do not require more than a simple majority

### 12.1.1 By-law 2024-118 (Property) 149 Gore Street Declared Surplus

447 - 448

A report from the Assistant City Solicitor/Senior Litigation Counsel is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-118 being a by-law to declare the City owned property legally described as PIN 31576-0095 (LT) PT LT 1-2 PL 4050 ST. MARY'S AS IN T362161; S/T & T/W INTEREST IN T362161 & T/W T362161; SAULT STE. MARIE, being civic 149 Gore Street, as surplus to the City’s needs and to authorize the disposition of the said property be passed in open Council this 9th day of September, 2024.

### 12.1.2 By-law 2024-120 (Lane Assumption) Abutting 80 Glasgow

449 - 450

A report from the Solicitor is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-120 being a by-law to assume for public use and establish as a public lane, the lane more particularly described as PIN 31609-0253(LT) PT LANE PL 1598 KORAH CLOSED BY T220708 PT 2 1R4911; S/T T221041; T226464E; SAULT STE. MARIE, Steel Plant Subdivision be passed in open Council this 9th day of September, 2024.

12.1.3 **By-law 2024-123 (Property Sale) 60 London Street Sale to DSSMSSAB** 451 - 452

A report from the Assistant City Solicitor/Senior Litigation Counsel is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-123 being a by-law to declare the City owned property legally described as PIN 31544-0082 (LT) LT 86 PL 8454 ST. MARY'S; SAULT STE. MARIE being civic 60 London Street as surplus to the City's needs and to authorize the disposition of the said property to the District of Sault Ste. Marie Social Services Administration Board or as otherwise directed be passed in open Council this 9th day of September, 2024.

12.1.4 **By-law 2024-124 (Agreement) Green Municipal Fund Grant** 453 - 476

A report from the Director of Economic Development is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-124 being a by-law to authorize the execution of the Agreement between the City and Federation of Canadian Municipalities for funding for the completion of a Phase II Environmental Assessment and a Record of Site Condition for the remaining portions of the Gateway property be passed in open Council this 9th day of September, 2024.

12.1.5 **By-law 2024-125 (Zoning) 10 Huron Street, 0 Huron Street, 29 Bay Street (1188004 Ontario Inc.)** 477 - 479

Council Report was passed by Council Resolution on August 12, 2024.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-125 being a by-law to remove the Holding (H) Provision from Zoning By-laws 2005-150 and 2005-151 for a part of the lands known municipally as 10 Huron Street, 0 Huron Street, 29 Bay Street (1188004 Ontario Inc. c/o Tony Porco) be passed in open Council this 9th day of September, 2024.

12.1.6 **By-law 2024-126 (Agreement) Active Transport Funding** 480 - 519

A report from the Junior Planner is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-126 being a by-law to authorize the execution of the Agreement between the City and His Majesty the King in Right of Canada, represented by the Minister of Infrastructure and Communities, hereinafter referred to as the Minister of Intergovernmental Affairs, Infrastructure and Communities to accept funds that have been allocated to Sault Ste. Marie and proceed with Hub Trail upgrades be passed in open Council this 9th day of September, 2024.

12.1.7 **By-law 2024-127 (Agreement) Sault Gymnastics Club Lease Renewal** 520 - 525

A report from the Deputy CAO Community Development & Enterprise Services is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-127 being a by-law to authorize the execution of the Agreement between the City and Sault Ste. Marie Gymnastics Club for the lease of space at the John Rhodes Community Centre be passed in open Council this 9th day of September, 2024.

12.1.8 **By-law 2024-128 (Engineering) Peoples Road Reconstruction** 526 - 577

A report from the Manager of Purchasing is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-128 being a by-law to to authorize the execution of the Agreement between the City and AECOM Canada Ltd. for engineering services for the reconstruction of Peoples Road (Churchill Avenue to Third Line) be passed in open Council this 9th day of September, 2024.

12.1.9 **By-law 2024-129 (Engineering) Reconstruction of East Street** 578 - 634

A report from the Manager of Purchasing is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-129 being a by-law to authorize the execution of the Agreement between the City and TULLOCH Engineering Inc. for the reconstruction of East Street (Bay Street to Wellington Street) be passed in open Council this 9th day of September, 2024.

12.1.10 **By-law 2024-130 (Agreement) Trans Canada Trail Bellevue Kayak Dock Accessibility Upgrades** 635 - 645

A report from the Accessibility Coordinator is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-130 being a by-law to authorize the execution of the Agreement between the City and Trans Canada Trail for Bellevue Kayak Dock accessibility upgrades be passed in open Council this 9th day of September, 2024.

12.1.11 **By-law 2024-131 (Engineering) Asset Management Plan Phase III** 646 - 647

A report from the Manager of Purchasing is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-131 being a by-law to comply with regulatory requirements in respect to Ontario Regulation 588/17 under Infrastructure for Jobs and Prosperity Act be passed in open Council this 9th day of September, 2024.

12.1.12 **By-law 2024-132 (Property Acquisition) Purchase 628 Second Line West** 648 - 649

A report from the Solicitor is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-132 being a by-law to authorize the acquisition of property located at civic 628 Second Line West (Windsor Park Residence Ltd.) be passed in open Council this 9th day of September, 2024.

12.1.13 **By-law 2024-133 (Planning) Housing Community Improvement Plan** 650 - 675

Council report was passed by Council resolution on August 12, 2024.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-133 being a by-law to approve the proposed Sault Ste. Marie Housing Community Improvement Plan, designate the Plan Administrator and delegate approval authority of the financial incentives be passed in open Council this 9th day of September, 2024.

12.1.14 **By-law 2024-134 (Planning) Housing Community Improvement Project Area** 676 - 677

Council report was passed by Council resolution on August 12, 2024.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-134 being a by-law to approve the proposed Sault Ste. Marie Housing Community Improvement Project Area be passed in

open Council this 9th day of September, 2024.

*12.1.15* *By-law 2024-119 (Agreement) YMCA Name Change* *678 - 699*

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-law 2024-119 being an agreement to authorize the execution of the Lease Agreement between the City and Dr. Lou and Mae Lukenda Charitable Foundation for the YMCA building at 235 McNabb Street, Sault Ste. Marie, Ontario be passed in open Council this 9th day of September, 2024.

**12.2 By-laws before Council for FIRST and SECOND reading which do not require more than a simple majority**

**12.2.1 By-Law 2024-121 (Lane Closing and Conveyance) Abutting 80 Glasgow** 700 - 701

A report from the Solicitor is on the Agenda.

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that By-Law 2024-121 being a by-law to stop up, close and authorize the conveyance of a lane in the Steel Plant Subdivision, Plan 1598 be **READ** the **FIRST** and **SECOND** time be passed in open Council this 9th day of September, 2024.

**12.3 By-laws before Council for THIRD reading which do not require more than a simple majority**

**13. Questions By, New Business From, or Addresses by Members of Council Concerning Matters Not Otherwise on the Agenda**

**14. Closed Session**

Mover Councillor C. Gardi

Seconder Councillor L. Dufour
Resolved that this Council move into closed session to discuss:

- one item concerning the proposed acquisition of land;
- three items concerning the proposed disposition of land; and
- one item concerning a position, plan, procedure, criteria or instruction to be applied to negotiations

Further Be It Resolved that should the said closed session be adjourned, the Council may reconvene in closed session to continue to discuss the same without the need for a further authorizing resolution.

*Municipal Act R.S.O. 2002 – section 239 2 (c) a proposed or pending*

*acquisition or disposition of land by the municipality or local board and section 239 2 (k) a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality*

## 15. Adjournment

Mover Councillor M. Scott

Seconder Councillor L. Dufour
Resolved that this Council now adjourn.

# REGULAR MEETING OF CITY COUNCIL

# MINUTES

Monday, August 12, 2024
5:00 pm
Council Chambers and Video Conference

Present: Mayor M. Shoemaker, Councillor S. Hollingsworth, Councillor S. Spina, Councillor L. Dufour, Councillor L. Vezeau-Allen, Councillor A. Caputo, Councillor R. Zagordo, Councillor M. Bruni, Councillor S. Kinach, Councillor C. Gardi, Councillor M. Scott

Officials: T. Vair, R. Tyczinski, L. Girardi, K. Fields, S. Schell, P. Johnson, S. Hamilton Beach, B. Lamming, M. McAuley, F. Coccimiglio, T. Vecchio, M. Zuppa, P. Tonazzo, C. Rumiel, S. Zuppa, E. Cormier, K. Pulkkinen

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**1. Land Acknowledgement**

**2. Adoption of Minutes**

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Hollingsworth

Resolved that the Minutes of the Regular Council Meeting of July 15, 2024 be approved.

**3. Questions and Information Arising Out of the Minutes and not Otherwise on the Agenda**

**4. Declaration of Pecuniary Interest**

**4.1 Mayor M. Shoemaker – A-8-24-HP – 10 Huron Street, 0 Huron Street, 29 Bay Street – Removal of Holding Provision – Gateway Site**

Applicant is a client of law firm.

**5. Approve Agenda as Presented**

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Spina

Resolved that the Agenda for August 12, 2024 City Council Meeting as presented be approved.

**Carried.**

**6. Presentations**

**7. Communications and Routine Reports of City Departments, Boards and Committees – Consent Agenda**

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that all the items listed under date August 12, 2024 – Agenda item 7 – Consent Agenda save and except Agenda item 7.7 be approved as recommended.

**Carried**

**7.1 Integrity Commissioner Report**

The report of the Acting Integrity Commissioner dated July 26, 2024 was received by Council.

John Hart, Acting Integrity Commissioner, was in attendance electronically.

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that the report of the Acting Integrity Commissioner dated July 26, 2024 be received as information.

**Carried**

**7.2 Outstanding Resolutions**

**7.3 Second Quarter Financial Report – June 30, 2024**

The report of the Manager of Finance was received by Council.

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Spina

Resolved that the report of the Manager of Finance dated August 12, 2024 concerning Second Quarter Financial Report – June 30, 2024 be received as information.

**Carried**

### 7.4 Sackville Road Extension – Engineering Services

The report of the Manager of Purchasing was received by Council.

The relevant By-law 2024-122 is listed under item 12 of the Minutes

### 7.5 Tender for Screened Street Sand

The report of the Manager of Purchasing was received by Council.

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that the report of the Manager of Purchasing dated August 12, 2024 concerning Tender for Screened Street Sand – Public Works be received and the supply be awarded to Pioneer Construction Ltd. at the tendered pricing, HST extra.

**Carried**

### 7.6 Computer Aided Dispatch System – Fire Services

The report of the Manager of Purchasing was received by Council.

Moved by: Councillor S. Hollingsworth
Seconded by: Councillor R. Zagordo

Resolved that the report of the Manager of Purchasing dated August 12, 2024 concerning NG911 Compliant Computer Aided Dispatch System as required by Fire Services be received and that the proposal submitted by CriSys Ltd. for initial purchase at $207,711 plus HST with estimated transition costs of $300,000 plus HST be approved.

**Carried**

### 7.8 Transit Route Optimization Study

The report of the Deputy CAO of Community Development and Enterprise Services was received by Council.

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Hollingsworth

Resolved that the report of the Deputy CAO, Community Development and Enterprise Services dated August 12, 2024 concerning Transit Route Optimization Study be received and that the following be approved:

1. Reallocate $200,000 from approved $825,000 2024 capital project Transit Electrical Upgrades to cover the cost of the Route Optimization Study;
2. Results of the study be brought back to Council with recommendations on:

- Route modifications to better serve the needs of transit users;
- Location support to remain at Dennis Street or relocate to Huron Street.

**Carried**

### 7.9 Twin Pad Arena Project Under Budget

The report of the Deputy CAO of Community Development and Enterprise Services was received by Council.

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Hollingsworth

Resolved that the report of the Deputy CAO, Community Development and Enterprise Services dated August 12, 2024 concerning Twin Pad Arena – Under Budget be received and that the contingency funding in the total amount of $100,000 be approved to utilize for the following:

1. Solid surfacing installation using millings for the access area north-east of the facility;
2. Infrastructure for venting and hooding on the second level bar preparation area and additional food and beverage equipment for the facility.

**Carried**

### 7.10 Community Development Fund – Green Initiatives Program Applications 2024 Q2 Intake

The report of the Sustainability Coordinator was received by Council.

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Hollingsworth

Resolved that the report of the Sustainability Coordinator dated August 12, 2024 concerning Community Development Fund – Green Initiatives Program Applications 2024 Q2 Intake be received and that the recommendation of the Environmental Sustainability Committee to allocate $1,274 to the Roberta Bondar Park Electric Lawn Maintenance Equipment Project be approved.

**Carried**

### 7.11 Bellevue Kayak Dock Accessibility Updates

The report of the Accessibility Coordinator of Community Development and Enterprise Services was received by Council.

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Spina

Resolved that the report of the Accessibility Coordinator dated August 12, 2024 concerning Bellevue Kayak Dock Accessibility Updates be received and that the amendment to the 2024 Capital Budget for the Bellevue kayak dock accessibility upgrade in the amount of $20,025 with associated funding of:

- $5,499 from the Barrier Removal Reserves for the Bellevue Kayak Dock accessibility updates;
- $7,543 for in-kind services from Public Work; and
- $6,983 grant from Trans Canada Trail

be approved.

**Carried**

**7.12 Bill 185, Cutting Red Tape to Build More Homes Act, 2024 Update**

The report of the Planner of Community Development and Enterprise Services was received by Council.

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that the report of the Planner dated August 12, 2024 concerning Bill 185, *Cutting Red Tape to Build More Homes Act, 2024* be received as information.

**Carried**

**7.7 Memorial Tower**

The report of the Deputy CAO of Community Development and Enterprise Services was received by Council

Moved by: Councillor M. Bruni
Seconded by: Councillor S. Spina

Resolved that the report of the Deputy CAO Community Development and Enterprise Services dated August 12, 2024 concerning the Memorial Tower be received and that proceeds in the amount of $1,510,000 be utilized from the Asset Management Reserve to make the required repairs.

| | For | Against | Conflict | Absent |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |

| | | | | |
|---|---|---|---|---|
| Councillor L. Dufour | | | | X |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | | | | X |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |
| **Results** | **9** | **0** | **0** | **2** |

**Carried**

**Amendment**:
Moved by: Councillor A. Caputo
Seconded by: Councillor L. Vezeau-Allen

Resolved that the motion be amended to remove the words "proceeds in the amount of $1,510,000 be utilized from the Contingency Reserve to make the required repairs" and add the words "staff be requested to consult with the Royal Canadian Legion, and report back to Council with other alternatives, including de-commissioning of the Memorial Tower (and funding options), as well as options concerning the service life of outdoor concrete."

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | | X | | |
| Councillor S. Hollingsworth | | X | | |
| Councillor S. Spina | | X | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | | X | | |
| Councillor M. Bruni | | X | | |
| Councillor S. Kinach | | X | | |
| Councillor C. Gardi | | X | | |

| | | | | |
|---|---|---|---|---|
| Councillor M. Scott | | X | | |
| **Results** | **3** | **8** | **0** | **0** |

**Defeated**

## 8. Reports of City Departments, Boards and Committees

### 8.1 Administration

### 8.2 Corporate Services

### 8.3 Community Development and Enterprise Services

### 8.3.1 Paid Parking at the Ronald A. Irwin Civic Centre

The report of the Deputy CAO of Community Development and Enterprise Services was received by Council.

Marco Niro, President of CUPE Local 3; Janelle Martin, President of CUPE Local 67 were in attendance.

Moved by: Councillor S. Spina
Seconded by: Councillor A. Caputo

Resolved that the report of the Deputy CAO of Community Development and Enterprise Services dated August 12, 2024 concerning Paid Employee and Visitor Parking at the Ronald A. Irwin Civic Centre be received as information.

| | For | Against | Conflict | Absent |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | | | | X |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | | | | X |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |

| | | | | |
|---|---|---|---|---|
| Councillor M. Scott | | | | X |
| **Results** | **8** | **0** | **0** | **3** |

**Carried**

**Motion**

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Hollingsworth

Resolved that Council direct staff to implement paid parking for the North and South Civic Centre lots effective January 1, 2025;

Further Be It Resolved that staff report back to Council in September 2025 about expanding paid parking to other City parking lots as of January 1, 2026;

Further Be It Resolved that the North and South Civic Centre parking lots and the 619 Bay Street parking lot be turned into “two-hour free” parking lots similar to other municipal parking lots in the downtown core;

- Permits be sold to employees as with other downtown parking lots;
- The cost of permits be set at the same rate as other downtown parking lots in which permits are sold;
- Visitors, part-time employees and students be exempt from the paid-parking system;
- Mayor and Council be given the option of purchasing a permit or paying per use;
- Staff be directed to determine any outstanding issues such as enforcement, whether parking will be first-come, first-served and how to treat any tenants in the Civic Centre as well as any other remaining issues that arise.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | | X | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | | X | | |
| Councillor A. Caputo | | X | | |
| Councillor R. Zagordo | X | | | |

| | | | | |
|---|---|---|---|---|
| Councillor M. Bruni | | X | | |
| Councillor S. Kinach | | X | | |
| Councillor C. Gardi | | X | | |
| Councillor M. Scott | X | | | |
| **Results** | **5** | **6** | **0** | **0** |

**Defeated**

**Amendment**:
Moved by: Councillor S. Spina
Seconded by: Councillor S. Hollingsworth

Resolved that the motion be postponed pending consultation by the CFO regarding parking as a taxable benefit.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | | X | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | | X | | |
| Councillor L. Vezeau-Allen | | X | | |
| Councillor A. Caputo | | X | | |
| Councillor R. Zagordo | | X | | |
| Councillor M. Bruni | | X | | |
| Councillor S. Kinach | | X | | |
| Councillor C. Gardi | | X | | |
| Councillor M. Scott | | X | | |
| **Results** | **2** | **9** | **0** | **0** |

**Defeated**

**8.4 Public Works and Engineering Services**

**8.5 Fire Services**

**8.6 Legal**

## 8.7 Planning

### 8.7.1 A-10-24-CIP Housing Community Improvement Plan

The report of the Junior Planner was received by Council.

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Hollingsworth

Resolved that the report of the Junior Planner dated August 12, 2024 concerning A-10-24-CIP Housing Community Improvement Plan be received and that Council:

1. Approve the proposed Housing Community Improvement Plan;
2. Approve the proposed Community Improvement Project Area;
3. Designate the Director of Planning or their designate as the Plan Administrator;
4. Delegate approval authority of the financial incentives to the Plan Administrator or their designate; and
5. Authorize a contribution of $300,000 from the uncommitted capital fund to support completion of the project

And that the Legal Department be requested to prepare the necessary by-laws to effect the same.

| | For | Against | Conflict | Absent |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | X | | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |

| | | | | |
|---|---|---|---|---|
| **Results** | **11** | **0** | **0** | **0** |

**Carried**

### 8.7.2 A-8-24-HP – 10 Huron Street, 0 Huron Street, 29 Bay Street – Removal of Holding Provision – Gateway Site

Mayor M. Shoemaker declared a conflict on this item. (Applicant is a client of law firm.)

The report of the Director of Planning was received by Council.

Orlando Rosa, Counsel for the applicant, was in attendance.

Moved by: Councillor S. Spina
Seconded by: Councillor A. Caputo

Resolved that the report of the Director of Planning dated August 12, 2024 concerning application A-8-24-HP be received and that Council approve the application and remove the holding provision from the portion of the property shown on the attached maps as ‘area to be rezoned’.

And that the Legal Department be requested to prepare the necessary by-law(s) to effect the same.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | | | **X** | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | X | | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |
| **Results** | **10** | **0** | **1** | **0** |

**Carried**

## 8.8 Boards and Committees

### 8.8.1 YMCA Board Appointment

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that the Manager of Recreation and Culture be appointed to the YMCA Board of Directors.

| | For | Against | Conflict | Absent |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | X | | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |
| **Results** | **11** | **0** | **0** | **0** |

**Carried**

## 9. Unfinished Business, Notice of Motions and Resolutions Placed on Agenda by Members of Council

### 9.1 Sensory Playground

Moved by: Councillor C. Gardi
Seconded by: Councillor M. Scott

Whereas in July 2016 the City of Sault Ste. Marie opened its first sensory playground in Bellevue Park in the east end of the community; and

Whereas since its opening, the sensory playground has been heavily used and thoroughly enjoyed by children and families; and

Whereas a sensory playground provides enhanced accessible play options and eliminates barriers to play, and provides sensory stimulation along with the promotion of family bonding; and

Whereas the City of Sault Ste. Marie should aim to provide equitable access to amenities and services in different parts of the community, especially as they relate to families and children; and

Whereas, as a community, with the establishment of the new splash pad in the west end there has been a revitalization of Manzo Park; and

Whereas many communities of Sault Ste. Marie's size have more than one sensory playground;

Now Therefore Be It Resolved that City staff be requested to explore options for the establishment of a sensory playground at Manzo Park or at any other City park in the west end of Sault Ste. Marie, and report back to City Council with options for such a playground.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | X | | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |
| **Results** | **11** | **0** | **0** | **0** |

**Carried**

## 9.2 Highway 17 Speed Increase

Moved by: Councillor S. Kinach
Seconded by: Councillor M. Bruni

Whereas the Ministry Transportation Ontario recently increased the maximum speed limit to 110km/hr on many newly updated sections of the Trans Canada highway on July 12, 2024; and

Whereas most of Ontario's highways were originally designed to safely accommodate speed limits of 110km/hr; and

Whereas most new model vehicles have advanced safety features such as adaptive cruise control and lane monitoring technology; and

Whereas Alberta, Manitoba, New Brunswick, Nova Scotia and Saskatchewan have a maximum speed limit of 110km/hr and British Columbia maximum speed limit is 120km/hr; and Whereas as the Transportation Minister Prabmeet Sarkaria stated data collected from 2022 shows evidence based speed increases are a common sense change to make life more convenient for Ontario drivers while bringing our highway speed limit in line with other Canadian Province

Now Therefore Be It Resolved that Mayor Shoemaker be requested to write a letter to Ontario Transportation Minister Prabmeet Sarkaria for consideration of Highway 17 Sault Ste Marie to Thessalon for a maximum speed limit increase along the sections on two-lane divided highway from the current 90km/hr.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | | X | | |
| Councillor S. Hollingsworth | | X | | |
| Councillor S. Spina | | X | | |
| Councillor L. Dufour | | X | | |
| Councillor L. Vezeau-Allen | | X | | |
| Councillor A. Caputo | | X | | |
| Councillor R. Zagordo | | X | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | | X | | |
| Councillor M. Scott | | X | | |
| **Results** | **2** | **9** | **0** | **0** |
| | | | | **Defeated** |

**9.3 "Solve the Crisis"**

Moved by: Councillor L. Dufour
Seconded by: Councillor A. Caputo

Be It Resolved That the City of Sault Ste. Marie endorses and supports the Ontario Big City Mayors in the recommended actions to “Solve the Crisis” of rising levels of homelessness, mental health issues and addiction in Ontario cities, from which Sault Ste. Marie is not exempt, which actions include:

- Appointing a single minister provincially to bring cross-ministry focus to this issue and fund that ministry appropriately;
- Have the new provincial minister strike a task force to advise and make recommendations on solutions to these issues with a cross-section of stakeholders and commit to funding the recommendations
- Provide the municipality with resources to transition homeless and underhoused individuals to appropriate housing with the necessary supports
- Fund a 24/7 crisis response service across the province to relieve the pressure on hospital emergency centres and first responders.

| | **For** | **Against** | **Conflict** | **Absent** |
|---|---|---|---|---|
| Mayor M. Shoemaker | X | | | |
| Councillor S. Hollingsworth | X | | | |
| Councillor S. Spina | X | | | |
| Councillor L. Dufour | X | | | |
| Councillor L. Vezeau-Allen | X | | | |
| Councillor A. Caputo | X | | | |
| Councillor R. Zagordo | X | | | |
| Councillor M. Bruni | X | | | |
| Councillor S. Kinach | X | | | |
| Councillor C. Gardi | X | | | |
| Councillor M. Scott | X | | | |
| **Results** | **11** | **0** | **0** | **0** |

**Carried**

**10. Committee of the Whole for the Purpose of Such Matters as are Referred to it by the Council by Resolution**

**11. Adoption of Report of the Committee of the Whole**

**12. Consideration and Passing of By-laws**

**12.1 By-laws before Council to be passed which do not require more than a simple majority**

**12.1.1 By-law 2024-122 (Agreement) Kresin Engineering Sackville Road Extension Consulting Services**

Moved by: Councillor A. Caputo
Seconded by: Councillor S. Spina

Resolved that By-law 2024-122 being a by-law to authorize the execution of the Agreement between the City and Kresin Engineering Corporation for engineering services for the design and contract administration for the extension of Sackville Road to Third Line.

**Carried**

**12.2 By-laws before Council for FIRST and SECOND reading which do not require more than a simple majority**

**12.3 By-laws before Council for THIRD reading which do not require more than a simple majority**

**13. Questions By, New Business From, or Addresses by Members of Council Concerning Matters Not Otherwise on the Agenda**

**14. Closed Session**

**15. Adjournment**

Moved by: Councillor R. Zagordo
Seconded by: Councillor S. Hollingsworth

Resolved that this Council now adjourn.

**Carried**

_____

Mayor

_____

City Clerk

OFFICE OF THE MAYOR

CORPORATION OF THE
CITY OF SAULT STE. MARIE

# Mayoral Decision No. 2024-10

Decision to Delegate the Powers Regarding the 2025 City Budget

WHEREAS section 284.16 of the *Municipal Act, 2001,* R.S.O. 2001 (the "Act") and section 7 (1) of 0. Regulation 530/22 provides that the Mayor shall, on or before February 1 of each year (a) prepare a proposed budget for the municipality that includes the estimates of sums required under subsection 289 (1) or 290 (1) of the Act, as the case may be; (b) provide the proposed budget to each member of council and to the clerk; and (c) make the proposed budget available to the public;

NOW THEREFORE I, Matthew Shoemaker, Mayor of the City of Sault Ste. Marie ("City") hereby direct the CAO and CFO/Treasurer to prepare the Preliminary 2025 Capital and Operating budgets to be tabled at the November 18, 2024 Council Meeting; and
Further that the budget be considered by Council at the previously scheduled December 9, 2024 Budget Meeting in the same manner in which Council has considered previous budgets.

This delegation takes effect on September 9, 2024 and remains in effect until this delegation is modified or revoked in writing.

Dated at the City of Sault Ste. Marie this 9th day of September, 2024

_____

Mayor Matthew Shoemaker

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Rachel Tyczinski, City Clerk |
| DEPARTMENT: | Corporate Services |
| RE: | Vote Counting Equipment and Alternative Voting Methods – Municipal Election 2026 |

---

## Purpose

The purpose of this report is to obtain Council approval to procure vote counting equipment and to authorize alternative voting methods for the 2026 municipal election.

## Background

The next regular municipal election will take place on October 26, 2026.

In 2021, Council approved conducting the 2022 municipal election by in-person voting with tabulator count as well as a “register to vote by mail” option, and vote from home.

## Analysis

Tabulators were used to count ballots for the first time in 2022. The efficiency of the vote-counting process was significantly improved using tabulators, both in terms of accuracy and in timeliness of results. The accessible vote tabulator was made available on Advance Vote Days and allowed electors with disabilities to vote privately and independently using a ballot marking device.

Vote by mail was also introduced in 2022. 697 electors registered to vote by mail with 512 completed kits returned.

Vote from home was offered again in 2022 with 83 electors choosing to have an election team come to their home with ballots.

Internet voting was not recommended for the 2022 municipal election for several reasons, including the lack of internet voting standards, as well as security and secrecy concerns. As these concerns remain valid, internet voting is not recommended for the 2026 municipal election.

## Financial Implications

The cost of tabulators, associated supplies, and professional services for the 2022 municipal election was $118,086 plus applicable HST. The City was able to lease

Election Ontario tabulators at a reduced rate in 2022. The City anticipates a slightly higher price for 2026 due to annual inflationary increases. Costs associated with the 2026 municipal election will be funded from the Election Reserve. $85,000 is contributed annually from the operating budget to the Election Reserve.

**Strategic Plan / Policy Impact / Climate Impact**
The municipal election 2026 is linked to the corporate value – commitment to citizens and community.

There is no climate impact.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the City Clerk dated September 9, 2024 concerning Vote Counting Equipment and Alternative Voting Methods – Municipal Election 2026 be received and that the 2026 municipal election be conducted with in-person voting with tabulator count, register to vote by mail, and vote from home;

Further that staff be authorized to issue an RFP for the acquisition of vote tabulators, associated supplies, and professional services.

A by-law authorizing the use of tabulators for the 2026 municipal election will appear on a future Council Agenda.

Respectfully submitted,

Rachel Tyczinski
City Clerk
705.759.5391
r.tyczinski@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Madison Zuppa, Deputy City Clerk |
| DEPARTMENT: | Corporate Services |
| RE: | City Awards 2024 |

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## Purpose

The purpose of the report is to recommend recipients of the Community Development Award, Heritage Award, and Sports Hall of Fame Award to Council.

## Background

The City of Sault Ste. Marie has five active community awards outlined below:

### *Community Development Award*

The Community Development Award was initiated by City Council in 1998. The purpose of this program is to recognize significant achievement in community development, highlight successful development ideas, and inspire other projects to meet the standards set by successful practices.

Community development is an all-encompassing term. Eligible projects may positively benefit the community in one or more of the following ways:

- Enhance the visual quality of the built environment;
- Pursue sustainable development and protect the natural environment;
- Promote equity and accessibility to a variety of people, income groups, and abilities;
- Maximize employment and earning opportunities; or
- Facilitate heritage protection.

### *Community Recognition Award*

The Community Recognition Award is presented annually for contribution and commitment in the field of culture as defined in the Cultural Policy for Sault Ste. Marie.

### *Municipal Heritage Award*

The Municipal Heritage Award is presented annually to recognize contributions to the preservation, restoration and enhancement of the City's Heritage Resources as defined in the City’s Cultural Policy.

***Sports Hall of Fame Award***
The Sault Ste. Marie Sports Hall of Fame recognizes exceptional achievements in the athletic community. Athletes, coaches, builders and teams are honoured for their accomplishments and the recognition they have brought to Sault Ste. Marie through sport.

***Walk of Fame Award***
The Walk of Fame Award recognizes individuals or groups for outstanding athletic, cultural, academic or humanitarian achievement who individually or as a member of a group achieved provincial, national or international accolades in an athletic or other competitive endeavour; a standard of excellence in a cultural, academic or humanitarian field; and has lived in the City of Sault Ste. Marie or surrounding area of Algoma for a minimum of 12 months at any point during their lifetime.

On January 9, 2023 Council approved that one awards ceremony be held on a go-forward basis to honour recipients annually. A ceremony is planned for mid September.

**Analysis**
Below outlines the recommended recipients and the contributions to the community.

***Community Development Award***
On May 16, 2024 the Community Development Award Committee considered 11 nominations. The Committee recommends that the 2024 Community Development Award be presented to Canal District's Train Station, located at 87 Huron Street.

Completed in 2021, the Train Station functions as a starting point and a destination for Sault Ste. Marie residents and visitors alike. The Train Station is the home of the Agawa Canyon Tour Train, one of northern Ontario's premier tourist attractions. This beautiful building is also home to the Blockhouse Pub, an outfitters shop, and a brewery facility.

Formerly a brownfield site, the Train Station has been designed to complement the existing architectural style of the nearby Machine Shop and Algoma Conservatory of Music buildings. This building not only enhances the visual quality of the built environment of the community, but it has helped revitalize the area into a vibrant, lively space that all of Sault Ste. Marie can be proud of.

***Community Recognition Award***
Not being awarded in 2024.

***Municipal Heritage Award***

On June 5, 2024 the Municipal Heritage Committee reviewed 1 nomination. The Committee is recommending that the 2024 Municipal Heritage Award be presented to Dean Sayers.

Dean Sayers served as Chief of Batchewana First Nation for nearly two decades, and is from the Crane Clan, specifically linked to the blue heron in the central Great Lakes region. His journey as a leader has been driven by an unwavering commitment to the progress and well-being of the original Peoples of these lands. Dean has been dedicated to advancing the interests of Indigenous communities and fiercely advocating for their rights. Dean has been a consistent participant in regional leadership spaces, such as the Assembly of First Nations (AFN), where he has contributed his experience and insights to the broader Indigenous community.

Dean has made significant contributions to heritage through his involvement in the development and creation of the ‘Voices from the Gathering Place’ project, which is a rich historical resource about Sault Ste. Marie that includes video resources of Anishinaabe elders and knowledge-keepers sharing history and culture through oral tradition. Dean’s contributions have also leant themselves to a permanent installation that is part of Parks Canada’s Visitor Centre at the Sault Ste. Marie Canal National Historic Site, which details significant oral history and the impacts on Batchewana First Nation as well as the Historic Sault Ste. Marie Metis People.

***Sports Hall of Fame***

On May 7, 2024 the Parks and Recreation Advisory Committee reviewed 8 nominations. The Committee is recommending the induction of the two athletes into the Sports Hall of Fame for 2024:

Reno Pettenuzzo – Fast Pitch

- Considered the best pitcher in Sault Ste. Marie and all of Ontario throughout his career;
- Propelled the Sault Ste. Marie Northerners to three all Ontario Senior B Championship in the 1960's;
- Was the league leader in pitching and hitting for the Richmond Hill team in the Toronto Beaches League during the late 1960's and earned MVP honors both seasons; and
- Played professionally in the United States including the Rhode Island Brewers where he was 21-5 in 1970.

Hubert Brazeau – Oval Track Racing

- Over 150 career wins;
- 1981 Super Late Model Champion at Northern Michigan Raceway;
- 1983 Super Late Model Champion at Northern Michigan Speedway;
- 1984-85-86-87 Four-time Super Late Model Champion at Onaway Speedway;
- 1981-1983-1984 Super Late Model Champion at Northern Raceway, Sault Ste. Marie;
- At the time of his retirement, at the end of the 1987 season, he held five track records (fastest all-time lap) at the following Tracks: Escanaba Superior Speedway, Onaway Speedway, Northern Raceways in Sault Ste. Marie, Ontario, Heyden Speedway and Northern Michigan Speedway.

***Walk of Fame***
Not being awarded in 2024.

**Financial Implications**
There are no financial implications related to this report.

**Strategic Plan / Policy Impact / Climate Impact**
This is an operational matter not articulated in the Corporate Strategic Plan.
There are no impacts on climate mitigation / adaptation.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the Deputy City Clerk dated September 9, 2024 concerning City Awards 2024 be received and that:

1. The Community Development Award be awarded to The Train Station;
2. The Heritage Award be awarded to Dean Sayers; and
3. The Sports Hall of Fame be awarded to Reno Pettenuzzo (posthumous) and Hubert Brazeau.

Respectfully submitted,

Madison Zuppa
Deputy City Clerk
705.759.5392
m.zuppa@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Lisa Petrocco – Manager of Taxation |
| DEPARTMENT: | Corporate Services |
| RE: | Property Tax Appeals |

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## Purpose

The purpose of this report is to seek Council approval of tax appeals as required, pursuant to section 357 of the *Municipal Act*.

## Background

Under section 357 of the *Municipal Act, 2001*, taxpayers may make an application for the cancellation, reduction or refund of taxes in response to changes in assessment facts concerning the property. The reduction reduces the taxes to the correct property amount. Applications submitted have been reviewed by Municipal Property Assessment Corporation (MPAC) to verify the assessment values and taxation periods to be used for the adjustment.

A listing of applications received for adjustment of realty taxes pursuant to section 357 of the *Municipal Act* is attached to this report.

## Analysis

The Municipal Property Assessment Corporation has recommended the amount of the assessment to be adjusted.

## Financial Implications

There is an annual budget allocation for tax write-offs. The decreased revenue of $2,078.63 can be accommodated within the existing budget allocation.

## Strategic Plan / Policy Impact / Climate Impact

This is an administrative matter not articulated in the Corporate Strategic Plan.

## Recommendation

It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Taxation dated September 9, 2024 concerning Property Tax Appeals be received and that the tax records be amended pursuant to section 357 of the *Municipal Act*.

Respectfully submitted,

Lisa Petrocco, CPA, CGA
Manager of Taxation
705.541.7065
l.petrocco@cityssm.on.ca

**APPLICATION TO COUNCIL TO CANCEL OR REFUND PROPERTY TAXES PURSUANT TO SECTION 357 OF THE MUNICIPAL ACT, 2001**

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**
**PROPERTY TAX APPEALS**

DATE: 2024 09 09
PAGE: 1 of 1

| ROLL # | PROPERTY ADDRESS | REASON | EXPLANATION | TAX CLASS | APPEAL NO. | TAXES | INTEREST | TOTAL |
|---|---|---|---|---|---|---|---|---|
| | | | | | **2024** | | | |
| 010-001-018-00 | 00306 PINE ST | A | Commercial assessment removed | CT/RT>RT | 24-020 | (180.32) | - | (180.32) |
| 010-060-007-00 | 00070 DACEY RD | D(i) | Garage demolished | RT | 24-021 | (143.13) | - | (143.13) |
| 040-023-183-00 | 00164 GORE ST | A | Portion of CT assessment changed to RT | CT/RT>CT/RT | 24-022 | (722.35) | (34.80) | (757.15) |
| 060-003-028-00 | 00069 LETCHER ST | D(i) | Garage demolished | RT | 24-023 | (89.46) | - | (89.46) |
| 060-010-009-00 | 00587 SECOND LINE W | D(i) | Duplex and three garage structures removed | MT | 24-024 | (908.57) | - | (908.57) |
| | | | | | **REPORT TOTAL** | **$ (2,043.83)** | **$ (34.80)** | **$ (2,078.63)** |

A. CEASES TO BE LIABLE FOR TAX AT RATE IT WAS TAXED
B. BECAME VACANT OR EXCESS LAND
C. BECAME EXEMPT
D. SICKNESS OR EXTREME POVERTY
D(i). RAZED BY FIRE, DEMOLITION OR OTHERWISE
D(ii). DAMAGED AND SUBSTANTIALLY UNUSABLE
E. MOBILE UNIT REMOVED
F. GROSS OR MANIFEST CLERICAL/FACTUAL ERROR
G. REPAIRS/RENO'S PREVENTING NORMAL USE (MIN 3 MONTHS)

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Karen Marlow, Manager of Purchasing |
| DEPARTMENT: | Corporate Services |
| RE: | RFP Engineering Service – Reconstruction of Peoples Road and East Street |

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## Purpose

The purpose of this report is to obtain Council approval for the provision of engineering services for the reconstruction of Peoples Road – Churchill Avenue to Third Line; and East Street – Bay Street to Wellington Street, as required by Public Works and Engineering Services.

## Background

At the July 15, 2024 meeting, Council approved the 2025-2029 Capital Transportation Program in principle which includes the reconstruction of:

- Peoples Road, Phase 1 in 2025 (Churchill Avenue to Penno Road) and Phase 2 in 2026 (Penno Road to Third Line); and
- East Street in 2025.

Proposals for the engineering services associated with the planning, design, tendering and contract administration of these two reconstructions were issued to Vendors of Record (VOR) within the Linear Municipal Infrastructure Category. Proposals were required to be submitted for consideration no later than 4:00 p.m. on August 13, 2024 (Peoples Road); and August 21, 2024 (East Street).

## Analysis

Proposals from three proponents were received prior to the closing date for both requests:

- Tulloch Engineering Inc., Sault Ste. Marie, ON
- Aecom Canada Ltd., Sault Ste. Marie, ON
- Kresin Engineering Corporation, Sault Ste. Marie, ON

The proposals received have been evaluated by a committee comprised of city staff from Public Works and Engineering. It is the consensus of the evaluation committee that the successful proponents for the work are as follows:

- Aecom Canada Ltd., Peoples Road – Churchill Avenue to Third Line
- Tulloch Engineering Inc., East Street – Bay Street to Wellington Street

**Financial Implications**
Aecom Canada Ltd. proposed fees in the amount of $1,243,146 including the non-rebatable portion of HST for engineering services Peoples Road.

Tulloch Engineering Inc. proposed fees in the amount of $546,028 including the non-rebatable portion of HST for engineering services East Street, with an additional $60,124 including the non-rebatable portion of HST, for fees associated with construction costs of the material testing*.
*(*Tulloch operates the certified laboratory to undertake construction materials testing and cannot be hired by the Contractor for these services while hired by the City to provide construction administration).*

As part of the 2024 capital budget, $200,000 was approved for engineering work related to the 2025 capital road projects. Aecom and Tulloch's 2024 work can be accommodated within this approved $200,000 allowance. The remainder of the engineering services work will not commence until such time that Council approves the 2025 Capital budget.

**Strategic Plan / Policy Impact / Climate Impact**
These projects are included in the Infrastructure focus area of the Corporate Strategic Plan.

**Recommendation**
It is therefore recommended that Council take the following action:

The relevant By-laws 2024-128 and 2024-129 are listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Karen Marlow
Manager of Purchasing
705.759.5298
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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Karen Marlow, Manager of Purchasing |
| DEPARTMENT: | Corporate Services |
| RE: | East End Wastewater Treatment Plant Settlement Mitigation Design – Engineering Services |

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## Purpose

The purpose of this report is to obtain Council approval to retain a consultant to provide engineering services for the design and contract administration relating to East End Wastewater Treatment Plant (EEWWTP) Settlement Mitigation Design, as required by Public Works and Engineering Services.

## Background

A Request for Proposal was issued in 2017 for professional services to complete an assessment of settlement issues at the EEWWTP, and at a Council meeting dated May 8, 2017 the following resolution was passed:

> Resolved that the report of the Land Development and Environmental Engineer dated 2017 05 08 concerning the East End Sewage Treatment Plant primary clarifiers and bioreactor engineering services be received and that Tulloch Engineering be retained with an Engineering Agreement to be brought forward at a future Council meeting.

By-law 2017-115 passed in open Council May 29, 2017

Building on the preliminary engineering work related to the Primary Clarifier and the Bioreactor at EEWWTP, approval to proceed with the design and construction of mitigation measures to arrest the settlement of the tanks is required.

## Analysis

The Manager of Development and Environmental Engineering recommends that single source, non-competitive approval be considered to Tulloch Engineering for the design and contract administration of the treatment plant settlement mitigation design based on the following:

- Tulloch Engineering was selected through a competitive proposal process in 2017 to conduct an assessment of settlement issues at the EEWWTP, the scope of which included Phase I surveys and investigations, Phase II geotechnical analysis, and Phase III recommendations of engineered solutions.

- Having completed the preliminary work on the settlement mitigation, Tulloch Engineering is ideally situated to continue the work implementing this solution.

This single source request is in accordance with Purchasing By-Law item 22.3 h) whereby Tulloch Engineering was awarded services related to the original assessment of settlement issues as described and such continuity of service is in the best interests of the City.

**Financial Implications**
Tulloch Engineering proposed fees in the amount of $601,197 including the non-rebatable portion of HST for the engineering services, with an additional $59,306 including the non-rebatable portion of HST, for fees associated with construction costs of the material testing*.
*(*Tulloch operates the certified laboratory to undertake construction materials testing and cannot be hired by the contractor for these services while hired by the City to provide construction administration).*

The expenditure amount can be accommodated from within the approved 2024 Sanitary budget.

**Strategic Plan / Policy Impact / Climate Impact**
This project is linked to the Infrastructure focus area of the Corporate Strategic Plan.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning Engineering Services for East End Wastewater Treatment Plant Settlement Mitigation Design as required by Public Works and Engineering Services be received and that Tulloch Engineering be retained at the total proposed fee of $649,079 plus HST.

A by-law authorizing signature of an agreement concerning provision of these services will appear on a future Council Agenda.

Respectfully submitted,

Karen Marlow
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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Karen Marlow, Manager of Purchasing |
| DEPARTMENT: | Corporate Services |
| RE: | Electric Vehicle Charging Station Infrastructure |

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## Purpose

The purpose of this report is to obtain Council approval for implementation of Electric Vehicle Charging Infrastructure accommodating five stations for light duty fleet vehicles to be installed at Transit, Public Works and Civic Centre, as recommended through Environmental Sustainability Committee (ESC).

## Background

As part of the Electric Vehicle (EV) Charging Infrastructure plan and preparation for transition to electric vehicles for city fleet, staff are recommending as first phase to purchase an initial five Level 2 EV charging stations for City light duty fleet at the following locations:

Transit Administration Building (111 Huron Street) – 1
Two (2) Public Works (129 Sackville Road) – 2
Two (2) Civic Centre (99 Foster Drive) – 2

## Analysis

A competitive bid process for suppliers RFP#042221 – Electric Vehicle Supply Equipment and Related Services was conducted under the LAS/Canoe Procurement Group of Canada which contained a roster of six potential providers. After review of vendor proposals by city staff, it was determined three vendors met the criteria of a turnkey solution to design, build, supply, install, and maintain the network of the EV charging infrastructure.

A scope of work and pricing request were issued to the shortlisted vendors. Responses were required to be submitted for consideration no later than 4 p.m. on August 19, 2024.

Submission from two providers were received prior to closing deadline, issued through their authorized representative:

S.&.T. Electrical Contractors Limited (S&T), Charge Point
Red Star Electric Ltd, FLO

After a review of the submissions, it is the consensus of the project team comprised of staff from Community Development and Enterprise Services and Public Works and Engineering Services, that the solution best suited to meet the City's requirements is from S&T with Charge Point. Charge Point will support grant writing opportunities and future plan developments of expanding fleet conversion to EV. S&T/Charge Point is prepared to install this year.

This request is in accordance with Purchasing By-law item 28) Cooperative Purchasing, where a competitive process was conducted, and participation is in the best interest of the City.

**Financial Implications**

S.&.T. Electrical Contractors Limited submitted pricing in the amount of $197,749 ($39,550 per station) including non-rebatable HST to purchase the five Electric Vehicle Charging Stations. This costing includes equipment infrastructure; design, build, and install requirements; and the initial first year cost for the system's 5-year maintenance and network services plan.

Transit's charging station has $175,000 within the 2024 Capital Budget for EV vehicle and charging station, funded by ICEP with City's share being 26.67%.

The remaining four charging stations for Public Works and Civic Centre will require additional funding as set out below.

Available funding:

$60,000 2024 Capital Budget for 2 units
$16,050 City Green Fund for 2 units

The shortfall of $82,150 can be accommodated as follows:

$22,740 2024 Green project expenditure budget
$59,410 recommended from Asset Management Reserve

Ongoing costs of $1,912 annually for all five units including non-rebatable portion of HST for service plan, will result in an operational increase (years 2 through 5).

A study is recommended to develop an installation plan for the remaining City light duty fleet conversion to EV. Staff will be submitting a request for the 2025 Capital Budget. Future capital budgets will include a phased-in installation for remaining chargers.

**Strategic Plan / Policy Impact / Climate Impact**

The addition of electrical charging infrastructure aligns with the Infrastructure focus area of the Corporate Strategic Plan, as well as the value of Environmental Stewardship, to use resources wisely to maintain and create a sustainability city for future generations.

It also aligns with the City's Greenhouse Gas Reduction Plan which targets net zero emissions by 2050; in particular, the Transportation Pillar which has a key

action of supporting transportation electrification opportunities through the installation of charging stations.

**Recommendation**

It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning the infrastructure installation of five electric vehicle charging stations as required by Transit, Public Works and Civic Centre be received and that the purchase from S.&.T. Electrical Contractors Limited at the quoted amount of $194,329 plus HST be approved with additional funding of $59,410 allocated from Asset Management Reserve.

Respectfully submitted,

Karen Marlow
Manager of Purchasing
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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Karen Marlow, Manager of Purchasing |
| DEPARTMENT: | Corporate Services |
| RE: | Seasonal Rental of Four Loader/Backhoes – Public Works |

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## Purpose

The purpose of this report is to obtain Council approval to continue the current rental arrangement of four loader/backhoes as required by Public Works and Engineering Services for the 2025 and 2026 summer construction seasons.

## Background

Public Works and Engineering Services (PWES) currently rents four backhoe units during construction season at $965/week/unit (*26 weeks-April 30 to October 31*) through Toromont CAT. The current two-year term expires October 2024.

In pre-planning for replacements and to secure rentals for April 2025, Public Works has reached out for budgetary costs.

## Analysis

Toromont CAT has submitted pricing of $1,375 per week/per unit to continue rental on current units. Alternatively, pricing on new unit models (2025) is at $1,551.25 per week/unit.

The current units are 2024 Cat 440 models with minimal hours (less than 500). Public Works is pleased with this equipment and the service level Toromont CAT delivers, which includes changing out to newer units when possible.

In review of these options, Public Works recommends continuing rental of current units for the 2025 and 2026 construction seasons at the lower rental rate.

The single source request of equipment rental is in accordance with Purchasing By-law 22.3 a) equipment is maintained by the manufacturer/representative, and h) where purchase is in the best interest of the City to retain existing equipment.

## Financial Implications

Toromont CAT quoted rental $1,375 per week/per unit amounts to $145,517 annually including the non-rebatable portion of HST for all four units.

This new rate will result in a budgetary increase starting in 2025 and beyond.

**Strategic Plan / Policy Impact / Climate Impact**
This is an operational matter not articulated in the Corporate Strategic Plan.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning the rental of four loader/backhoes for the 2025 and 2026 summer construction seasons, as required by Public Works be received and that the rental from Toromont CAT at their weekly rate of $1,375 plus HST per machine be approved.

Respectfully submitted,

Karen Marlow
Manager of Purchasing
705.759.5298
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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Brent Lamming, Deputy CAO Community Development & Enterprise Services |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | Sault Gymnastics Club Lease Renewal |

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## Purpose

The purpose of this report is to seek Council approval to enter into a new five year lease with the Sault Gymnastics Club (Club).

## Background

The Sault Gymnastics Club has had a long-standing lease (since 1979) with the City occupying space at the John Rhodes Community Centre on the second level. Under an agreement dated March 1, 2000, the Club agreed to pay to the City the capital costs attributable to the expanded gymnastics area (10,724.321 sq. ft. as opposed to 7,123.424 sq. ft. originally). The capital costs were $271,400 and the Club agreed to pay to the City as a loan repayment over twenty years with annual installments with interest on the amount outstanding from year to year at the rate of $2,000 per month until the capital cost is retired. Financing was secured by the City to cover the capital costs to facilitate. The agreement provided for three renewal options of five years and if each were renewed would have an expiry of December 31, 2019. The agreement was signed by the Club President and Vice President.

At the December 2, 2019 Council meeting, the following resolution was passed.

> Resolved that By-law 2019-233 being a by-law to authorize the execution of the Agreement between the City and Sault Ste. Marie Gymnastic Club to lease 10,724.321 square feet for the gymnasium facilities including adjoining washroom and change rooms at the John Rhodes Centre for the term commencing January 1, 2020 to December 31, 2024 be passed in open Council this 2nd day of December 2019.

## Analysis

Staff have met with Club representatives on several occasions to discuss the existing agreement and payment arrangements moving forward. Under the

existing lease the loan has been repaid in full and utility payments were made as agreed.

The new proposed lease consists of monthly rent and prorated utility payments with a recommended five-year term expiring December 31, 2029, with the option to renew for one option period of five years.

The new terms will see a monthly rent payment of $1,654.62 plus $500 for pro-rated utilities. For the remainder of the term, the utilities will increase every January 1, by the Consumer Price Increase, Ontario (“CPI”) on both rent and utility costs.

As part of the lease Financial Statements are provided annually.

Staff recognizes the importance the Club plays in providing an opportunity for youth in the community and fits well within the facility for which the space was designed. Staff recommends the agreement as proposed.

**Financial Implications**
This new agreement will provide for an incremental $29,917.20 over the five-year term not including CPI Ontario annual increase.

**Strategic Plan / Policy Impact / Climate Impact**
The recommendation supports the focus area of the Community Strategic Plan for 2021-2024 in a number of ways.

- Within the Service Delivery focus area, it continues to assist in delivering excellent customer service to citizens.
- Developing Partnerships with our Key Stakeholders and collaboration with community partners, which is essential to our success.
- Improves Quality of Life by supporting recreation and culture.

**Recommendation**
It is therefore recommended that Council take the following action:

The relevant By-law 2024-127 is listed under item 12 of the Agenda and will be read with all by-laws under that item.”

Respectfully submitted,

Brent Lamming, PFP, CPA, CMA
Deputy CAO
Community Development & Enterprise Services
(705)759-5314
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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Diane Morrell, Accessibility Coordinator |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | Trans Canada Trail Funding Agreement |

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## Purpose

The purpose of this report is to seek Council approval to enter into an agreement with Trans Canada Trail for Bellevue Kayak Dock accessibility updates.

## Background

At the August 12, 2024 Council meeting, the following resolution was passed:

"Resolved that the report of the Accessibility Coordinator dated August 12, 2024 concerning Bellevue Kayak Dock Accessibility Updates be received and that Council approve the amendment to the 2024 Capital Budget for the Bellevue kayak dock accessibility upgrade in the amount of $20,025 with associated funding of:

- $5,499 from the Barrier Removal Reserves for the Bellevue Kayak Dock
- Accessibility updates;
- $7,543 for in-kind services from Public Works; and
- $6,983 grant from Trans Canada Trail."

## Analysis

The City has received notification of approval of funds from Trans Canada Trail, and the funding agreement is the last step in the project before work can begin. The project is entirely composed of accessibility updates to the existing kayak dock at Bellevue Park. Accessibility features include paved barrier free parking, paved path of travel with appropriate grade from parking to dock, and dock railings.

## Financial Implications

- $7,543 for in-kind services from Public Works.
- $5,499 from Barrier Removal Reserves.
- Barrier Removal Reserves has an uncommitted balance of $26,300.

## Strategic Plan / Policy Impact / Climate Impact

The topic of this report is linked to the Strategic Focus Areas of Quality of Live, Service Delivery and Infrastructure.

This project also aligns with the *Accessibility for Ontarians with Disabilities Act*, 2005 ("AODA") and the Corporation's Accessibility Policy respecting the four core principles of:

- Dignity
- Independence
- Integration
- Equality of Opportunity

There is no climate change impact associated with this request.

**Recommendation**
It is therefore recommended that Council take the following action:

The relevant By-law 2024-130 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Diane Morrell
Accessibility Coordinator
705.541.7310
d.morrell@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Rick Van Staveren, Director Economic Development |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | Federation of Canadian Municipalities Brownfield Funding Approved |

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## PURPOSE

The purpose of this report is to advise Council that the funding application for the Federation of Canadian Municipalities (FCM) has been approved.

## BACKGROUND

On November 20, 2023 Council passed the following resolution:

Resolved that the report of the Director of Economic Development dated November 20, 2023 concerning Federation for Canadian Municipalities Brownfield Funding Application be received and that an application to the remediation program be submitted; further that the City contribute up to $100,000 from the Community Development Fund – Economic Development Program for the project.

The program covers 50% of the costs of remediation planning and remediation studies up to $200,000. To advance future development of Parcels Two and Three (Attachment A – Gateway Areas Legal Final) staff recommended an application to FCM. The project includes the completion of a Phase II Environmental Assessment and a Record of Site Condition for the remaining portions of the Gateway property.

It is estimated that the cost to complete this work will be up to $200,00 with the City contributing up to $100,000 from the Community Development Fund – Economic Development Program (CDF – EDP).

## ANALYSIS

Completion of this environmental study work will assist any future developer of the property by providing a current environmental report (previous reports were completed in 1996). The studies will also provide options for the redevelopment of the property and confirm whether a residential development can be feasibly undertaken on the parcels.

With this information Economic Development staff can market the property appropriately and advance discussions with interested developers leading to a future sale and the development of these properties.

**FINANCIAL IMPLICATIONS**
Funding for the environmental studies is estimated to total up to $200,000. With the recent approval of the FCM application, $100,000 will be provided by FCM and $100,000 from the Community Development Fund – Economic Development Program previously approved by Council.

**STRATEGIC PLAN / POLICY IMPACT**
This project supports the Strategic Focus Area of Community Development by contributing to quality of life and a vibrant downtown area. It also supports the City of Sault Ste Marie's environmental commitment.

**RECOMMENDATION**
It is therefore recommended that Council take the following action:

The relevant By-law 2024-124 is listed under Agenda item 12 and will be read with all by-laws under that item.

Respectfully submitted,

Rick Van Staveren
Director, Economic Development
705.759.5428
r.vanstaveren@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Travis Anderson, Director Tourism & Community Development |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | August 2024 Tourism Development Fund Applications |

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## Purpose

This report provides recommendations to Council from staff and the Tourism Sault Ste. Marie Board of Directors for the distribution of Tourism Development Funds

## Background

The Tourism Development Fund (TDF) was implemented June 1, 2021 to provide financial support to the broader tourism sector in different two streams - Festivals and Special Events and Attractions and Product Development. The funds for both streams of the TDF are generated from revenue collected through the Municipal Accommodation Tax (MAT).

Consideration is given to support initiatives that produce positive results in at least one of the following criteria:

- Development of quality tourism products and events;
- Increase in overnight stays and visitor spending in Sault Ste. Marie;
- Enhancement of the Sault's tourism product offerings;
- Support of the city's reputation and position as a first-rate visitor destination;
- Fulfill a gap in the tourism visitor experience landscape; and
- Encourage private sector tourism investment in Sault Ste. Marie.

Upon receipt of a TDF application, Tourism staff reviews the application for eligibility and assessment criteria and brings a recommendation forward to the Tourism Sault Ste. Marie Board of Directors. The Tourism Sault Ste. Marie Board of Directors further evaluates the applications and makes a recommendation to City Council for the distribution of the grant funds.

## Analysis

Tourism Development Fund applications are permitted on an ongoing intake and are reviewed monthly at the Tourism Sault Ste. Marie Board of Directors meetings.

Funds are expensed by the recipient and then claimed through the Tourism Development Fund after the completion of the event.

At the Tourism Sault Ste. Marie Board of Directors meeting held August 20, 2024, applications were reviewed with the following recommendations:

1. Soo Curlers Association Henderson Metal Fall Classic ($7,612.39)
2. Festival of Colours ($5,000)
3. Algoma Invitational Wrestling Tournament ($2,500)

**Soo Curlers Association – Henderson Metal Fall Classic**

*Background*
The Henderson Metal Fall Classic is a premiere curling tournament on the World Curling Tour which will take place from October 17-20, 2024. The tournament features 28 of the top men's curling teams from around the world, including Canada, USA, Italy, Switzerland, Czechia, Norway, Korea and Japan. Teams will compete on world-class ice over four days in a triple knockout style tournament.

Event organizers have been able to secure a $100,000+ purse prize, making this event the largest purse awarded outside the Grand Slam of Curling. This prize has created a significant draw for elite curlers and as such, a draw for tourists to travel to watch the event.

The Henderson Metal Fall Classic is a world-class event that strengthens and positions Sault Ste. Marie as destination for hosting reputable events. Last year the Tourism Development Fund supported costs related to the purchase and installation of video streaming technology, making the Soo Curlers Club one of 8 in Canada and less than 20 curling clubs in the world with this technology. This investment has assisted in securing additional tournaments including the Masters in 2025. The funding will assist the Club to upgrade the facilities PA (public address) system and the event and to purchase carpeting to cover the wood flooring on the on-ice spectator area and fan zone.

*Participants/ Visitation Projections*
Based on team registration and spectators
Local: 432
Regional:95
Ontario: 89
Canada: 37
USA: 40

*Economic Impact*
206 Visitors x 5 days x $150 per person per day = $154,500

In recognition of the positive impact the Henderson Metal Fall Classic will have on the local tourism industry the Board of Tourism Sault Ste. Marie passed the following resolution:

Be it resolved that the Tourism Sault Ste. Marie Board of Directors recommend a contribution of $7612.39 through the Tourism Development Fund – Conferences and Special Events Stream to support the Henderson Metal Fall Classic to be held October 17-20, 2024, and a report be submitted to City Council for consideration and approval.

**Festival of Colours**

*Background*
In India, the Festival of Colours (Holi) announces the arrival of spring and the passing of winter. The goal of the Vedic Cultural Centre will be to create a Festival of Colour celebration, strategically in Sault Ste. Marie to act as the central event for those that celebrate in northern Michigan, Sudbury, North Bay, and regionally. The idea is to build a large celebration for multiple communities to generate an enhanced experience as opposed to having multiple festivals throughout Northern Ontario. The Festival of Colour will be held October 18-19, 2024.

The Festival of Colour will include a Holika Dahan – bonfire evening and performance, Playing with Colours – a no barrier celebration as participants toss coloured powders, water balloons, and ‘pichkaris’ filled with coloured water, traditional songs, Bollywood hits, folk music, yoga, drummers, festival food gujiya (sweet dumpling), malpua (a sweet pancake) and thandai (spiced cold drinks).

*Participants/ Visitation Projections*
Visitor projections are based on visitor numbers in comparative communities (Thunder Bay) who host similar events.
Local: 991
Regional: 405
Ontario: 318
Canada: 220
USA: 74

*Economic Impact (out of town visitation only)*
612 out of town visitors x 2 days x $150 per person per day = $183,600

In recognition of the positive impact of the Festival of Colours will have on the local tourism industry the Board of Tourism Sault Ste. Marie passed the following resolution:

Be it resolved that the Tourism Sault Ste. Marie Board of Directors recommend a contribution of $5,000 through the Tourism Development Fund – Conferences and

Special Events Stream to support the 2024 Festival of Colours and that a report be submitted to City Council for consideration and approval.

**Algoma Invitational Wrestling Tournament**

*Background*
The Algoma Invitational Wrestling Tournament is a revival of a previously hosted high school wrestling tournament that, in the past successfully brought over 300 youth athletes to Sault Ste. Marie from Ontario and Michigan.

This new tournament aims to attract 200 participants in its first year. The tournament is hosted by the Algoma Wrestling Club in partnership with all three active wrestling groups in Sault Ste. Marie. The tournament will be hosted at Algoma University and Superior Heights Secondary School. Wrestling teams will arrive in Sault Ste. Marie on Friday, December 13, 2024, with a team competition taking place on Friday evening, an individual competition will take place on Saturday, December 14, 2024, and an athlete's clinic/seminar on Sunday, December 15, 2024.

*Participants/ Visitation Projections*
Visitor projections are based on anticipated team attendance in year one.
Local: 185
Regional: 74
Ontario: 60
Canada: 0
USA: 30

Economic Impact
90 out of town visitors x 2 days x $150 per person per day = $27,000

In recognition of the revival of the Algoma Invitational Wrestling Tournament, the Board of Tourism Sault Ste. Marie passed the following resolution:

Be it resolved that the Tourism Sault Ste. Marie Board of Directors recommend a contribution of $2500 through the Tourism Development Fund – Conferences and Special Events Stream to support the Algoma Invitational Wrestling Tournament and that a report be submitted to City Council for consideration and approval.

**Financial Implications**
No new funds would be required. The Tourism Development Fund currently has $465,780 uncommitted for the purposes of financial assistance within the tourism sector.

**Strategic Plan / Policy Impact / Climate Impact**
This item supports the Corporate Strategic Plans Focus Area:

- Community Development and Partnership focus of Maximizing Economic Development and Investment with the commitment to maintain financial viability.
- Community Development – Develop partnerships with key stakeholders and reconciliation.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the Director of Tourism and Community Development dated September 9, 2024 be received and that the recommendation of the Tourism Sault Ste. Marie Board of Directors to allocate $15,112.39 as detailed below be approved:

1. Soo Curlers Association Henderson Metal Fall Classic ($7,612.39);
2. Festival of Colours ($5,000);
3. Algoma Invitational Wrestling Tournament ($2,500).

Respectfully submitted,

Travis Anderson
Director, Tourism and
Community Development
705.989.7915
t.anderson@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# COUNCIL REPORT

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Dan Perri, Municipal Services and Design Engineer |
| DEPARTMENT: | Public Works and Engineering Services |
| RE: | Scope of Work Change – Lake Street Reconstruction |

---

## Purpose

The purpose of this report is to obtain Council approval for a scope of work change associated with Contract 2024-2E – Lake Street Reconstruction.

## Background

At the May 13, 2024 Council meeting, Contract 2024-2E was awarded to Trimount Construction Group Inc. During construction, a section of the Bellevue Park parking lot was identified as a good candidate for improved surface works.

## Analysis

The work proposed in Bellevue Park includes 115m of concrete barrier curb and 4,100 square metres of asphalt along with fine grading and surface preparation. Trimount Construction Group Inc. provided a quotation for this work in the amount of $149,209 excluding HST. Staff recommend adding this work to Contract 2024-2E.

Per the Procurement By-law, scope of work changes exceeding $125,000 must be approved by Council.

## Financial Implications

When non-recoverable HST is added, the total cost for this work is $151,835. At this time, the contract is tracking under budget. This amount can be covered within the original contract budget.

## Strategic Plan / Policy Impact / Climate Impact

This report is linked to the Quality of Life and Infrastructure focus areas of the Corporate Strategic Plan.

## Recommendation

It is therefore recommended that Council take the following action:

Resolved that the report of the Municipal Services and Design Engineer dated September 9, 2024 regarding Contract 2024-2E – Lake Street Reconstruction be received and that the scope of work change in the amount of $151,835 be approved.

Respectfully submitted,

Dan Perri, P.Eng.
Municipal Services and Design Engineer
705.759.5329
d.perri@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Jeffrey King, Solicitor |
| DEPARTMENT: | Legal Department |
| RE: | Lane Assumption, Closing and Conveyance – Steel Plant Subdivision |

---

## Purpose

The purpose of this report is to seek Council approval to assume, stop up, close and convey a laneway in the Steel Plant Subdivision, Plan 1598.

## Attachment

Attached as Schedule “A” is a map of the subject property.

## Background

City Council passed a By-law declaring the abutting city owned property at 80 Glasgow (PIN 31609-0252(LT) and an abutting lane (PIN 31609-0266(LT) as surplus on July 10th, 2023.

To facilitate same, the Legal Department is seeking Council’s approval to assume, stop up, close and convey part of the public lane which abuts the above-noted PINs and described as:

> PIN 31609-0253(LT) PT LANE PL 1598 KORAH CLOSED BY T220708 PT 2 1R4911; S/T T221041; T226464E; SAULT STE. MARIE

The request was circulated to various City Departments and it was recommended by Engineering and Planning that the adjacent laneway should also be considered for sale.

## Financial Implications

There is no significant financial impact associated with this matter.

## Strategic Plan / Policy Impact / Climate Impact

This is an operational matter not articulated in the corporate Strategic Plan.

## Recommendation

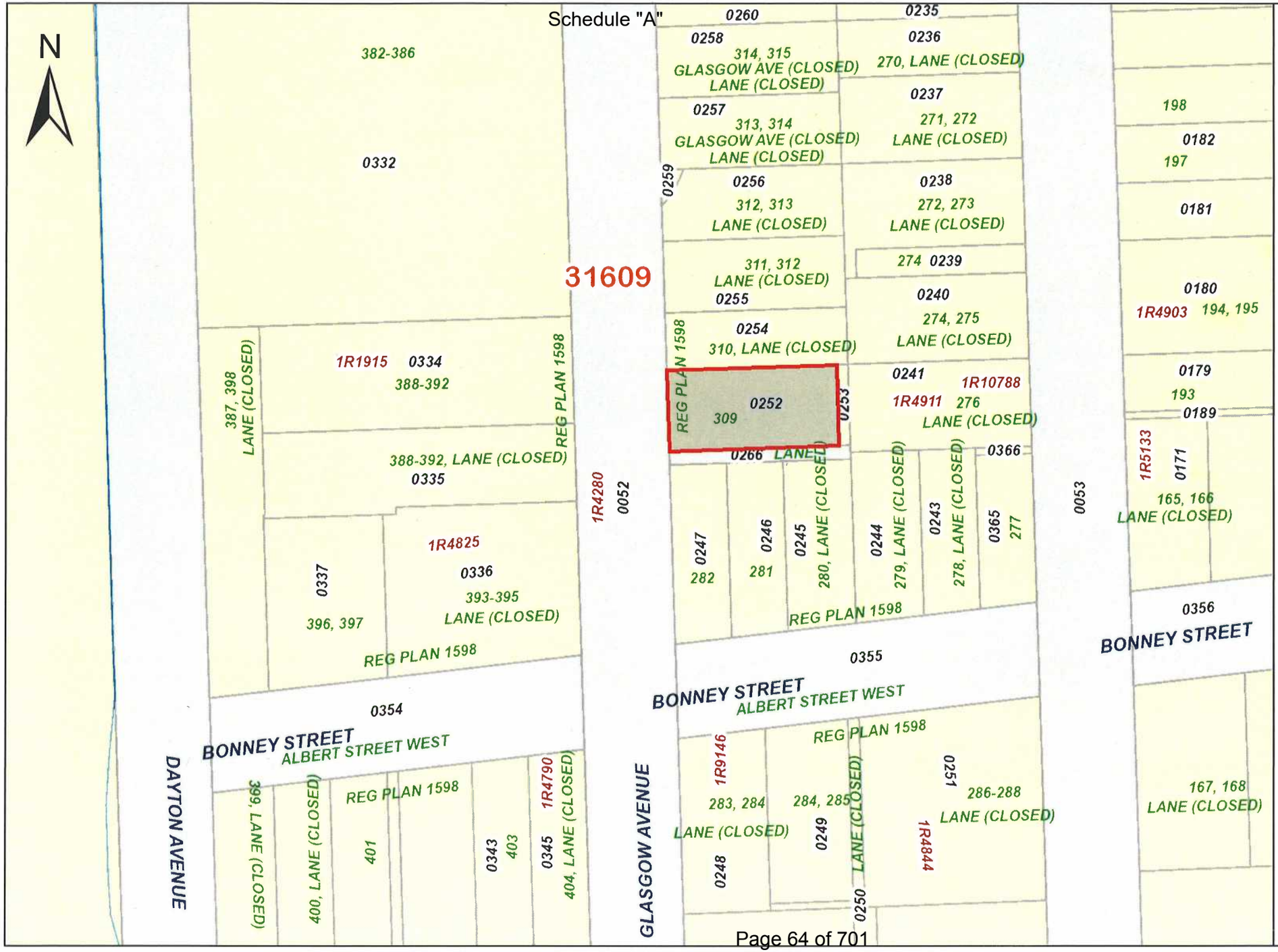
It is therefore recommended that Council take the following action:

The relevant By-laws 2024-120 and 2024-121 are listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Jeffrey King
Solicitor
705.759-2662
j.king3@cityssm.on.ca

Schedule "A"




ServiceOntario

PRINTED ON 27 OCT, 2020 AT 14:52:14
FOR LILIANA01

**SCALE**

0 30 meters

## PROPERTY INDEX MAP

ALGOMA(No. 01)

**LEGEND**

| | |
|---|---|
| FREEHOLD PROPERTY | |
| LEASEHOLD PROPERTY | |
| LIMITED INTEREST PROPERTY | |
| CONDOMINIUM PROPERTY | |
| RETIRED PIN (MAP UPDATE PENDING) | |
| PROPERTY NUMBER | 0449 |
| BLOCK NUMBER | 08050 |
| GEOGRAPHIC FABRIC | |
| EASEMENT | |

**THIS IS NOT A PLAN OF SURVEY**

**NOTES**

**REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS**

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED

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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Jeffrey King, Solicitor |
| DEPARTMENT: | Legal Department |
| RE: | Purchase of Property at 628 Second Line West |

---

## Purpose

The purpose of this report is to request approval from Council for the acquisition of property located at civic 628 Second Line West, legally described as PT LT 1 PL 5943 KORAH AS IN T23331, T54425, T39067 EXCEPT T54424; S/T T82455; SAULT STE. MARIE, PIN 31596-0092.

## Attachment

Attached as Schedule “A” is a map of the subject property.

## Background

The subject property is located at 628 Second Line West on the northeast corner of Second Line and Goulais Avenue. The property is owned by Windsor Park Residence Ltd. The City needs to acquire this property to improve the intersection for either a right turning lane or a roundabout. An appraisal was completed and a purchase price of $700,000 has been agreed upon should Council approve this transaction.

## Analysis

Not applicable.

## Financial Implications

Money for the purchase and demolition would come from the uncommitted capital roads reserve fund.

## Strategic Plan / Policy Impact / Climate Impact

This is an operational matter and not part of the Strategic Plan.

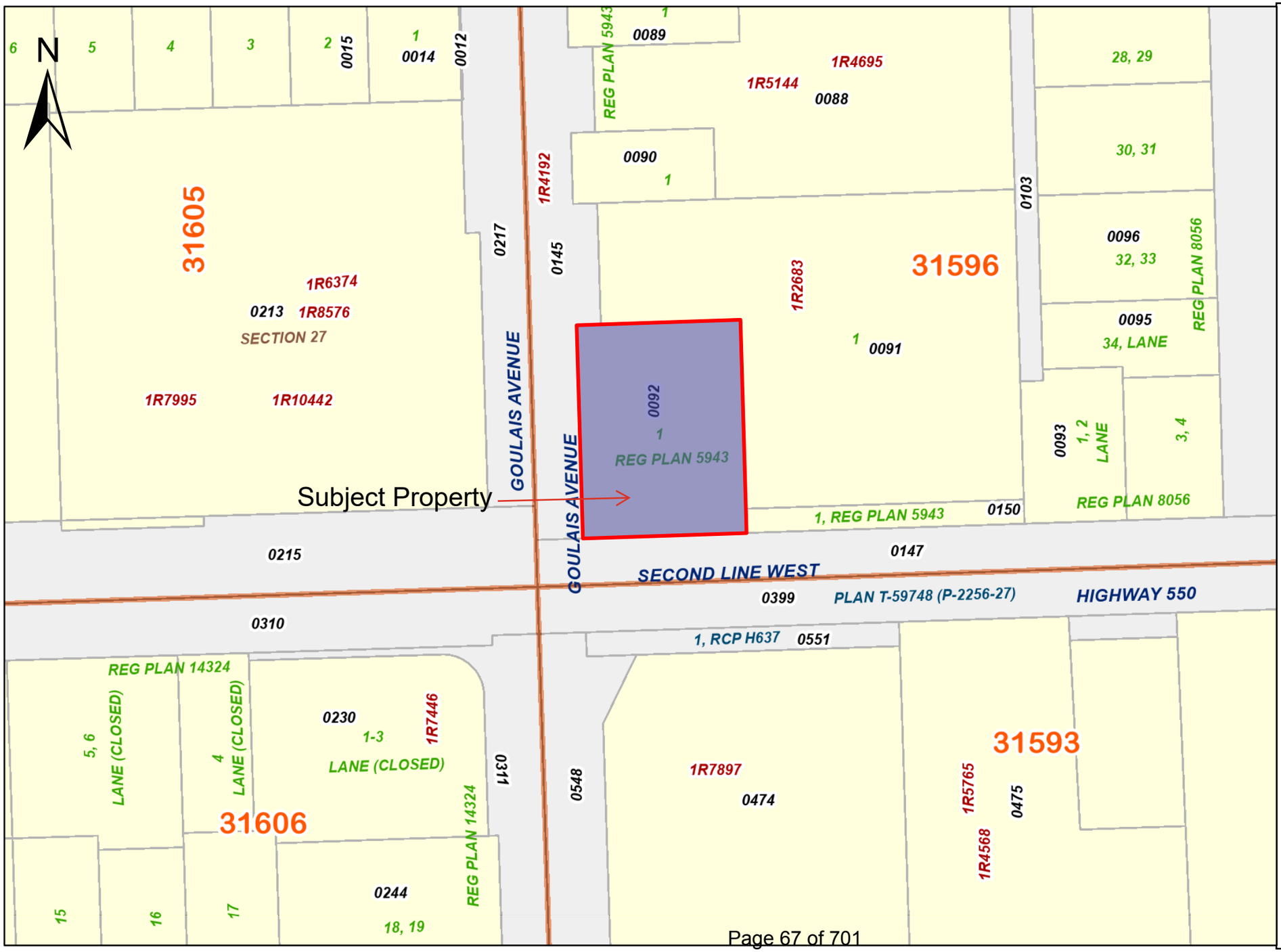
## Recommendation

It is therefore recommended that Council take the following action:

The relevant By-Law 2024-132 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Jeffrey King
Solicitor
705.759.2662
Email: j.king3@cityssm.on.ca

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PRINTED ON 05 JUN, 2024 AT 10:29:50
FOR ERIKA001

**SCALE**

0 8 16 24 32 40 48 meters

## PROPERTY INDEX MAP

ALGOMA(No. 01)

### LEGEND

| | |
|---|---|
| FREEHOLD PROPERTY | |
| LEASEHOLD PROPERTY | |
| LIMITED INTEREST PROPERTY | |
| CONDOMINIUM PROPERTY | |
| RETIRED PIN (MAP UPDATE PENDING) | |
| PROPERTY NUMBER | 0449 |
| BLOCK NUMBER | 08050 |
| GEOGRAPHIC FABRIC | |
| EASEMENT | |

**THIS IS NOT A PLAN OF SURVEY**

### NOTES

**REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS**

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

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REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED

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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Jeffrey King, Solicitor |
| DEPARTMENT: | Legal Department |
| RE: | Purchase of Property at 628 Second Line West |

---

## Purpose

The purpose of this report is to request approval from Council for the acquisition of property located at civic 628 Second Line West, legally described as PT LT 1 PL 5943 KORAH AS IN T23331, T54425, T39067 EXCEPT T54424; S/T T82455; SAULT STE. MARIE, PIN 31596-0092.

## Attachment

Attached as Schedule “A” is a map of the subject property.

## Background

The subject property is located at 628 Second Line West on the northeast corner of Second Line and Goulais Avenue. The property is owned by Windsor Park Residence Ltd. The City needs to acquire this property to improve the intersection for either a right turning lane or a roundabout. An appraisal was completed and a purchase price of ***$705,000*** has been agreed upon should Council approve this transaction.

## Analysis

Not applicable.

## Financial Implications

Money for the purchase and demolition would come from the uncommitted capital roads reserve fund.

## Strategic Plan / Policy Impact / Climate Impact

This is an operational matter and not part of the Strategic Plan.

## Recommendation

It is therefore recommended that Council take the following action:

The relevant By-Law 2024-132 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Jeffrey King
Solicitor
705.759.2662
Email: j.king3@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Melanie Borowicz-Sibenik, Assistant City Solicitor/Senior Litigation Counsel |
| DEPARTMENT: | Legal Department |
| RE: | Property Declared Surplus and Sale to DSSMSSAB – 60 London Street |

---

## Purpose

The purpose of this report is to recommend to Council that the property described as LT 86 PL 8454 ST. MARY'S; SAULT STE. MARIE, being civic 60 London Street be declared as surplus and offered for sale to the District of Sault Ste. Marie Social Services Administration Board ("DSSMSSAB") for one ($1.00) dollar in accordance with the City's policy for the disposition of land.

## Attachment

Attached as Schedule "A" is a map of the subject property.

## Background

The subject property was vested into the name of the City on February 7, 2024. The request to sell the property to DSSMSSAB for a nominal amount was circulated to various City Departments and the Sault Ste. Marie Region Conservation Authority for comments.

The Public Works and Engineering Department stated they have no potential use for the property.

The Engineering Department indicated there are new services to the property line from road reconstruction and they do not need to retain the property.

The Building Department stated they have no issues in proceeding.

The Planning Department indicated they were supportive of putting this property on the market.

The Community Development and Enterprise Services Department stated they have no comments.

The Sault Ste. Marie Region Conservation Authority advised that 60 London Street is not located within an area under the jurisdiction of the Conservation Authority, with regard to O. Reg. 176/06 for Development, Interference with Wetlands and Alterations to Shoreline and Watercourses.

**Analysis**
If Council declares the Subject Property surplus, the property will be advertised on the City's web page with the notation that it will be sold to the District of Sault Ste. Marie Social Services Administration Board.

**Financial Implications**
If the City decides to dispose of the Subject Property, it would be consistent with the City's plan to dispose of surplus property. As this property is presently City owned the City does not receive any revenues from taxes. Upon sale of the property, it may be assessable depending upon its ultimate use

**Strategic Plan / Policy Impact / Climate Impact**
Not applicable.

**Recommendation**
It is therefore recommended that Council take the following action:

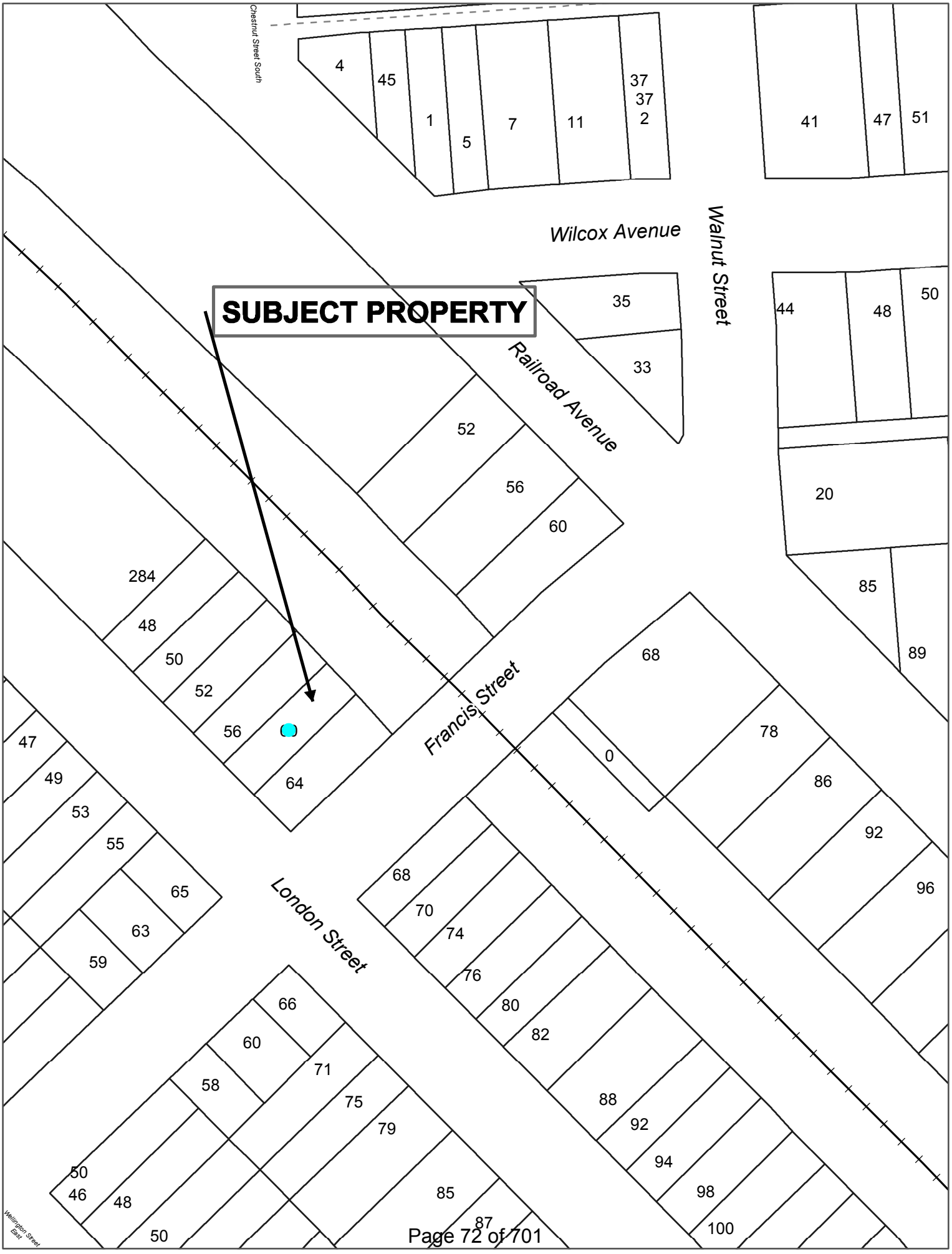
Authorize that the City owned property described as PIN 31544-0082 (LT) LT 86 PL 8454 ST. MARY'S; SAULT STE. MARIE, being 60 London Street be declared as surplus to the City's needs and to authorize the disposition of the said property to the District of Sault Ste. Marie Social Services Administration Board for one ($1.00) dollar, in accordance with the City's policy for the disposition of land.

The relevant By-law 2024-123 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Melanie Borowicz-Sibenik
Assistant City Solicitor/Senior
Litigation Counsel
705.759-5403
m.borowiczsibenik@cityssm.on.ca

Schedule "A"


SUBJECT PROPERTY
Chestnut Street South
Wilcox Avenue
Walnut Street
Railroad Avenue
Francis Street
London Street
Wellington Street East
4
45
1
5
7
11
37
37
2
41
47
51
35
33
44
48
50
20
52
56
60
284
48
50
52
56
64
47
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68
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92
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80
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100
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85
89

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Salvatore Marchese, Junior Planner |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | Active Transportation Fund Agreement |

---

## Purpose

The purpose of this report is to seek Council approval to enter into an agreement with Infrastructure Canada to accept funds that have been allocated to Sault Ste. Marie and to proceed with Hub Trail upgrades.

## Background

At the March 21, 2022 Council passed the following resolution:

> Resolved that the report of the Senior Planner dated March 21, 2022 concerning Active Transportation Fund be received and that staff be authorized to submit an application to the Federal Government's Active Transportation Fund for the following projects:
>
> - James Street Neighbourhood Connector – $132,000
> - West End Connector – $668,000
> - Carmen's Way John Roswell Hub Trail Gap – $350,000
> - Mark Street John Roswell Hub Trail Gap – 253,000
>
> for a total of $1,403,000 and that the City's required 40% share ($560,000) be sourced from municipal funds approved within the 2023 capital budget.

The City received notification in May 2023 of the approval of the funding application submitted to Infrastructure Canada in the amount of $841,800. Infrastructure Canada has provided a contribution agreement for approval and signature by the City of Sault Ste. Marie as the applicant.

## Analysis

The approval of this application provides for the expansion of four routes of the Hub Trail. These routes align with the City's Active Transportation strategy, lend support to other revitalization efforts undertaken recently, and bring additional access to parts of the community that do not have direct access to the main trail.

While working with Infrastructure Canada to confirm details of the route and funding for the project, the City moved ahead on part of the project where it could be combined with existing work being done in the area. The Carmen's Way and James Street portions were part of the work done and included under contract 2023-8E authorized by By-law 2023-21 in June 2023.

Upon Infrastructure Canada's receipt of the execution by-law approved by Council, Infrastructure Canada will put the agreement in final form, sign it, and return a final copy of the agreement to the City. The draft form contribution agreement will remain as worded, being part of Schedule "A" to the execution by-law, with only edits to the formatting and fonts.

The contribution agreement sets a deadline for all work to be completed on the trails by March 31, 2026.

**Financial Implications**

There are no direct financial implications associated with this report. The financial summary is outlined below. The first four projects can be completed within the funding allocated within this contribution agreement. The City's share of funding was included within the 2023 capital budget and the commitment remains. Staff are also planning to complete a portion for People's Road subject to Council's approval of the 2025 capital budget.

| | | | |
|---|---|---|---|
| Total Funding | | 1,403,000 | |
| Federal Share | | 841,800 | |
| City Share | | 561,200 | |
| | | | |
| Projects | Federal | City | Total |
| James Street Neighbourhood Connector | 79,200 | 52,800 | 132,000 |
| West End Connector | 400,800 | 267,200 | 668,000 |
| Carmen's Way Hub Trail Gap | 210,000 | 140,000 | 350,000 |
| Mark Street Hub Trail Gap | 151,800 | 101,200 | 253,000 |
| Subtotal | 841,800 | 561,200 | 1,403,000 |
| | | | |
| Additional Project | | | |
| People's Road from Second Line to Churchill Ave. | - | 188,251 | 188,251 |
| | | | |
| Total | 841,800 | 749,451 | 1,591,251 |

**Strategic Plan / Policy Impact / Climate Impact**

Active Transportation projects and infrastructure supports the City's Corporate Strategic Plan under "Quality of Life Advantages" and the "Environment"

Investments and expansion in Active Transportation projects supports a reduction in greenhouse gas emission and contributes to the City's response to Climate change.

**Recommendation**
It is therefore recommended that Council take the following action:

The relevant By-law 2024-126 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Salvatore Marchese
Junior Planner
705.759.5445
s.marchese@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Catherine Taddo, P. Eng., Manager of Development and Environmental Engineering |
| DEPARTMENT: | Public Works and Engineering Services |
| RE: | Asset Management Plan – Non-Core Assets |

---

## Purpose

The purpose of this report is to request approval of the asset management plan reports for phase II, non-core assets completed in accordance with Ontario Regulation 588/17 (as amended by Ontario Regulation 192/21) under the *Infrastructure for Jobs and Prosperity Act*.

## Background

In 2022 Council approved the City's Asset Management plans related to core assets, and on January 9, 2023 an additional information report regarding the plans was presented to Council.

On June 19, 2023 Council approved an Agreement with AECOM Canada Ltd. for continuation of the asset management plan work, to build out the Phase I plan to include all assets as required by the legislation for Phase II.

## Analysis

Municipalities in Ontario are required to prepare an asset management plan in accordance with Ontario Regulation 588/17 (as amended by Ontario Regulation 192/21) under the *Infrastructure for Jobs and Prosperity Act*. The asset management plans related to non-core municipal infrastructure include an inventory of assets, current levels of service, and costs to maintain levels of service. The asset management plan reports have been attached as follows:

1. Active Transportation;
2. Roadway Appurtenances;
3. Facilities;
4. Fleet;
5. Parks and Cemetery;
6. Solid Waste, and;
7. Protective Services.

The final asset management plans for non-core infrastructure assets will be posted on the City's website for the public to access.

The next milestone under the Regulation includes build-out of the current asset management plan to incorporate all assets, proposed levels of service, lifecycle management strategy and financial strategy by July 1, 2025.

**Financial Implications**

The asset management plan for non-core infrastructure includes a high-level assessment of future funding needs required to manage the assets at the current level of service. The guidance provided in this plan will inform asset investment and renewal decisions, including capital and operating budgets.

The asset management plans will inform the development of the City's long range financial plan that will provide funding strategies to address the requirements for the renewal, maintenance, and future growth of City assets, while being cognizant of the City's risks and fiscal constraints.

The objective at this stage is to formally adopt the reports, in accordance with the regulatory requirements. Similar to the process that took place for the core asset management reports in Phase I, staff will return to Council at a future date, where a summary presentation by the Consultant, will provide further insights and an opportunity for Council to ask questions.

Additionally, on the agenda is a recommendation to move forward with Phase III of the asset management plan. Phase III will build on Phases I and II by incorporating proposed levels of service, lifecycle management strategy and financial strategy, which will help guide future decision-making and planning.

**Strategic Plan / Policy Impact / Climate Impact**

The report links to the Strategic Plan focus area of infrastructure, and specifically maintaining existing infrastructure.

**Recommendation**

It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Development and Environmental Engineering dated September 9, 2024 concerning Asset Management Plan Phase II – Non-Core Assets be received and that the asset management plan reports be approved.

Respectfully submitted,

Catherine Taddo, P. Eng.
Manager of Development and Environmental Engineering
705.759.5380
c.taddo@cityssm.on.ca

FINAL

AECOM

# City of Sault Ste. Marie Active Transportation Asset Management Plan

June 2024



Delivering a better world

# Statement of Qualifications and Limitations

The attached Report (the “Report”) has been prepared by AECOM Canada Ltd. (“AECOM”) for the benefit of the Client (“Client”) in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents AECOM’s professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time..

AECOM shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. AECOM accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

AECOM agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but AECOM makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Without in any way limiting the generality of the foregoing, any estimates or opinions regarding probable construction costs or construction schedule provided by AECOM represent AECOM’s professional judgement in light of its experience and the knowledge and information available to it at the time of preparation. Since AECOM has no control over market or economic conditions, prices for construction labour, equipment or materials or bidding procedures, AECOM, its directors, officers and employees are not able to, nor do they, make any representations, warranties or guarantees whatsoever, whether express or implied, with respect to such estimates or opinions, or their variance from actual construction costs or schedules, and accept no responsibility for any loss or damage arising therefrom or in any way related thereto. Persons relying on such estimates or opinions do so at their own risk.

Except (1) as agreed to in writing by AECOM and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

AECOM accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information (“improper use of the Report”), except to the extent those parties have obtained the prior written consent of AECOM to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.

*AECOM: 2015-04-13*
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## Quality information

| Prepared by | Prepared by |
|---|---|
| | |
| Evelyn Gao, M.Sc., IAM Cert., Data Scientist | Lily Deng, IAM Cert., Asset Management Consultant |

| Checked by | Verified by | Approved by |
|---|---|---|
| | | |
| Donghui Lu, PhD., IAM Cert., Civil Manager | Jeff Atherton, Associate Vice President, Digital Transformation | Christiaan Lombard, MBA P.Eng., Asset Management Leader, Americas Water |

## Revision History

| Revision | Revision date | Details | Authorized | Name | Position |
|---|---|---|---|---|---|
| Draft (V1) | April 16th, 2024 | Draft Report – Active Transportation AMP | | Christiaan Lombard | Project Manager |
| Final | June 17th, 2024 | Final Report – Active Transportation AMP | | Christiaan Lombard | Project Manager |

## Distribution List

| # Hard Copies | PDF Required | Association / Company Name |
|---|---|---|
| 0 | 1 | Catherine Taddo, P.Eng., Manager, Development and Environmental Engineering, Public Works and Engineering Services, City of Sault Ste. Marie |

## Prepared for:

Catherine Taddo, P. Eng.
Manager, Development and Environmental Engineering
Public Works and Engineering Services

City of Sault Ste. Marie
99 Foster Drive, Sault Ste. Marie, ON P6A 5X6

## Prepared by:

AECOM Canada Ltd.
523 Wellington Street East
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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop an asset management plan (AMP) to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an AMP to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protection services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's active transportation assets and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of Ontario Regulation (O. Reg.) 588/17.

Organizations that implement good asset management (AM) practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024 deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the LoS that the municipality proposes to provide, the lifecycle activities and associated costs needed to achieve those LoS, available funding, any funding shortfalls, and the risk of failing to meet the proposed LoS. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service (LoS) objectives, stakeholder identification, LoS framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Section 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. **Figure 1-1** demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

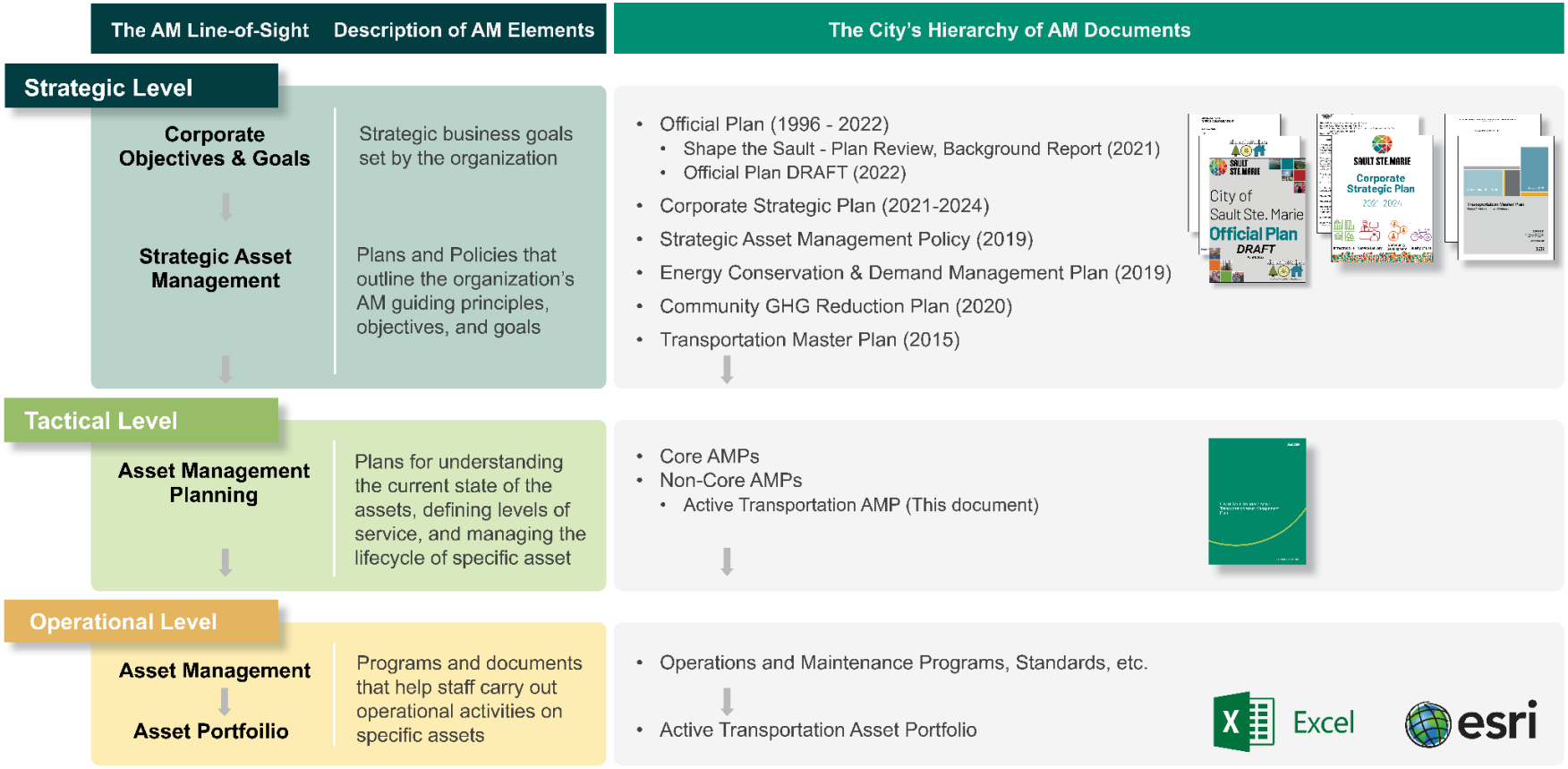


**Figure 1-1: The City's Asset Management Line of Sight**

# 2. State of Infrastructure

Active transportation assets encompass a variety of infrastructure and amenities designed to support non-motorized modes of transportation, such as walking and cycling. The City's active transportation system includes the pedestrian route network, the bicycle route network, and the multi-use path network. The components of these networks form a comprehensive inventory, detailing the quantity, condition, and specifications. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long-range AM planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of active transportation assets, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of active transportation is illustrated, showcasing three main categories: pedestrian route network, bicycle route network, and multi-use path network. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's active transportation assets, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or costs tracking at the asset or higher levels.

It is important to mention that pedestrian and multi-use path bridges are not encompassed within this hierarchy, as they have been addressed in the Roads AMP. Additionally, the steel sheet pilings supporting the waterfront walkway provide stormwater protection for the seawall and will be incorporated into the Stormwater AMP in the next iteration. Therefore, they are excluded from the waterfront walkway asset components and further analysis in this AMP.

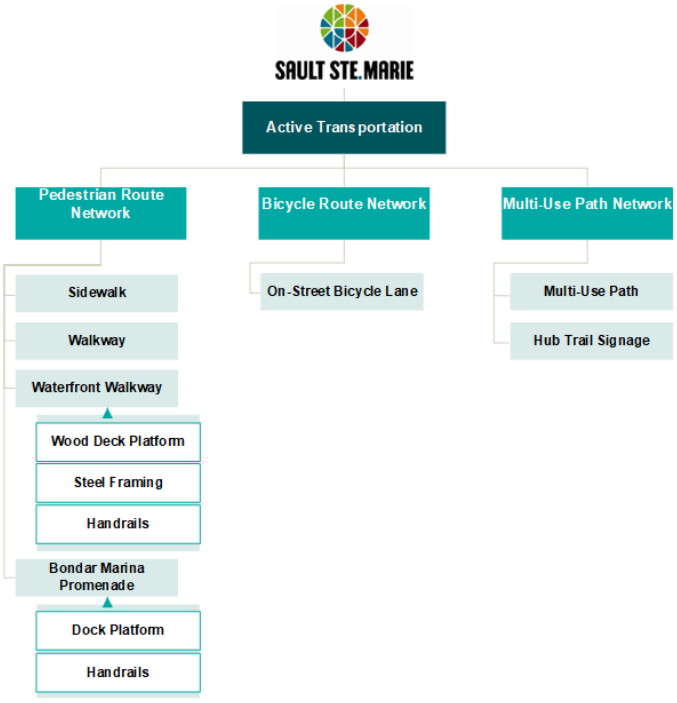


**Figure 2-1: City of Sault Ste. Marie Active Transportation Asset Hierarchy**

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

A complete active transportation inventory is compiled based on the raw data provided by the City during the data gathering stage of the project, and is obtained from the following sources: ArcGIS Shapefile – Public Sidewalks (November, 2023), ArcGIS Shapefile – Bike Lanes (November, 2023), ArcGIS Shapefile – Hub Trails (January, 2024).

**Table 2-1** presents the summary of the City's active transportation inventory.

**Table 2-1: Active Transportation Inventory Summary**

| Asset Group | Asset Category | Asset Sub-Category | Quantity | Unit |
|---|---|---|---|---|
| Active Transportation | Pedestrian Route Network | Sidewalk | 346 | km |
| | | Walkway | 8 | km |
| | | Waterfront Walkway | 1/2,745 | km / $m^2$ |
| | | Bondar Marina Promenade | 0.13/199 | km / $m^2$ |
| | Bicycle Route Network | On-Street Bicycle Lane | 35 | km |
| | Multi-Use Path Network | Multi-Use Path | 26 | km |
| | | Hub Trail Signage | 134 | Ea. |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices or construction costs. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

**Table 2-2** presents the unit replacement cost and the total replacement value for active transportation asset categories within the City. It is worth noting that the cost valuations for the bicycle route network have already been included in the City's Roads AMP; therefore, they are not considered here. Aside from that, the combined replacement value for the remaining categories amounts to approximately $156 million, with the pedestrian route network accounting for the majority portion (87%).

**Table 2-2: Current Replacement Value**

| Asset Group | Asset Category | Asset Sub-Category | Unit Replacement Cost | Total Replacement Value |
|---|---|---|---|---|
| Active Transportation | Pedestrian Route Network | Sidewalk | $250 / m | $123,412,000 |
| | | Walkway | $250 / m | $2,509,000 |
| | | Waterfront Walkway | $485 – $1,894 / m and $m^2$ | $9,078,000 |
| | | Bondar Marina Promenade | $353 – $1,228 / m and $m^2$ | $422,000 |
| | Bicycle Route Network* | - | - | - |
| | Multi-Use Path Network | Multi-Use Path | $555 / m | $20,283,000 |
| | | Hub Trail Signage | $468 – $707 Ea. | $108,000 |
| **Total** | | | | **$155,812,000** |

** Replacement costs for bicycle route network have been included in the Roads AMP.*

It is noted that the replacement costs are estimated based on a Class 4[1] cost estimation approach. These estimates are typically prepared with limited information, resulting in wide accuracy ranges. Class 4 estimates serve various purposes, including project screening, feasibility assessment, concept evaluation, and preliminary budget approval. They are utilized for detailed strategic planning, business development, project screening at more advanced stages, alternative scheme analysis, confirmation of economic and technical feasibility, and approval to proceed to the next stage. Typically, depending on the construction complexity of the project, relevant reference information, and other associated risks, the accuracy ranges for Class 4 estimates fall within the following bounds (could exceed based on various criteria):

- On the lower side, -10% to -20%
- On the higher side, +20% to +30%

It is also worth noting that the total replacement values are presented in inflated dollars and have been marked up by 45%, out of which 15% accounts for engineering and project management cost and 30% for contingency cost.

### 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modeling may be justified. Conversely, for low-value assets, the cost of deterioration modeling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at an acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Some assets are operated intermittently or even infrequently or are being operated at a lower demand than their designed capacity. Thus, the actual operating “age” of the asset is reduced.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., corrosive chemicals), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical.

**Figure 2-2** shows the weighted average asset age and RSL as a proportion of average ESL for sidewalks, Bondar Marina promenade, and multi-use paths. However, due to the absence of installation date information for all other asset subcategories (i.e., the remaining subcategories under the pedestrian route network), their average age and RSL are not presented in this section. It is recommended to collect installation date information for these assets and include it in the next iteration of the AMP.

[1] Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Cost Estimate Classification System - As Applied In Engineering, Procurement, and Construction for the Building and General Construction Industries, 2020, Retrieved in February 2024

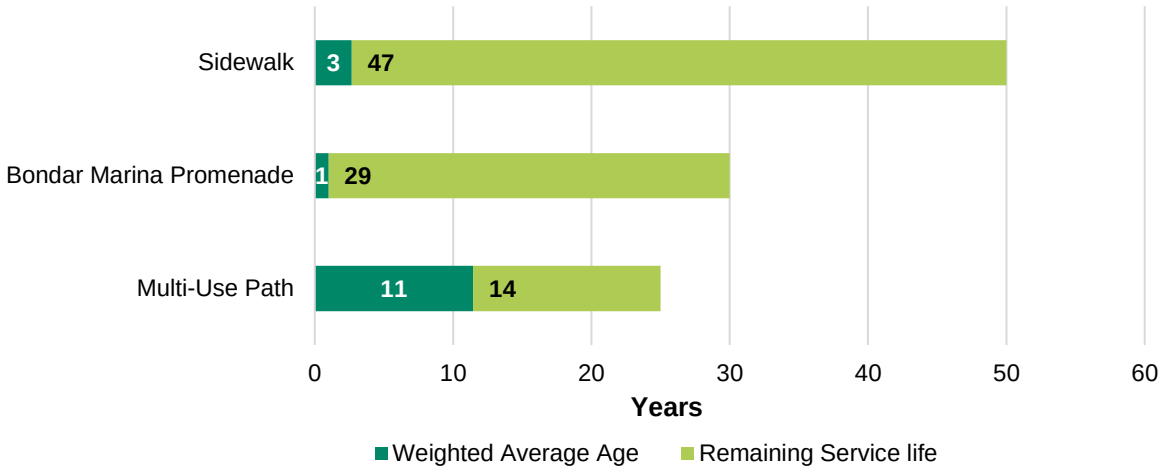


**Figure 2-2: Active Transportation Asset Weighted Average Age and Remaining Service Life**

### 2.2.4 Asset Condition

There are no regular field condition assessments for active transportation assets that produce reliable condition gradings for AM purposes. In some instances, this gap can be addressed by applying the two-parameter Weibull distribution function, a statistical method commonly used in reliability studies and lifetime prediction models. However, in this particular case, only 5% of the City's active transportation assets have installation dates (**Section 2.3.1**), which limits the application of Weibull distribution.

To enhance the evaluation on asset condition, it is recommended that the City establish a mechanism to collect essential asset information. Such action would contribute valuable data for more comprehensive condition assessments and assist in implementing effective asset management strategies.

## 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

### 2.3.1 Data Gap Observations

The City's active transportation assets were not previously stored in a single inventory. A significant amount of asset information was extracted from GIS databases, supplemented by spreadsheets and documents. Efforts have been made to address and fill gaps in key data where available, such as expected service life and replacement costs, based upon the City's own experience. This has been enhanced by additional data sources such as RS Means and AECOM's prior experience from other active transportation AM projects.

**Table 2-3** provides a summary of data completeness levels in the compiled active transportation inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-3: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Active Transportation** | 0% | 100% | 5% | 0% | 81% | 81% |

Improvement activities that support continuous improvement of the asset inventory are:

1. Asset ID: Currently, asset IDs created in individual ArcGIS shapefiles are not unique to other asset classes. It is recommended to add unique asset ID to new assets identified in the asset inventory.
2. Installation year: It is recommended to collect accurate installation date information for all assets and include it in the next iteration of the AMP.
3. Condition Assessment: Consider a routine condition assessment program.

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the active transportation assets. **Table 2-4** provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data.

**Table 2-4: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

## 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[2]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-3**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

[2] TechTarget Network, Definition: Data Life Cycle, 2020.

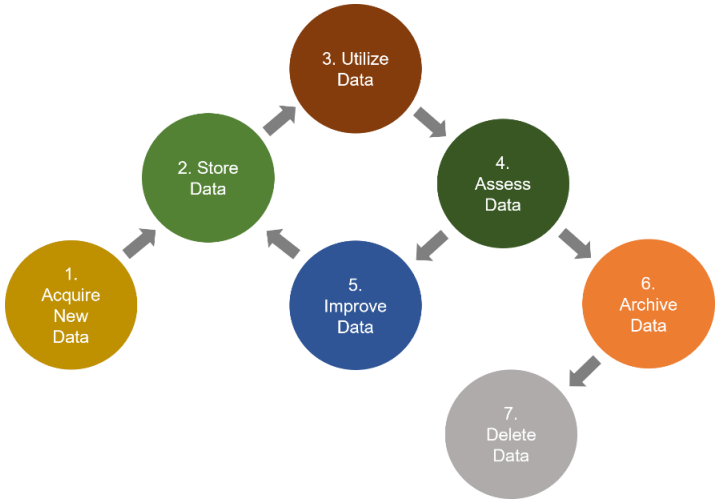


**Figure 2-3: Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data, but to migrate and merge data from other sources.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring a new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:
  - Poor asset performance due to lack of information and understanding of asset behaviour.
  - Non-compliance with statutory regulations or safety requirements.
  - Safety incidents due to risks not being identified or reported.
  - Asset failure due to gaps in maintenance planning.
- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or

maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:

- Consider what data should be archived and articulate the reasons behind the archival decisions.
- Examine any legal obligations pertaining to the retention of data records.
- Determine the appropriate duration for retaining different categories of data records.
- Evaluate the risks associated with the inability to retrieve specific data records.
- Specify the authorized individuals or entities who should have access to archived data records.
- Establish the expected timeframe for retrieving archived data records.
- Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.

- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data “squirrelling”, due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization’s data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report their current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and non-core assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[3] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1.** Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

**Table 3-1: The City’s Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe and accessible for all ages and abilities (the “8 to 80 Cities” concept). |

[3] City of Sault Ste Marie. 2021. Comprehensive Background Report.

| Overarching Themes | Corporate Objective |
|---|---|
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the City's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the City's history, diverse communities, and natural and cultural heritage, with the Downtown as the City's core destination for arts and culture. |

## 3.3 Stakeholder Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for fleet during the LoS workshops held with City staff. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups are identified below.

- Residential Customers
- Industrial, Commercial & institutional (ICI) Customers
- Regulatory Agencies
- Neighbouring Municipalities
- Environmental Groups
- Internal City Departments
- Disability Groups
- Sault Cycling Club

### 3.3.1 Legislated and Regulatory Requirements

Active Transportation assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., clean drinking water and safe roads, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**. Monitoring and development programs relevant to fleet assets are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • Motor Vehicle Safety Act<br>• Canadian Environmental Protection Act, 1999 (CEPA)<br>• Federal Sustainable Development Act | • Highway Traffic Act<br>• Ontario's Drive Clean Program<br>• Ontario Public Service Green Fleet Directive<br>• Environmental Assessment Act<br>– Ontario Regulation 231 – Transit Projects and Metrolinx Undertakings<br>• Environmental Protection Act<br>– Ontario Regulation 85 – End of Life Vehicles<br>• Commercial Vehicle Operating Registration (CVOR)<br>• Bus driver licensing through Ontario DriveTest Centres |

## 3.4 O. Reg. 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 only identifies levels of service metrics for core assets. A number of key LoS performance measures for active transportation assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5.**

## 3.5 Levels of Service Performance Metrics

Through a review of the legislated and regulatory requirements required for active transportation and collaboration with the City during the LoS workshop, 5 LoS performance metrics were determined for active transportation, as presented in **Table 3-3**.

### Table 3-3: Levels of Service Performance Metrics

| Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) | Data Source |
|---|---|---|---|---|---|
| Active Transportation | Access & Capacity | Walking, Cycling and Transit Volumes on Key Corridors | # | Y | The City's Transit services collect passenger count data.<br>The City's Engineering Department has the capability to collect passenger count data. |
| Active Transportation | Access & Capacity | Non-auto Mode Share | % | Y | Statistics Canada Census. Data is collected in 5 year intervals. |
| Active Transportation | Affordability | Proportion of Budget Dedicated to Capital and Maintenance of Active Transportation Infrastructure | % | Y | The City's municipal budget. |
| Active Transportation | Access & Capacity | Active Transportation Network Growth | km | N | Potential data source is the City's ArcGIS database. Includes multi-use trails, on-street bike lanes, sidewalks, and walkways. However, it should be noted that the data is not readily accessible. |
| Active Transportation | Quality & Reliability | User Comfort for the Multi-Use Trail | Letter Grade | N | Potential data sources are user ratings and surveys. The City's planning department gather user feedback during informational sessions. Comments related to the multi-use trail can be utilized in creation of a grading system to indicate the overall quality of the active transportation system. However, it should be noted that the data is not readily accessible. |

## 3.6 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.
- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

## 3.7 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social and technological landscape.

A summary of factors identified from the LoS workshop that would impact fleet service levels include, but are not limited to, the following:

- Technology.
- Electrification.
- Energy and Demand Management.
    - Increased Use of Electric Micro-Mobility Devices.
- Funding level.
- Growth
- Climate Change.
- Cold Climate
    - Creates operational issues in snow removal.
    - Staffing availability is limited for cold weather maintenance.
    - Staffing qualifications limited.

On November 2, 2021, the City had released the Comprehensive Background Report for updating the Official Plan[4]. The City's Official Plan guides local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to reach to 80,000 by 2031, and 83,300 people by 2036. Employment is projected to grow by approximately 6,000 jobs, from 31,000 jobs in 2016 to 36,900 jobs in 2036.

[4] City of Sault Ste Marie. 1996. Official Plan

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the 2025 deadline.

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

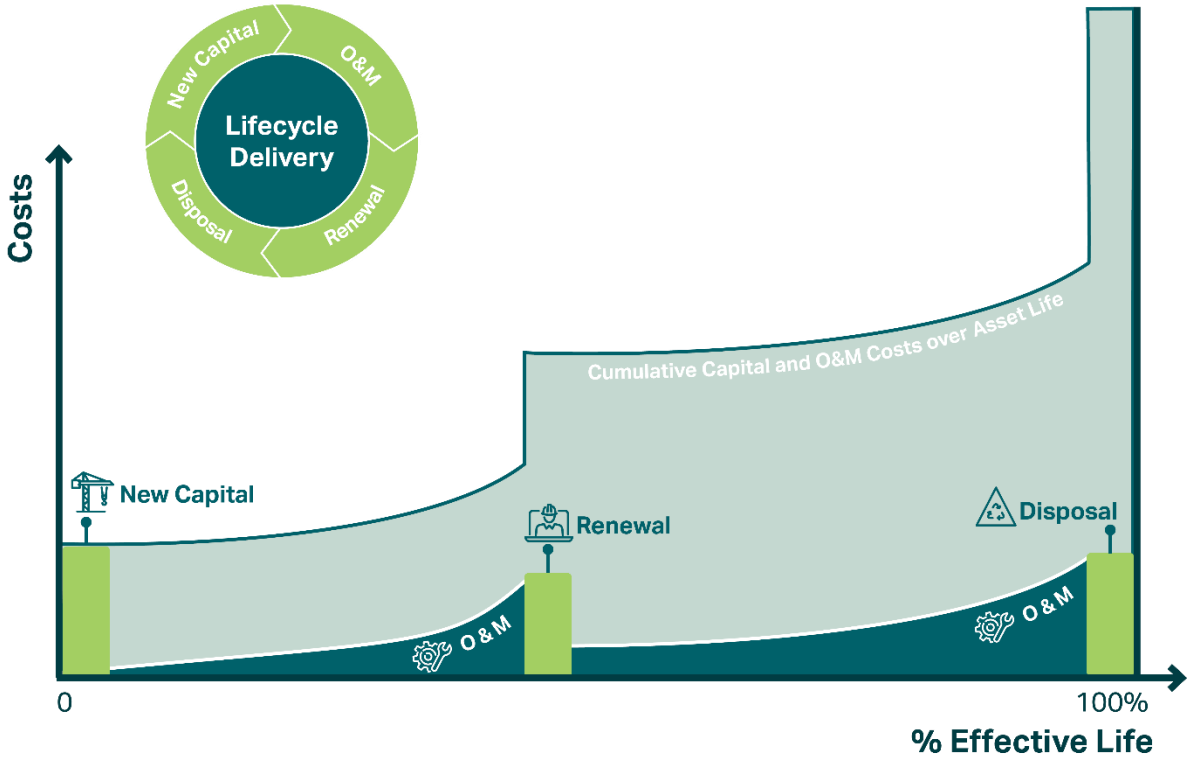


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

- The asset's operability and maintainability.
- Supply chain considerations.
- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality. Replacement activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes to leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment.

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

The City's pursuit of active transportation assets is driven by growth, primarily guided by the Official Plan and Transportation Master Plan. Additionally, the City considers other guiding documents, including the Cycling Master Plan, Corporate Strategic Plan, Energy Conservation & Demand Management Plan, Community GHG Reduction Plan, Strategic Asset Management Policy, and the Active Transportation Plan which is currently under development.

# 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in active transportation AM also contribute to cost-effectiveness over the asset's lifecycle. **Table 4-1** summarizes the O&M activities associated with the City's active transportation assets.

**Table 4-1: O&M Activities for Active Transportation Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Notes |
|---|---|---|---|
| Active Transportation | Pedestrian Route Network | • Inspect and repair.<br>• Snow removal.<br>• Inspect the condition of the frame/railing for the waterfront walkway section.<br>• Inspect or replace wood planks on the boardwalk on a complaint basis.<br>• Assess the structural framework and integrity with external engineering consultants.<br>• Replace a certain number of boards annually. | • It is the City's responsibility to perform snow removal on 1/3 to 1/2 of the overall network. However, snow removal is not mandated by Ontario's Minimum Maintenance Standards (MMS), and there are no clear definitions for these requirements. Despite this, the City does not want to transfer this responsibility to the residents, considering the demographic, which primarily consists of an aging population.<br>• The City has initiated the benchmarking of snow removal O&M, sending surveys to participants to learn about the methodologies employed for snow clearing in the network.<br>• The City's sidewalks O&M cost includes concrete maintenance and summer/winter maintenance programs. |
| | Bicycle Route Network | • Inspect and repair.<br>• Snow removal.<br>• Street sweeping and cleaning. | • The on-street bike lane network is currently closed seasonally, but cycling residents desire it to be open year-round. |
| | Multi-Use Path Network | • Inspect and repair.<br>• Snow removal. | NA |

# 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs. **Table 4-2** summarizes the renewal and replacement activities associated with the City's active transportation assets.

**Table 4-2: O&M Activities for Active Transportation Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Notes |
|---|---|---|---|
| Active Transportation | Pedestrian Route Network | • Resurface.<br>• Replace at end of life.<br>• Re-deck the boardwalk.<br>• Replace the frame/railing for the waterfront walkway section as needed. | • 3% of sidewalk network (by length) is replaced annually.<br>• Some sidewalks are replaced in conjunction with road reconstruction, and the associated costs are covered under roadway projects. Sidewalk evaluation is included as a smaller component of the roadway resurfacing program. |

| Asset Group | Asset Category | Activities Undertaken by the City | Notes |
|---|---|---|---|
| | Bicycle Route Network | • Resurface.<br>• Replace at end of life. | • The City allocates approximately $180,000 for replacement costs on a 5-year cycle.<br>• Bike lane condition assessments and inspections are conducted by road crews.<br>• Considerations of separated bike lanes may create additional efforts for snow removal and other maintenance activities |
| | Multi-Use Path Network | • Resurface.<br>• Replace at end of life. | • The City's maintenance expenditure for multi-use path network is approximately $50,000, while asphalt works are not included in this budget.<br>• While tree roots may cause issues necessitating replacement, the City's budget is inadequate to address such concerns. |

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic AM. As the City's active transportation assets approach the end of their lifecycle or become obsolete, a systematic methodology to their removal and decommissioning is essential. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements. **Table 4-3** summarizes the decommissioning and disposal activities associated with the City's active transportation assets.

**Table 4-3: Decommissioning and Disposal Activities for Active Transportation Assets**

| Asset Group | Activities Undertaken by the City |
|---|---|
| Active Transportation | • Sidewalk panels are separated and disposed of in an unofficial concrete dump.<br>• The City has an asphalt recycler to store asphalt material.<br>• The City has a budget for crushing the concrete and reuse in applicable projects, amounting to approximately $80,000 in reserve. |

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-4**.

**Table 4-4: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively. |

| Step | Description |
|---|---|
| | • Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

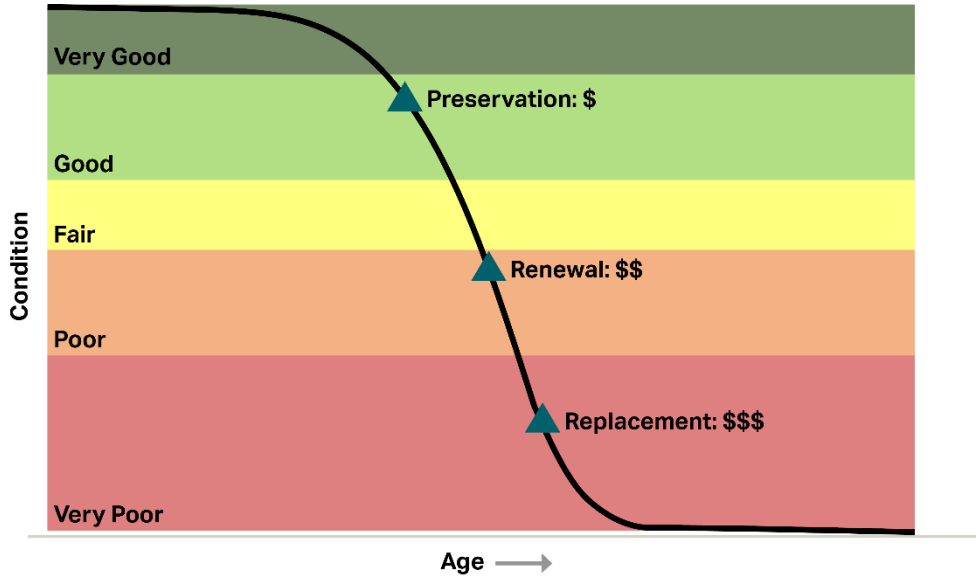


**Figure 4-2: Asset Deterioration Curve and Renewal Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. Key considerations include:

**1. Safety**

The City faces challenges in managing active transportation assets, especially concerning slip, trip, and fall incidents among residents, which could potentially result in insurance claims. The exposure to such risk is heightened due to the dynamic nature of outdoor pathways and public spaces. Uneven surfaces, weather-related hazards, and varying traffic conditions all contribute to difficulties in mitigating pedestrian safety incidents. To minimize this risk, the City should prioritize regular maintenance, promptly address potential tripping hazards, and implement preventive measures such as anti-slip surfaces.

**2. Accessibility in Active Transportation Infrastructure**

As the demand for active transportation options increases, the City faces a growing need to ensure that their active transportation infrastructure caters to diverse accessibility requirements, accommodating the evolving demand of pedestrians, cyclists, and other users. However, the City's existing infrastructure may present challenges due to aging facilities and outdated amenities, potentially hindering accessibility for active transportation users. To address these challenges effectively, the City should implement innovative solutions and revise strategies to enhance accessibility and promote the use of active transportation methods.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment or replacement decisions for each sub-category of active transportation.

**Section 5.2** assesses the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each active transportation asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's active transportation assets. A financial dashboard was developed to present the results of the lifecycle modeling (**Appendix A**).

The annual reinvestment needs for the active transportation assets were determined based on their age and ESL in years (i.e., replacing assets that have exceeded their ESL) in inflated dollar values, incorporating the following assumptions:

- Base year: The base year used is 2024. Any historic asset valuations have been inflated using the experienced inflation rate.
- Inflation rate: the inflation rates adopted for the financial model are presented in **Table 5-1**.

**Table 5-1: Inflation Rate over 20 Years** [5]

| Year | Inflation Rate |
|---|---|
| 2024 | 7% |
| 2025 | 6% |
| 2026 | 5% |
| 2027 | 4% |
| 2028 | 4% |
| 2029 | 3% |
| 2030 - 2043 | 3% |

- Markup: The project management and engineering, and contingency mark ups are 15% and 30% respectively.

[5] AECOM Analysis, "Rising Inflation", June 2022, Retrieved in October 2022

- Disposal Rate: 1% of the annual reinvestment is used as an allocation for disposal costs.

When the installation date is unavailable for assets, which is the case for the majority of the assets categorized under pedestrian route network, an annual reinvestment rate is applied to estimate the need for asset replacement. Detailed reinvestment assumptions for assets with missing installation dates or asset categories requiring a specific renewal approach are provided in **Table 5-2**.

**Table 5-2: Active Transportation Asset Capital Reinvestment Assumptions**

| Asset Categories | Annual Reinvestment Rate (2024-2033) | Reinvestment Strategy | Annual Average Reinvestment Cost (2024-2033)* |
|---|---|---|---|
| Pedestrian Route Network | 2% | Replace assets for a life cycle of 50 years | $ 50,180 – $2,468,000 |
| Bondar Marina Promenade | 2% | Replace for a life cycle of 30 years, starting 10 years after installation (2022) | $ 8,440 |
| Hub Trail Signage | The Council has already approved $150,000 for replacing hub trail signage; therefore, this capital reinvestment is not included in the funding need analysis. | | |

** Note: The annual average reinvestment cost is presented in non inflated dollar value.*

# 5.2 Capital Reinvestment Need Analysis

## 5.2.1 20-Year Reinvestment Need Analysis

The City's active transportation assets require an average annual reinvestment of $4.7 million over the period 2024-2033 and $5.8 million over 2034-2043 in inflated dollar values, as presented in

**Figure 5-1**. This is equivalent to a total of approximately $105 million over the next 20-year period. Notably, the reinvestment funding needs for sidewalks comprise the largest portion in most years, with a few exceptions, such as 2024, 2033, and 2035. In 2024, the waterfront walkway requires a reinvestment need of approximately $9 million, mainly because the steel framing of the waterfront deck platform has exceeded its ESL and necessitates replacement. Additionally, the multi-use paths play a significant role in the reinvestment needs in 2033 and 2035.

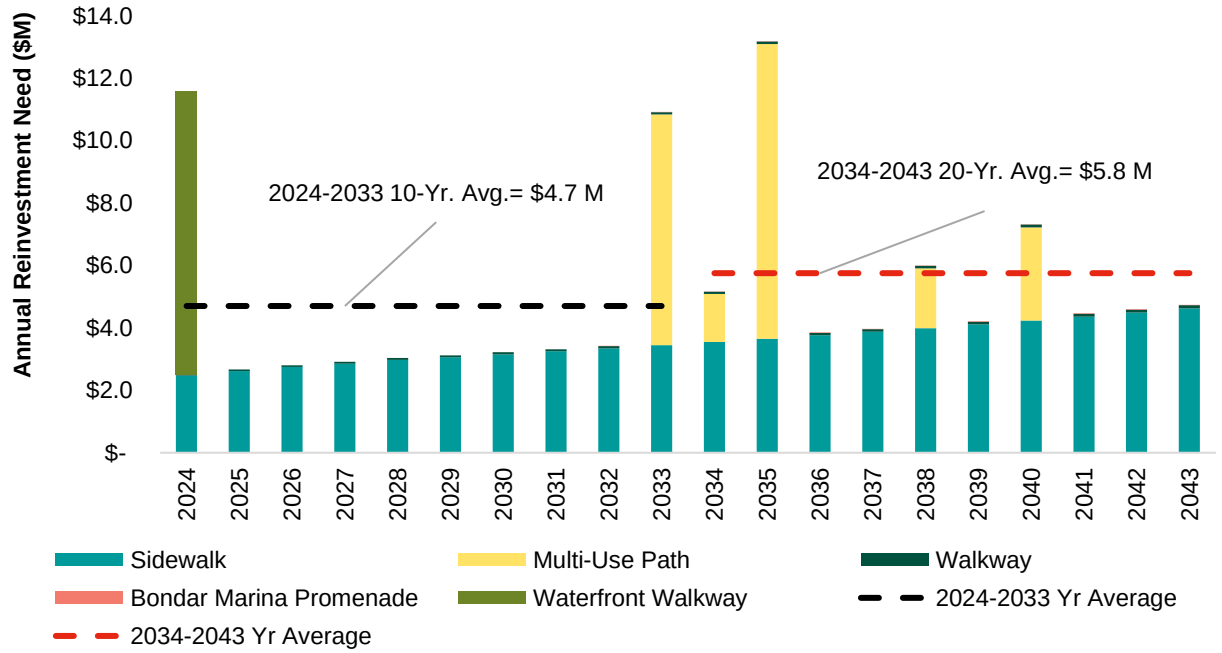


**Figure 5-1: Active Transportation 20-Year Reinvestment Need**

**Figure 5-2** provides a detailed illustration of the reinvestment requirements for the multi-use paths by year. It is evident that, with an ESL of 25 years, a large portion of the multi-use paths will reach the end of life in 2033 and 2035, calling for replacement and thus contributing to the spikes.

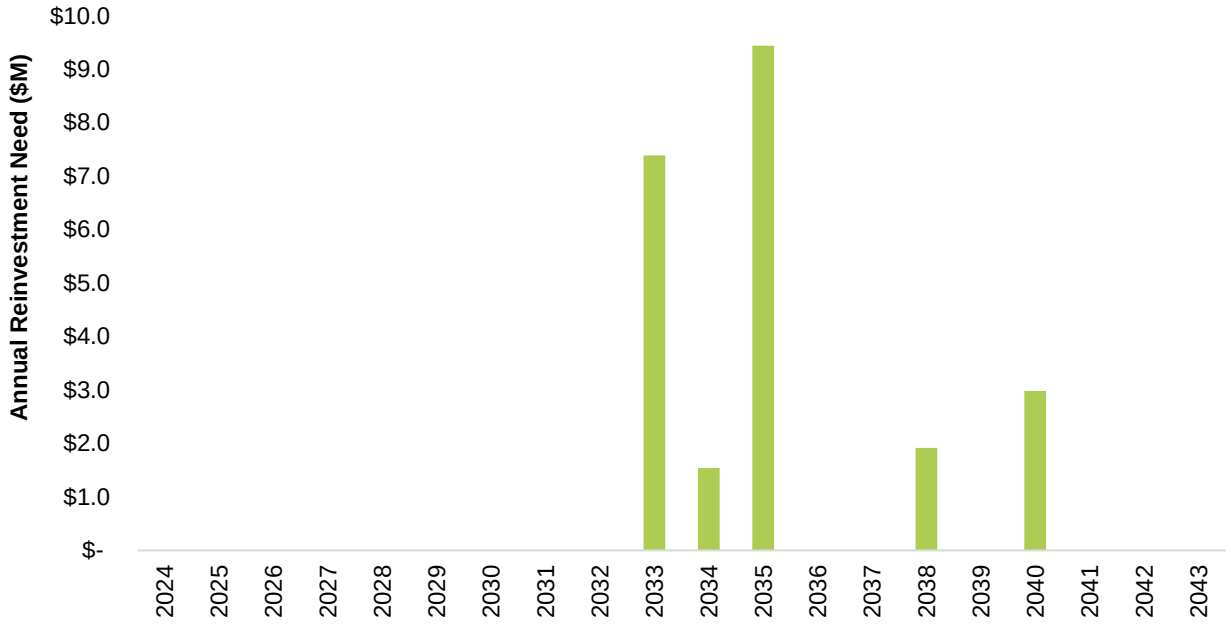


**Figure 5-2: Multi-Use Path Reinvestments by Year**

The detailed 20-year reinvestment needs for active transportation assets are presented in **Table 5-3** in inflated dollar values.

**Table 5-3: Active Transportation Assets 20-Year Total and Annual Average Reinvestment Need**

| Asset Sub-Category | Annual Average Need | 20-Year Total |
|---|---|---|
| Sidewalk | $3,529,000 | $70,581,000 |
| Walkway | $72,000 | $1,435,000 |
| Waterfront Walkway | $454,000 | $9,076,000 |
| Bondar Marina Promenade | $8,000 | $162,000 |
| Multi-Use Path | $1,164,000 | $23,274,000 |
| **Total** | **$5,226,000** | **$104,529,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's active transportation assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-3.** This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and uniform financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

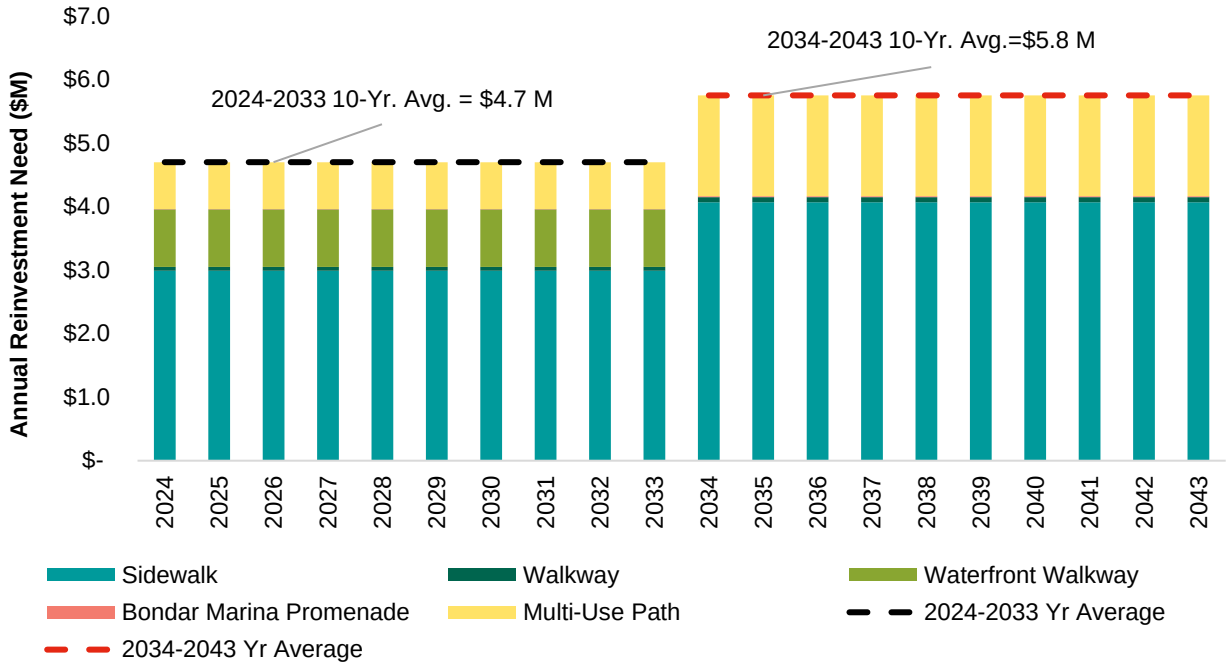


**Figure 5-3: Active Transportation Assets 20-Year Smoothed Annual Reinvestment Needs**

## 5.3 Full Funding Need Profile

**Figure 5-4** shows a full picture of the City's active transportation asset funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The smoothed annual reinvestment cost (**Figure 5-3**) was combined with the City's projected O&M cost (approximately $1.6 million annually for sidewalks). Additionally, one percent of the annual replacement cost was added to account for the asset disposal cost. With these additions, the City's active transportation asset full funding requirement increases to approximately $64 million over the next 10 years, averaging $6.4 million per year in inflated dollar value.

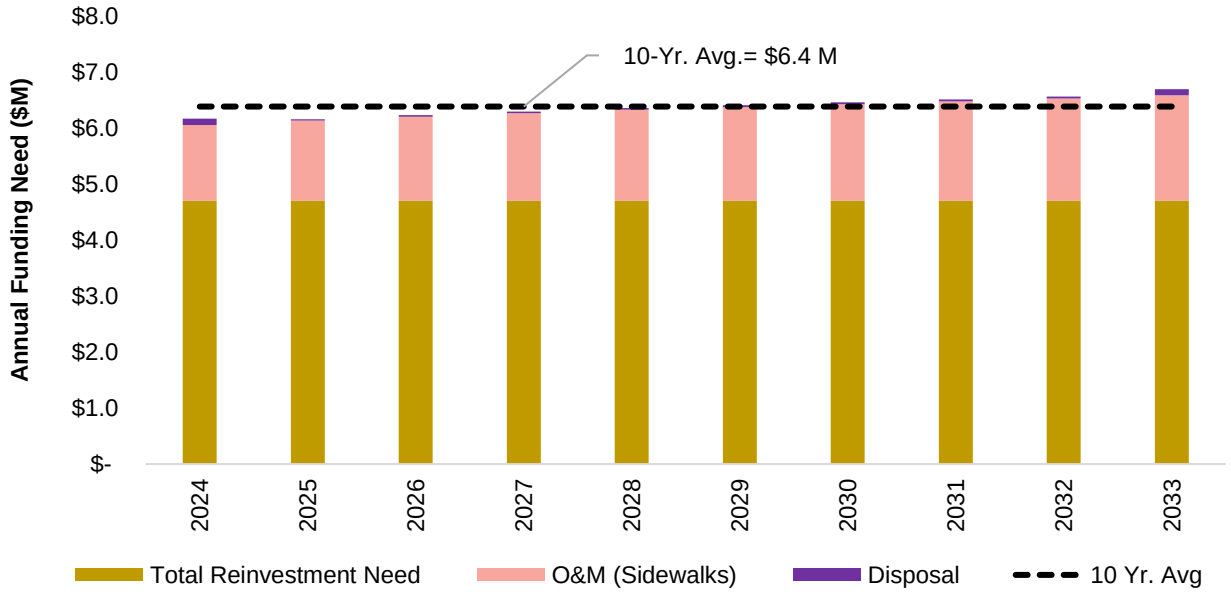


**Figure 5-4: Active Transportation Asset Full Funding Need Profile**

## 5.4 Funding Strategies

The City relies primarily on the property tax levy to fund their active transportation assets. Additionally, they receive funding from sources such as the Canada Community-Building Fund (CCBF), the Ontario Community Infrastructure Funding (OCIF), and the Ontario Municipal Commuter Cycling Program (OMCC). These diverse funding streams enable the City to allocate investments that exceed the capacity achievable through tax levies alone.

Moreover, AECOM suggests exploring the following options, acknowledging that the City's eligibility for these funds is subject to certain criteria:

- Investing in Canada Infrastructure Program
- Municipal Asset Management Program (MAMP)
- Enabling Accessibility Fund (EAF)
- Northern Ontario Heritage Fund Corporation (NOHFC)
- Active Transportation Fund

### 5.4.1 Investing in Canada Infrastructure Program

Administered by the Government of Canada, the Investing in Canada Infrastructure Program delivers long-term and stable funding to communities with the aim of addressing environmental challenges, fostering clean growth, and enhancing resilience to climate change. Through bilateral agreements, over $33 billion in funding is allocated to provinces and territories, supporting a diverse range of infrastructure projects nationwide[6].

The program encompasses investments across four targeted funding streams: the public transit stream, the green infrastructure stream, the community, culture, and recreation infrastructure stream, and the rural and northern communities' infrastructure stream. The public transit stream allocates funds for the construction, expansion, and enhancement of public transit infrastructure. The focus of these investments is on projects that aim to increase the capacity of public transit systems, enhance the quality and safety of existing or future transit infrastructure, and improve overall access to public transit systems. In pursuit of funding through this stream, the City has actively submitted proposals for the following projects[7]:

- Electrification of Transit System
- Transit Facility and Equipment Upgrades
- Purchase of Rolling Stock Assets
- Relocation of the Downtown Transit Terminal Construction and Renovation
- Transit Facility and Equipment Upgrades
- Purchase of Transit Ticket Vending Machines
- Purchase and Installation of Transit Bus Shelter

### 5.4.2 Municipal Asset Management Program (MAMP)

The MAMP is aimed at improving AM practices within municipalities[8]. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program may offer funding to support the development or improvement of AM plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable AM practices.

[6] Investing in Canada Infrastructure Program. (2023). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program. Retrieved on February 14th, 2024.

[7] Investing in Canada Infrastructure Program: Projects Under Review. (2022). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program: Projects Under Review. Retrieved on February 14th, 2024.

[8] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 14th, 2024.

### 5.4.3 Enabling Accessibility Fund (EAF)

The EAF is a Federal government program aimed at supporting projects that enhance accessibility for individuals with disabilities[9]. The fund provides financial assistance to eligible organizations for initiatives such as infrastructure improvements, renovations, and retrofitting to create more accessible spaces. Its goal is to contribute to a barrier-free and inclusive society by addressing physical barriers and promoting equal access in community spaces.

### 5.4.4 Northern Ontario Heritage Fund Corporation (NOHFC)

The NOHFC is an organization that provides financial support and promotes economic development in the northern regions of Ontario. Established to stimulate growth and sustainability, NOHFC offers funding for various projects, such as business expansion, job creation, infrastructure development, and community initiatives. Within the NOHFC, the Community Enhancement Program is an initiative aimed at supporting community-driven projects[10]. This program provides financial assistance for local initiatives that enhance community infrastructure, amenities, and services. Eligible projects may include the development or improvement of recreational facilities, community spaces, and essential services.

### 5.4.5 Active Transportation Fund

The Active Transportation Fund, introduced as part of a $5.9 billion funding initiative for public transit and active transportation, aims to invest $400 million over five years (beginning 2021-22) to enhance and expand active transportation networks across diverse communities[11]. Aligned with Canada's National Active Transportation Strategy, this fund seeks opportunities to increase the quantity, utilization, and quality of active transportation infrastructure nationwide. Eligible projects under this fund are divided into two streams: planning projects and capital projects. Planning projects, with a maximum payout of $50,000, involve the development or enhancement of formal active transportation strategic planning documents and stakeholder engagement. Capital projects, on the other hand, involve new infrastructure construction, enhancement of existing infrastructure, and the incorporation of fixed design and safety features that encourage increased active transportation. It is worth noting that the application for this fund is currently closed, and the results will be communicated in writing by Infrastructure Canada.

### 5.4.6 Trail Funding Program

The Trail Funding program is intended to assist Trail operators across Canada in the development and enhancement of the Trans Canada Trail[12]. The program includes a range of funding streams to support specific trail priorities including trail infrastructure and major repairs, trail signage, and accessibility and inclusion in trails.

[9] About Enabling Accessibility Fund. (2023). Government of Canada. Enabling Accessibility Fund - Canada.ca. Retrieved on February 14th, 2024.

[10] Community Enhancement Program. (2024). Northern Ontario Heritage Fund Corporation. Community Enhancement Program | NOHFC. Retrieved on February 14th, 2024.

[11] Active Transportation Fund. (2023). Infrastructure Canada. Infrastructure Canada - Active Transportation Fund. Retrieved on February 14th, 2024.

[12] Trail Funding Program: Program Framework. Trans Canada Trail. Trans Canada Trail | Trail Funding Program: Program Framework (tctrail.ca). Retrieved on March 15th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1.**

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory. | • Continue to refine the asset inventory and close existing data gap.<br>• As mentioned in **Section 2.1**, incorporate the steel sheet pilings supporting the waterfront walkway into the Stormwater AMP in the next iteration. |
| 2. | Use consistent condition grading schemes and develop a condition assessment process for all active transportation assets. | • Perform condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council.<br>• For assets without condition data, it is recommended that the City establish a mechanism to collect the installation dates.<br>– Currently, only 5% of the City's active transportation assets have installation dates. |
| 3. | Refine the LoS Framework and Setting LoS Targets. | • Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engage in discussions with key stakeholders to establish service level targets and identify associated costs to meet those targets.<br>• Once LoS targets have been decided upon, the City should develop strategies on how to meet service level targets, considering its existing operating environment (i.e., staff availability, current funding, resources, etc.).<br>• Develop a Customer Consultation Plan to engage the public and other stakeholders on the LoS framework and better understand customers' willingness to pay for enhanced service levels. |
| 4. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a comprehensive criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while the failure of low-risk assets could be accepted with caution. |
| 5. | Funding Need | • The financial model is based on several assumptions previously outlined in **Section 5**. It is recommended the City review financial modeling assumptions on reinvestment rate and replacement values and update the financial model with new information as it becomes available.<br>• As outlined in<br>• **Figure** 5-2, it is recommended that the City allocate an average of $4.7 million per year over the next 10 years for capital reinvestment in active transportation assets. Additionally, a total of $1.6 million should be budgeted for O&M expenditures during the same period. |
| 6. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication. |

# Appendix A – Active Transportation MS Excel Lifecycle Model and Inventory

FINAL

AECOM

# City of Sault Ste. Marie Roadway Appurtenances Asset Management Plan

June 2024



Delivering a better world

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| Revision | Revision date | Details | Authorized | Name | Position |
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| Final | June 17th, 2024 | Final Report – Roadway Appurtenances AMP | | Christiaan Lombard | Project Manager |

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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop an asset management plan to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an asset management plan to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protection services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's roadway appurtenances and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of O. Reg. 588/17.

Organizations that implement good AM practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024 deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the LoS that the municipality proposes to provide, the lifecycle activities and associated costs needed to achieve those LoS, available funding, any funding shortfalls, and the risk of failing to meet the proposed LoS. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service objectives, stakeholder identification, levels of service (LoS) framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Section 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. **Figure 1-1** demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

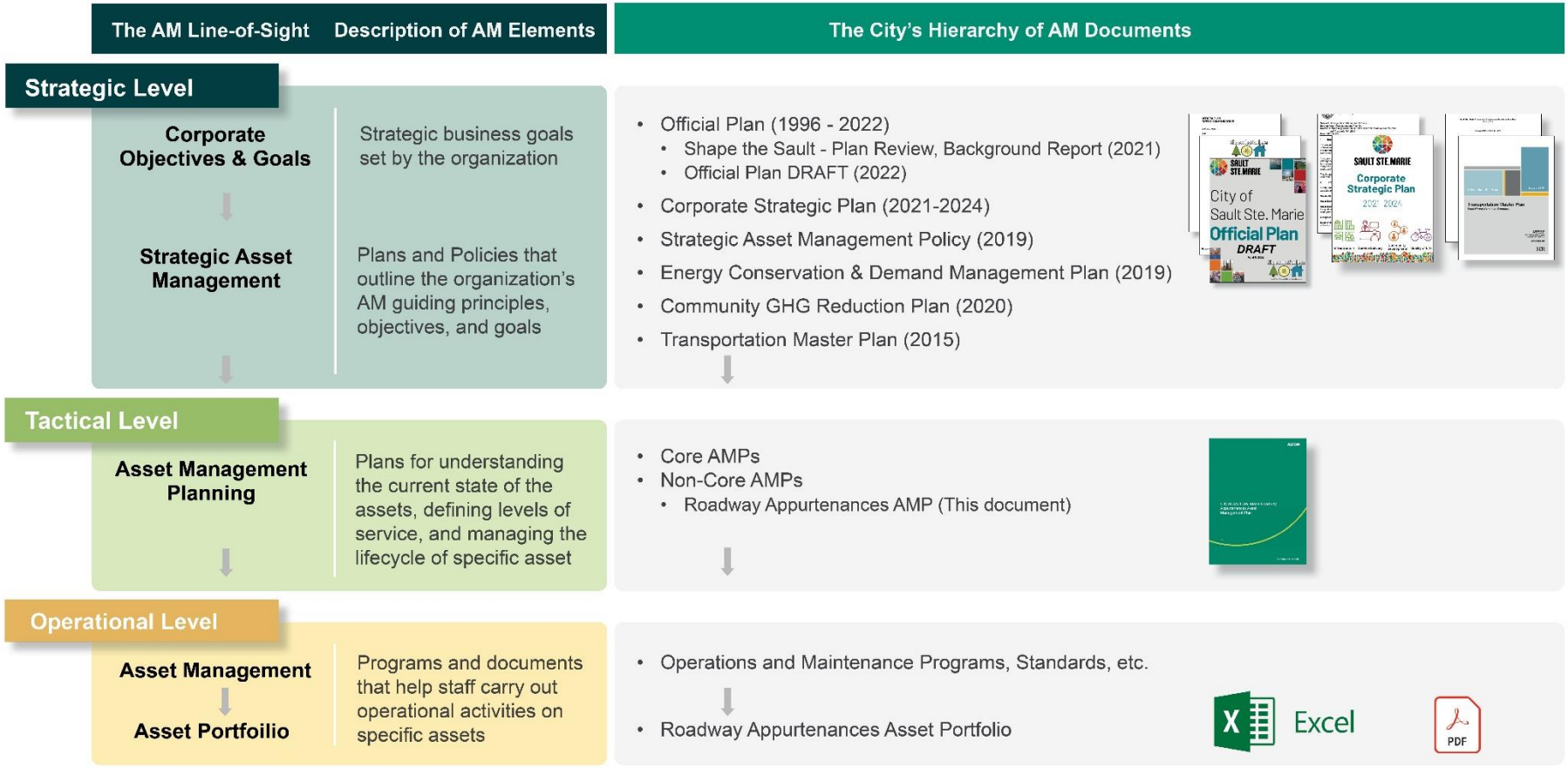


**Figure 1-1: The City's Asset Management Line of Sight**

# 2. State of Infrastructure

Roadway appurtenances encompass a diverse range of auxiliary elements crucial to the functionality and safety of roadways. The City's roadway appurtenances include traffic signals, signage, railway crossings, parking lots, and various supporting structures. The inventory of roadway appurtenances is a comprehensive catalog detailing the quantity, condition, and specifications of these components within the City. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into the maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range asset management planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of roadway appurtenances, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of roadway appurtenances is illustrated, showcasing five main categories: traffic signals, traffic equipment, traffic signs, parking lots, and railway crossings. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's roadway appurtenances, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or track costs at the asset level or higher levels.

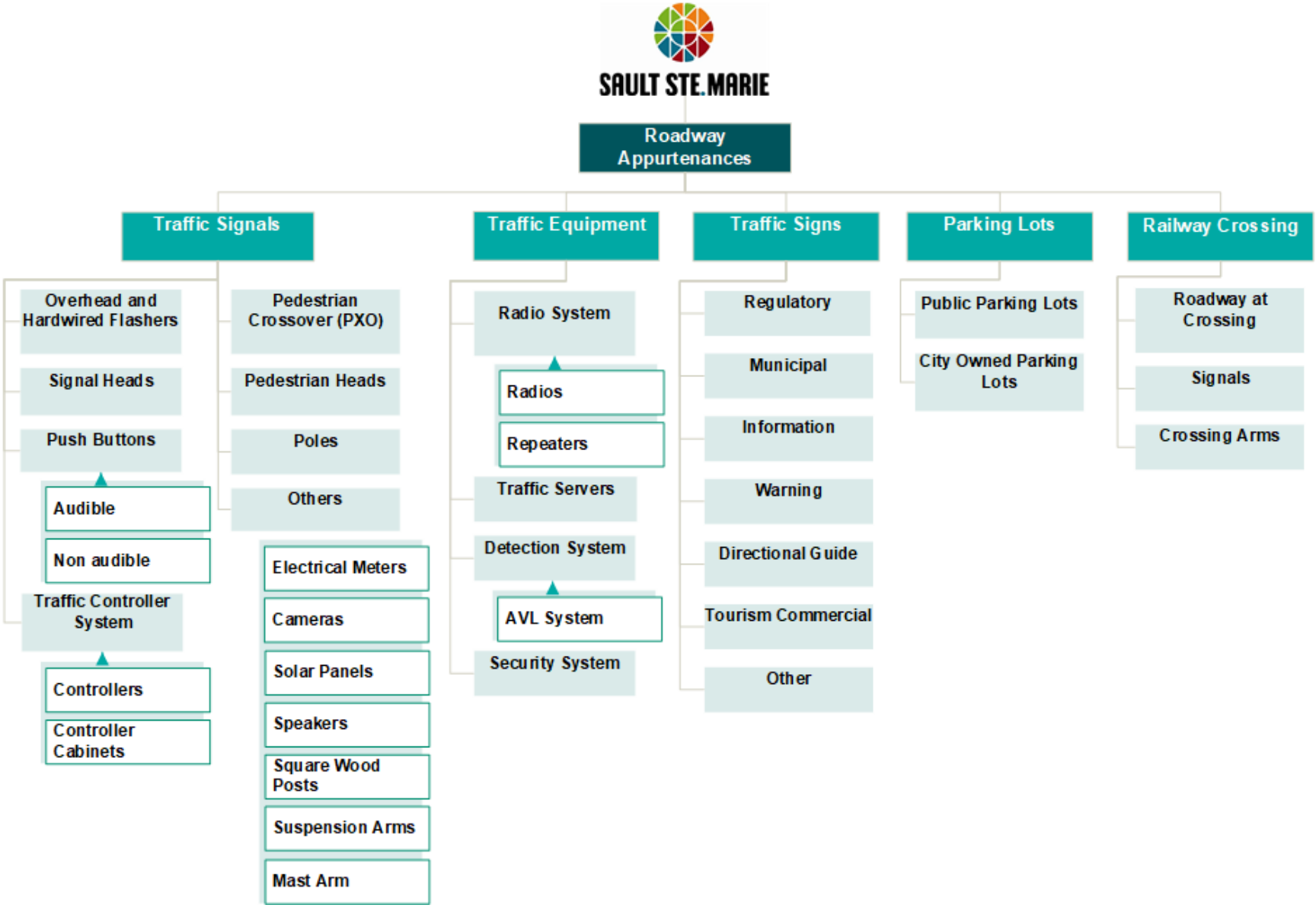


**Figure 2-1: City of Sault Ste. Marie Roadway Appurtenances Asset Hierarchy**

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

**Table 2-1** presents the summary of the City's roadway appurtenances inventory.

**Table 2-1: Roadway Appurtenance Inventory Summary**

| Asset Group | Asset Category | Quantity | Unit |
|---|---|---|---|
| Roadway Appurtenances | Traffic Signals | 2,381 | Ea. |
| | Traffic Equipment | 276 | Ea. |
| | Traffic Signs | 13,172 | Ea. |
| | Railway Crossings | 52 | Ea. |
| | Parking Lots | 46,932 | $m^2$ |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices or construction costs. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

**Table 2-2** presents the unit replacement cost and the total replacement value for distinct roadway appurtenance asset categories within the City. Notably, railway crossings constitute the most significant portion, accounting for a replacement value of approximately $12 million, followed by parking lots at $10 million, traffic signs and traffic signals at $8 million each, and traffic equipment at $0.7 million. The combined replacement value for all these categories amounts to approximately $39 million.

It is worth noting that the total replacement values have been marked up by 45%, out of which 15% accounts for engineering and project management cost and 30% for contingency cost.

**Table 2-2: Current Replacement Value**

| Asset Group | Asset Category | Unit Replacement Cost ($/Unit) | Total Replacement Value (2024) |
|---|---|---|---|
| Roadway Appurtenances | Traffic Signals | $100 - $75,000 Ea. | $7,992,000 |
| | Traffic Equipment | $1,058 - $18,057 Ea. | $776,000 |
| | Traffic Signs | $400 - $15,000 Ea. | $8,809,000 |
| | Railway Crossings | $150,000 Ea. | $12,102,000 |
| | Parking Lots | $140 / $m^2$ | $10,194,000 |
| **Total** | | | **$39,873,000** |

## 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated

deterioration modeling may be justified. Conversely, for low-value assets, the cost of deterioration modeling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at an acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Some assets are operated intermittently or even infrequently or are being operated at a lower demand than their designed capacity. Thus, the actual operating "age" of the asset is reduced.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., corrosive chemicals), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical.

**Figure 2-2** shows the weighted average asset age and RSL as a proportion of average ESL for traffic signs, the radio system, and the traffic controller system. However, due to the absence of installation date information for other asset subcategories, their average age and RSL are not presented in this AMP. It is recommended to collect installation date information for these assets and include it in the next iteration of the AMP.

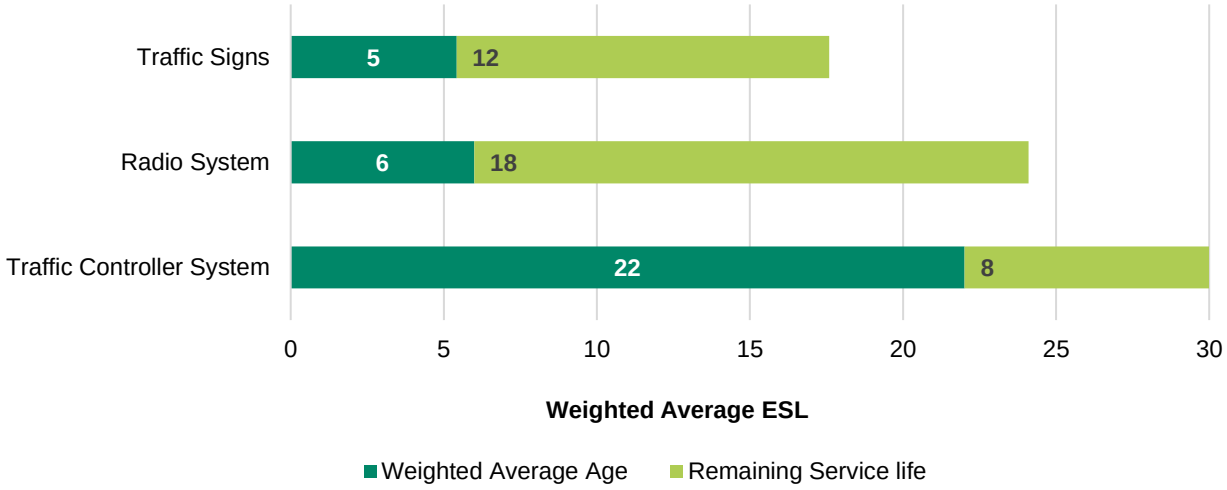


**Figure 2-2: Roadway Appurtenance Weighted Average Age and Remaining Service Life**

## 2.2.4 Asset Condition

Regular field condition assessments for traffic signs are conducted as mandated by the O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways under Municipal Act. For other asset categories that do not have field condition assessment results, the two-parameter Weibull distribution function was used to assess the current condition and to project the future condition of the City's roadway appurtenances. The Weibull distribution has been used extensively in reliability studies and lifetime prediction models in industries ranging from automotive to the oil & gas and provides a suitable distribution for this type of analysis.

The underlying premise of the Weibull-shaped deterioration is that while some assets fail prematurely due to severe conditions or improper installation, other assets are very long-lived and function well beyond their theoretical ESL. In order to perform a high order network-level analysis, it was assumed that assets would fail (and require replacement) within a deterioration envelope / curve approximated by a Weibull probability distribution. The two-parameter Weibull cumulative distribution has two parameters for scale and shape, as set out in Equation [1]:

$$f(x;\alpha,\beta) = e^{-\left(\frac{x}{\beta}\right)^{\alpha}} \quad [1]$$

Where: $x$ = Age
$\alpha$ = Shape parameter (or slope)
$\beta$ = Scale parameter

A set of Weibull cumulative distribution functions were leveraged to simulate a set of deterioration curves for assets with different ESLs as shown in **Figure 2-3**.

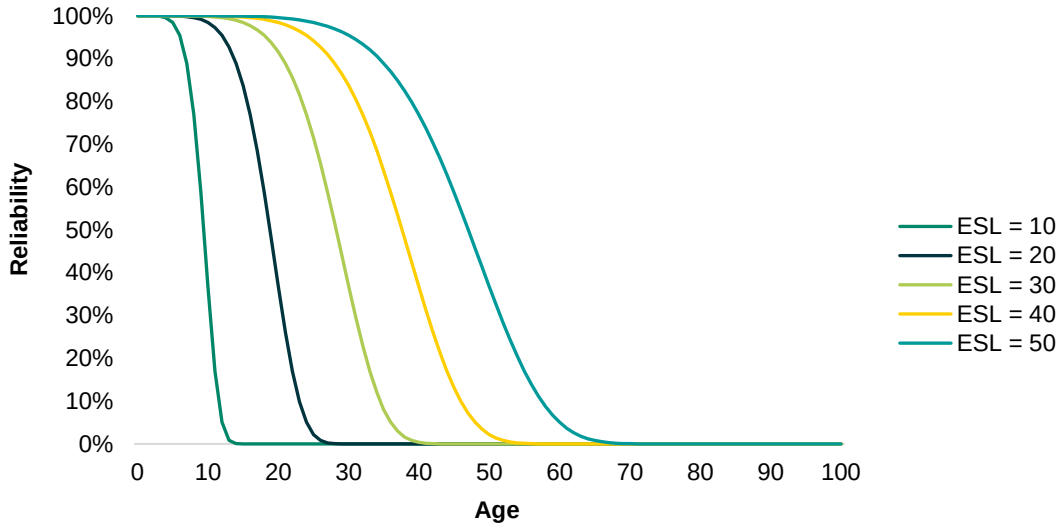


**Figure 2-3: Asset Deterioration Curve Samples**

**Table 2-3** and **Figure 2-4** present the condition ratings of the City's roadway appurtenances with respective replacement values. As stated previously, a substantial number of roadway appurtenances lack installation date information. Therefore, a significant data gap exists for assets labelled as "Unknown" condition, representing 69% of the total replacement value. The known condition ratings span from "Very Good" to "Very Poor," with "Very Good" and "Good" collectively contributing 23% to the overall replacement value.

**Table 2-3: Roadway Appurtenances Condition Summary**

| Rank | Condition Rating | Replacement Value | % of Replacement Value |
|---|---|---|---|
| 1 | Very Good | $2,777,000 | 8% |
| 2 | Good | $5,580,000 | 15% |
| 3 | Fair | $1,263,000 | 3% |
| 4 | Poor | $1,099,000 | 3% |
| 5 | Very Poor | $891,000 | 2% |
| 6 | Unknown | $25,516,000 | 69% |

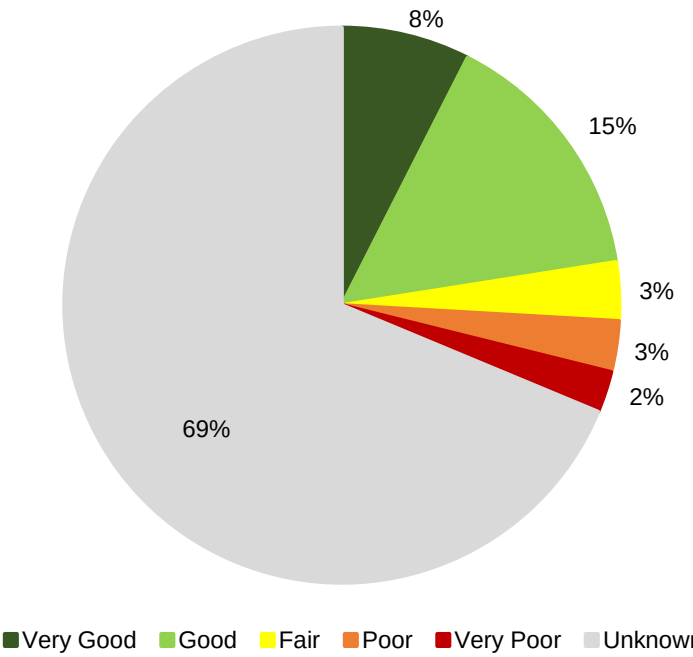


**Figure 2-4: Roadway Appurtenances Asset Condition Weighted by Replacement Value**

**Figure 2-5** granulates the condition of the assets based on asset subcategories and their respective replacement values. It is important to note that, in this AMP, only the condition of the traffic controller system, traffic signs, and the radio system has been assessed. The data gap for other subcategories still requires attention and completion.

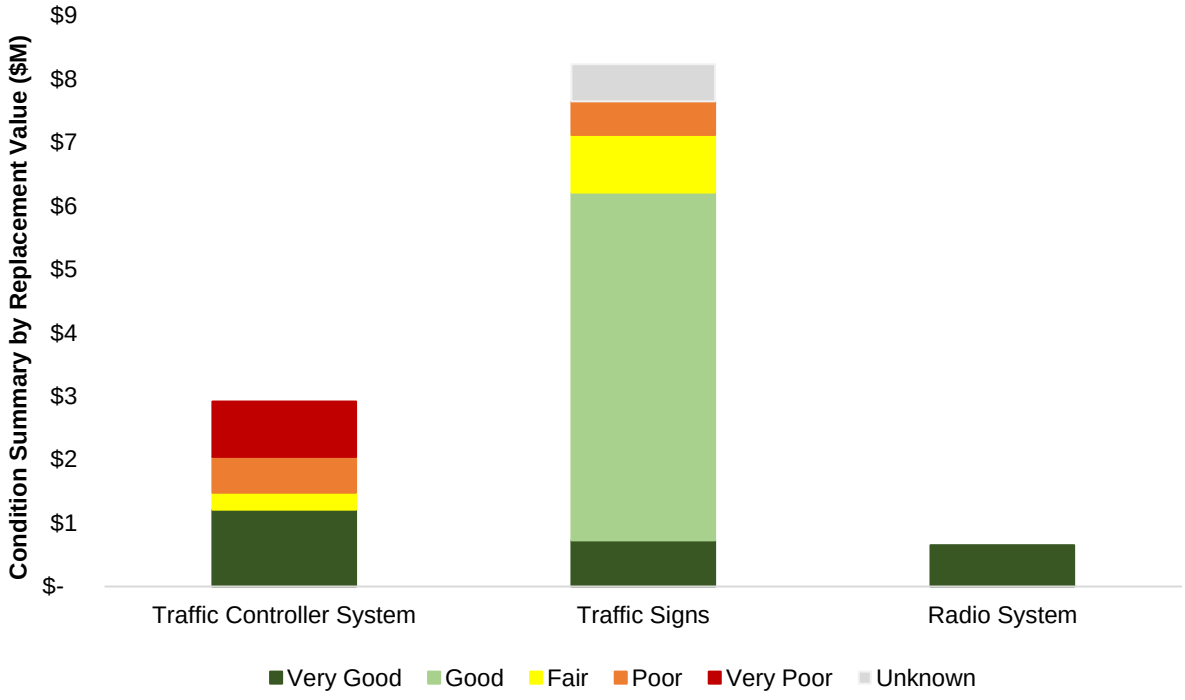


**Figure 2-5: Distribution of Roadway Appurtenances Asset Condition**

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's roadway appurtenances were previously stored across multiple spreadsheets and GIS database. This project has successfully centralized the data into a single inventory. Additionally, it has addressed and filled gaps in key data, such as expected service life and replacement costs, achieving a 100% completeness rate. **Table 2-4** provides a summary of data completeness levels in the compiled roadway appurtenance inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-4: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Roadway Appurtenances** | 85% | 100% | 20% | 91% | 100% | 100% |

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the roadway appurtenances. **Table 2-5** provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data.

**Table 2-5: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

## 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[1]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure**

[1] TechTarget Network, Definition: Data Life Cycle, 2020.

2-6) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

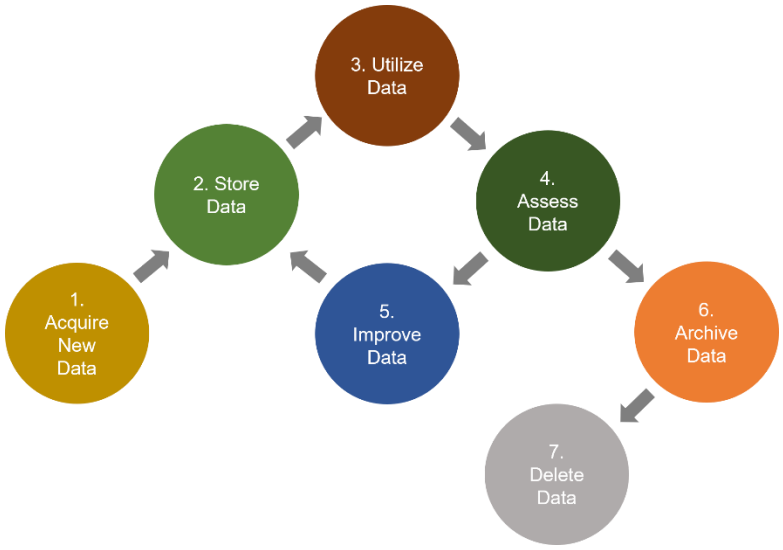


**Figure 2-6: Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data, but to migrate and merge data from other sources.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring a new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:
  - Poor asset performance due to lack of information and understanding of asset behaviour.
  - Non-compliance with statutory regulations or safety requirements.
  - Safety incidents due to risks not being identified or reported.
  - Asset failure due to gaps in maintenance planning.
- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization

aligns its data improvement targets with its AM objectives and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.

- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
  - Consider what data should be archived and articulate the reasons behind the archival decisions.
  - Examine any legal obligations pertaining to the retention of data records.
  - Determine the appropriate duration for retaining different categories of data records.
  - Evaluate the risks associated with the inability to retrieve specific data records.
  - Specify the authorized individuals or entities who should have access to archived data records.
  - Establish the expected timeframe for retrieving archived data records.
  - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.
- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data “squirrelling”, due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization’s data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report the current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and non core assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers and employees). The City’s Comprehensive Background Report[2] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1**. Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

[2] City of Sault Ste Marie. 2021. Comprehensive Background Report.

**Table 3-1: The City's Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe and accessible for all ages and abilities (the "8 to 80 Cities" concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment and recreation. |
| Economic Resiliency | Supports the growth and diversification of the city's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the Sault's history, diverse communities and natural and cultural heritage, with the Downtown as the Sault's core destination for arts and culture. |

## 3.3 Stakeholders Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for roadway appurtenances at the LoS workshops. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups for roadway appurtenances are identified below:

- Residential Customers
- Regulatory Agencies
- Neighbouring Municipalities
- Environmental Groups
- Internal City Departments
- Railway Companies

### 3.3.1 Legislated and Regulatory Requirements

Roadway Appurtenance assets are critical to the Town's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the Town's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., clean drinking water and safe roads, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2.** Policy and guiding documents relevant to roadway appurtenance assets are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • Canada Transportation Act<br>• Railway Safety Management System Regulations<br>• Railway Safety Act<br>• Grade Crossings Regulations<br>• Canadian Rail Operating Rules | • Highway Traffic Act<br>– Ontario Regulation 615 – Traffic Signs<br>– Ontario Regulation 402 – Pedestrian Crossover Signs<br>– Ontario Regulation 408 – Traffic Control Signal Systems<br>– Ontario Regulation 626 - Traffic Control Signal Systems<br>• Municipal Act<br>– Ontario Regulation 239 – Minimum Maintenance Standards for Municipal Highways<br>• Public Transportation and Highway Improvement Act<br>• Ontario Traffic Manual |

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 identifies levels of service metrics for core assets. A number of key LoS performance measures for roadway appurtenances assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5**.

## 3.5 Levels of Service Performance Metrics

Through a review of the legislated and regulatory requirements required for roadway appurtenances and Collaboration with the City during the level of service's workshop, 1 levels of service performance metric was determined for roadway appurtenances and is presented in **Table 3-3**.

**Table 3-3: Levels of Service Performance Metrics (Roadway Appurtenances)**

| | Asset Category | Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) | Regulation |
|---|---|---|---|---|---|---|
| 1. | Roadway Appurtenances | Quality & Reliability | Frequency of inspecting signs | # of Inspections /year | Y | O. Reg. 239/02: Minimum Maintenance Standards |

## 3.6 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS Framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.

- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

## 3.7 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social and technological landscape.

A summary of factors identified from the LoS workshop that would impact roadway appurtenances service levels include, but are not limited to, the following:

- Technology.
- Growth.
- Speed Management.
- Funding level.

On November 2, 2021, the City of Sault Ste. Marie's Planning Division released the Comprehensive Background Report for updating the Official Plan[3]. The City's Official Plan guides the local decision-making on land use, development and public infrastructure over the next 20 years. The City's population is expected to roughly reach to 80,000 (by 2031), and 83,300 people by 2036. Employment is projected to grow by about 6,000 jobs, from approximately 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the July 1, 2025 deadline.

[3] City of Sault Ste Marie. 1996. Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the asset management planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

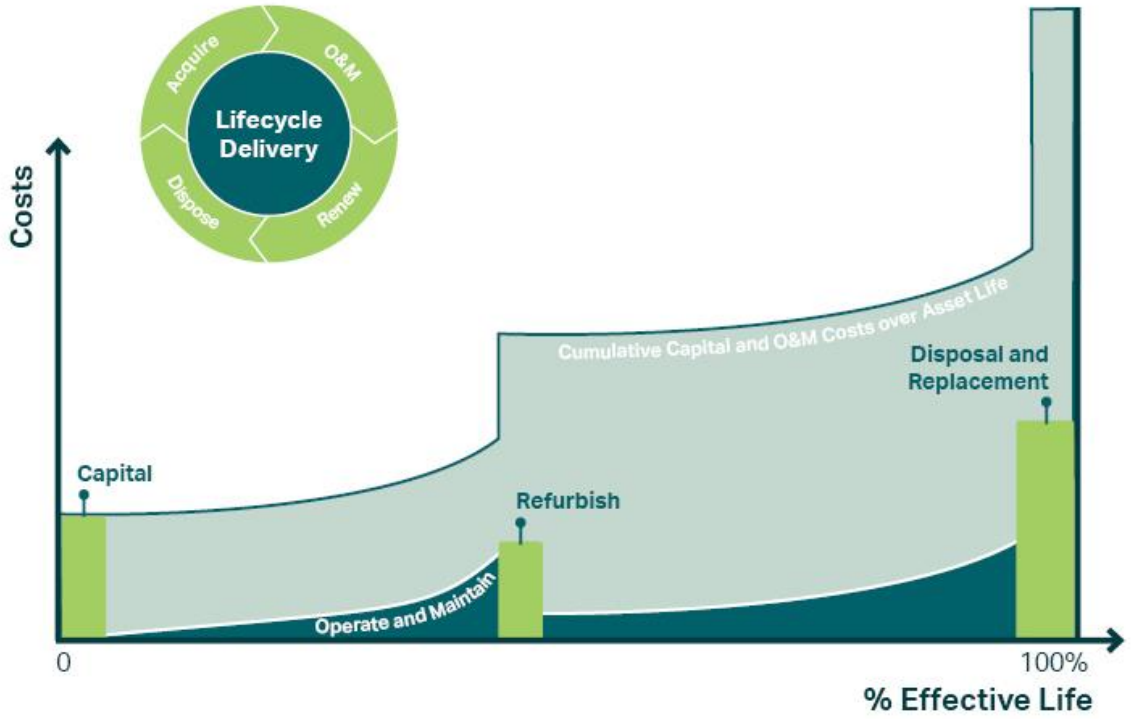


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. Asset management and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

    - The asset's operability and maintainability.

- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, resurfacing a parking lot. Replacement activities are expected to occur once an asset has reached the end of its useful life, and rehabilitation is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes to leading to non-compliance, the inability of the asset to handle increased service levels, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure being tolerable, assets negatively impacting service delivery or the environment.

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

# 4.2 Asset Acquisition Strategies

The City's pursuit of new roadway appurtenances is primarily fueled by their growth. With the expansion of both population and infrastructure, there arises a need for updated and enhanced road features to cater to the rising traffic and facilitate efficient transportation. The City's commitment to complying with traffic and safety regulations is equally crucial, ensuring that the transportation infrastructure aligns with current standards, thereby improving overall road safety. This input prompts targeted improvements in response to resident concerns. Last but not least, the City's dedication to sustainability initiatives propels the adoption of smart, energy-efficient technologies, contributing to environmentally friendly solutions in the transportation system.

**Table 4-1** summarizes the acquisition activities associated with the City's roadway appurtenances.

**Table 4-1: Acquisition Activities for Roadway Appurtenances**

| Asset Group | Activities Undertaken by the City | Guiding Documents |
|---|---|---|
| Roadway Appurtenances | • New Intersections Development: Accompanied by the creation of GIS data and drawings.<br>• Cameras: New installations to Improve timing of traffic signals and contribute to a reduction in customer complaints. | • Official Plan<br>• Transportation Master Plan<br>• Corporate Strategic Plan<br>• Energy Conservation & Demand Management Plan<br>• Community Greenhouse Gas Reduction Plan<br>• Strategic Asset Management Policy |

# 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in roadway appurtenances management also contributes to cost-effectiveness over the asset's lifecycle. It is worth noting that currently the City has not established maintenance targets for roadway appurtenances; instead, they rely on the minimum maintenance standards as the guiding document.

**Table 4-2** summarizes the O&M activities associated with the City's roadway appurtenances.

**Table 4-2: O&M Activities for Roadway Appurtenances**

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| Roadway Appurtenances | Traffic Signals | • Regular monitoring of signal functionality.<br>• Inspection and repair of traffic signal poles.<br>• Implementation of software updates and hardware repairs.<br>• Repairs of LED lamps:<br>– Entire LED segments are replaced rather than repairing individual bulbs.<br>– Daily inspections to ensure signal functionality.<br>– Conducting visual and digital inspections, documenting any defects found. | Challenges in Traffic Signals O&M:<br>• Managing the high volume of maintenance work at each intersection poses tracking difficulties, requiring ongoing efforts for documentation.<br>• Addressing staffing and budget constraints is crucial for effective maintenance operations.<br>• The short operational season, from May to the beginning of November, demands focused efforts to optimize maintenance activities.<br>• Conducting maintenance internally is the current approach; there are challenges in utilizing external contractors for specialized work.<br>• The installation of PXOs has been delayed for a few years due to their lower priority. |
| | Traffic Equipment | • Regular calibration and cleaning of equipment.<br>• Inspection and repair of hardware.<br>• Updates of software:<br>– It is an ongoing process for traffic signals.<br>– Updates are typically required for most controllers, traffic controllers cabinets, and any hardware in the field. | NA |

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| | Traffic Signs | • Regular inspections.<br>• Cleaning and repairing signs.<br>• Replacing faded or damaged signs.<br>• Conducting a reflectivity study each summer for regulatory and warning signs.<br>• Conducting annual reflectivity studies to comply with regulatory standards.<br>• Conducting bi-yearly inspections alongside bridge inspections for overhead signs. | • The O&M of traffic signs is mandated by the Municipal Act, which stipulates specific requirements that must be met. This involves conducting regular inspections and testing, with a commitment to proving compliance with the established standards and regulations.<br>• The City document sign inspections results in GIS. |
| | Parking Lots | • Regular cleaning and surface repairs.<br>• Repairing lighting, signage, and markings.<br>• Winter maintenance such as snow clearing.<br>• Repairing markings for parking spaces. | NA |
| | Railway Crossing | • Inspecting and maintaining signal equipment.<br>• Inspecting barrier functionality and safety mechanisms.<br>• Testing traffic signals at railway crossing interconnections annually through collaborative efforts between the City and the railway company. | • The City needs to address public complaints arising from offset rails, with the responsibility for action falling on the railway companies. The difficulties lie in coordinating and communicating with railway companies to establish proactive maintenance plans, adding a layer of complexity to ensuring the safety and functionality of railway crossings. |

# 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs. **Table 4-3** summarizes the renewal and replacement activities associated with the City's roadway appurtenances.

**Table 4-3: Renewal and Replacement Activities for Roadway Appurtenances**

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| Roadway Appurtenances | Traffic Signals | • Replacement at the end of life. | • The City has undertaken the replacement for overhead flashers for sustainability purposes.<br>• The City is in the process of replacing cabinets, and the replacement process is being facilitated through the capital road transportation program.<br>• The re-lamping process has been completed, utilizing exclusively LED bulbs with a 10–15 years lifecycle; however, the City currently lacks a plan for end-of-life replacements. |
| | Traffic Equipment | • Replacement at end of life. | • The City is implementing smart traffic system by adding more intersections online. |
| | Traffic Signs | • Replacement at end of life. | • A replacement program is in place, and replacements of regulatory and warning signs are documented in GIS.<br>• South facing signs may require more frequent replacement. |
| | Parking Lots | • Resurfacing (currently not budgeted for regular resurfacing) | • Currently, there is no plan on replacement of parking lots assets. |

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| | Railway Crossing | • Replacement at end of life (currently unplanned). | • The renewal and replacement activities are determined by the railway company, with maintenance requests communicated to the City, which provides funds for the maintenance. |

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic asset management. As the City's roadway appurtenances approach the end of their lifecycle or become obsolete, a systematic methodology to their removal and decommissioning is essential. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements. **Table 4-4** summarizes the decommissioning and disposal activities associated with the City's roadway appurtenances.

**Table 4-4: Decommissioning and Disposal Activities for Roadway Appurtenances**

| Asset Group | Activities Undertaken by the City |
|---|---|
| Roadway Appurtenances | • Recycling metal, plastic, electronic components, and asphalt and concrete, etc.<br>• Ensuring proper disposal of batteries and electronic waste.<br>• Providing hazardous waste depots.<br>• Participating in metal recycling, receiving some funds in return. |

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-5**.

**Table 4-5: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors, and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset

deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

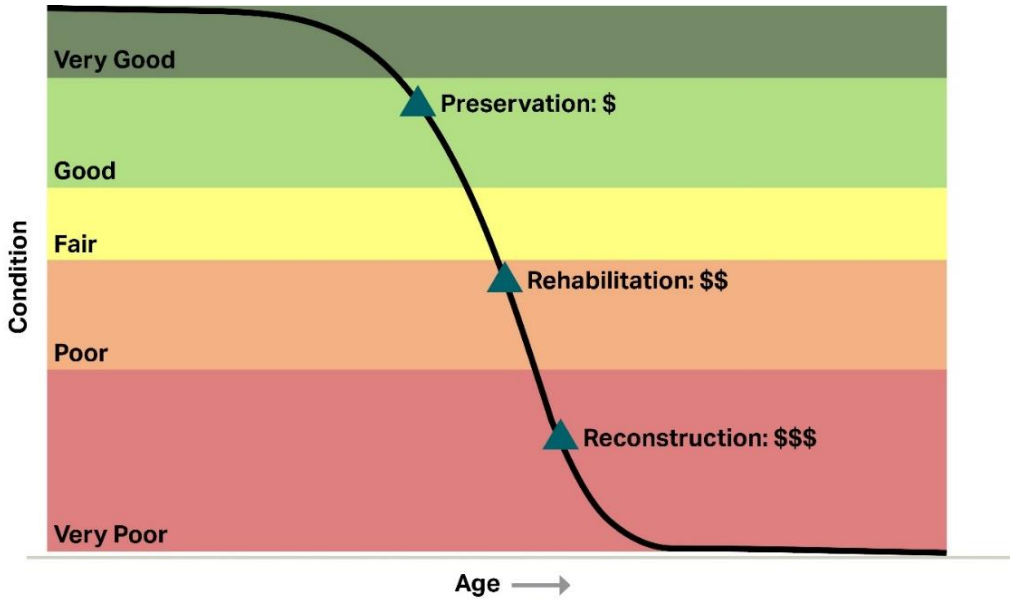


**Figure 4-2: Asset Deterioration Curve and Rehabilitation Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City's risk management process, AECOM recommends taking into account the following key considerations:

**1. Legislation Ambiguity for Railway Crossings**

Managing roadway appurtenances involves navigating uncertainties in legislation, especially when responsibilities for railway crossings are ambiguous. The division of duties and obligations between the rail company and the City may not always be clearly delineated, presenting a potential challenge in terms of accountability and decision-making. This lack of clarity in legislation can lead to difficulties in establishing a comprehensive and streamlined approach to managing roadway appurtenances at railway crossings, potentially resulting in delays, disputes, or suboptimal maintenance practices.

**2. Growing Accessibility Requirements**

As the demand for higher levels of service grows, the City faces an increased need to ensure that roadway appurtenances align with accessibility standards, accommodating the diverse needs of the community. However, the City's aging infrastructure poses an additional risk, as some equipment may not meet evolving standards, potentially resulting in accessibility gaps. To address these challenges, the City should adopt a holistic approach that combines technological innovation, policy adjustments, and systematic infrastructure upgrades.

**3. Safety**

Maintaining traffic signals and signs is crucial for keeping the City's streets safe. Not only does neglecting them pose a safety hazard, but it can also lead to costly lawsuits against the City. The City is now fully compliant with the regulatory requirements for the upkeep of traffic signs and signals. By investing in the maintenance of the traffic systems, the City is committed to building a safer environment for residents to travel.

**4. Traffic Congestion and Environmental Impact**

Non-functional or missing traffic signals and signs can disrupt the flow of traffic, leading to congestion, delays, and increased frustration for road users. Increased traffic congestion due to poorly maintained traffic control systems can lead to higher emissions from vehicles, contributing to pollution.

### 5. Increased Maintenance Costs

Regular maintenance of roadway appurtenance assets is a cost-effective strategy that prevents the escalation of minor issues into major repairs or replacements (see **Figure 4-2**).

### 6. Decreased Efficiency of Emergency Services

Well-maintained traffic signals and signs are essential for enabling emergency response vehicles to navigate the City swiftly and efficiently. Proper upkeep ensures that these vehicles can quickly reach their destinations during emergencies, enhancing the City's ability to provide timely and effective emergency services.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintaining, renewal, or expanding assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment or replacement decisions for each subcategory of roadway appurtenances.

**Section 5.2** assesses the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** summarizes the O&M budget forecast over the next 10 years (2024-2033).

**Section 5.4** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each roadway appurtenance asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's roadway appurtenance assets. A financial dashboard was developed to present the results of the lifecycle modeling (**Appendix A**).

The annual reinvestment needs for the roadway appurtenance assets were determined based on their age and ESL in years (i.e., replacing assets that have exceeded their ESL) in inflated dollar values, incorporating the following assumptions:

- Base year: The base year used is 2024. Any historic asset valuations have been inflated using the experienced inflation rate.
- Inflation rate: the inflation rates adopted for the financial model are presented in **Table 5-1**.

**Table 5-1: Inflation Rate over 20 Years** [4]

| Year | Inflation Rate |
|---|---|
| 2024 | 7% |
| 2025 | 6% |
| 2026 | 5% |
| 2027 | 4% |
| 2028 | 4% |
| 2029 | 3% |
| 2030 - 2043 | 3% |

- Markup: The project management and engineering, and contingency mark ups are 15% and 30% respectively.

[4] AECOM Analysis, "Rising Inflation", June 2022, Retrieved in October 2022

- Disposal Rate: 1% of the annual reinvestment is used as an allocation for disposal costs.

In cases where the installation date is unavailable, an annual reinvestment rate is applied to estimate the asset replacement need. Detailed reinvestment assumptions for assets with missing installation dates or asset categories requiring a specific renewal approach are provided in **Table 5-2**.

**Table 5-2: Roadway Appurtenances Asset Capital Reinvestment Assumptions**

| Asset Categories | Annual Reinvestment Rate (2024-2033) | Reinvestment Strategy | Annual Average Reinvestment Cost (2024-2033)* | Assumption |
|---|---|---|---|---|
| All Traffic Signal Assets without Install Date | Varies | Replace assets for when they exceed their ESLs | $ 270,000 | Varies; covered under O&M budget forecast |
| Traffic Signs (Exclude Regulatory Signs) | 6.7% | Replace assets for a life cycle of 15 years | $ 398,000 | 6.7% of traffic signs replaced annually; covered under O&M budget forecast |
| Overhead Signs | 2% | Replace assets for a life cycle of 50 years | $ 13,000 | 2% of overhead signs replaced annually; covered under O&M budget forecast |
| Parking Lots | 1.5% | Resurface every 25 years | $ 151,000 | 4% of parking lots resurfaced annually with a unit cost of $80/$m^2$ |
| Railway Crossings | 3.3% | Replace assets for a life cycle of 30 years | $ 404,000 | 3.3% of railway crossing replaced annually |

**Note: The annual average reinvestment cost are presented in non inflated dollar value.*

# 5.2 Capital Reinvestment Need Analysis

## 5.2.1 20-Year Reinvestment Need Analysis

The City's roadway appurtenances require an average annual reinvestment rate of $1.0 million over the period 2024-2033 and $1.2 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $22 million over the next 20-year period. Notably, the reinvestment funding needs for railway crossings account for the largest share in most years. However, it is worth noting that due to legislative ambiguity, there is a possibility for the City to share the reinvestment costs of railway crossings with both the government and the railway company.

Furthermore, the radio system significantly contributes to the reinvestment requirements for 2043. This is largely attributed to the majority of the City's radio system being installed in 2018, and with an ESL of 25 years, these assets are scheduled for replacement in 2043.

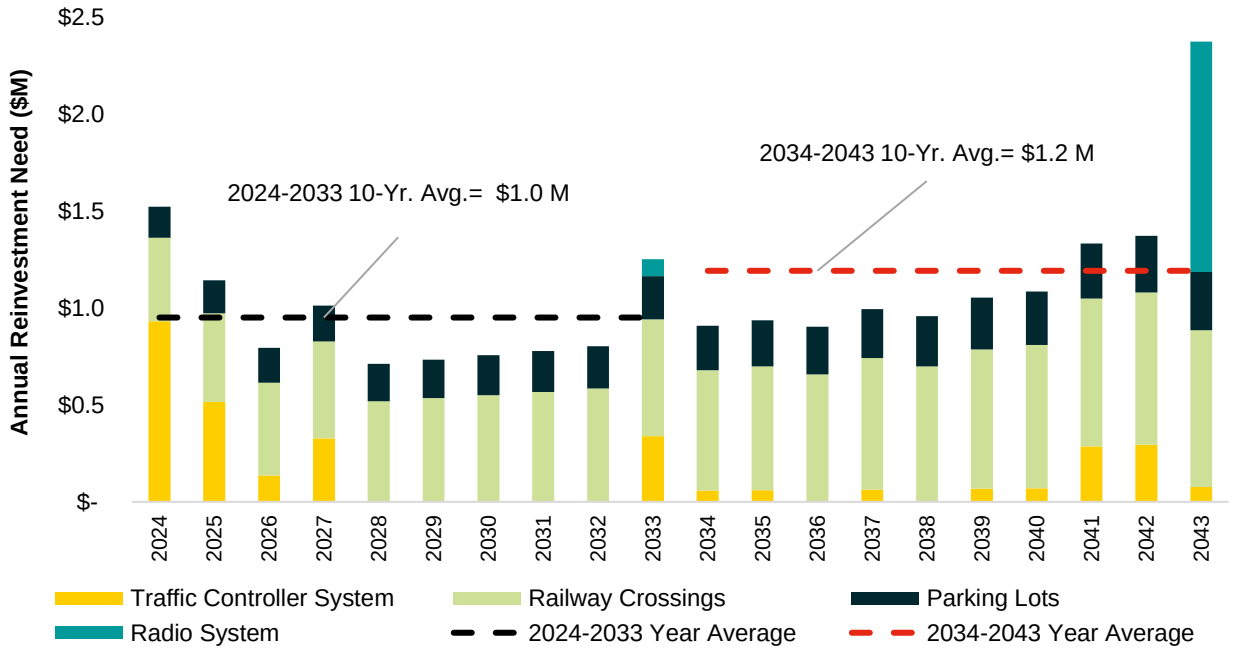


**Figure 5-1: Roadway Appurtenances 20-Year Reinvestment Need**

The detailed 20-year reinvestment needs for roadway appurtenances are presented in **Table 5-3** in inflated dollar values.

**Table 5-3: Roadway Appurtenances 20-Year Total and Annual Average Reinvestment Need**

| Asset Sub-Category | Annual Average Need | 20-Year Total |
|---|---|---|
| Traffic Controller System | $161,000 | $3,225,000 |
| Radio System | $64,000 | $1,276,000 |
| Railway Crossings | $617,000 | $12,343,000 |
| Parking Lots | $230,000 | $4,595,000 |
| **Total** | **$1,072,000** | **$21,439,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's roadway appurtenances have been evenly distributed over the next 20 years, as illustrated in **Figure 5-2**. This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and steady financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

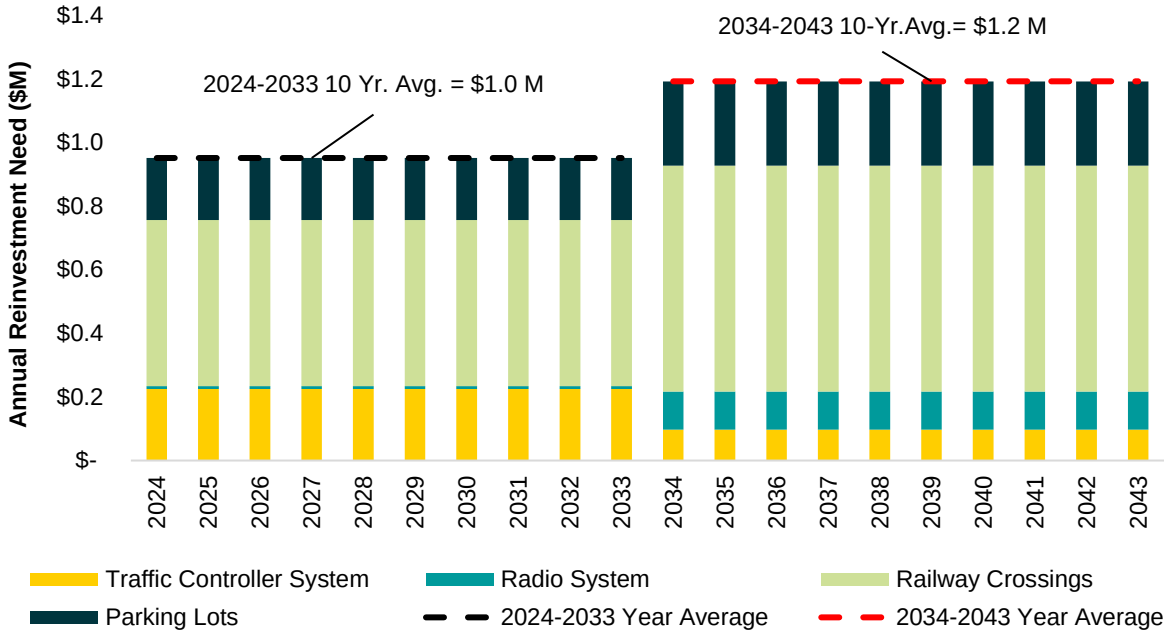


**Figure 5-2: Roadway Appurtenances 20-Year Smoothed Annual Reinvestment Needs**

## 5.3 O&M Funding Need

**Figure 5-3** and **Table 5-4** show the O&M funding forecast for the next 10 years from 2024 to 2033. The annual average forecasted O&M funding need is $3.6 million over the next 10 years in inflated dollar value. This O&M forecast is based on the current O&M expenditure under the Traffic and Communication and Parking O&M budget, overlaid with the anticipated future expenditure. It is noted that the replacement of regulatory signs is covered by the current O&M budget, while the need for replacing other signs, traffic signals, and equipment (excluding the traffic controller system and radio system) has been added to the current budget and is included in the future forecasted O&M budget.

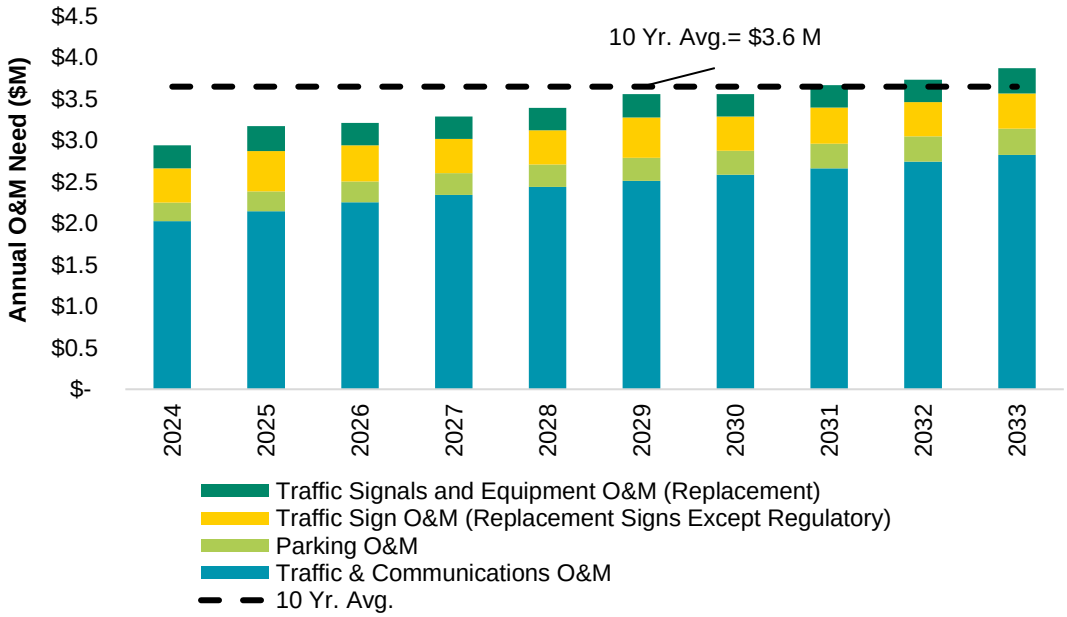


**Figure 5-3: Roadway Appurtenance O&M Forecast**

The detailed 10-year O&M budgets for roadway appurtenances are presented in **Table 5-4** in inflated dollar values.

**Table 5-4: Roadway Appurtenance 10-Year Total and Annual O&M Budget**

| O&M Category | Annual Average Budget | 10-Year Total |
|---|---|---|
| Traffic Signals and Equipment O&M (Replacement) | $278,000 | $2,780,000 |
| Traffic Sign O&M (Replacement Signs Except Regulatory) | $432,000 | $4,318,000 |
| Parking O&M | $274,000 | $2,738,000 |
| Traffic & Communications O&M | $2,454,000 | $24,538,000 |
| **Total** | **$3,647,000** | **$36,472,000** |

# 5.4 Full Funding Need Profile

**Figure 5-4** shows a full picture of the City's roadway appurtenances funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual reinvestment cost (**Figure 5-1**) was combined with the City's projected roadway appurtenances O&M cost (**Figure 5-3**). Additionally, one percent of the annual replacement cost was added to account for the asset disposal cost. With these additions, the City's roadway appurtenances full funding requirement increases to approximately $46 million over the next 10 years, averaging $4.6 million per year in inflated dollar value.

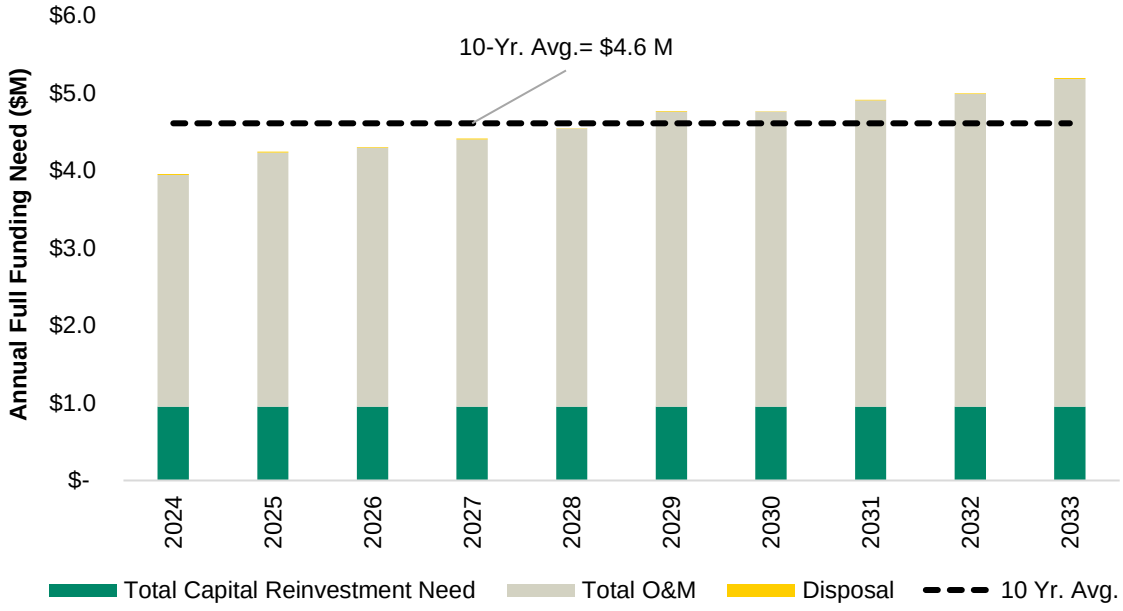


**Figure 5-4: Roadway Appurtenances Full Funding Need Profile**

# 5.5 Funding Strategies

The City primarily relies on tax levy for funding roadway appurtenances, supplemented by potential amounts from Ontario Community Infrastructure Funding (OCIF) and Canada Community-Building Fund (CCBF). In addition, AECOM suggests the following options that could be considered, acknowledging that the City's eligibility for these funds is subject to certain criteria:

- Investing in Canada Infrastructure Program

- Municipal Asset Management Program (MAMP)
- Enabling Accessibility Fund (EAF)

### 5.5.1 Investing in Canada Infrastructure Program

The Investing in Canada Infrastructure Program is a key component of the Government of Canada's broader Investing in Canada Plan. Administered by Infrastructure Canada, this program delivers long-term and stable funding to communities with the aim of addressing environmental challenges, fostering clean growth, and enhancing resilience to climate change. Through bilateral agreements, over $33 billion in funding is allocated to provinces and territories, supporting a diverse range of infrastructure projects nationwide[5].

The program encompasses investments across four targeted funding streams: the public transit stream, green infrastructure stream, community, culture, and recreation infrastructure stream, and the rural and northern communities' infrastructure stream. The public transit stream allocates funds for the construction, expansion, and enhancement of public transit infrastructure. The focus of these investments is on projects that aim to increase the capacity of public transit systems, enhance the quality and safety of existing or future transit infrastructure, and improve overall access to public transit systems. In pursuit of funding through this stream, the City has actively submitted proposals for the following projects[6]:

- Electrification of Transit System
- Transit Facility and Equipment Upgrades
- Purchase of Rolling Stock Assets
- Relocation of the Downtown Transit Terminal Construction and Renovation
- Transit Facility and Equipment Upgrades
- Purchase of Transit Ticket Vending Machines
- Purchase and Installation of Transit Bus Shelter

### 5.5.2 Municipal Asset Management Program (MAMP)

Municipal Asset Management Program (MAMP) is aimed at improving asset management practices within municipalities[7]. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program may offer funding to support the development or improvement of asset management plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable asset management practices.

### 5.5.3 Enabling Accessibility Fund (EAF)

The Enabling Accessibility Fund (EAF) is a federal government program aimed at supporting projects that enhance accessibility for individuals with disabilities[8]. The fund provides financial assistance to eligible organizations for initiatives such as infrastructure improvements, renovations, and retrofitting to create more accessible spaces. Its goal is to contribute to a barrier-free and inclusive society by addressing physical barriers and promoting equal access in community spaces.

[5]Investing in Canada Infrastructure Program. (2023). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program. Retrieved on February 14th, 2024.

[6] Investing in Canada Infrastructure Program: Projects Under Review. (2022). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program: Projects Under Review. Retrieved on February 14th, 2024.

[7] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 14th, 2024.

[8] About Enabling Accessibility Fund. (2023). Government of Canada. Enabling Accessibility Fund - Canada.ca. Retrieved on Retrieved on February 14th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1**.

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset inventory. | • Continue to refine the asset inventory and close existing data gaps, so as to have a more accurate representation of the current state of the roadway appurtenances; and, ultimately, to make more informed and defensible decisions.<br>– AECOM recommends the City to continue maintaining the roadway appurtenances inventory, keep updating the inventory as assets are acquired or disposed.<br>– Refine the install date information of roadway appurtenances assets to better estimate the remaining service life. |
| 2. | Use consistent condition grading schemes for roadway appurtenance assets and develop condition assessment process for all roadway appurtenance assets. | • The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>– Currently, the City has condition data for regulated traffic signs, categorized as Fair, Good, Poor, and New. It is suggested that these condition categories be refined to align with the corporate-wide standard for consistency.<br>• Prioritize condition assessments on the most critical assets. The City's execution of a controller cabinets age report has already proven to be instrumental in supporting this business case. |
| 3. | Refine the LoS Framework and Setting LOS Target. | • Gathering current data on asset performance for Key Performance Indicators (KPIs) that are currently not monitored.<br>• Analyzing this data to identify trends and set annual performance benchmarks.<br>• Engaging with key stakeholders to define service level targets and calculate the costs required to achieve these targets.<br>• Upon establishing service level targets, the City should strategize on achieving these targets within the constraints of its operational context, including staff availability, existing funding, and available resources.<br>• Initiating a Customer Consultation Plan to involve the public and stakeholders in discussions about the Level of Service (LoS) framework, aiming to understand their willingness to pay for improved service levels.<br>• Continue to maintain, monitor, and periodically update the Level of Service (LoS) Framework. |
| 4. | Incorporate risk assessment for future iterations of the AM plan and use the risk assessment results to drive future condition assessments and financial needs forecasting. | • Conduct a criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while low-risk assets could be accepted with caution. |
| 5. | Establish a sustainable roadway appurtenances funding model that fits the needs of the community | • In light of the annual funding need outlined in **Figure 5-2**, it is recommended that the City allocate an average of $1.0 million per year over the next 10 years for capital reinvestment in roadway appurtenances. Additionally, a total of $3.6 million should be budgeted for O&M expenditures during the same period.<br>• Review financial modeling assumptions on reinvestment rate and replacement values and update the financial model with new information as it becomes available. The financial model is based on several key assumptions that could have a significant impact on the outcomes of the model. |

| Index | Improvement Initiative | Description |
|---|---|---|
| | | • To address legislative ambiguities concerning railway crossings, it is recommended that the City engage in dialogue with rail companies to clarify responsibilities and obligations. Establishing clear agreements or guidelines can help delineate duties, enhance accountability, and streamline decision-making processes. This proactive approach will mitigate potential delays, disputes, and ensure effective maintenance practices for railway crossings.<br>• Explore funding resources that the City may take into consideration while performing strategic lifecycle and financial strategies (**Sections 5.5**) |
| 6. | Continue to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements that may include enhancing existing software, adding-on, or replacing.<br>• Develop a Knowledge Retention Strategy & Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance natural AM awareness internally through internal communication. |

# Appendix A - Roadway Appurtenances MS Excel Lifecycle Model and Inventory

FINAL

AECOM

# City of Sault Ste. Marie
# Facility Asset Management Plan

June 2024

Delivering a better world

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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop an asset management plan (AMP) to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, facilities (buildings), and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an AMP to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protection services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's facilities and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of Ontario Regulation (O. Reg.) 588/17.

Organizations that implement good asset management (AM) practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024 deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the level of service that the municipality proposes to provide, the activities required to meet those level of service, and a strategy to fund activities. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service (LoS) objectives, stakeholder identification, LoS framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Sections 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. Figure 1-1 demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

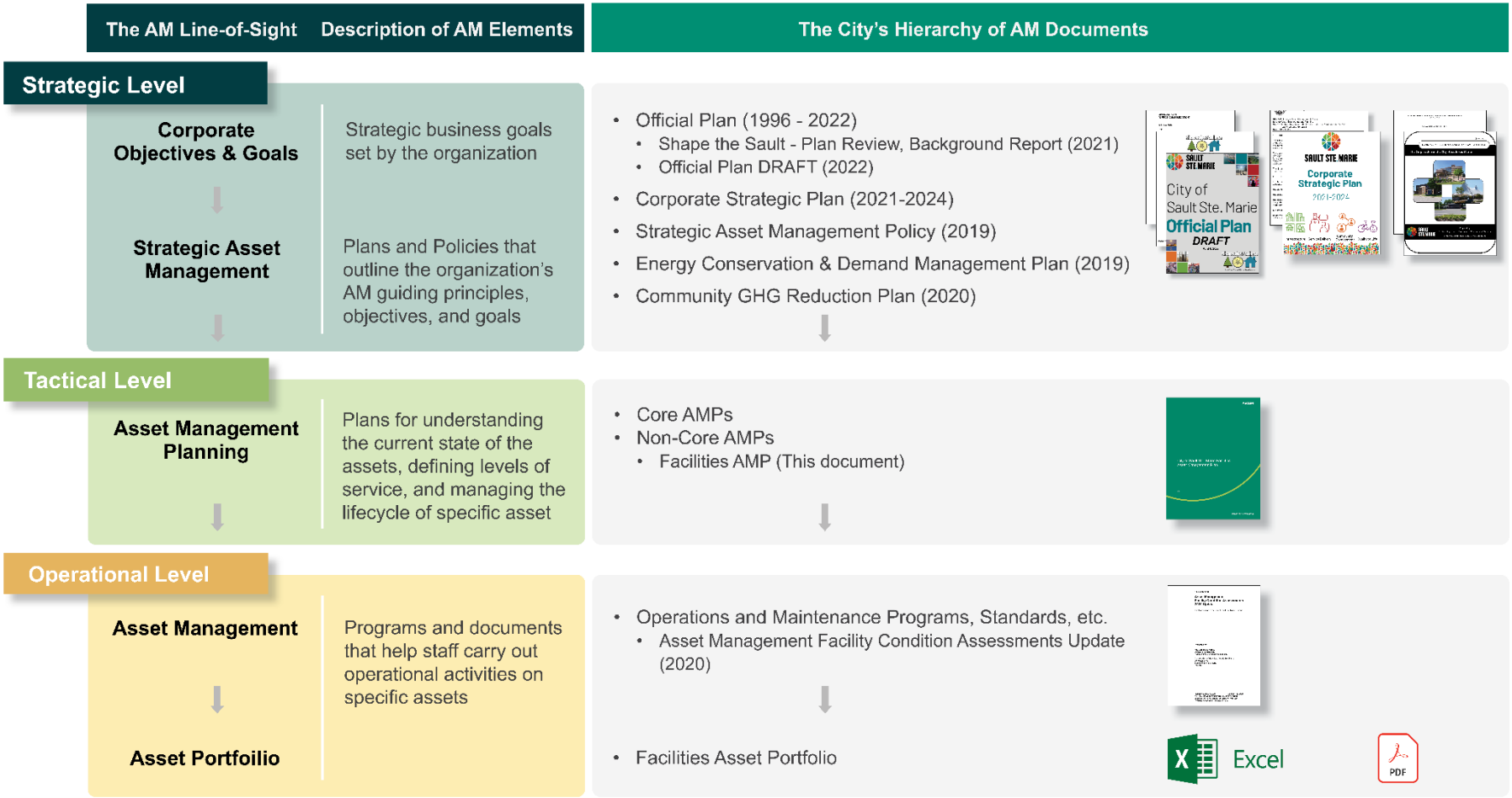


**Figure 1-1: The City's AM Line of Sight**

# 2. State of Infrastructure

Facilities in the City encompass a diverse range of buildings crucial to the functionality and vibrance of the City's communities. The City's facilities include cemetery, marinas, community centers, fire, library, police, public works, transit, and IT assets.

For this project, AECOM leveraged the data from the "Asset Management Facility Condition Assessments 2020 Update", a comprehensive catalog that details the quantity, condition, and specifications of all relevant facilities within the City. By analyzing the inventory and addressing data gaps, this section enables informed decision-making and strategic resource allocation, offering essential insights into maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range AM planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of facilities. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of facilities is illustrated, showcasing two main categories: Facility and IT. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's facilities, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or costs tracking at the asset or higher levels.

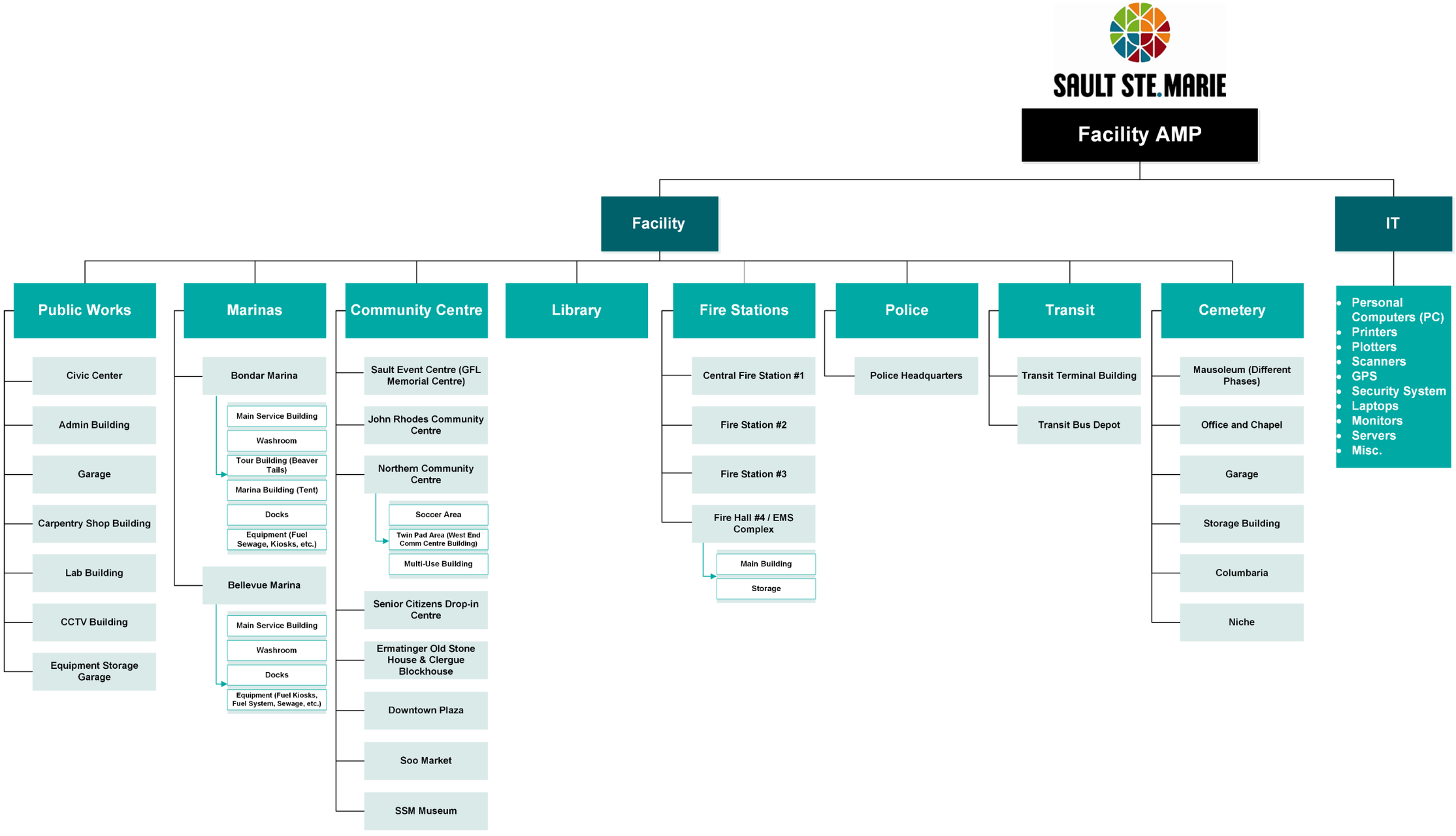


**Figure 2-1: City of Sault Ste. Marie Facility Asset Hierarchy**

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

Table 2-1 presents the summary of the City's facility inventory. City's facility inventory includes a diverse range of facilities and IT assets, which have been categorized as Cemetery, Community Center, Fire, IT, Library, Park (Marina), Police, Public Works, and Transit.

**Table 2-1: Facility Inventory Summary**

| Asset Class | Facility | Facility Name | Asset Category | Quantity | Unit |
|---|---|---|---|---|---|
| Facility | Cemetery | Greenwood Cemetery | Mausoleum | 21 structures | Ea. |
| | Cemetery | Greenwood Cemetery | Columbaria | 33 structures | Ea. |
| | Cemetery | Greenwood Cemetery | Office | 1 | Ea. |
| | Cemetery | Greenwood Cemetery | Garage | 1 | Ea. |
| | Cemetery | Greenwood Cemetery | Niche | 808 | Ea. |
| | Cemetery | Greenwood Cemetery | Storage | 1 | Ea. |
| | Community Center | Downtown Plaza | - | 2,314 | sq. ft |
| | Community Center | Ermatinger Old Stone House & Clergue Blockhouse | - | 7,686 | sq. ft |
| | Community Center | John Rhodes Community | - | 155,000 | sq. ft |
| | Community Center | Northern Community Centre | - | 143,114 | sq. ft |
| | Community Center | Sault Event Centre (GFL Memorial Centre) | - | 134,075 | sq. ft |
| | Community Center | Senior Citizens Drop-in | - | 14,470 | sq. ft |
| | Community Center | Soo Market | - | 7,746 | sq. ft |
| | Community Center | SSM Museum | - | 17,672 | sq. ft |
| | Fire | Central Fire Station #1 | - | 18,120 | sq. ft |
| | Fire | Fire Hall #4 / EMS Complex | - | 38,460 | sq. ft |
| | Fire | Fire Station #2 | - | 4,311 | sq. ft |
| | Fire | Fire Station #3 | - | 4,311 | sq. ft |
| | IT | - | Laptops | 152 | Ea. |
| | IT | - | Misc | 268 | Ea. |
| | IT | - | Monitors | 900 | Ea. |
| | IT | - | PC | 1,910 | Ea. |
| | IT | - | Plotter | 2 | Ea. |
| | IT | - | Copier | 1 | Ea. |
| | IT | - | Scanner | 3 | Ea. |
| | IT | - | GPS | 3 | Ea. |

| Asset Class | Facility | Facility Name | Asset Category | Quantity | Unit |
|---|---|---|---|---|---|
| | IT | - | Printers | 112 | Ea. |
| | IT | - | Server Storage | 1 | Ea. |
| | IT | - | Surveying Camera | 4 | Ea. |
| | IT | - | Servers | 89 | Ea. |
| | Library | Main Branch Public Library | - | 33,525 | sq. ft |
| | Park (Marina) | Robert Bondar Park Marina | Service Building | 2 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Structure | 1 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Tour Building | 1 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Tent | 1 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Dock | 2 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Fuel System | 2 | Ea. |
| | Park (Marina) | Robert Bondar Park Marina | Sewage | 1 | Ea. |
| | Park (Marina) | Bellevue Marina | Dock | 8 | Ea. |
| | Park (Marina) | Bellevue Marina | Fuel Kiosk | 1 | Ea. |
| | Park (Marina) | Bellevue Marina | Service Building | 1 | Ea. |
| | Park (Marina) | Bellevue Marina | Fuel System | 3 | Ea. |
| | Park (Marina) | Bellevue Marina | Equipment | 8 | Ea. |
| | Park (Marina) | Bellevue Marina | Sewage | 1 | Ea. |
| | Police | Police Headquarters | - | 42,113 | sq. ft |
| | Public Works | Carpentry Shop Building 'B' | - | 4,750 | sq. ft |
| | Public Works | CCTV Building, Public Works | - | 1,216 | sq. ft |
| | Public Works | Civic Centre | - | 93,510 | sq. ft |
| | Public Works | Equipment Storage Garage, | - | 21,804 | sq. ft |
| | Public Works | Lab Building, Public Works | - | 1,236 | sq. ft |
| | Public Works | Public Works Administration | - | 10,100 | sq. ft |
| | PWs | Public Works Garage, Building A | - | 61,100 | sq. ft |
| | Transit | Transit Bus Depot | - | 44,000 | sq. ft |
| | Transit | Transit Terminal Building | - | 2,200 | sq. ft |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices or construction costs. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

**Table 2-2** presents the total replacement value for facility asset categories within the City. It is also worth noting that the total replacement values are presented in inflated dollars and have been marked up by 45%, out of which 15% accounts for engineering and project management cost, and 30% for contingency cost.

**Table 2-2: Current Replacement Value**

| Asset Class | Facility Type | Facility Name | Asset Category | Total Replacement Value (2024) |
|---|---|---|---|---|
| Facility | Cemetery | Greenwood Cemetery | Mausoleum | $40,656,000 |
| | Cemetery | Greenwood Cemetery | Columbaria | $3,263,000 |
| | Cemetery | Greenwood Cemetery | Office | $580,000 |
| | Cemetery | Greenwood Cemetery | Garage | $508,000 |
| | Cemetery | Greenwood Cemetery | Niche | $1,076,000 |
| | Cemetery | Greenwood Cemetery | Storage | $580,000 |
| | Community Center | Downtown Plaza | - | $11,000,000 |
| | Community Center | Ermatinger Old Stone House & Clergue Blockhouse | - | $25,000,000 |
| | Community Center | John Rhodes Community Centre | - | $60,000,000 |
| | Community Center | Northern Community Centre | - | $60,000,000 |
| | Community Center | Sault Event Centre (GFL Memorial Centre) | - | $41,899,000 |
| | Community Center | Senior Citizens Drop-in Centre | - | $10,000,000 |
| | Community Center | Soo Market | - | $3,300,000 |
| | Community Center | SSM Museum | - | $35,000,000 |
| | Fire | Central Fire Station #1 | - | $6,051,000 |
| | Fire | Fire Hall #4 / EMS Complex | - | $9,652,000 |
| | Fire | Fire Station #2 | - | $1,488,000 |
| | Fire | Fire Station #3 | - | $1,431,000 |
| | IT | - | Laptops | $768,000 |
| | IT | - | Miscellaneous | $1,024,000 |
| | IT | - | Monitors | $1,340,000 |
| | IT | - | PC | $5,355,000 |
| | IT | - | Plotter | $56,000 |

| Asset Class | Facility Type | Facility Name | Asset Category | Total Replacement Value (2024) |
|---|---|---|---|---|
| | IT | - | Copier | $170,000 |
| | IT | - | Scanner | $186,000 |
| | IT | - | GPS | $365,000 |
| | IT | - | Printers | $1,300,000 |
| | IT | - | Server Storage | $26,000 |
| | IT | - | Surveying Camera | $599,000 |
| | IT | - | Servers | $6,042,000 |
| | Library | Main Branch Public Library | - | $12,438,000 |
| | Park (Marina) | Robert Bondar Park Marina | - | $20,000,000 |
| | Park (Marina) | Bellevue Marina | - | $12,962,000 |
| | Police | Police Headquarters | - | $14,523,000 |
| | PWs | Carpentry Shop Building 'B' | - | $2,295,000 |
| | PWs | CCTV Building, Public Works Yard | - | $841,000 |
| | PWs | Civic Centre | - | $60,000,000 |
| | PWs | Equipment Storage Garage, Public Works Yard | - | $4,961,000 |
| | PWs | Lab Building, Public Works Yard | - | $844,000 |
| | PWs | Public Works Administration Building | - | $3,325,000 |
| | PWs | Public Works Garage, Building A | - | $14,233,000 |
| | Transit | Transit Bus Depot | - | $35,000,000 |
| | Transit | Transit Terminal Building | - | $3,000,000 |
| **Total** | | | | **$513,137,000** |

It is noted that the replacement costs are estimated based on Class 4[1] cost estimation approach. These estimates are typically prepared with limited information, resulting in fairly wide accuracy ranges. Class 4 estimates serve various purposes, including project screening, feasibility assessment, concept evaluation, and preliminary budget approval. They are utilized for detailed strategic planning, business development, project screening at more advanced stages, alternative scheme analysis, confirmation of economic and technical feasibility, and approval to proceed to the next stage.

Typically, depending on the construction complexity of the project, relevant reference information, and other associated risks, the accuracy ranges for Class 4 estimates fall within the following bounds (could exceed based on various criteria):

- On the lower side, -10% to -20%
- On the higher side, +20% to +30%

[1] Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Cost Estimate Classification System - As Applied In Engineering, Procurement, and Construction for the Building and General Construction Industries, 2020, Retrieved in February 2024

### 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modeling may be justified. Conversely, for low-value assets, the cost of deterioration modeling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at an acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Some assets are operated intermittently or even infrequently or are being operated at a lower demand than their designed capacity. Thus, the actual operating “age” of the asset is reduced.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., roofing materials), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset.
  - Regular Maintenance: Timely inspections, repairs, and preventive maintenance extend service life.
  - Quality of Maintenance: Properly trained staff using quality materials impact longevity.
  - Deferred Maintenance: Neglecting repairs accelerates aging.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical.

**Figure 2-2** shows the weighted average asset age as a proportion of average ESL for IT assets. As observed, the IT assets have already exceeded their ESLs and require immediate attention. It is noted that for a few IT assets (scanner and laptops), installation year is not available. It is recommended to collect installation date information for these assets and include it in the next iteration of the AMP. **Figure 2-3** also illustrates the average age and RSL, based on the information captured from Morrison Hershfield Limited (MH) report, for facilities. MH conducted a comprehensive condition assessment for facilities in 2020, known as the “Asset Management Facility Condition Assessments 2020 Update”.

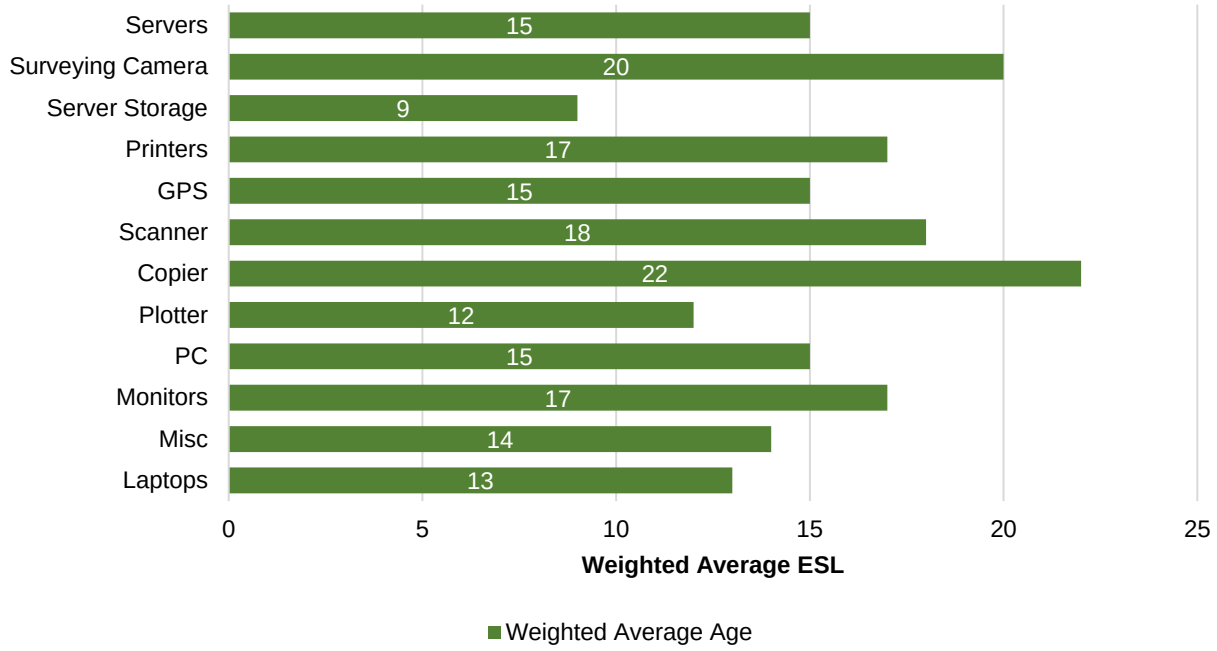


**Figure 2-2: IT Assets Weighted Average Age and Remaining Service Life**

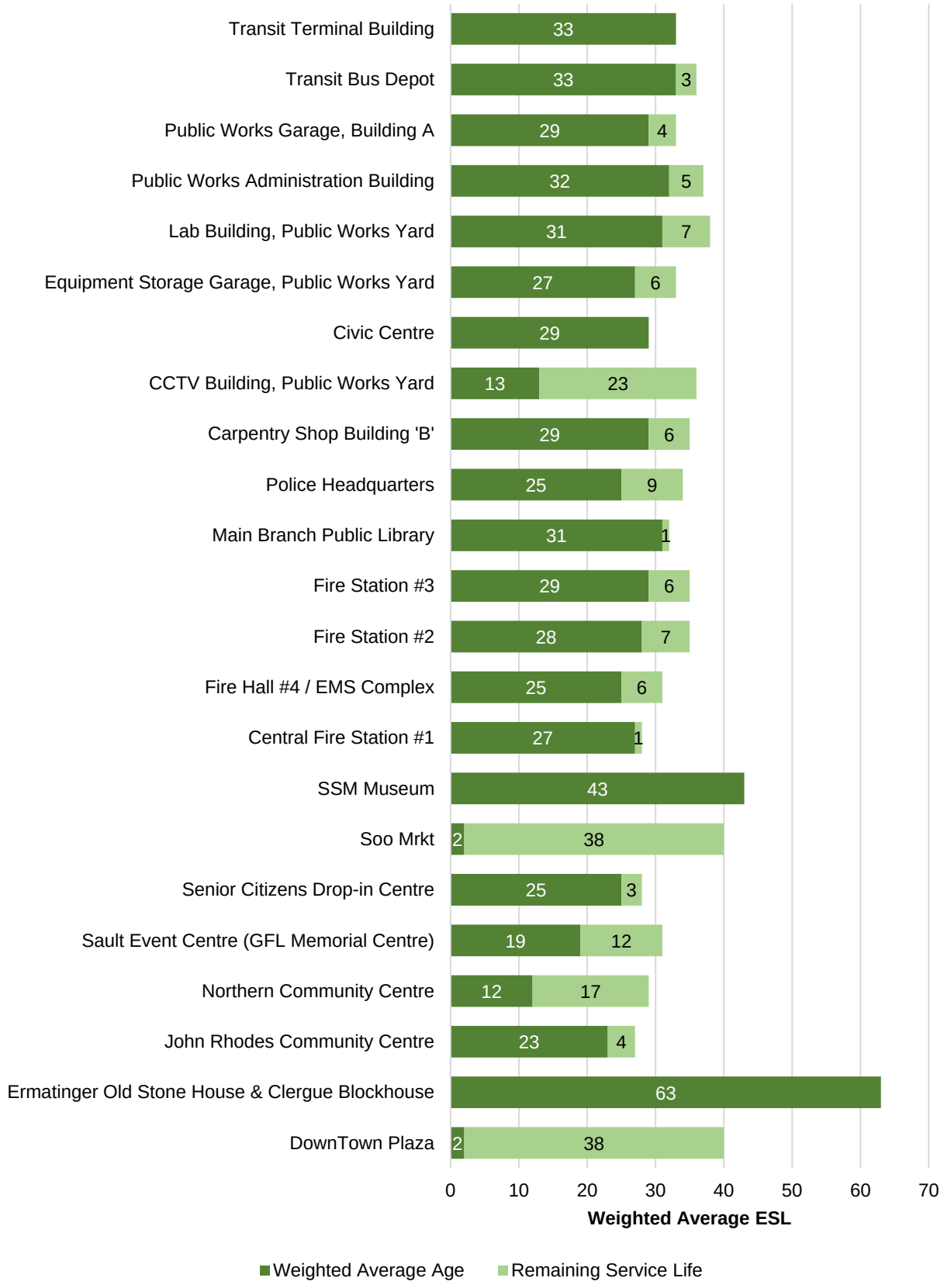


**Figure 2-3: Facilities Average Age and Remaining Service Life**

## 2.2.4 Asset Condition

As presented earlier (**Figure 2-1**), this AMP covers IT assets and facilities. After discussions with the City's staff, it was determined that IT assets lack a clear deterioration pattern. Consequently, IT assets have been excluded from this section. In terms of facilities, Morrison Hershfield Limited (MH)[2] conducted a comprehensive building condition assessment for 27 facilities in the City. AECOM utilized this information to provide a summarized overview of the condition of various facilities.

**Table 2-3** and **Figure 2-4** present the condition ratings of the City's facilities based on the MH report. It is worth noting that approximately 50% of the components are in very good and good condition, while only 11% fall into the poor and very poor categories. Additionally, 12% of the components did not have corresponding condition ratings. **Figure 2-5** presents a further breakdown of the facilities' condition based on the Uniformat components.

**Table 2-3: Facilities Condition Summary Based on the Condition Assessment Report Prepared in 2020**

| Rank | Condition Rating | Count of Components | % of Replacement Value |
|---|---|---|---|
| 1 | Very Good | 49 | 4% |
| 2 | Good | 496 | 45% |
| 3 | Fair | 302 | 27% |
| 4 | Poor | 104 | 9% |
| 5 | Very Poor | 18 | 2% |
| 6 | Unknown | 134 | 12% |
| **TOTAL** | | **1,103** | **100%** |

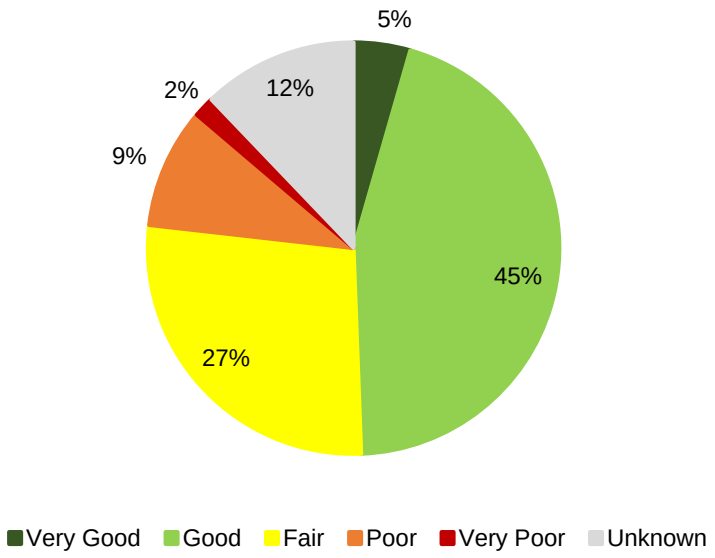


**Figure 2-4: Facilities Condition by Count of Components**

[2] Asset Management Facility Condition Assessments 2020 Update, Prepared by Morrison Hershfield Limited (MH)

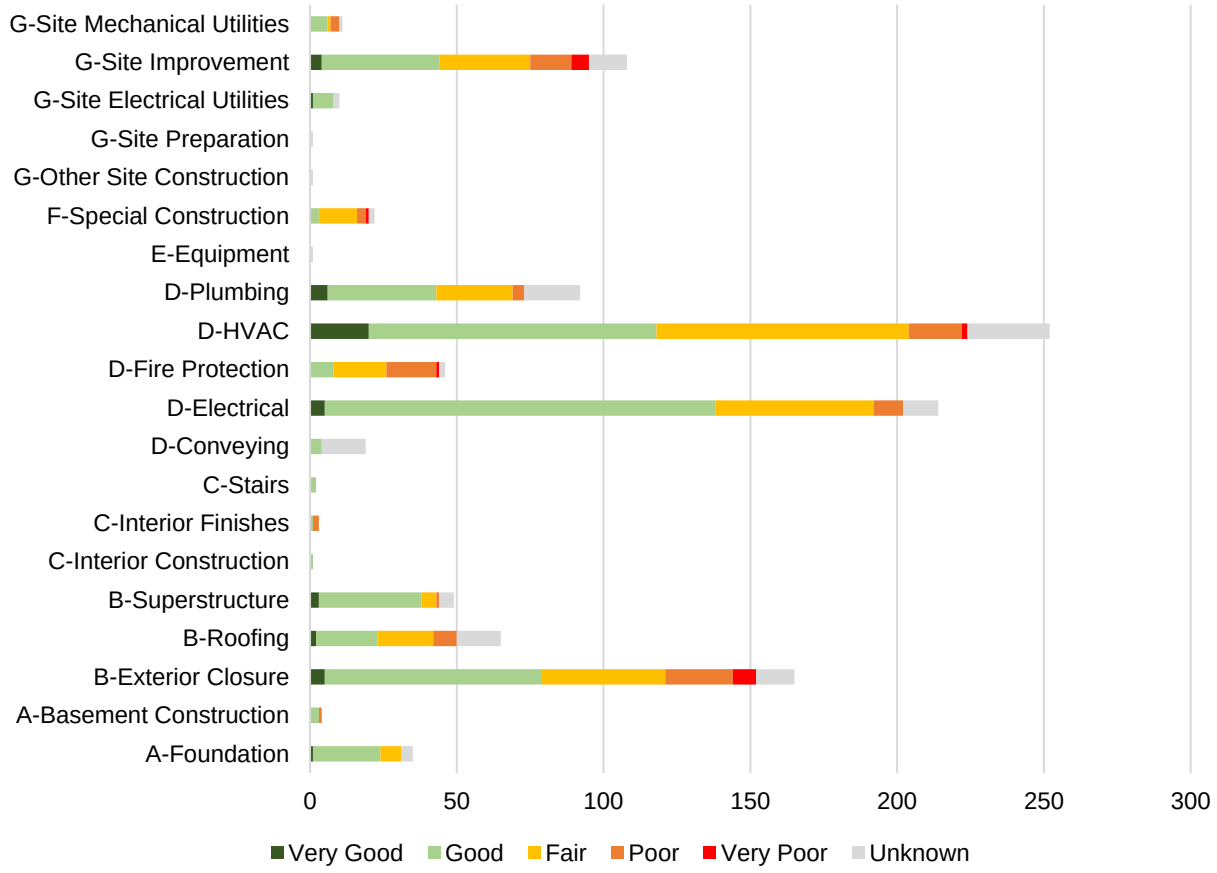


**Figure 2-5: Facilities Condition Broken Down by Building Components**

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's IT assets stored across multiple spreadsheets. Moreover, there is no single spreadsheet for facilities. This project has strived to successfully centralize the data into a single inventory. Additionally, it has addressed and filled gaps in key data, such as expected service life and replacement costs. **Table 2-4** provides a high-level summary of data completeness levels in the compiled facility inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-4: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Facility** | ≈ 0%* | 100% | 90% | 88% | 100% | ≈ 0%** |
| **IT** | ≈ 0% | ≈ 0%*** | ≈ 99% | 0% | 100% | 100% |

** No asset ID provided for facilities. (If available, asset IDs for building from GIS to be used for facilities)*
*** AECOM used RS Means to estimate the replacement cost for facilities.*
**** Although the division is provided, the physical location is not clear*.

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the facilities. **Table 2-5** provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data.

**Table 2-5: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

### 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[3]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-6**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

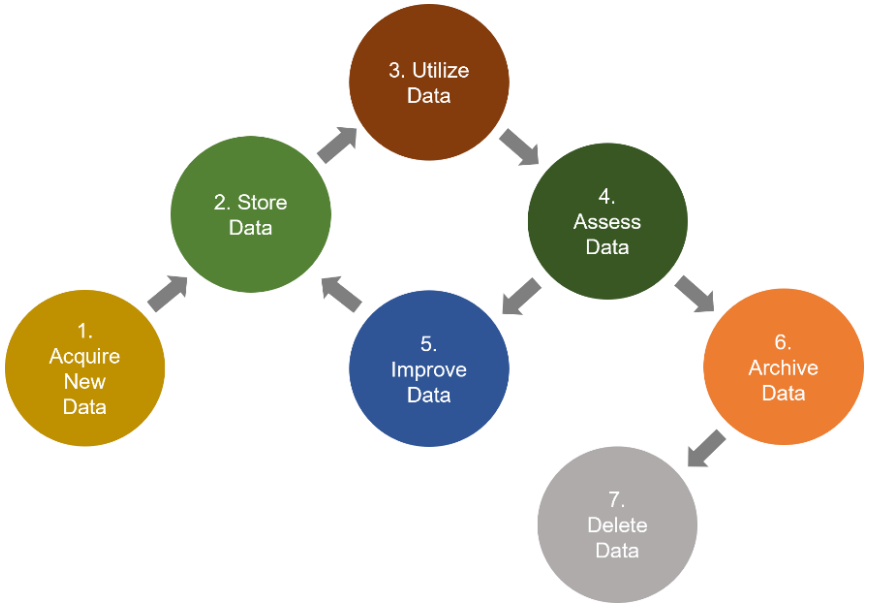


**Figure 2-6: Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data, but to migrate and merge data from other sources.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring a new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:

[3] TechTarget Network, Definition: Data Life Cycle, 2020.

  - Poor asset performance due to lack of information and understanding of asset behaviour.
  - Non-compliance with statutory regulations or safety requirements.
  - Safety incidents due to risks not being identified or reported.
  - Asset failure due to gaps in maintenance planning.

- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
  - Consider what data should be archived and articulate the reasons behind the archival decisions.
  - Examine any legal obligations pertaining to the retention of data records.
  - Determine the appropriate duration for retaining different categories of data records.
  - Evaluate the risks associated with the inability to retrieve specific data records.
  - Specify the authorized individuals or entities who should have access to archived data records.
  - Establish the expected timeframe for retrieving archived data records.
  - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.
- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data “squirrelling”, due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization’s data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report their current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and non-core assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[4] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1**. Each overarching theme is also assigned a corporate service objective.

The development of LoS targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

[4] City of Sault Ste Marie. 2021. Comprehensive Background Report.

**Table 3-1: The City's Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe and accessible for all ages and abilities (the "8 to 80 Cities" concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the City's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the City's history, diverse communities, and natural and cultural heritage, with the Downtown as the City's core destination for arts and culture. |

## 3.3 Stakeholder Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for facilities during the LoS workshop held with City staff. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups for facilities are identified below:

- Residential Customers
- Regulatory Agencies
- Industrial, Commercial & institutional (ICI) Customers
- Regulatory Agencies
- Neighbouring Municipalities
- Environmental Groups
- Internal City Departments
- Sporting Groups
- Heritage Buildings, Museums, and Archival Building
- Developers

### 3.3.1 Legislated and Regulatory Requirements

Facilities assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., high quality community centres, marinas, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**. Policy and guiding documents relevant to facilities are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • National Building Code of Canada<br>• National Fire Code of Canada<br>• National Energy Code of Canada for Buildings | • Building Code Acts<br>• Ontario Heritage Act<br>• Accessibility for Ontarians with Disabilities Act (AODA)<br>• Municipal Acts<br>• Electricity Act<br>– Ontario Regulation 507 – Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans |

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 only identifies levels of service metrics for core assets. A number of key LoS performance measures for facilities assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5**.

## 3.5 Levels of Service Performance Metrics

Through a review of the legislated and regulatory requirements required for facilities and collaboration with the City during the LoS workshop, a summary of the City's facilities LoS performance metrics are presented in **Table 3-3**.

### Table 3-3: Levels of Service Performance Metrics (Facilities)

| | Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) |
|---|---|---|---|---|---|
| 1. | Facility | Environment & Sustainability | Total annual electricity consumption per square foot | GJ / m2 | TBD |
| 2. | Facility | Environment & Sustainability | Total annual natural gas consumption per square foot | GJ / m2 | TBD |
| 3. | Facility | Environment & Sustainability | # of energy efficiency retrofit projects completed | # | TBD |
| 4. | Facility | Access & Capacity | GFL Memorial Gardens - # of Walkers per Year | # / year | Y |
| 5. | Facility | Access & Capacity | GFL Memorial Gardens - Utilization of Prime Time Hours | % | Y |
| 6. | Facility | Access & Capacity | GFL Memorial Gardens - # of Visitors Annually | # / year | Y |
| 7. | Facility | Access & Capacity | NCC - # of Turf bookings | # / year | Y |
| 8. | Facility | Access & Capacity | Pool – # of swim passes issued annually | # / year | Y |
| 9. | Facility | Access & Capacity | Seniors Centre - # of person registered participant days | # / year | Y |
| 10. | Facility | Access & Capacity | ECNHS – Total visitation | - | TBD |
| 11. | Facility | Access & Capacity | Roberta Bondar Pavilion – Bondar total participation | - | TBD |
| 12. | Facility | Access & Capacity | Marinas – Boater nights | - | TBD |
| 13. | Facility | Affordability | Cost of operating expenses to fire service buildings (utilities, repairs and maintenance, exterior and property maintenance, | $ / year | TBD |

## 3.6 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and / or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.
- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed LoS and a formalized financial strategy by July 1, 2025.

## 3.7 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social and technological landscape.

A summary of factors identified from the LoS workshop that would impact facility service levels include, but are not limited to, the following:

- Technology.
- Population Growth
- Building Construction.
- Energy and Demand Management.
- Funding level.
- Climate Change.

On November 2, 2021, the City's Planning Division released the Comprehensive Background Report for updating the Official Plan[5]. The City's Official Plan guides local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to reach 80,000 by 2031, and 83,300 people by 2036. Employment is projected to grow by approximately 6,000 jobs, from 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the 2025 deadline.

[5] City of Sault Ste Marie. 1996. Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

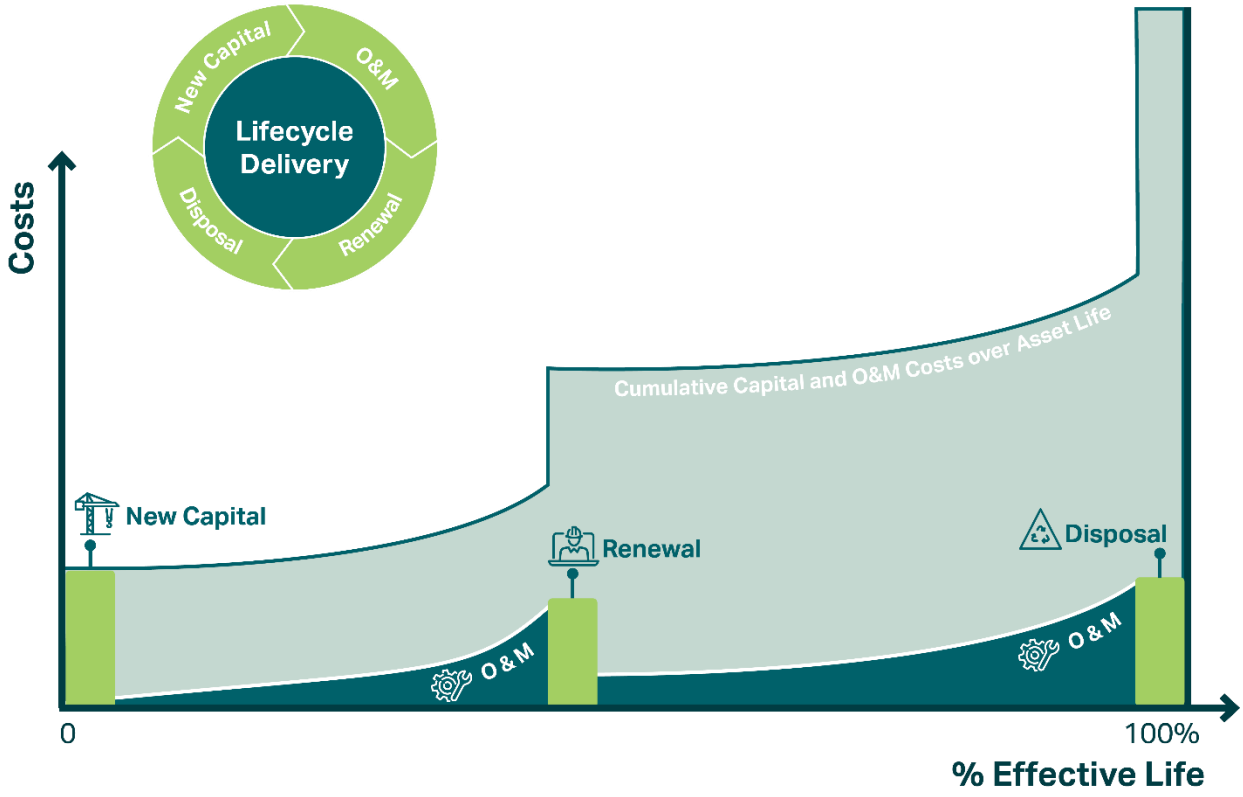


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

- The asset's operability and maintainability.
- Supply chain considerations.
- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, roof replacement. Reconstruction activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes to leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment.

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

Population growth, marked by an influx of newcomers and students, as well as an increase in diversity, stands as the most significant driver for the City to acquire new facility assets. The demand for additional recreational activities, coupled with the need for diverse programming for active living seniors, also influence the City's acquisition decisions. Additionally, the growth in the City's workforce, particularly in essential services like Fire and Police, contributes to the need for expanded facilities. Compliance with regulations is also a significant driver, ensuring that the City aligns with relevant standards. Lastly, the City is influenced by technological advancements and an IT digital strategy, prompting the acquisition of new assets to keep pace with evolving technologies and enhance digital capabilities. **Table 4-1** summarizes the acquisition activities associated with the City's facilities.

**Table 4-1: Acquisition Activities for Facility Assets**

| Asset Group | Activities Undertaken by the City | Guiding Documents |
|---|---|---|
| Facilities | • Built a $32 million recreation and culture facility.<br>• Developed a public plaza park in the downtown area.<br>• Established recreational facilities for seniors.<br>• Acquired transit terminal dispatch facilities. | • The City's Official Plan<br>• Corporate Strategic Plan<br>• Energy Conservation & Demand Management Plan<br>• Community Greenhouse Gas Reduction Plan<br>• Strategic AM Policy |

## 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in facility AM also contribute to cost-effectiveness over the asset's lifecycle. **Table 4-2** summarizes the O&M activities associated with the City's facility assets.

**Table 4-2: O&M Activities for Facility Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Notes |
|---|---|---|---|
| Facilities | Buildings | • Condition assessment<br>• Mechanical and Electrical maintenance (HVAC, Electrical System, Plumbing)<br>• Building cleaning | The City emphasizes the need for regular updates to condition assessment information due to two key reasons:<br>• Some older documentation may no longer be relevant in the present context.<br>• Not all buildings were initially included in the assessment. |
| | IT | • Cleaning<br>• Checking<br>• Updating<br>• Replacing components<br>• Security audits and assessments<br>• Safety inspections<br>• Equipment calibration | For the libraries, the City is desired to implement a maintenance schedule and a robust management system for tracking work orders. |

## 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs. **Table 4-3** summarizes the renewal and replacement activities associated with the City's facility assets.

**Table 4-3: Renewal and Replacement Activities for Facility Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| Facilities | Buildings | • Renovation and rehabilitation<br>• Replacement at the end of life<br>• Unique practices for historical buildings | The City's planned Initiatives include:<br>• Community services solar initiatives for power generation<br>• Roof renovations for John Rhodes Community Centre<br>• GFL garden projects |
| | IT | • Hardware upgrades<br>• Software upgrades<br>• Replacement at the end of life | • Adoption of new technology |

## 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic AM. As the City's facilities assets approach the end of their lifecycle or become obsolete, a systematic approach to their removal and decommissioning is essential. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements. **Table 4-4** summarizes the decommissioning and disposal activities associated with the City's facility assets.

**Table 4-4: Decommissioning and Disposal Activities for Facility Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Note |
|---|---|---|---|
| Facilities | Buildings | • Recycling<br>• Donation<br>• Hazardous waste management<br>• Post-disposal monitoring and reporting | • The City has Environmental Impact Reduction Programs in place.<br>• The City conducts annual asbestos reviews. |
| | IT | • Reuse and refurbishment<br>• Donation<br>• Waste-to-energy conversion<br>• Hazardous waste management<br>• Secure data and information removal<br>• Recycling of materials | - |

## 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that

ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-5**.

**Table 4-5: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

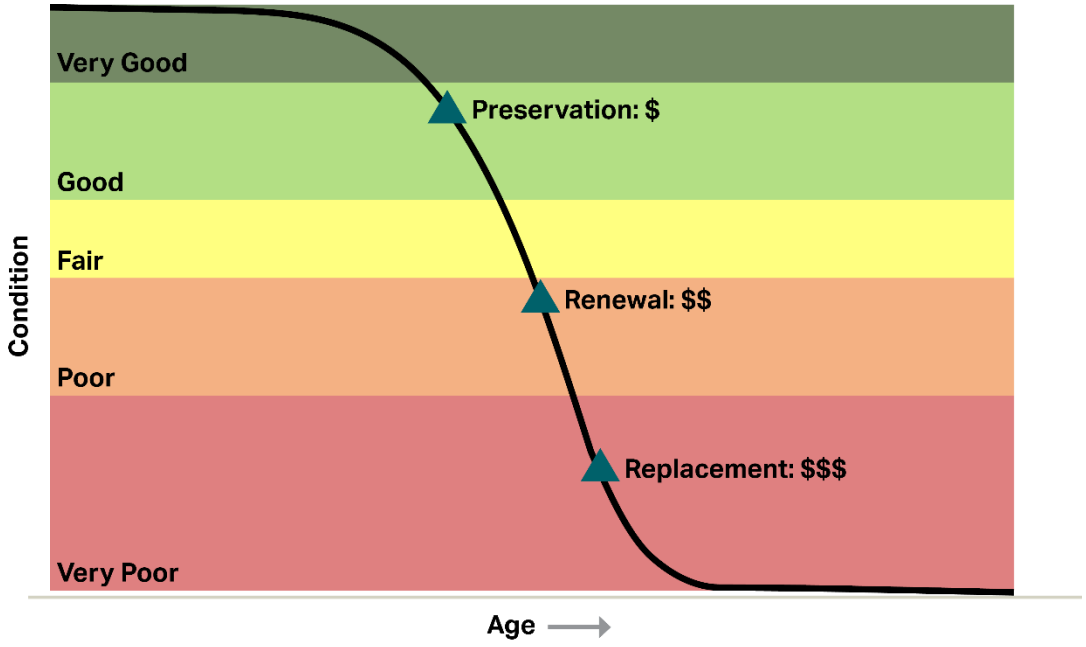


**Figure 4-2: Asset Deterioration Curve and Renewal Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City’s risk management process, AECOM recommends taking into account the following key considerations:

**1. Cybersecurity Risks**

The interconnected nature of digital systems exposes the City to potential cyber threats, ranging from data breaches to ransomware attacks. A crucial aspect of mitigating these risks is maintaining up-to-date IT equipment. This involves not only patching and updating software but also upgrading hardware that may no longer receive security updates. Additionally, the City should consider implementing robust cybersecurity protocols, providing employee training on best practices in cybersecurity, and establishing intrusion detection systems to monitor and promptly respond to threats.

**2. Regulatory Compliance**

Stay up to date with all relevant regulations and standards to ensure compliance. Non-compliance can result in fines and other penalties.

**3. Increased maintenance cost**

By implementing consistent and proactive maintenance schedules for infrastructure and facilities, municipalities can identify and address potential issues before they escalate. This preventive approach reduces the likelihood of major breakdowns or emergency repairs, ultimately minimizing the overall O&M expenses. Additionally, regular maintenance extends the lifespan of assets, enhances their efficiency, and ensures that they comply with safety standards, contributing to a more sustainable and cost-effective management of municipal resources.

**4. Sustainability Practices**

Implement sustainability practices, such as energy-efficient systems and waste reduction strategies, to reduce operational costs and environmental impact.

**5. Technology Integration**

Technology integration can help municipalities mitigate risks throughout the lifecycle of their facilities by identifying potential dangers, updating infrastructure, promoting local economic development, enhancing workplace safety, and automating risk systems. These measures lead to more efficient operations, safer workplaces, and ultimately, more resilient communities.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment and replacement decisions for facility assets.

**Section 5.2** assesses the annual funding requirements over the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for facility assets. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's facility assets. A financial dashboard was developed to present the results of the lifecycle modeling (**Appendix A**).

The annual reinvestment needs for the facility assets were determined based on various assumptions in inflated dollar values. For IT assets, as the majority of the assets have already exceeded their ESLs, which contributed to a significant backlog, an annual reinvestment rate of 10% was assumed over the next 20 years to renew and maintain these assets in a reasonable way. In addition, Morrison Hershfield Limited (MH) conducted a comprehensive condition assessment for facilities in the City, thoroughly examining the existing infrastructure and outlining recommendations for necessary improvements over a 20-year period. The findings of this assessment served as the foundation for this AMP, which incorporated an inflated reinvestment rate over the specified two-decade timeframe. The inflated reinvestment rate likely accounted for factors such as inflation, increased construction costs, and evolving facility standards. By incorporating this adjusted rate, the project aimed to ensure that the funding allocated over the 20-year period would be adequate to address not only the current conditions but also the anticipated future challenges and developments in the facilities in the City. This strategic approach reflects a proactive stance toward long-term facility management and sustainability, aligning with the recommendations put forth by MH in their initial condition assessment. For those facilities that did not include in the MH report, an annual reinvestment rate of 1% was assumed. Detailed reinvestment assumptions for facilities are provided in **Table 5-1**.

### Table 5-1: Facility Capital Reinvestment Assumptions

| Facility Name/Category | Annual Reinvestment Rate (2024-2033) | Reinvestment Strategy | Annual Average Reinvestment Cost (2024-2033) * |
|---|---|---|---|
| Bellevue Marina | 1.00% | 1% annual reinvestment considered | $158,000 |
| Carpentry Shop Building 'B' | 0.70% | MH Report | $17,000 |
| CCTV Building, Public Works Yard | 1.62% | MH Report | $14,000 |
| Central Fire Station #1 | 1.44% | MH Report | $87,000 |
| Civic Centre | 0.54% | MH Report | $324,000 |
| Downtown Plaza | 1.00% | 1% annual reinvestment considered | $134,000 |
| Equipment Storage Garage, Public Works Yard | 0.86% | MH Report | $43,000 |
| Ermatinger Old Stone House & Clergue Blockhouse | 0.15% | MH Report | $39,000 |
| Fire Hall #4 / EMS Complex | 2.78% | MH Report | $269,000 |
| Fire Station #2 | 1.81% | MH Report | $27,000 |
| Fire Station #3 | 1.23% | MH Report | $18,000 |
| Greenwood Cemetery | 0.39% | MH Report | $181,000 |
| John Rhodes Community Centre | 0.38% | MH Report | $226,000 |
| Lab Building, Public Works Yard | 1.64% | MH Report | $14,000 |
| Main Branch Public Library | 0.69% | MH Report | $87,000 |
| Northern Community Centre | 0.44% | MH Report | $267,000 |
| Police Headquarters | 1.49% | MH Report | $217,000 |
| Public Works Administration Building | 1.54% | MH Report | $52,000 |
| Public Works Garage, Building A | 2.37% | MH Report | $338,000 |
| Robert Bondar Park Marina | 1.20% | MH Report | $240,000 |
| Sault Event Centre (GFL Memorial Centre) | 1.50% | MH Report | $628,000 |
| Senior Citizens Drop-in Centre | 0.66% | MH Report | $67,000 |
| Soo Market | 1.00% | 1% annual reinvestment considered | $40,000 |
| SSM Museum | 0.19% | MH Report | $68,000 |
| Transit Bus Depot | 0.44% | MH Report | $156,000 |
| Transit Terminal Building | 0.49% | MH Report | $15,000 |
| IT** | 10.00% | 10% annual reinvestment rate was considered | $2,238,000 |
| **10-Year Average Annual Reinvestment Rate** | **1.06%** | **-** | **$5,964,000** |

** Note: The annual average reinvestment cost is presented in inflated dollar value. ** $150,000 annually allocated to the dispatch system, which is equivalent to $1.5 million from 2024 to 2033.*

# 5.2 Capital Reinvestment Need Analysis

## 5.2.1 20-Year Reinvestment Need Analysis

The City's facilities require an average annual reinvestment of $5.9 million over the period 2024-2033 and $8.9million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $148 million over the next 20-year period. As mentioned before, facilities annual reinvestment need is determined based on the MH report. **Figure 5-2** illustrates a detailed breakdown of the facility 20-year reinvestment need.

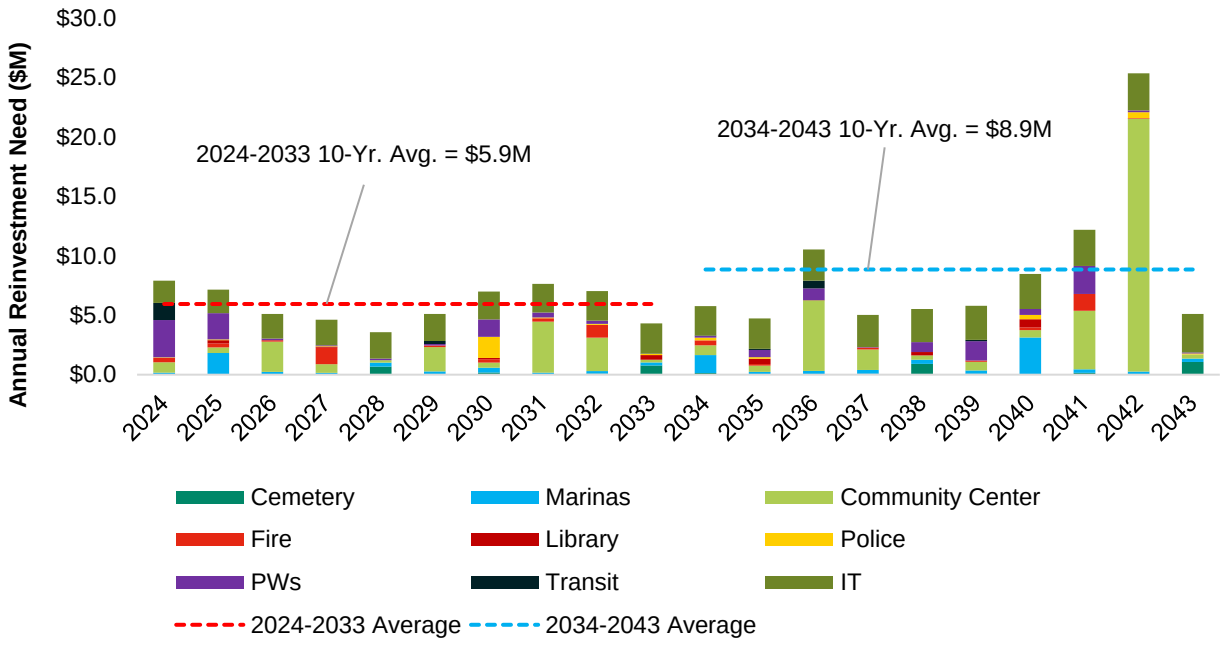


**Figure 5-1: Facility 20-Year Reinvestment Need**

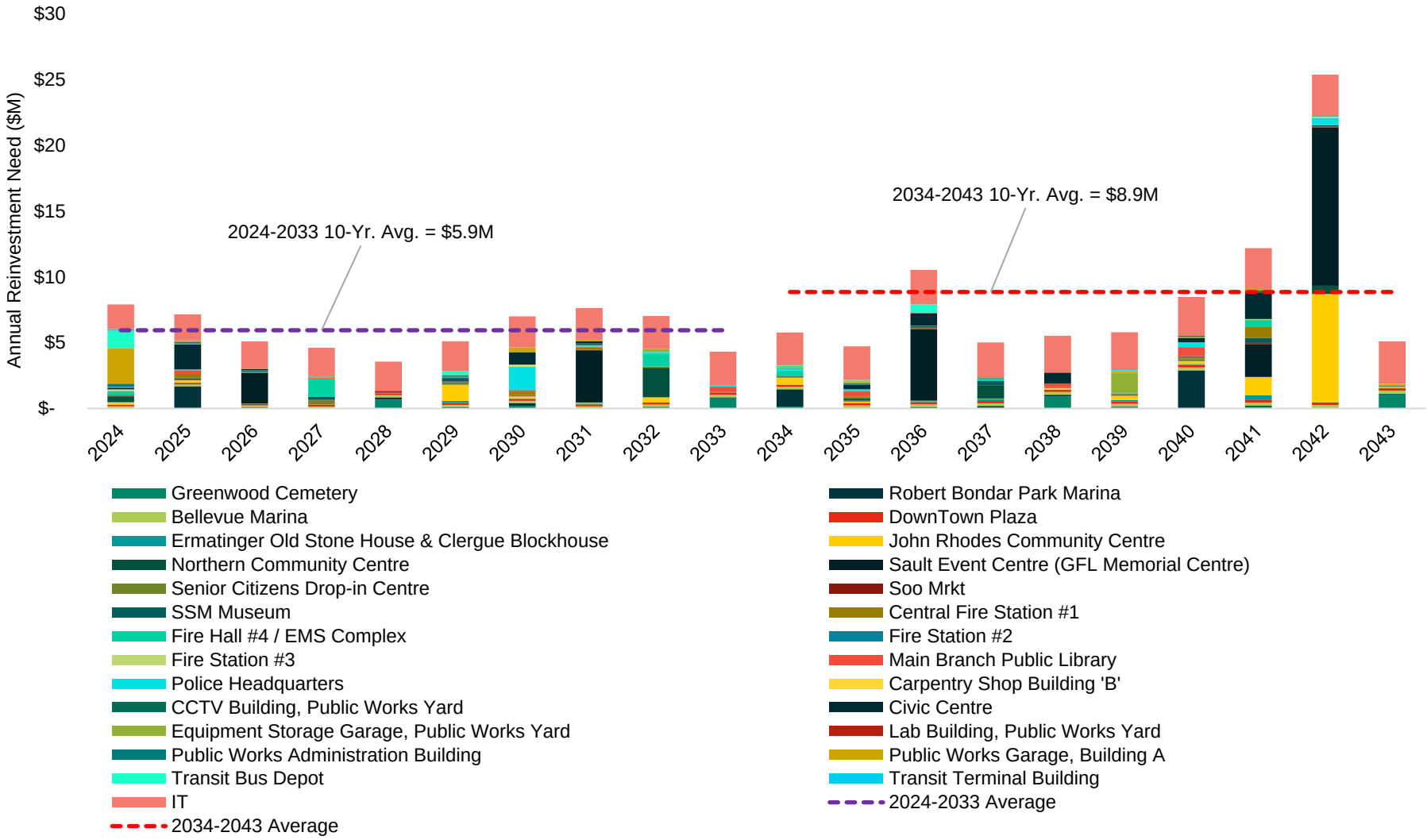


**Figure 5-2: Detailed Breakdown of Facility 20-Year Reinvestment Need**

The detailed 20-year reinvestment needs for facilities and IT are presented in **Table 5-2** in inflated dollar values.

**Table 5-2: Facility 20-Year Total and Annual Average Reinvestment Need**

| Facility Name/Category | Annual Average Need | 20-Year Total |
|---|---|---|
| Bellevue Marina | $186,000 | $3,707,000 |
| Carpentry Shop Building 'B' | $13,000 | $246,000 |
| CCTV Building, Public Works Yard | $9,000 | $177,000 |
| Central Fire Station #1 | $101,000 | $2,010,000 |
| Civic Centre | $385,000 | $7,687,000 |
| Downtown Plaza | $158,000 | $3,146,000 |
| Equipment Storage Garage, Public Works | $104,000 | $2,069,000 |
| Ermatinger Old Stone House & Clergue | $61,000 | $1,201,000 |
| Fire Hall #4 / EMS Complex | $191,000 | $3,819,000 |
| Fire Station #2 | $22,000 | $434,000 |
| Fire Station #3 | $13,000 | $253,000 |
| Greenwood Cemetery | $214,000 | $4,265,000 |
| John Rhodes Community Centre | $666,000 | $13,320,000 |
| Lab Building, Public Works Yard | $11,000 | $205,000 |
| Main Branch Public Library | $115,000 | $2,281,000 |
| Northern Community Centre | $214,000 | $4,276,000 |
| Police Headquarters | $175,000 | $3,488,000 |
| Public Works Administration Building | $45,000 | $885,000 |
| Public Works Garage, Building A | $201,000 | $4,002,000 |
| Robert Bondar Park Marina | $361,000 | $7,215,000 |
| Sault Event Centre (GFL Memorial Centre) | $1,314,000 | $26,279,000 |
| Senior Citizens Drop-in Centre | $44,000 | $873,000 |
| Soo Market | $48,000 | $944,000 |
| SSM Museum | $95,000 | $1,892,000 |
| Transit Bus Depot | $121,000 | $2,415,000 |
| Transit Terminal Building | $11,000 | $216,000 |
| IT | $2,539,000 | $50,774,000 |
| **Total** | **$7,417,000** | **$148,079,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's facilities have been evenly distributed over the next 20 years, as illustrated in **Figure 5-3**. This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and uniform financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

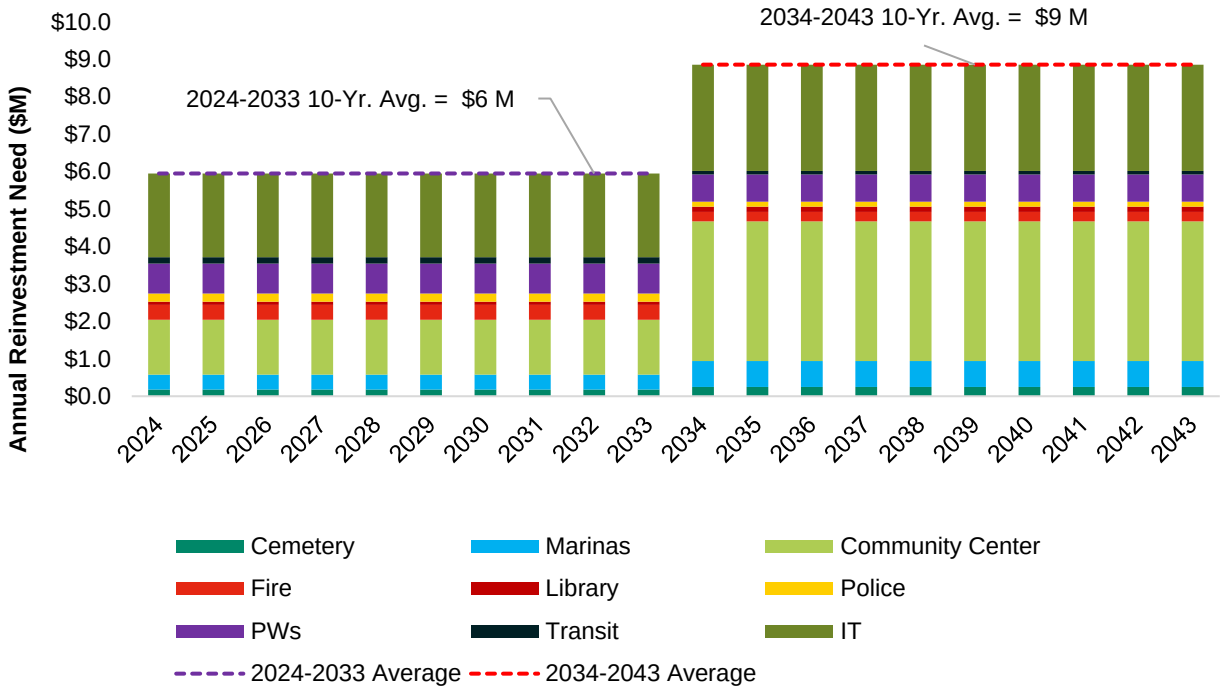


**Figure 5-3: Facility 20-Year Smoothed Annual Reinvestment Needs**

# 5.3 Full Funding Need Profile

**Figure 5-4** shows a full picture of the City's facility funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual reinvestment cost (**Figure 5-1**) was combined with the City's projected facility O&M cost[6]. Additionally, 1% of the annual replacement cost was added to account for the asset disposal cost. With these additions, the City's facility full funding requirement increases to approximately $120 million over the next 10 years, averaging $12 million per year in inflated dollar value.

[6] City of Sault Ste, Marie, 2024 Final Operating Budget

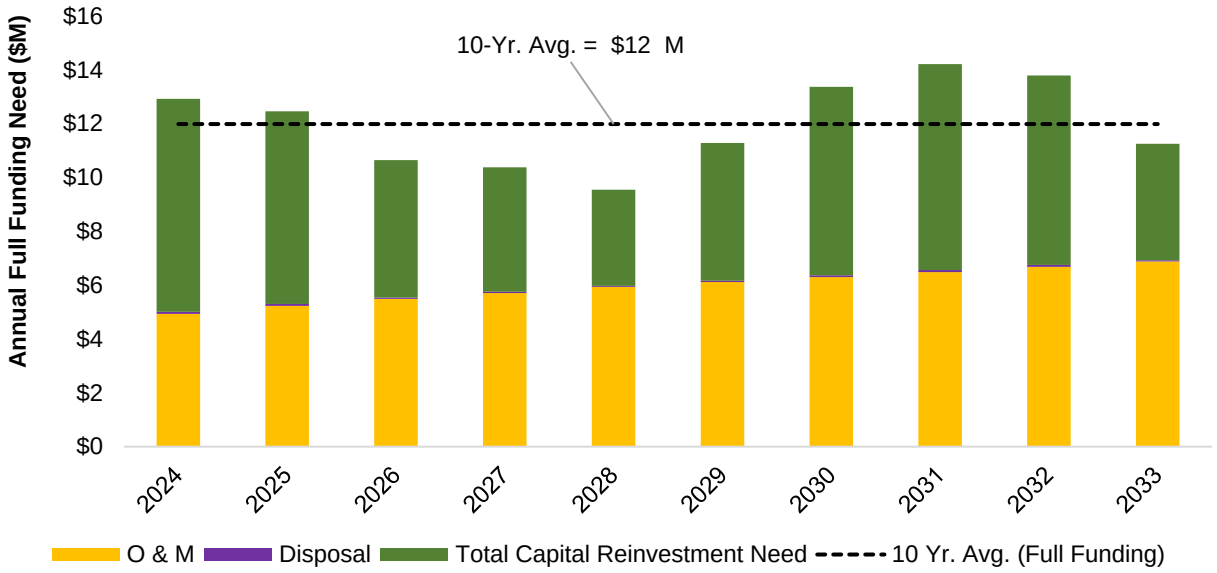


**Figure 5-4: Facilities Full Funding Need Profile**

# 5.4 Funding Strategies

The City primarily secures funding for facilities and IT assets through the property tax levy, supplemented by an annual contribution to IT asset reserves and financial support from higher levels of government. Drawing insights from other municipalities, the City is keen to explore the possibility of implementing an increase in the levy designated explicitly for capital assets. Simultaneously, they recognize the importance of striking the right balance between maximizing the potential of the property tax levy and ensuring affordability for residents and business owners. In light of the City's financial concerns, AECOM encourages the City to actively seek alternative funding sources to address potential challenges. This section introduces the following funding options, acknowledging that the City's eligibility for these funds is contingent upon specific criteria:

- Canada Community-Building Fund (CCBF)
- Canada Cultural Spaces Fund (CCSF)
- Municipal Asset Management Program (MAMP)
- Green Municipal Fund (GMF)
- Canada Growth Fund (CGF)
- Enabling Accessibility Fund (EAF)
- Northern Ontario Heritage Fund Corporation (NOHFC)

## 5.4.1 Canada Community-Building Fund (CCBF)

The CCBF, previously known as the Federal Gas Tax Fund, is a permanent source of upfront funding distributed twice a year to territories and provinces. The delivery of the CCBF to municipalities varies by province or territory, with allocation following a per-capita basis for provinces, territories, and First Nations[7].

The CCBF is administered in Ontario through a bilateral agreement with the Government of Ontario, the Association of Municipalities of Ontario (AMO), and municipalities. This program allocates approximately $816 million annually to 641 communities in Ontario, with an additional top-up of $816.5 million provided in 2020 to expedite communities' recovery from the COVID-19 pandemic. Notably, as of 2022, the City has received over $9 million through the CCBF, granting the City flexibility to strategically invest across 19 distinct project categories[8].

## 5.4.2 Canada Cultural Spaces Fund (CCSF)

The CCSF is a program administered by the Department of Canadian Heritage in Canada[9]. The fund is designed to support the improvement, renovation, and construction of cultural spaces and facilities. Its primary goal is to enhance access to, and the quality of, cultural spaces for artists and their communities. It is also worth noting that this fund is in high demand, and available program funding is very limited for the current and next fiscal years.

## 5.4.3 Municipal Asset Management Program (MAMP)

The MAMP is aimed at improving AM practices within municipalities[10]. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program

[7] The Canada Community-Building Fund. (2022). Infrastructure Canada. Infrastructure Canada - The Canada Community-Building Fund. Retrieved on February 14th, 2024.

[8] Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts. (2021). Infrastructure Canada. Backgrounder: Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts - Canada.ca. Retrieved on February 14th, 2024.

[9] Canada Cultural Spaces Fund. (2024). Canadian Heritage. Canada Cultural Spaces Fund - Canada.ca. Retrieved on February 14th, 2024.

[10] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 14th, 2024.

may offer funding to support the development or improvement of AM plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable AM practices.

### 5.4.4 Green Municipal Fund (GMF)

The GMF is a financial initiative in Canada dedicated to supporting sustainability and environmental projects at the municipal level. Managed by the Federation of Canadian Municipalities (FCM), the GMF provides funding and resources to assist municipalities across the country in undertaking projects that contribute to environmental sustainability, energy efficiency, and the reduction of greenhouse gas (GHG) emissions[11]. Within the realm of facilities, municipalities can explore various opportunities provided by this fund. These opportunities may include funding for projects related to energy efficiency upgrades, renewable energy installations, green building initiatives, waste management programs, and other environmentally sustainable practices within municipal facilities. Some of the available funding opportunities are as follows:

- Capital project: Retrofit of existing municipal buildings.
- Capital project: Construction of new sustainable municipal and community buildings.
- Study: New construction of municipal and community buildings.
- Study: Retrofit pathway for municipal buildings.

### 5.4.5 Canada Growth Fund (CGF)

The CGF is an independent and arm's length public fund with a $15 billion investment aimed at accelerating the adoption of technologies to reduce emissions and drive the transformation of Canada's economy[12]. The fund's primary objective is to catalyze substantial private sector investment in Canadian businesses and projects, fostering economic growth on the path to net-zero emissions. The fund focuses its investment activities in three primary sectors: projects utilizing less mature technologies and processes proven in pilots but not yet widely adopted; clean technology companies scaling less mature technologies in demonstration or commercialization stages; and projects and companies involved in low-carbon or climate technology value chains.

### 5.4.6 Enabling Accessibility Fund (EAF)

The EAF is a federal government program aimed at supporting projects that enhance accessibility for individuals with disabilities[13]. The fund provides financial assistance to eligible organizations for initiatives such as infrastructure improvements, renovations, and retrofitting to create more accessible spaces. Its goal is to contribute to a barrier-free and inclusive society by addressing physical barriers and promoting equal access in community spaces.

### 5.4.7 Northern Ontario Heritage Fund Corporation (NOHFC)

The NOHFC is an organization that provides financial support and promotes economic development in the northern regions of Ontario. Established to stimulate growth and sustainability, NOHFC offers funding for various projects, such as business expansion, job creation, infrastructure development, and community initiatives. Within the NOHFC, the Community Enhancement Program is an initiative aimed at supporting community-driven projects[14]. This program provides financial assistance for local initiatives that enhance community infrastructure, amenities, and services. Eligible projects may include the development or improvement of recreational facilities, community spaces, and essential services.

[11] Funding opportunities. (n.d.). Green Municipal Fund. Funding opportunities | Green Municipal Fund. Retrieved on February 14th, 2024.

[12] Canada Growth Fund. (n.d.). Department of Finance Canada. gf-fc-en.pdf (canada.ca). Retrieved on February 14th, 2024.

[13] About Enabling Accessibility Fund. (2023). Government of Canada. Enabling Accessibility Fund - Canada.ca. Retrieved on February 14th, 2024.

[14] Community Enhancement Program. (2024). Northern Ontario Heritage Fund Corporation. Community Enhancement Program | NOHFC. Retrieved on February 14th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1**.

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory. | • Continue to refine the asset inventory and close existing data gaps, so as to have a more accurate representation of the current state of the facility and IT assets; and, ultimately, to make more informed and defensible decisions.<br>– AECOM recommends the City to create a comprehensive inventory with replacement value for all facilities based on the Uniformat structure, and keep updating the inventory as assets are acquired or disposed. The MH report is an appropriate reference to be used for developing the facility inventories.<br>– AECOM also recommends creating a clear and comprehensive IT inventory.<br>• Refine the install date information of the facilities and IT assets.<br>• Define unique asset IDs for IT assets. These IDs should differ from accounting numbers, as the accounting number is not unique for each asset.<br>• Asset IDs for buildings to be used in the next update of the AMP |
| 2. | Develop a formalized facility assets condition assessment process and use consistent condition grading schemes for these assets. | • The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>• Record the condition of IT assets although IT assets do not show a clear deterioration pattern.<br>• Continue performing condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council.<br>– Morisson Hershfield Limited (MH) implemented a thorough condition assessment for facilities in the City. While the MH (Municipal Health) report provides valuable insights, it's important to note that not every single facility within the City is covered by the report. This raises the necessity for a more comprehensive and up-to-date condition assessment program. Such a program should extend its coverage beyond the facilities included in the MH report, ensuring a thorough evaluation of all relevant structures and assets within the City. This expanded approach will enable a more holistic understanding of the overall condition of various facilities, facilitating better-informed decision-making and prioritization of maintenance or improvement initiatives |
| 3. | Refine the LoS Framework. | • Collect current asset performance data for key performance indicators (KPIs) that are not currently being tracked.<br>• Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engaging with key stakeholders to define LoS targets and calculate the costs required to achieve these targets.<br>• Upon establishing LoS targets that is required by the July 1st ,2025 deadline by O. Reg. 588/17, the City should strategize on achieving these targets within the constraints of its operational context, including staff availability, existing funding, and available resources.<br>• Initiating a Customer Consultation Plan to involve the public and stakeholders in discussions about the LoS framework, aiming to understand their willingness to pay for improved LoS.<br>• Continue to maintain, monitor, and periodically update the LoS Framework. |

| Index | Improvement Initiative | Description |
|---|---|---|
| 4. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while the failure of low-risk assets could be accepted with caution. |
| 5. | Establish a sustainable facility funding model that fits the needs of the community. | • In light of the annual funding need outlined in **Figure 5-3**, it is recommended that the City allocate an average of $6.0 million per year over the next 10 years for capital reinvestment in facilities. Additionally, a total of approximately $59 million should be budgeted for O&M expenditures during the same period.<br>• Review financial modeling assumptions on reinvestment rate and replacement values and update the financial model with new information as it becomes available. The financial model is based on several key assumptions that could have a significant impact on the outcomes of the model.<br>• Carefully review the reinvestment rate for IT assets. As mentioned earlier, most IT assets have already surpassed their Expected Service Lives (ESLs). To address this backlog, AECOM has allocated a 10% reinvestment rate for IT assets. However, this rate can be adjusted based on the specific requirements of the City.<br>• Explore funding resources that the City may take into consideration while performing strategic lifecycle and financial strategies (**Section 5.4**) |
| 5. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication.<br>• Communicate AM improvement initiatives and enhance natural AM awareness internally through internal communication. |

# Appendix A - Facility MS Excel Lifecycle Model and Inventory

FINAL

# City of Sault Ste. Marie
# Fleet Asset Management Plan

June 2024

City of Sault Ste. Marie
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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the “City”) to develop an asset management plan (AMP) to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM’s proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary’s River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an AMP to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City’s protection services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City’s fleet assets and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City’s Strategic AM Policy and Section 5 of Ontario Regulation (O. Reg.) 588/17.

Mercury Associates, Inc (Mercury) has conducted a comprehensive review of the City’s fleet operations for the Public Work and Engineering Service (PWES) fleets in 2021, known as “Fleet Practices Review Final Report”. The project scope consisted of four main components, including fleet benchmarking, cost of service, management practice review, and rightsizing study.

Organizations that implement good asset management (AM) practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 AM Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024, deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the LoS that the municipality proposes to provide, the lifecycle activities and associated costs needed to achieve those LoS, available funding, any funding shortfalls, and the risk of failing to meet the proposed LoS. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service (LoS) objectives, stakeholder identification, LoS framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Sections 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. Figure 1-1Figure 1-1: The City's AM Line of Sight demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

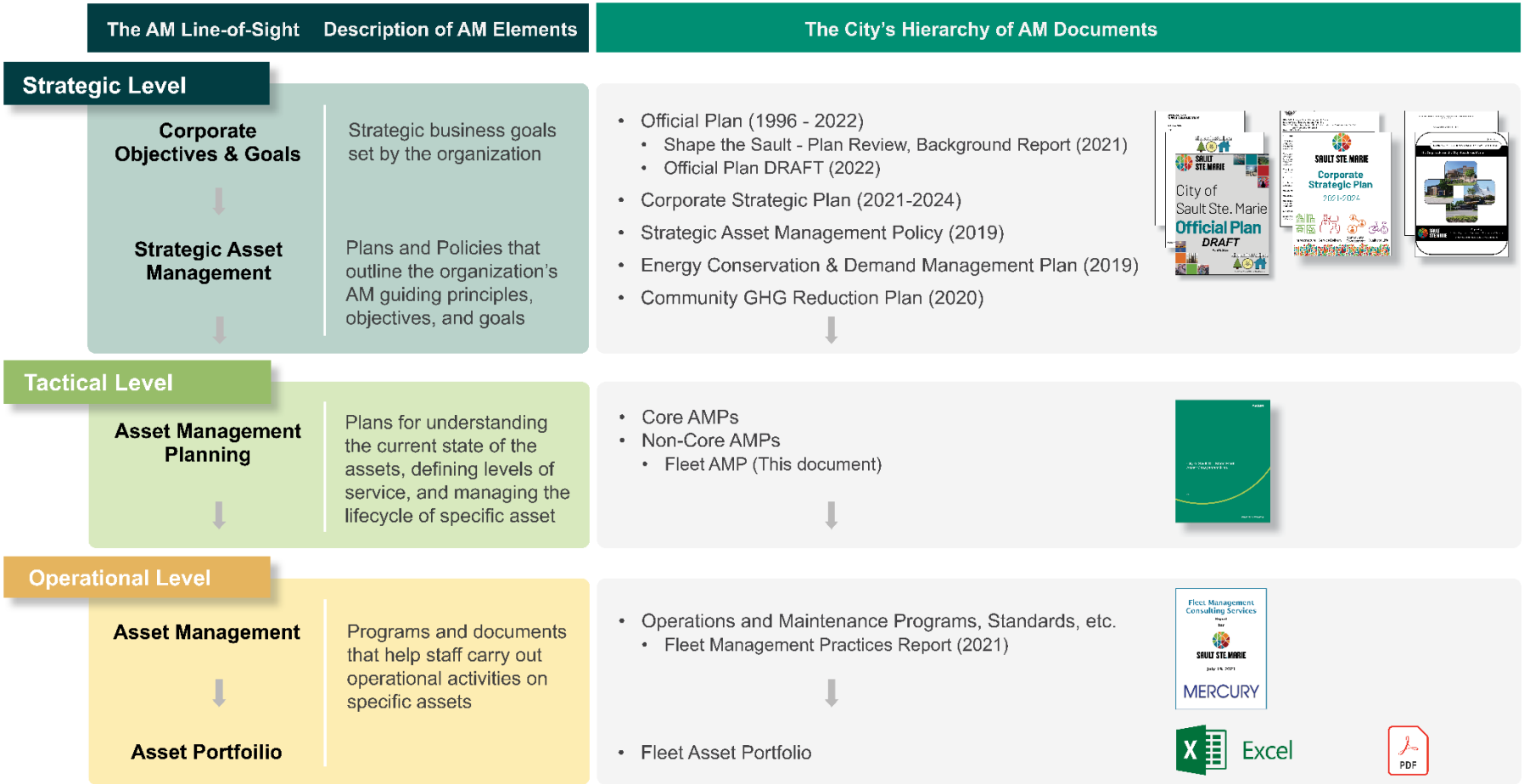


**Figure 1-1: The City's AM Line of Sight**

# 2. State of Infrastructure

Fleet assets are managed by the Fleet Management Division, who provides service for all City's operational vehicles, public transit vehicles, public work, transit, and arena equipment, except those used by the City's Fire and Rescue and Police Service. Almost all other City department utilize vehicles/equipment for their day-to-day operation and public service activities. Fleet Management is responsible for maintaining these fleet assets in a timely and efficiently manner to support the continuous delivery of City services every day. Currently, Fleet Management Division manages over 600 assets that range significantly in both complexity and value. Fleet Management Services provides all the licensing, registration, and insurance of the vehicles and maintains preventative maintenance activities.

The inventory of fleet is a comprehensive catalog detailing the quantity, condition, and specifications of these components within the City. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into the maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range asset management planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of Fleet assets, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of Fleet is illustrated, showcasing four main categories: Public Work and Engineering Service (PWES) Fleet, Community Development and Enterprise Service (CDES) Fleet, Public Work (PW) Equipment, and Community Service Department (CSD) Equipment. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's fleet assets, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or track costs at the asset level or higher levels.

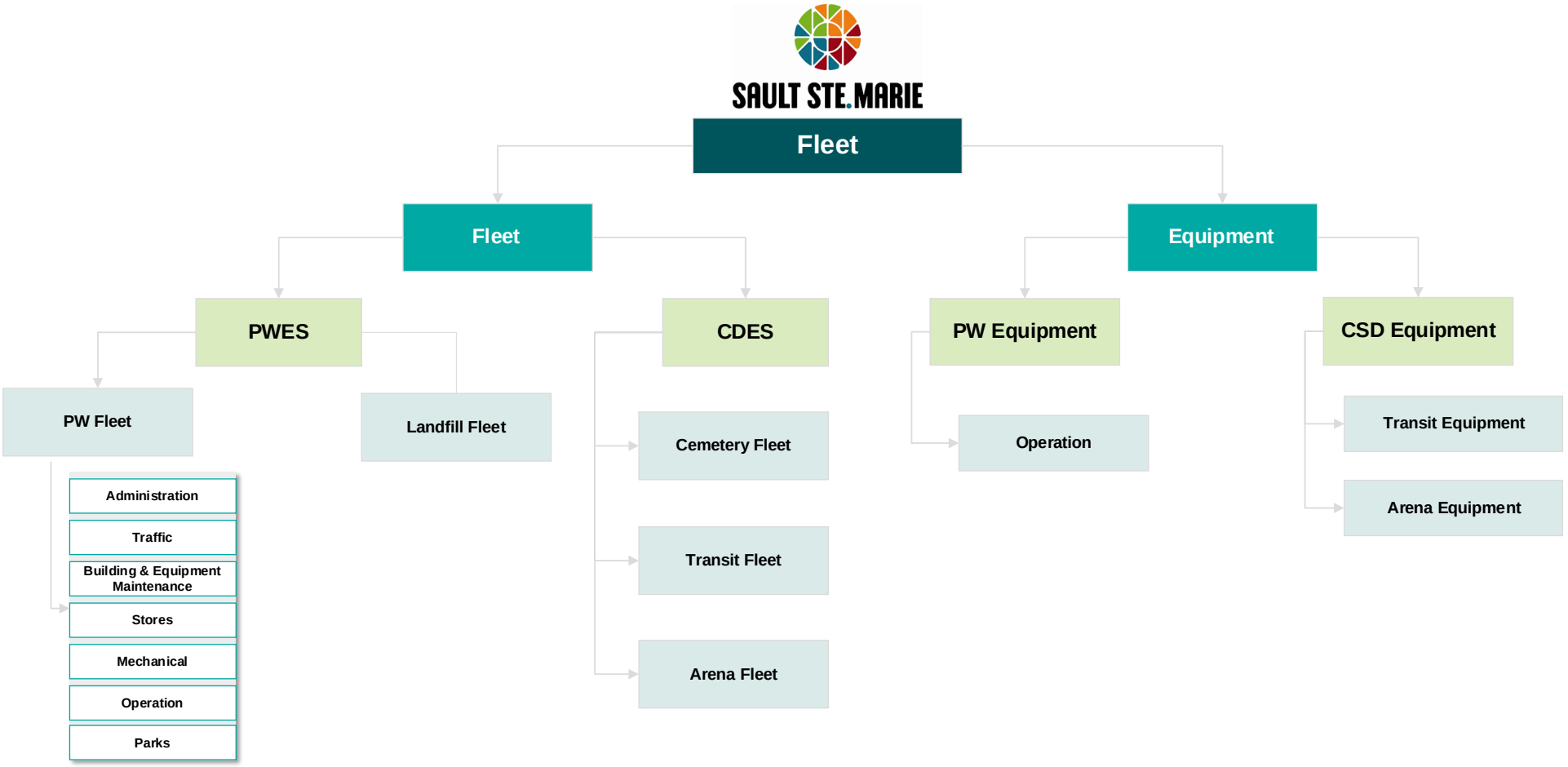


**Figure 2-1: City of Sault Ste. Marie Fleet Asset Hierarchy**

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

A completed fleet asset inventory is compiled based on the raw data provided by the City at the initial stage of the project, which was obtained from the following sources:

- Active Capital Assets 2021
- BUS LIST - As of Feb 2023
- Copy of Equipment Cemetery 2022
- Transit Capital 22 - Updated August 24, 2022
- FINAL 2023 UPDATE SSM Public Works Replacement Plan Workbook updated 20230309.

**Table 2-1** presents the summary of the City's fleet asset inventory. In total, the City fleet team manages 409 fleets and 204 equipment, serving different city service departments.

**Table 2-1: Fleet Inventory Summary**

| Asset Group | Departments | Asset Class | Quantity | Unit |
|---|---|---|---|---|
| Fleet | PWES Fleet | PW - Admin Fleet | 4 | Ea. |
| | | PW - Building Equipment Maintenance Fleet | 12 | Ea. |
| | | PW - Operation Fleet | 202 | Ea. |
| | | PW - Mechanical Fleet | 1 | Ea. |
| | | PW - Stores Fleet | 1 | Ea. |
| | | PW - Traffic Fleet | 16 | Ea. |
| | | PW - Park Fleet | 77 | Ea. |
| | | Landfill Fleet | 9 | Ea. |
| | CDES Fleet | Arena Fleet | 5 | Ea. |
| | | Cemetery Fleet | 32 | Ea. |
| | | Transit Fleet | 50 | Ea. |
| Equipment | PW Equipment | PW - Operation Equipment | 18 | Ea. |
| | CSD Equipment | Arena Equipment | 2 | Ea. |
| | | Transit Equipment | 184 | Ea. |
| **Total Fleet** | | | **409** | **Ea.** |
| **Total Equipment** | | | **204** | **Ea.** |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

The finalized asset replacement values were determined with the largest numbers of the following:

- Escalating the original asset purchase costs to 2024 dollars, by the average inflation rate of the past 10 years (2014-2023) at 2.11%.
- Current replacement cost from AECOM cost library and Mercury Fleet Assessment Report.

**Table 2-2** presents the unit replacement cost and the total replacement value for fleet asset categories within the City. Notably, the Public Work fleet constitutes the most significant portion, accounting for a replacement value of approximately $36 million, followed by the Transit fleet at $20 million, the Landfill fleet at $2.4 million, the Cemetery fleet at $1.9 million, Transit equipment at $1.9 million, Public Work operation equipment at $0.77 million, Arean fleet at $0.54 million, and Arena equipment at $0.14 million. The combined replacement value for all these categories amounts to approximately $63 million. Note that all total replacement values are rounded to the nearest thousand.

**Table 2-2 Current Replacement Value**

| Asset Group | Departments | Asset Class | Replacement Cost Range | Total Replacement Value (2024) |
|---|---|---|---|---|
| Fleet | PWES Fleet | PW - Admin Fleet | $25,000 - $45,000 | $139,000 |
| | | PW - Building Equipment Maintenance Fleet | $10,000 - $201,000 | $779,000 |
| | | PW - Operation Fleet | $8,000 - $632,000 | $27,852,000 |
| | | PW - Mechanical Fleet | $45,000 | $45,000 |
| | | PW - Stores Fleet | $25,000 | $25,000 |
| | | PW - Traffic Fleet | $13,000 - $205,000 | $1,901,000 |
| | | PW - Park Fleet | $8,000 - $336,000 | $4,915,000 |
| | | Landfill Fleet | $21,000 - $305,000 | $2,400,000 |
| | CDES Fleet | Arena Fleet | $102,000 - $117,000 | $544,000 |
| | | Cemetery Fleet | $8,000 - $195,000 | $1,940,000 |
| | | Transit Fleet | $25,000 - $604,000 | $19,739,000 |
| Equipment | PW Equipment | PW - Operation Equipment | $8,000 - $135,000 | $770,000 |
| | CSD Equipment | Arena Equipment | $6,000 - $135,000 | $141,000 |
| | | Transit Equipment | $3,000 - $108,000 | $1,849,000 |
| **Total Fleet** | | | | **$60,279,000** |
| **Total Equipment** | | | | **$2,760,000** |
| **Total** | | | | **$63,039,000** |

It is noted that the replacement costs are estimated based on the Class 4[1] cost estimation approach. These estimates are typically prepared with limited information, resulting in wide accuracy ranges. Class 4 estimates serve various purposes, including project screening, feasibility assessment, concept evaluation, and preliminary budget approval. They are utilized for detailed strategic planning, business development, project screening at more advanced stages, alternative scheme analysis, confirmation of economic and technical feasibility, and approval to proceed to the next stage. Typically, depending on the construction complexity of the project, relevant reference information, and other associated risks, the accuracy ranges for Class 4 estimates fall within the following bounds (could exceed based on various criteria):

- On the lower side, -10% to -20%
- On the higher side, +20% to +30%

It is also worth noting that the total replacement values are presented in inflated dollars and have been marked up by 5% to 30% for fleet assets, which accounts for market markup and any necessary service cost.

[1] Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Cost Estimate Classification System - As Applied In Engineering, Procurement, and Construction for the Building and General Construction Industries, 2020, Retrieved in February 2024

## 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modelling may be justified. Conversely, for low-value assets, the cost of deterioration modelling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Some assets are operated intermittently or even infrequently or are being operated at a lower demand than their designed capacity. Thus, the actual operating "age" of the asset is reduced.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., corrosive chemicals), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as the cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical.

**Figure 2-2** shows the weighted average asset age and RSL as a proportion of average ESL for each asset class. The ESL and RUL data for fleet assets are counted in months. Overall, the weighted average age of Transit equipment, Cemetery fleet, Arena fleet, PW - Park fleet, PW - Store fleet and PW – Mechanical fleet is equal to or beyond the weighted average ESL. The Transit fleet, Landfill fleet and Arena equipment have relatively longer RUL compared to the other asset classes.

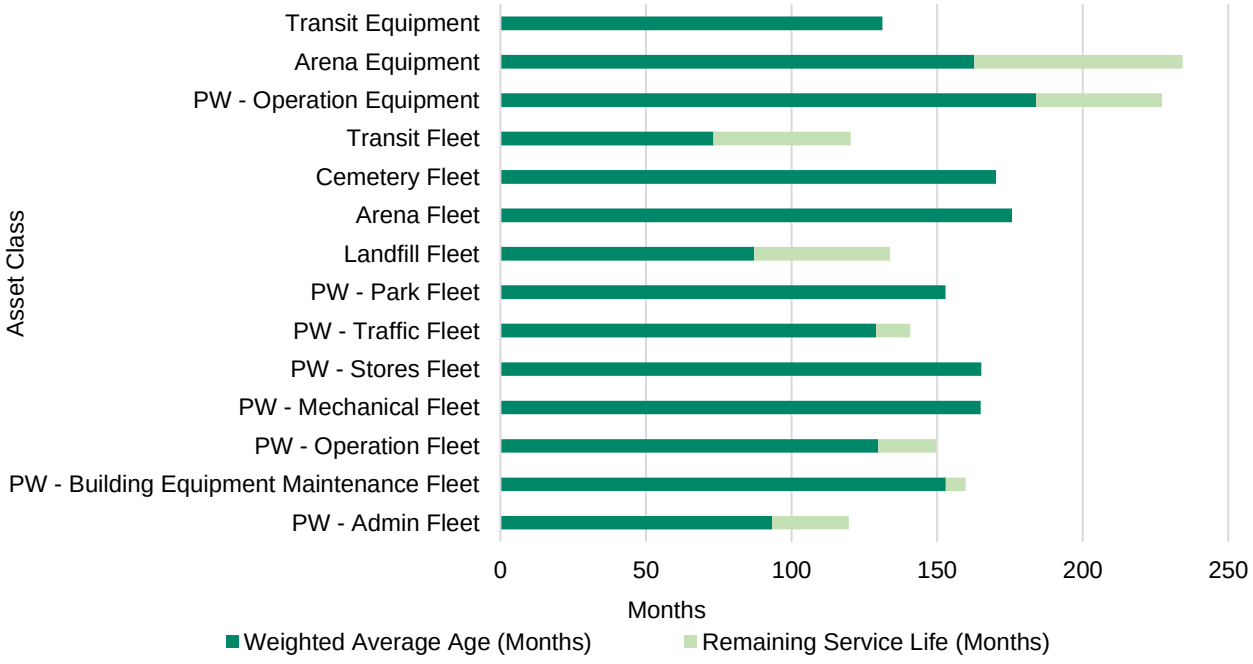


**Figure 2-2: Fleet Weighted Average Age and Remaining Service Life**

## 2.2.4 Asset Condition

Regular condition assessments for fleet assets are recommended to monitor the condition and support the asset management decision. For other asset categories that do not have condition assessment results, the two-parameter Weibull distribution function was used to assess the current condition and to project the future condition of the City's fleet assets. The Weibull distribution has been used extensively in reliability studies and lifetime prediction models in industries ranging from automotive to oil & gas and provides a suitable distribution for this type of analysis.

The underlying premise of the Weibull-shaped deterioration is that while some assets fail prematurely due to severe conditions or improper installation, other assets are very long-lived and function well beyond their theoretical ESL. In order to perform a high order network-level analysis, it was assumed that assets would fail (and require replacement) within a deterioration envelope / curve approximated by a Weibull probability distribution. The two-parameter Weibull cumulative distribution has two parameters for scale and shape, as set out in Equation [1]:

$$f(x;\alpha,\beta) = e^{-\left(\frac{x}{\beta}\right)^{\alpha}} \quad [1]$$

Where: $x$ = Age
$\alpha$ = Shape parameter (or slope)
$\beta$ = Scale parameter

A set of Weibull cumulative distribution functions was leveraged to simulate a set of deterioration curves for assets with different ESLs as shown in **Figure 2-3**.

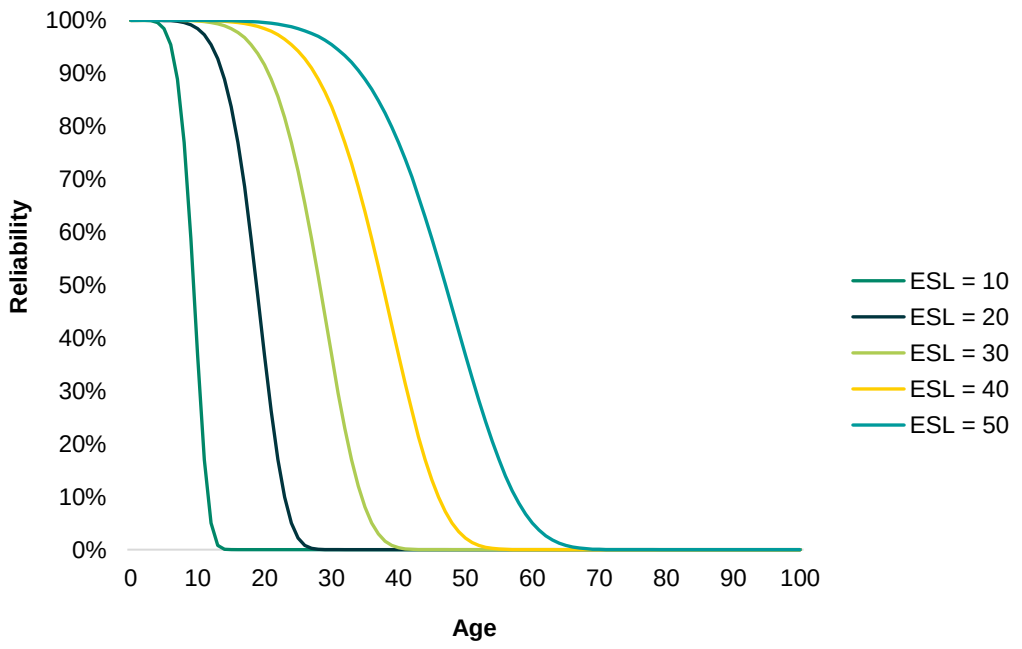


**Figure 2-3: Asset Deterioration Curve Samples**

The asset condition ratings were based on the five-point condition rating scale presented in **Table 2-3.**

### Table 2-3: Condition Assessment Rating Details

| Physical Condition Rating | Condition Description |
|---|---|
| 1 - Very Good | The asset is new or in new condition, meets or exceeds all current standards of practice, shows no signs of deterioration, and is fully operable. |
| 2 - Good | The asset has minimal signs of deterioration, generally meets all current standards of practice, and is fully operable. |
| 3 - Fair | The asset may show moderate signs of deterioration, generally meets the current standard of practice, asset performance may decrease and cause service interruptions and is fully operable. |
| 4 - Poor | The asset is approaching its end-of-life expectancy, shows significant signs of deterioration, major components may need to be rebuilt or replaced, may be functioning at an acceptable level is expected to deteriorate further. |
| 5 - Very Poor | The asset is beyond its life expectancy, may no longer meet the current standard of practice, major component may no longer be serviceable, shows significant deterioration, functions at a limited capacity, and may pose a safety hazard if used. |

**Table 2-4** and **Figure 2-4** present the condition ratings of the City's fleet with respective replacement values in non-inflated dollars. The known condition ratings span from "Very Good" to "Very Poor," with "Very Good" and "Good" collectively contributing 57% to the overall replacement value. 37% of the assets are in Very Poor condition.

### Table 2-4: Fleet Condition Summary

| Rank | Condition Rating | Replacement Value | % of Replacement Value |
|---|---|---|---|
| 1 | Very Good | $30,338,000 | 48% |
| 2 | Good | $5,421,000 | 9% |
| 3 | Fair | $1,778,000 | 3% |
| 4 | Poor | $2,042,000 | 3% |
| 5 | Very Poor | $23,494,000 | 37% |
| **Total** | | **$63,073,000** | **100%** |

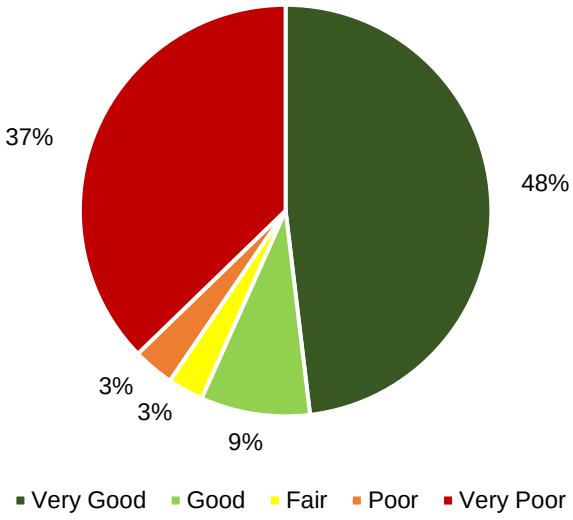


**Figure 2-4: Fleet Asset Condition Weighted by Replacement Value**

**Figure 2-5** shows the condition summary breakdown for each asset class, weighted by replacement value. For Public Work – Admin fleet ($90 thousand), Landfill fleet ($1.8 million), Transit fleet ($13 million), Public Work Operation equipment ($12 million) and Arena equipment assets ($0.14 million), over 50% of the assets are in Very Good condition.

Over 50% of the Public Work – Building Equipment Maintenance fleets ($0.45 million) and Public Work – Operation fleets ($15 million) are in Very Good and Good condition.

For the Arena fleet ($0.34 million) and Cemetery fleet ($1.2 million), over 50% of the assets are in Very Poor condition. Public Work – Store fleet (one vehicle valued at $25 thousand) and Public Work – Mechanical fleet (one vehicle valued at $45 thousand) have the worst overall weighted condition, with 100% of the total replacement value in very poor condition.

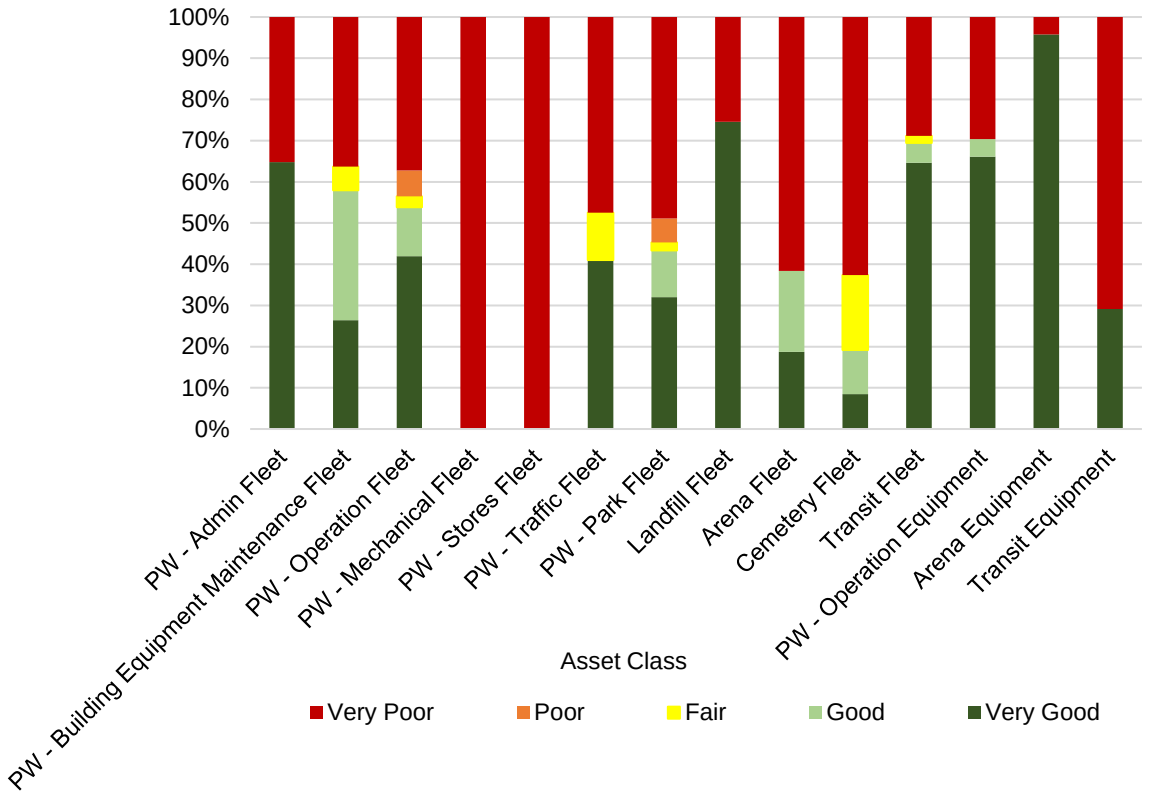


**Figure 2-5: Condition Summary for Each Asset Class Weighted by Replacement Value**

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's fleet assets were previously stored across multiple spreadsheets. This project has successfully centralized the data into a single inventory. Additionally, it has addressed and filled gaps in key data, such as expected service life and replacement costs, achieving a 100% completeness rate. **Table 2-5** provides a summary of data completeness levels in the compiled fleet inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-5: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Fleet** | 93% | 78% | 100% | 100% | 100% | 100% |

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the fleet assets. **Table 2-6** provides a description for the data confidence grades used to classify the reliability of the

asset data. This can serve as a reference for the City to assess the quality of their asset data. A brief summary and explanation of the available data can be seen in **Table 2-7**. Overall, The Fleet asset inventory data are comprehensive in terms of the six key parameters required for the Asset management data analysis.

**Table 2-6: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

**Table 2-7: Asset Data Confidence**

| Asset Group | Inventory Confidence | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Fleet** | A | B | A | A | A | A |

## 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[2]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-6**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

[2] TechTarget Network (2020): Definition: Data Life Cycle

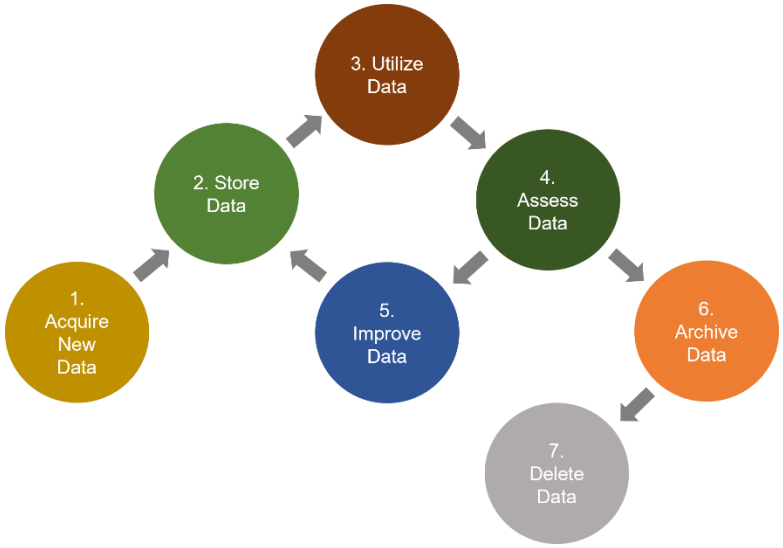


**Figure 2-6: Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment, and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data but also to migrate and merge data from other sources.
    - New assets for the fleet should be consistently added to the inventory and a minimum required data set defined to maintain inventory accuracy and reliability. The required data includes the new vehicle make, model, VIN, fuel type, original purchase price, purchase location, etc.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
    - Assets are typically stored in either the CMMS or the maintained asset inventory spreadsheet. For fleet assets, typical information including periodical kilometre reading, engine oil level, general vehicle condition, and last service dates need to be captured and maintained to be updated during the daily data management process.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
    - Previously, the City conducted a fleet assessment regarding the Public Work fleets and certain analytical results were supporting the lifecycle activities decision-making.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:
    - Poor asset performance due to lack of information and understanding of asset behaviour.
    - Non-compliance with statutory regulations or safety requirements.
    - Safety incidents due to risks not being identified or reported.

- Asset failure due to gaps in maintenance planning.

- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
    - Consider what data should be archived and articulate the reasons behind the archival decisions.
    - Examine any legal obligations pertaining to the retention of data records.
    - Determine the appropriate duration for retaining different categories of data records.
    - Evaluate the risks associated with the inability to retrieve specific data records.
    - Specify the authorized individuals or entities who should have access to archived data records.
    - Establish the expected timeframe for retrieving archived data records.
    - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.
- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data “squirrelling”, due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization’s data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report their current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and noncore assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[3] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1.** Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

**Table 3-1: The City’s Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe, and accessible for all ages and abilities (the “8 to 80 Cities” concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |

[3] City of Sault Ste Marie (2021): Comprehensive Background Report.

| Overarching Themes | Corporate Objective |
|---|---|
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the City's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the City's history, diverse communities, and natural and cultural heritage, with the Downtown as the City's core destination for arts and culture. |

## 3.3 Stakeholder Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for fleet during the LoS workshop held with City staff. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups are identified below.

- Residential Customers
- Industrial, Commercial & institutional (ICI) Customers
- Regulatory Agencies
- Neighbouring Municipalities
- Environmental Groups
- Internal City Departments
- School Boards and Post Secondary Institutions
- Social Services

### 3.3.1 Legislated and Regulatory Requirements

Fleet assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., clean drinking water and safe roads, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**. Monitoring and development programs relevant to fleet assets are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • Motor Vehicle Safety Act<br>• Canadian Environmental Protection Act, 1999 (CEPA)<br>• Federal Sustainable Development Act | • Highway Traffic Act<br>• Ontario's Drive Clean Program<br>• Ontario Public Service Green Fleet Directive<br>• Environmental Assessment Act<br>  • Ontario Regulation 231 – Transit Projects and Metrolinx Undertakings<br>• Environmental Protection Act<br>  • Ontario Regulation 85 – End of Life Vehicles<br>• Commercial Vehicle Operating Registration (CVOR)<br>• Bus driver licensing through Ontario Drive Test Centres |

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 only identifies levels of service metrics for core assets. A number of key LoS performance measures for fleet assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5**.

## 3.5 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.
- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

A total of 10 LoS performance measures for Fleet Service have been documented. A summary of the City's fleet service level metrics is presented in **Table 3-3**.

### Table 3-3: Levels of Service Performance Metrics (Fleet)

| | Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) |
|---|---|---|---|---|---|
| 1. | Fleet – Public Works and Engineering Services | Environment & Sustainability | Number of Vehicles that are Electric or Hybrid | # | TBD |
| 2. | Fleet – Public Works and Engineering Services | Environment & Sustainability | Total Annual Fuel Volume Used for Vehicles | Litres | TBD |
| 3. | Fleet – Public Works and Engineering Services | Quality & Reliability | % of Vehicles and Equipment Past Their Optimum Service Life | % | TBD |
| 4. | Fleet – Public Works and Engineering Services | Quality & Reliability | Total Idle Time for Front Line Vehicles | hrs | TBD |
| 5. | Fleet – Public Works and Engineering Services | Quality & Reliability | Mileage per Vehicle | km / Vehicle | TBD |
| 6. | Fleet – Public Works and Engineering Services | Quality & Reliability | Total Repairs per Vehicle | Repairs/ Vehicle | TBD |
| 7. | Fleet – Transit | Access & Capacity | Total Transit Ridership per Year | # Boardings | Y |
| 8. | Fleet – Transit | Quality & Reliability | Average Age of Fleet in Years | Age (Years) | Y |
| 9. | Fleet – Transit | Environment & Sustainability | Total Annual Fuel Consumption | Litres | TBD |

# 3.6 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social, and technological landscape.

A summary of factors identified from the LoS workshop that would impact fleet service levels include, but are not limited to, the following:

- Technology.
- Electrification.
- Energy and Demand Management.
- Funding level.
- Climate Change.

On November 2, 2021, the City's Planning Division released the Comprehensive Background Report for updating the Official Plan[4]. The City's Official Plan guides local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to reach 80,000 people by 2031, and 83,300 people by 2036. Employment is projected to grow by approximately 6,000 jobs, from 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training, and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the 2025 deadline.

[4] City of Sault Ste Marie (1996): Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

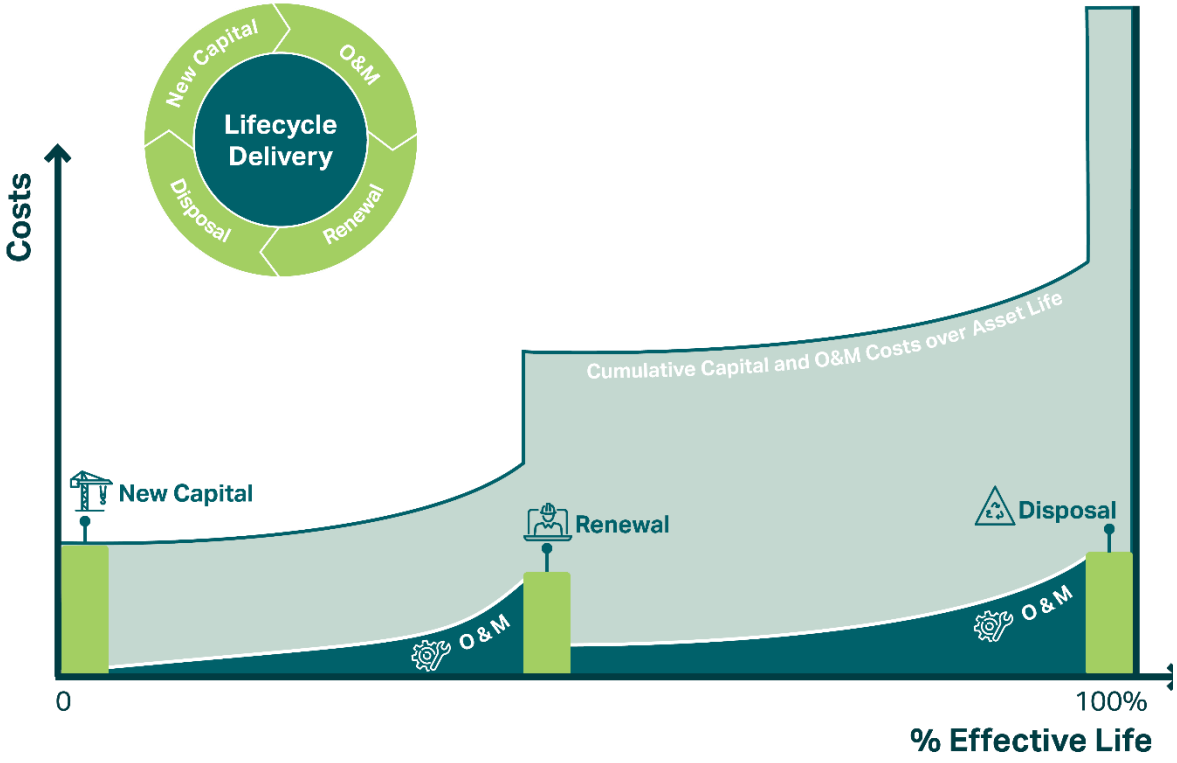


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

    - Growing demands for public service and public transit.

- The asset's operability and maintainability.
- Supply chain considerations.
- Adaptation to climate change.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new assets are commissioned, the City assumes the responsibility of operating and maintaining the asset according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, overhaul the equipment and vehicle engines. Replacement activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment (e.g., old buses are unsafe for delivering services), or assets no longer suitable for their original purpose (e.g., the old police cars are not suitable for patrol services, but still reliable for light-duty public service).

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

The City's motivations for acquiring fleet assets are multifaceted. Firstly, there is a compelling need to accommodate the expanding service scope, fueled by the growing workload and demand on public services. Furthermore, the increasing population and diversity have added to these demands. Recognizing the crucial role of data accuracy, the City also acknowledges the necessity for an advanced fleet management system.

Electrification predicted to have minimal impact on waste generation but will impact the waste collection fleet and the fueling costs. The City's fleet asset acquisition strategies are also strongly driven by the federal regulations[5] and their Greenhouse Gas (GHG) Emissions Reduction Plan[6].

- Federal plans embrace EV: Regulations published by Federal Government in 2023 laid out plans to phase out passenger vehicles powered only by gasoline or diesel in 2035. As these vehicles are replace the City should be mindful of the increased maintenance and purchase costs of Hybrid Electric Vehicles (HEV) and Plug-In Electric Vehicles (PEV).
- Green house gas emission reduction plan: During the first stage of the plan, the City conducted a GHG inventory study, revealing that 56% of the City's GHG emissions were generated by vehicle fleet and equipment. Therefore, the transition to a green fleet is an importation consideration when acquiring fleet assets.

**Table 4-1** summarizes the acquisition activities associated with the City's fleet assets.

**Table 4-1: Acquisition Activities for Fleet Assets**

| Asset Group | Activities Undertaken by the City | Notes |
|---|---|---|
| Fleet | • Fleet and equipment acquisition.<br>• Electric vehicle (EV) charging station construction.<br>• Compressed natural gas (CNG) fueling station construction.<br>• Garage and maintenance shop upgrade.<br>• Advanced fleet information management system. | • Guided by the financial assessments, the City primarily opts for asset purchases rather than leasing. However, in order to address peak demand during certain seasons, the City also engages in occasional seasonal rentals.<br>• The City has initiated a pilot project since 2011 for implementing EVs and EV charging stations. The project's scope includes:<br>  • 1 pick-up truck.<br>  • 2 EV units for transit (approved but not yet purchased).<br>  • 1 EV Zamboni.<br>  • Vehicle chargers at Wastewater Treatment Plants. |

As shown in **Table 4-1**, many of the City's acquisition activities are associated with green transformation. In general, the shift towards a green fleet represents a significant change that will require increased capital investments in the short term. This is particularly evident in the substantial funding needed for developing and establishing the supporting infrastructure. Although the initial capital expenditure may pose financial challenges, the long-term benefits of reduced environmental impact and enhanced sustainability make it a worthwhile investment for the community's future well-being. **Table 4-2** summarizes the impact of green fleet acquisition activities on the City's capital expenditures.

**Table 4-2: The Impact of Green Fleet Acquisition Activities on The City's Capital Expenditures**

| Activities | Impact on Capital Expenditures |
|---|---|
| Green fleet acquisition | • Pro: Lower sales tax compared to conventional vehicles.<br>• Pro: Federal and Provincial rebates and grants available (still in the early stage).<br>• Con: High acquisition costs compare to the standard gasoline vehicles.<br>• Con: Limited availability for the heavy-duty vehicles and specialized equipment.<br>• Con: Relative longer waiting times.<br>• Con: Highly rely on the stability and availability of the electricity grid. |
| Green infrastructure investment (EV charging stations, CNG fueling stations, etc.) | • High construction costs.<br>• High costs associated with garage and maintenance shop upgrade. |

[5] Transport Canada. (2024, January 22). Canada's Zero-Emission vehicle sales targets. Retrieved from Transport Canada.
[6] City of Sault Ste. Marie. (2024). Greenhouse Gas Emissions Reduction Plan. Retrieved from City of Sault Ste. Marie.

# 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in fleet AM also contribute to cost-effectiveness over the asset's lifecycle. **Table 4-3** summarizes the O&M activities associated with the City's fleet assets.

**Table 4-3: O&M Activities for Fleet Assets**

| Asset Group | Activities Undertaken by the City | Notes |
|---|---|---|
| Fleet | • Car washing.<br>• Regular safety inspection.<br>• Service (Oil change) per 300 hours of service.<br>• Oil sampling.<br>• Exhaust emission testing.<br>• Tire pressure check.<br>• Tire rotation and replacement.<br>• Car repair and parts replacement.<br>• Fuel consumption and EV battery charging.<br>• LED light replacement.<br>• Driver training and education.<br>• Fleet information system and server maintenance. | • The City has established a maintenance budget for spare parts acquisition, with the flexibility to utilize the capital budget for major expenses.<br>• The City has a separate budget for car insurance, distinct from the legal budget.<br>• The City may contract out services as needed, while transit services are handled on-site by their staff. Transit services include:<br>  • Use high-quality lubricants.<br>  • Use stainless steel components.<br>  • All buses are taken off the road every six months and subjected to a complete mechanical inspection. |

With the green fleet transformation, the City may also need to consider O&M activities specifically for EVs. With less or no consumption of fossil fuel, the amount of greenhouse gas emissions would be significantly reduced. In addition, EVs have fewer moving parts, resulting in reduced wear and tear and, therefore, lower maintenance expenses. While EVs still require periodic maintenance, such as brake system checks and battery inspections, the absence of complex engine components often leads to a more cost-effective O&M profile. Furthermore, the lower reliance on fossil fuels for power contributes to potential long-term savings, offering an economic incentive for the adoption of EVs in the context of operational sustainability and efficiency. However, after certain years of use or every 100-120 thousand kilometres driven, the batteries will depreciate significantly to reduce the effective mileage range, and the subsequent battery replacements will induce a large expenditure, which might take up to 20% to 30% of the total vehicle purchase cost.

# 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs.

Similar to the acquisition of fleet assets, the City's decision to renew and replace fleet assets is driven by a variety of factors. Changes in service scope, increased workload, and growing population and diversity can necessitate the replacement of vehicles with larger capacity or upgraded features. As the current fleet ages and becomes obsolete, the need for renewal becomes imperative to maintain operational efficiency and meet evolving demands. Additionally, a strategic shift towards environmental sustainability may prompt the replacement of conventional vehicles with a green fleet, aligning with the City's commitment to reducing its environmental impact. These drivers collectively guide the strategies for fleet asset renewal and replacement, ensuring that the fleet remains modern, efficient, and aligned with evolving operational requirements.

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic AM. As the City's fleet assets approach the end of their lifecycle or become obsolete, a systematic approach to their removal and decommissioning

is essential. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements. **Table 4-4** summarizes the decommissioning and disposal activities associated with the City's fleet assets.

**Table 4-4: Decommissioning and Disposal Activities for Fleet Assets**

| Asset Group | Activities Undertaken by the City | Notes |
|---|---|---|
| Fleet | • Sell the old vehicles for residual values.<br>• Trade in the old vehicles for new ones.<br>• Repurpose the vehicles. For example, retired police cars can be used as service cars.<br>• Vehicle scrapping. | • The decommissioning process is conducted by the Shop Clerk and mechanic, and the asset is marked as "Inactive" in the system.<br>• Assets are traded in to offset the cost of new acquisitions.<br>• Due to age and poor condition, some assets are sold for scrap metal. |

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-5**.

**Table 4-5: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

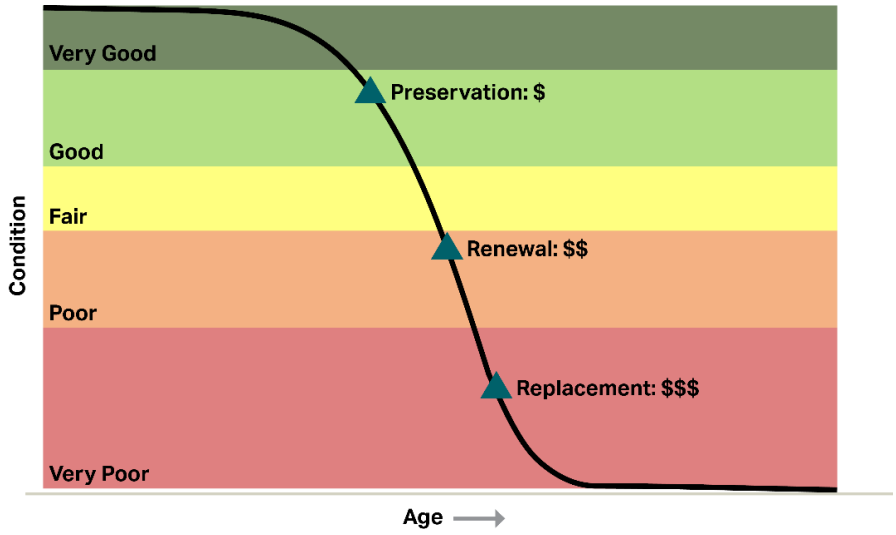


**Figure 4-2: Asset Deterioration Curve and Renewal Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to its overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City's risk management process, AECOM recommends taking into account the following key considerations:

1. **Supply Chain Disruptions**:

   The automotive industry has been hit the hardest by supply chain disruptions during the COVID-19 pandemic. A critical issue has been the semiconductor shortage, resulting in fewer options, higher prices, and extended waiting times for delivery since then. Consequently, the City may face increased costs when purchasing new vehicles.

2. **Environmental Requirements**:

   In the City's GHG Emissions Reduction Plan, the City has initiated the transition to purchasing only vehicles that are highly efficient, run on zero-carbon and renewable energy fuels, and support transportation electrification opportunities. This aligns with the Canadian Federal Government's target for all federally financed bus purchases to be zero-emission.

3. **Risks Associated with Developing City's Electrical Vehicle Fleets**:

   Despite the environmental benefits, there are several risks associated with developing EV fleet, such as:

   - Potential supply chain vulnerabilities and high upfront costs: in the current market, electrical vehicles would spend an average of 20% to 30% more in purchasing compared to similar gasoline or diesel models. And due to the high demand, the delivery time the electrical vehicles might take up to 2 to 6 months for some popular or specialized models. They might impact the service efficiency and productivity of the City's fleet team.
   - Limited Heavy-duty Engineering EV and Specialized Equipment: the major car vendors in the current market have not offered lots of electrical alternatives for heavy-duty electric engineering vehicles and specialized equipment, such as the pick-up truck at Class 5 commercial grade (equivalent to Ford F450).
   - Significant Investment in Charging Infrastructure and Maintenance Facilities: the productivity of the EV fleet team highly depends on the development of the charging infrastructure. The City needs to invest to deploy its exclusive or additional public charging station to ensure the service vehicles can be charged timely and adequately. Furthermore, EVs have different maintenance requirements compared to traditional vehicles, which means the current service facilities need to be upgraded accordingly and the fleet operators need to be trained to maintain the EVs effectively.
   - Range Anxiety: the charging time for a common electric vehicle might take up to 1.5 to 3 hours, depending on the battery size and electric power. The mileage range per charge could vary from 200 kilometres to 500 kilometres, based on the vehicle's running temperature and duties performed (cold temperature and high-speed driving reduce the battery efficiency). In this case, an enhanced vehicle charging plan needs to be conducted by the service planner to maximize the vehicle's efficiency and prepare for any potential breakdown due to insufficient power.
   - Uncertainties Regarding Battery Lifespan: The battery might depreciate significantly after 8-10 years or every 120 thousand to 150 thousand kilometres of running. The lifespan becomes shorter in a more frequent usage or in the cold territories. The battery replacement can incur a significant capital expenditure, taking up to 20 to 40% of the original purchasing price, and will cause a certain level of service interruption.
   - Reliability Concerns: Mechanical breakdowns and software glitches for the EVs are expected, especially considering some EV products in the markets are immature in mechanical reliability and software stability, as lack of long-term testing and improvement. Substantial expenditures and major service breakdowns might happen due to this circumstance.
   - Unqualified EV Manufacturers: some newcomers in the EV manufacturing industry are facing uncertain futures resulting from financial crises, rising interest rates, and supply shortages. Company bankruptcy or suspension of manufacturing certain models of the vehicle might become an uncertainty to the City's fleet team, with the risk of vehicle out-of-commissioning due to a lack of parts and services.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element in ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model, considering two scenarios: **Scenario 1** considers like-for-like replacement, while **Scenario 2** considers green fleet expansion. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment and replacement decisions for each subcategory of fleet assets.

**Section 5.2** assesses the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** summarizes the O&M budget forecast over the next 10 years (2024-2033).

**Section 5.5** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

**Section 5.6** summarizes the City's fleet asset funding strategies and available grants for supporting the fleet asset management lifecycle activities.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each fleet asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's fleet assets. A financial dashboard was developed to present the results of the lifecycle modelling (**Appendix A**).

The annual reinvestment needs for the fleet assets were determined based on their age and ESL in years in inflated dollar values and are based on the following assumptions:

- Base year: the base year used is 2024. Any historic asset valuations have been inflated using the experienced inflation rate.
- Analytical Period: the analysis period for capital reinvestment needs is from 2024 to 2043, and the analysis period for full funding needs is from 2024 to 2033.
- Funding Restriction: no funding restrictions are applied.
- Replace at the End of ESL: Assets will be replaced when their theoretical end of useful life is reached.
- Incorporation with Mercury Report: for the Public Work fleets covered in the Mercury Fleet Assessment Report[7], the lifecycle replacement schedule is aligned with the recommendation from that report.
- Cost markup for Like-for-Like Replacement: 5% markup applied to account for required service charging and dealership markups.
- Cost markup for Green Fleet Expansion: 30% markup applied to account for the price increase of the EV or hybrid vehicles compared to the original fossil fuel vehicles.
- Backlog Smooth-out: replace assets that are in Very Poor condition and have already exceeded their ESL, depending on their designated replacement year (Designated Replacement Year = Asset Install Year

[7] Mercury Associates Inc. (2021): SSM Fleet Practices Review Final Report

+ Estimated Service Life), The backlog replacements were planned to be allocated within the first four years of the analysis period, determined by applying the following logic:

- If the designated asset replacement year is between 1996 and 2005, they will be replaced on 2024-06-01.
- If the designated asset replacement year is between 2006 and 2015, they will be replaced on 2025-01-01.
- If the designated asset replacement year is between 2016 and 2019, they will be replaced on 2026-01-01.
- If the designated asset replacement year is between 2020 and 2023, they will be replaced on 2027-01-01.

- Future Inflation: AECOM applied an annual inflation rate forecast to this analysis, as presented in **Table 5-1**.

**Table 5-1: Inflation Rate for Different Years Throughout 20 Years[8]**

| Year | Inflation Rate |
|---|---|
| 2024 | 7% |
| 2025 | 6% |
| 2026 | 5% |
| 2027 | 4% |
| 2028 | 4% |
| 2029 | 3% |
| 2030 - 2043 | 3% |

- O&M Funding Needs: The annual operation and maintenance (O&M) funding needs are estimated by applying the Vehicle Equivalent Unit (benchmarking O&M cost/VEU) methodology and escalated with the inflation rate forecast presented in **Table 5-1** for the next 20 years.
- Capital Expansion Funding Needs: The annual new asset acquisition (expansion) funding needs are forecasted by escalating the City of SSM's average historical expansion expenditure from 2019 to 2024 with the inflation rate forecast presented in **Table 5-1**.
- Asset Disposal Funding Needs: The annual disposal and decommissioning (disposal) funding needs are forecasted by annual capital reinvestment needs multiplied by the disposal rate, which is 1% in this exercise.
- The cost numbers are rounded to the nearest $1,000.

# 5.2 Capital Reinvestment Need Analysis

## 5.2.1 Scenario 1: Like-for-Like Replacement

The like-for-like replacement scenario is to replace the existing vehicles with new ones of similar functionality and same fuel types, whereas over 95% of the current fleets are driven by fossil fuel. In this case, the City's fleet assets require an average annual reinvestment rate of $8.0 million over the period 2024-2033 and $9.7 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $178 million over the next 20-year period. Notably, the reinvestment funding needs for the Transit fleet account for the largest share in most years, which incur the expenditure spikes in the years 2027, 2031, 2037 and 2041. The reinvestment funding needs for Public Work fleets are $3.1 million over the period 2024-2033 and $3.8 million over 2034-2043 in inflated dollar values.

[8] AECOM Analysis, "Rising Inflation", June 2022, Retrieved in October 2022

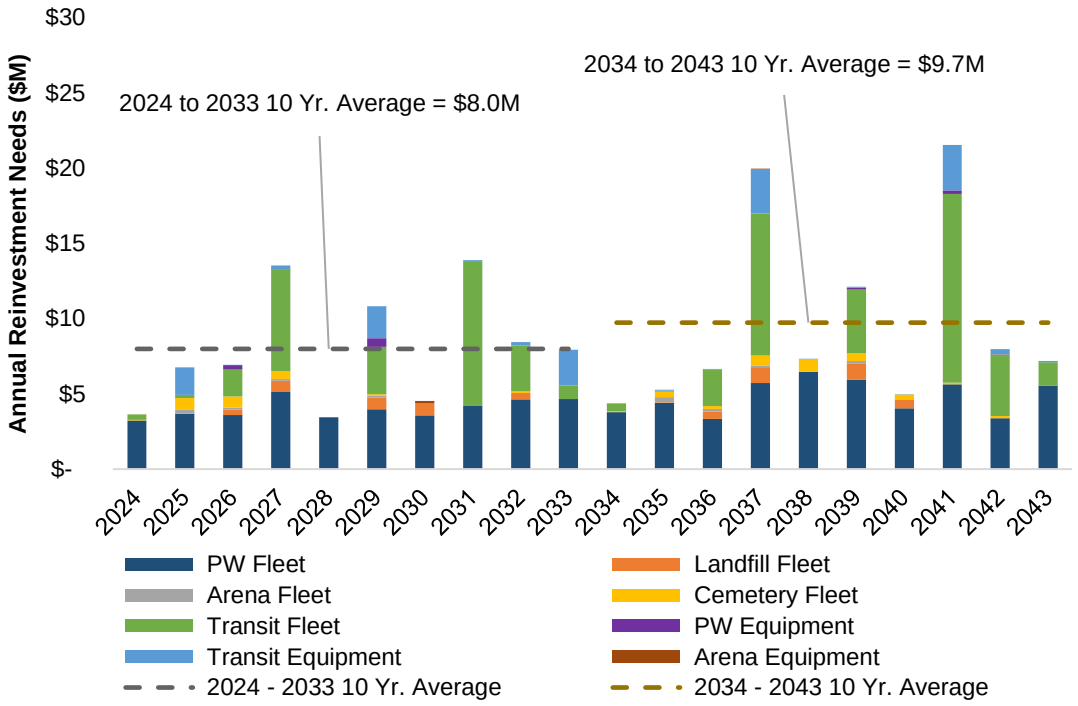


**Figure 5-1: Fleets 20-Year Reinvestment Need (Scenario 1: Like-for-Like)**

The detailed 20-year reinvestment needs for fleet assets are presented in **Table 5-2** in inflated dollar values according to the business case values.

**Table 5-2: Fleet Asset 20-Year Total and Annual Average Reinvestment Needs**

| Asset Class | Annual Average Reinvestment Need | 20-Year Total |
|---|---|---|
| PW Fleet | $4,419,000 | $88,365,000 |
| Landfill Fleet | $311,000 | $6,205,000 |
| Arena Fleet | $77,000 | $1,523,000 |
| Cemetery Fleet | $278,000 | $5,558,000 |
| Transit Fleet | $3,035,000 | $60,696,000 |
| PW Equipment | $62,000 | $1,234,000 |
| Arena Equipment | $10,000 | $198,000 |
| Transit Equipment | $680,000 | $13,581,000 |
| **Total** | **$8,872,000** | **$177,360,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's fleet assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-2.** This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and steadier financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

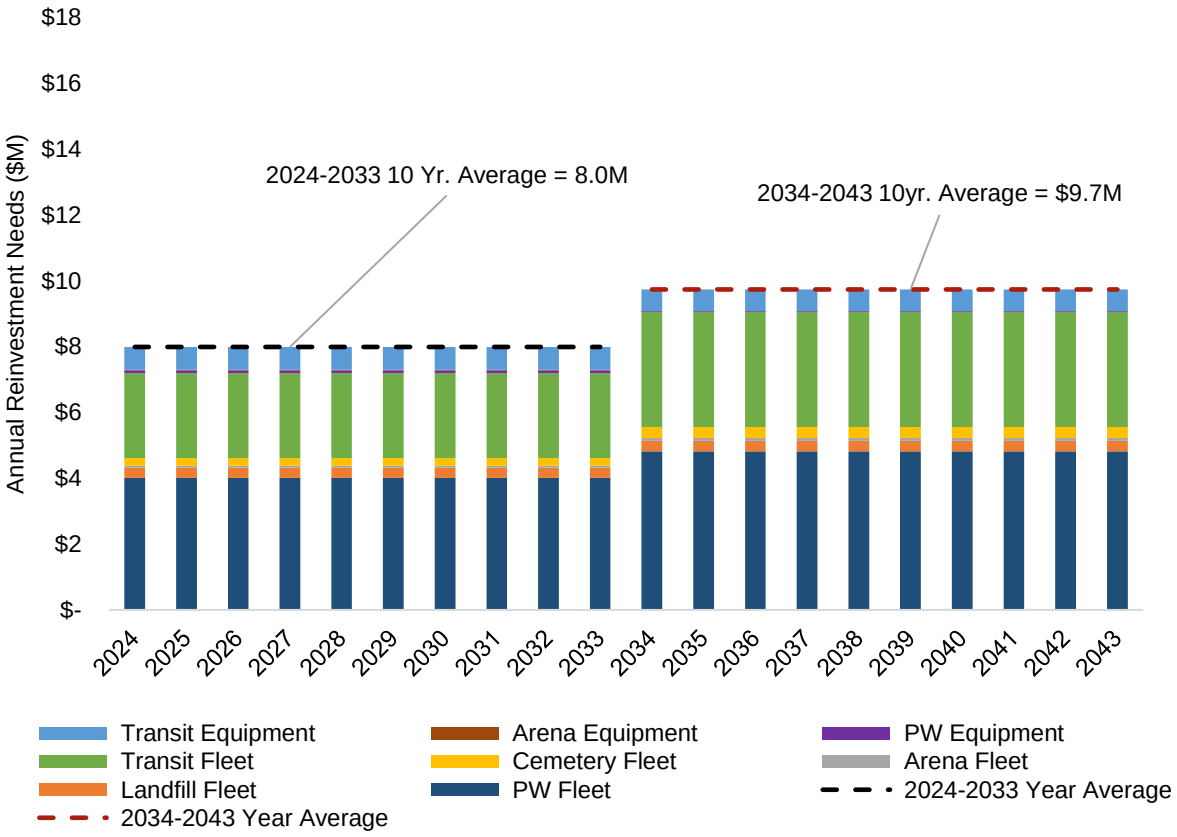


**Figure 5-2: Fleet Asset 20-Year Smoothed Annual Reinvestment Needs (Scenario 1: Like-For-Like)**

## 5.2.2 Scenario 2: Green Fleet Expansion

The green fleet expansion scenario is to replace the existing vehicles with new ones of similar functionality with cleaner energy types, such as pure electric vehicles, hybrid, and plug-in hybrid vehicles. The green fleet alternatives are not available for all types of vehicles (refer to **Section 4.6**). Only the vehicles belonging to automobile, carts, LD (Light-Duty) Truck, SUV and Transit Bus class categories are considered to be replaced with electric vehicles or different types of hybrid vehicles in this green fleet expansion scenario. In this case, a plus 30% price adjustment is applied to the vehicle replacement costs to account for the average price increase between traditional fossil fuel vehicles and green vehicles (refer to **Section 4.6**). **Table 5-3** summarizes the number of vehicles in the City's fleet that are possible to be replaced with green vehicle alternatives by each vehicle category and the price difference.

**Table 5-3: Vehicles of Different Class Categories Available to Be Replaced with Green Vehicles**

| Class Category | Green Fleet Option | Number of Vehicles Affected | Price Increase |
|---|---|---|---|
| Automobile | Hybrid/EV | 17 | 103,000 |
| Carts | EV | 10 | 168,000 |
| LD Truck | Hybrid/EV | 90 | 1,717,000 |
| SUV | Hybrid/EV | 6 | 103,000 |
| Transit Bus | EV Bus | 42 | 4,791,000 |
| **Total** | | **165** | **6,880,000** |

In total, there are 165 vehicles of varies class categories could potentially be replaced with green vehicles, which incurs a total additional cost of $6.9 million.

In this case, The City's fleet assets require an average annual reinvestment rate of $8.8 million over the period 2024-2033 and $10.9 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-3**. This is equivalent to a total of approximately $197 million over the next 20-year period. Notably, the reinvestment funding needs for the Transit fleet account for the largest share in most years, which incur the expenditure spikes in the years 2027, 2031, 2037 and 2041. The reinvestment funding needs for Public Work fleets are $3.3 million over the period 2024-2033 and $3.7 million over 2034-2043 in inflated dollar values.

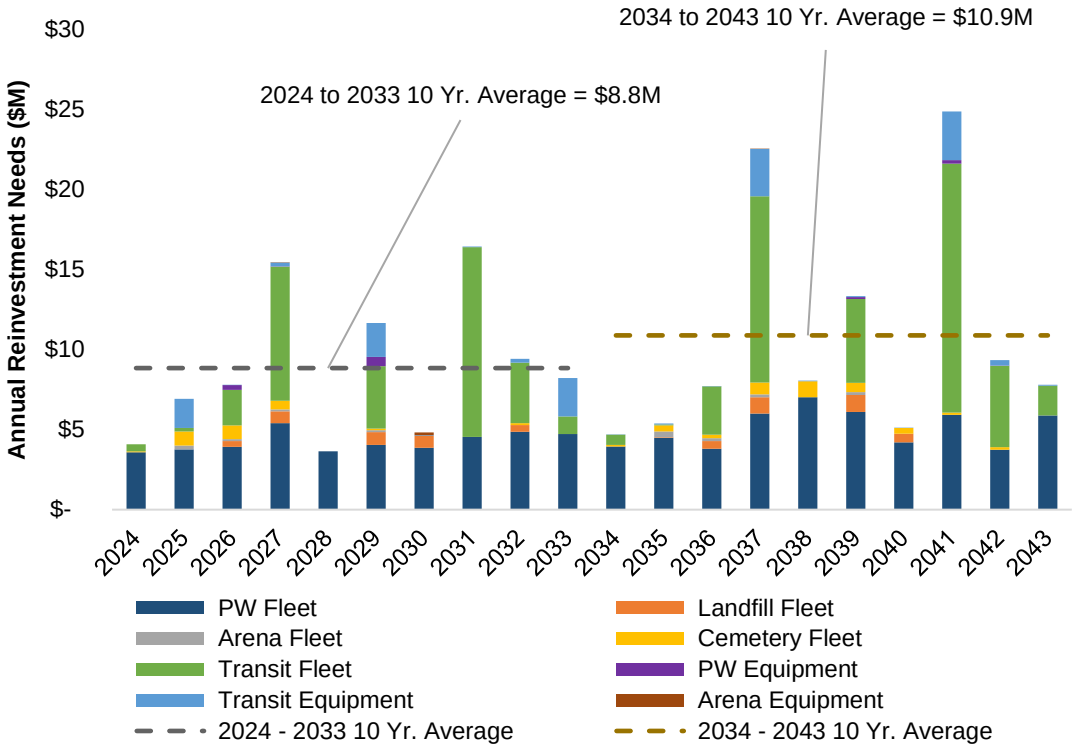


**Figure 5-3: Fleets 20-Year Reinvestment Need (Scenario 2: Green Fleet)**

The detailed 20-year reinvestment needs for fleet assets are presented in **Table 5-4** in inflated dollar values according to the business case values.

**Table 5-4: Fleet Asset 20-Year Total and Annual Average Reinvestment Needs (Scenario 2: Green Fleet)**

| Asset Class | Annual Average Reinvestment Need | 20-Year Total |
|---|---|---|
| PW Fleet | $4,667,000 | $93,340,000 |
| Landfill Fleet | $311,000 | $6,205,000 |
| Arena Fleet | $77,000 | $1,523,000 |
| Cemetery Fleet | $312,000 | $6,232,000 |
| Transit Fleet | $3,744,000 | $74,864,000 |
| PW Equipment | $62,000 | $1,234,000 |
| Arena Equipment | $10,000 | $198,000 |
| Transit Equipment | $680,000 | $13,581,000 |
| **Total** | **$9,863,000** | **$197,177,000** |

To better align with the City’s budgeting requirements, the annual capital reinvestment needs for the City's fleet assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-4.** This smoothing of reinvestment requirements aims to facilitate the City’s budgeting processes by providing a more predictable and

steadier financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

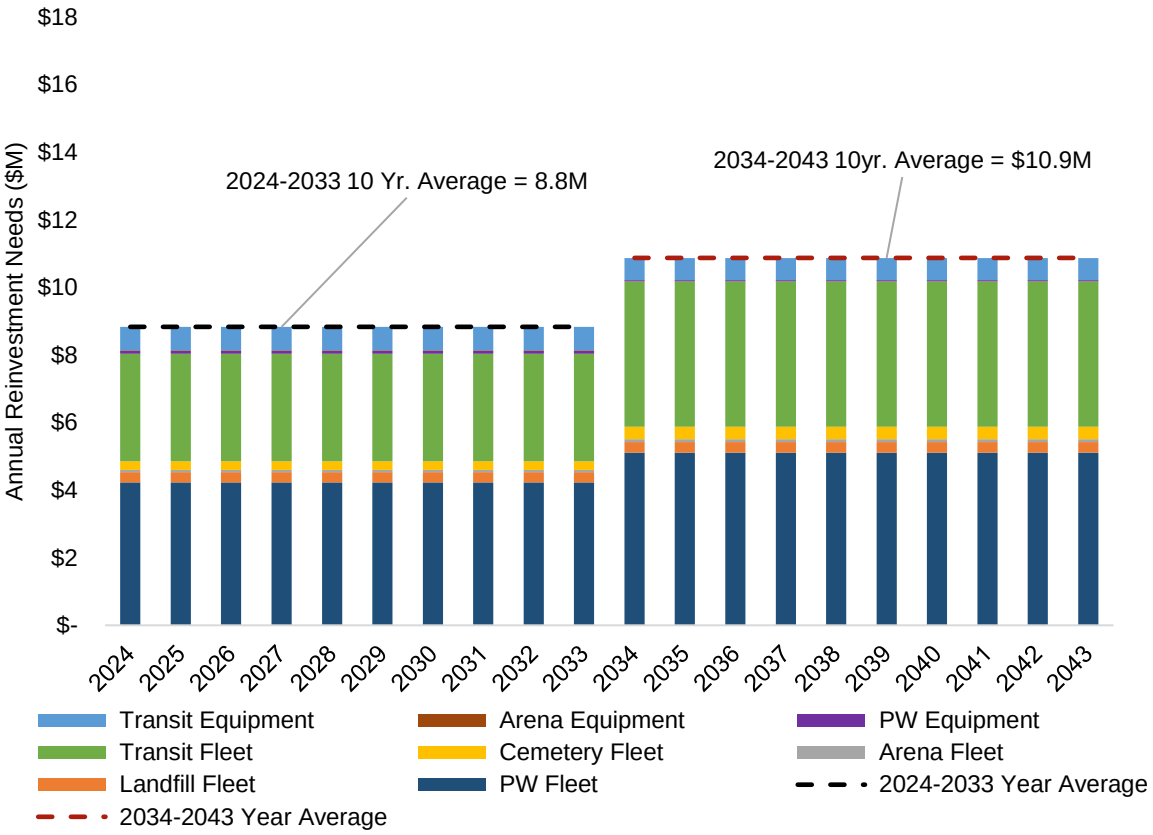


**Figure 5-4: Fleet Asset 20-Year Smoothed Annual Reinvestment Needs (Scenario 2: Green Fleet)**

# 5.3 O&M Funding Need Analysis

## 5.3.1 Vehicle Equivalent Unit

The concept of Vehicle Equivalent Units (VEUs) is used in fleet management to determine staffing and cost requirements for vehicle maintenance. It represents a way to aggregate different types of vehicles within a fleet into a common unit measurement. In this case, the average annual O&M costs per vehicle equivalent unit (VEU) are applied to estimate the O&M costs needed for each fleet asset. According to other municipal studies in Canada and the U.S.A., the cost per Vehicle Equivalent Unit (VEU) range corrected for inflation is $2,300 to $3,900[9]. Generally, the newer of the vehicles, the fewer O&M costs are required.

The average maintenance and repair cost per VEU for the City of SSM's fleet is $5,456/VEU in 2021[10]. AECOM inflated the benchmarking cost into 2024 dollars and the cost breakdown is presented in **Table 5-5**.

[9] Mercury Associates Inc. (2021): SSM Fleet Practices Review Final Report
[10] Mercury Associates Inc. (2021): SSM Fleet Practices Review Final Report

### Table 5-5: Maintenance and Repair Benchmarking Cost Per VEU

| Maintenance Cost Item | Cost per VEU |
|---|---|
| In-house Labour | $3,094 |
| Sublet Repair Service | $1,000 |
| Parts | $1,844 |
| **Total Cost Per VEU** | **$5,982** |

The VEUs for a regular automobile (sedan) equals one, and the vehicles under other class categories have different VEU values depending on their size, function, and duty level compared to the regular automobile. **Table 5-6** summarizes the VEUs/unit and the maintenance and repair cost per class category.

### Table 5-6: VEUs/Unit and the Maintenance and Repair Cost Per Class Category

| Class Category | VEU(s)/Unit | Annual Maintenance and Repair Cost |
|---|---|---|
| Transit Bus | 7.50 | $44,194 |
| HD Truck | 6.46 | $38,056 |
| MD Truck | 4.50 | $26,516 |
| Off-Road and Construction | 4.44 | $26,163 |
| Grounds Equip | 1.76 | $10,371 |
| Material Handling | 1.76 | $10,371 |
| LD Truck | 1.63 | $9,606 |
| Van | 1.50 | $8,839 |
| Automobile | 1.00 | $5,892 |
| SUV | 1.00 | $5,892 |
| Carts | 1.00 | $5,892 |
| Large Equipment | 0.80 | $4,714 |
| Trailer | 0.74 | $4,355 |
| Attachments | 0.64 | $3,795 |
| Mounted | 0.40 | $2,357 |
| Stationary | 0.40 | $2,357 |
| Equipment-Small | 0.30 | $1,768 |
| Miscellaneous Equipment | 0.20 | $1,178 |
| Equipment-Testing | 0.20 | $1,178 |
| Steamer | 0.20 | $1,178 |
| Transit Equipment | 0.20 | $1,178 |

## 5.3.2 10-Year O&M Funding Forecast

The O&M funding needs are totalized based on the maintenance cost/vehicle summarized in **Table 5-6**. **Figure 5-5** and **Table 5-7** show the O&M funding forecast for the next 10 years from 2024 to 2033. The annual average forecasted O&M funding need is $8.4 million over the next 10 years in inflated dollar value.

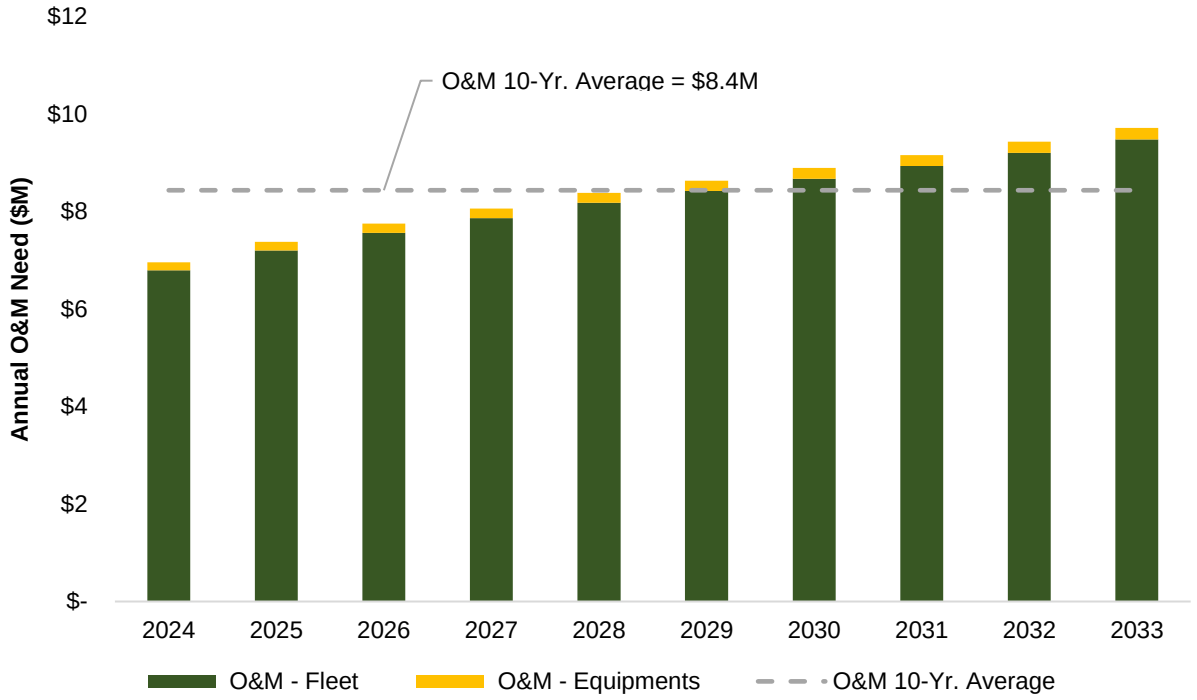


**Figure 5-5: Fleet 10-Year O&M Forecast**

The detailed 10-year O&M budgets for fleet assets are presented in **Table 5-7** in inflated dollar values.

**Table 5-7: Fleet 10-Year Total and Annual O&M Budget**

| O&M Category | Annual Average Budget | 10-Year Total |
|---|---|---|
| Fleet O&M | $8,226,000 | $82,259,000 |
| Equipment O&M | $207,000 | $2,065,000 |
| **Total** | **$8,433,000** | **$84,324,000** |

# 5.4 Capital Expansion Funding Needs

## 5.4.1 Green Fleet Infrastructure Investment Needs

To address the growing demand for vehicle charging, both for public and private vehicles, the municipality should consider implementing several key actions, such as:

- Investment in public charging stations in high-traffic areas such as recreational facilities, city hall, public parking lots, and transportation hubs.
- Upgrade the existing fleet maintenance garage and bus servicing facilities to support the operation and maintenance needs of the EV fleet.

By analyzing the 2021 to 2024 capital budgets published by the City, the historical expenditures in green fleet infrastructure investment were captured, and the historical costs were summarized in **Table 5-8.** The average expenditure for the green fleet infrastructure over the past 3 years was $0.81 million.

**Table 5-8: Historical Green Fleet Infrastructure Investment**

| Capital Year | Asset Class | Cost Item | Cost |
|---|---|---|---|
| 2024 | Transit Fleet | Electrical Upgrade and Charging Units | $825,000 |
| 2023 | Transit Fleet | Infrastructure Modifications for Elec Bus | $450,000 |
| 2022 | Transit Fleet | Charging Station | 1,166,000 |
| | Transit Fleet | EV Infrastructure Design | |
| **Total** | | | **$2,441,000** |
| **3-Year Average** | | | **$814,000** |

## 5.4.2 Capital Expansion Funding Needs

By analyzing the 2019 to 2023 capital budgets published by the City, the historical capital expansion (definition refers to **Section 4.2**) expenditures were captured, and the historical costs were summarized in **Table 5-9**. The average expenditure for the green fleet infrastructure over the past 5 years was $3.58 million.

**Table 5-9: Historical Capital Expenditure**

| Capital Year | Fleet | Equipment | Total |
|---|---|---|---|
| 2023 | $5,555,000 | $499,000 | $6,054,000 |
| 2022 | $3,609,000 | $583,000 | $4,192,000 |
| 2021 | $2,205,000 | $0 | $2,205,000 |
| 2020 | $1,559,000 | $0 | $1,559,000 |
| 2019 | $2,267,000 | $0 | $2,267,000 |
| **2019-2023 Average** | **$3,039,000** | **$541,000** | **$3,580,000** |

# 5.5 Full Funding Need Profile

## 5.5.1 Scenario 1: Like-for-Like Replacement

**Figure 5-6** shows a full picture of the City's fleet funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual full funding needs for scenario 1: like-for-like replacement, were combined with the following:

- Capital reinvestment needs (**Figure 5-1**)
- Projected fleet O&M cost (**Figure 5-5**).
- The annual capital expansion funding needs forecasted by escalating the City of SSM's average historical capital expansion expenditure (**Table 5-9**) with the inflation rate forecast presented in **Table 5-1**.
- One percent of the annual replacement cost was added to account for the asset disposal cost. Note that *PS 3280 Asset Retirement Obligations*[11] is a new accounting standard covering asset retirement obligations that applies to all Canadian public sector entities that prepare their financial statements under PSAB.

With these additions, the City's fleet full funding requirement increases to approximately $205 million over the next 10 years, averaging $20.5 million per year in inflated dollar value.

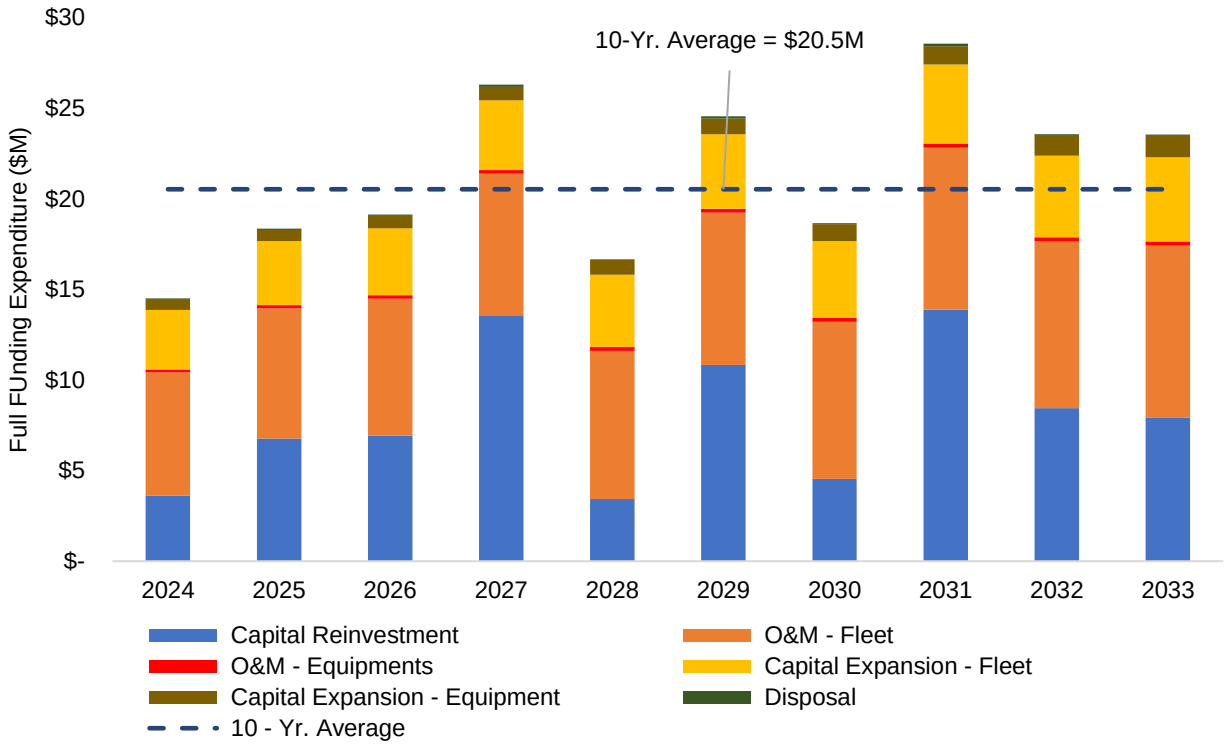


**Figure 5-6: Fleet Asset Full Funding Needs (Scenario 1: Like-For-Like)**

## 5.5.2 Scenario 2: Green Fleet Expansion

**Figure 5-7** shows a full picture of the City's fleet funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual full funding needs for scenario 1: like-for-like replacement, were combined with the following:

[11] Public Sector Accounting Board (PSAB). (2021). PS 3280 - Asset Retirement Obligations.

- Capital reinvestment needs (**Figure 5-3**)
- Projected fleet O&M cost (**Figure 5-5**).
- The annual green fleet Infrastructure investment needs forecasted by escalating the City of SSM's average historical green fleet Infrastructure investment (**Table 5-8**) with the inflation rate forecast presented in **Table 5-1**.
- The annual capital expansion funding needs forecasted by escalating the City of SSM's average historical capital expansion expenditure (**Table 5-9**) with the inflation rate forecast presented in **Table 5-1**.
- One percent of the annual replacement cost was added to account for the asset disposal cost. Note that *PS 3280 Asset Retirement Obligations*[12] is a new accounting standard covering asset retirement obligations that applies to all Canadian public sector entities that prepare their financial statements under PSAB.

With these additions, the City's fleet full funding requirement increases to approximately $224 million over the next 10 years, averaging $22.4 million per year in inflated dollar value.

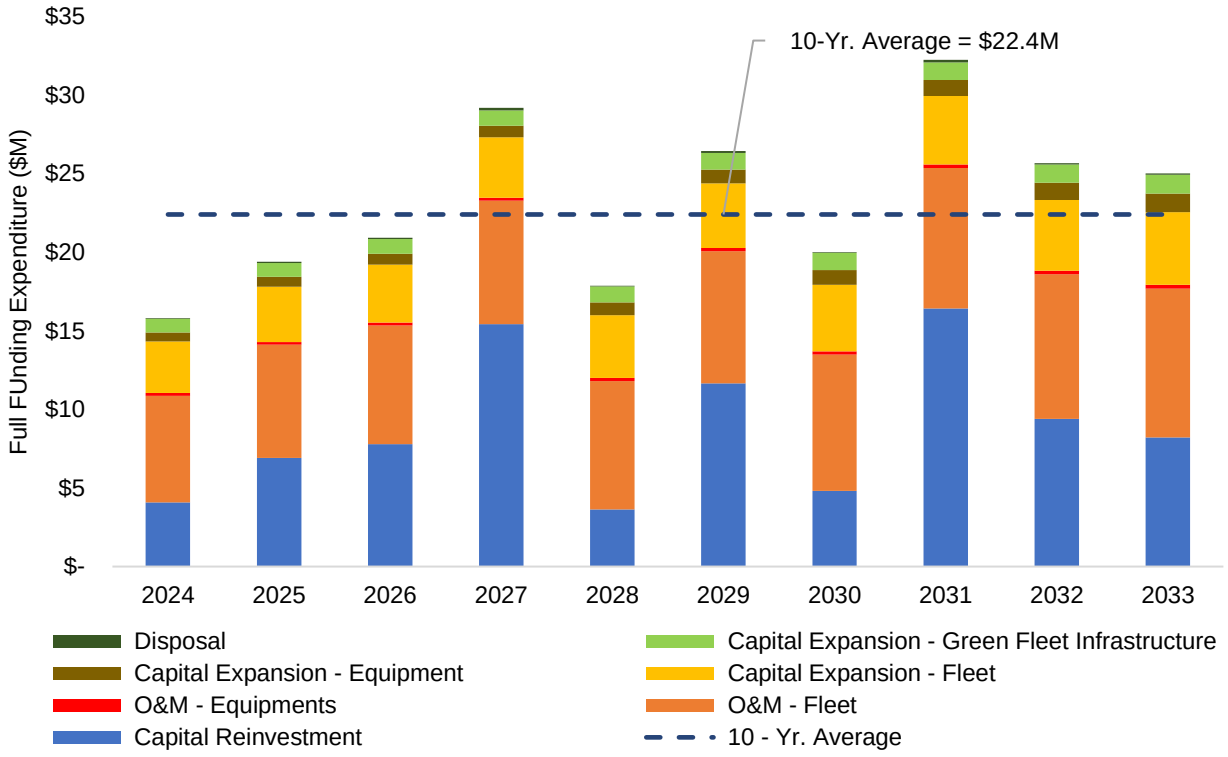


**Figure 5-7: Fleet Asset Full Funding Needs (Scenario 2: Green Fleet)**

[12] Public Sector Accounting Board (PSAB). (2021). PS 3280 - Asset Retirement Obligations.

# 5.6 Funding Strategies

The City's public works fleet is primarily supported by the property tax levy, while transit heavily depends on funding from both Federal and Provincial governments, constituting approximately 75% of its financial support. However, there is a growing concern about the sustainability of government funding for transit. The lack of continuous financial support from the government may result in a significant decrease in capital investment, affecting the City's ability to deliver services to desired levels. In light of these concerns, AECOM encourages the City to actively explore alternative funding sources to mitigate potential challenges. This section introduces the following potential funding options that could be considered, acknowledging that the City's eligibility for these funds is subject to certain criteria:

- Canada Community-Building Fund (CCBF)
- Investing in Canada Infrastructure Program
- Zero Emission Transit Fund
- Canada Infrastructure Bank (CIB)
- Federal incentives for zero-emission vehicles (ZEVs)
  - The Incentives for Zero-Emission Vehicles Program
  - The Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program
- Green Municipal Fund (GMF)
- Green Freight Program (GFP)

## 5.6.1 Canada Community-Building Fund (CCBF)

The CCBF, previously known as the Federal Gas Tax Fund, is a permanent source of upfront funding distributed twice a year to territories and provinces. The delivery of the CCBF to municipalities varies by province or territory, with allocation following a per-capita basis for provinces, territories, and First Nations[13].

The CCBF is administered in Ontario through a bilateral agreement with the Government of Ontario, the Association of Municipalities of Ontario (AMO), and municipalities. This program allocates approximately $816 million annually to 641 communities in Ontario, with an additional top-up of $816.5 million provided in 2020 to expedite communities' recovery from the COVID-19 pandemic. Notably, as of 2022, the City has received over $9 million through the CCBF, granting the City flexibility to strategically invest across 19 distinct project categories[14].

## 5.6.2 Investing in Canada Infrastructure Program

Administered by the Government of Canada, the Investing in Canada Infrastructure Program delivers long-term and stable funding to communities with the aim of addressing environmental challenges, fostering clean growth, and enhancing resilience to climate change. Through bilateral agreements, over $33 billion in funding is allocated to provinces and territories, supporting a diverse range of infrastructure projects nationwide[15].

The program encompasses investments across four targeted funding streams: the public transit stream, the green infrastructure stream, the community, culture, and recreation infrastructure stream, and the rural and northern communities' infrastructure stream. The public transit stream allocates funds for the construction, expansion, and enhancement of public transit infrastructure. The focus of these investments is on projects that aim to increase the capacity of public transit systems, enhance the quality and safety of existing or future transit infrastructure, and

[13] The Canada Community-Building Fund. (2022). Infrastructure Canada. Infrastructure Canada - The Canada Community-Building Fund. Retrieved on February 12th, 2024.

[14] Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts. (2021). Infrastructure Canada. Backgrounder: Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts - Canada.ca. Retrieved on February 12th, 2024.

[15] Investing in Canada Infrastructure Program. (2023). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program. Retrieved on February 12th, 2024.

improve overall access to public transit systems. In pursuit of funding through this stream, the City has actively submitted proposals for the following projects[16]:

- Electrification of Transit System.
- Transit Facility and Equipment Upgrades.
- Purchase of Rolling Stock Assets.
- Relocation of the Downtown Transit Terminal Construction and Renovation.
- Transit Facility and Equipment Upgrades.
- Purchase of Transit Ticket Vending Machines.
- Purchase and Installation of Transit Bus Shelter.

### 5.6.3 Zero Emission Transit Fund

The Zero Emission Transit Fund is a separate fund that builds on the existing Investing in Canada Infrastructure Program[17]. Through this fund, the Government of Canada is investing $2.75 billion over five years, starting in 2021, to support public transit and school bus operators in planning for electrification. The funding also supports the purchase of 5,000 zero-emission buses and the construction of necessary infrastructure, including charging facilities and facility upgrades.

There are two components under the Zero Emission Transit Fund for which projects are eligible for funding:

- Planning Projects: Eligible projects include studies, modeling, and feasibility analyses that will support the development of future larger-scale capital projects.
- Capital Projects: Eligible capital projects include buses, charging and refueling infrastructure, and other ancillary infrastructure needs.

### 5.6.4 Canada Infrastructure Bank (CIB)

The CIB is a Crown corporation mandated to invest in transformative infrastructure projects. With almost 50 partnerships spanning the entire country, including small communities and large urban areas, the CIB focuses on five key investment areas: public transit, green infrastructure, clean power, trade and transportation, and broadband infrastructure[18].

In the public transit sector, their involvement extends to advising, investing in, and building knowledge with public transit owners and service providers, with a particular emphasis on initiatives such as zero-emission buses, light rail transit, and bus rapid transit. Since the announcement of the $10 billion Growth Plan in October 2020, the CIB has formed partnerships and approved investments for the purchase of 1,300 zero-emission public transit and school buses. Moving forward, the CIB has set a long-term target to invest $5 billion in public transit, with a specific allocation of at least $1.5 billion for zero-emission buses and associated infrastructure[19].

[16] Investing in Canada Infrastructure Program: Projects Under Review. (2022). Infrastructure Canada. Infrastructure Canada - Investing in Canada Infrastructure Program: Projects Under Review. Retrieved on February 12th, 2024.

[17] Zero Emission Transit Fund. (2023). Infrastructure Canada. Infrastructure Canada - Zero Emission Transit Fund. Retrieved on February 12th, 2024.

[18] Public Transit. (n.d.). Canada Infrastructure Bank. Public Transit | Canada Infrastructure Bank (CIB) (cib-bic.ca). Retrieved on February 12th, 2024.

[19] Government of Canada targets zero emission bus transportation with launch of new fund. (2021). Infrastructure Canada. Government of Canada targets zero emission bus transportation with launch of new fund - Canada.ca. Retrieved on February 12th, 2024.

### 5.6.5 Federal incentives for zero-emission vehicles (ZEVs)

There are Federal incentives available for buying or leasing zero-emission vehicles (ZEVs) through two programs, each tailored to different vehicle types[20]:

- **The Incentives for Zero-Emission Vehicles (iZEV) Program**

  The Incentives for Zero-Emission Vehicles (iZEV) Program, launched in May 2019, aims to promote the adoption of Zero-Emission Vehicles (ZEVs) among Canadians and Canadian organizations. Individuals and organizations in Canada are eligible for up to $5,000 at the point of sale when purchasing or leasing light-duty ZEVs such as cars, SUVs, and light pick-up trucks.

- **The Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program**

  Initiated on July 11th, 2022, the Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program offers up to $200,000 at the point of sale for the purchase or lease of medium- and heavy-duty Zero-Emission Vehicles (ZEVs) with a gross weight rating exceeding 8,500 lbs. To qualify, the vehicle must be intended for use on public streets, roads, highways, or other paved surfaces. Eligible organizations can benefit from up to 10 incentives in a calendar year, reaching a maximum cap of $1,000,000.

### 5.6.6 Green Municipal Fund (GMF)

The GMF is a financial initiative in Canada dedicated to supporting sustainability and environmental projects at the municipal level. Managed by the Federation of Canadian Municipalities (FCM), the GMF provides funding and resources to assist municipalities across the country in undertaking projects that contribute to environmental sustainability, energy efficiency, and the reduction of greenhouse gas (GHG) emissions[21].

In the context of fleet management, the GMF allocates funds for pilot projects, feasibility studies, and capital projects aimed at reducing or avoiding fossil fuel use in municipal service delivery vehicles. Eligible projects should aim to reduce greenhouse gas (GHG) emissions by 20% compared to an existing or modeled baseline measurement. Priority during the evaluation of applications will be given to projects that demonstrate transformative potential, significant impacts, and a strong implementation framework.

### 5.6.7 Green Freight Program (GFP)

The GFP aims to assist fleets in reducing fuel consumption and greenhouse gas emissions. It offers support through various means, such as fleet energy assessments, retrofits, engine repowers, adopting logistical best practices, and acquiring low-carbon vehicles[22]. The program operates through two funding streams. Stream 1 (Assess and Retrofit) offers grant funding of up to $250,000 for Third-Party Fleet Energy Assessments and Truck/Trailer Equipment Retrofits. Meanwhile, Stream 2 (Repower and Replace) offers non-repayable contributions for fuel switching, engine repowers, and the procurement of low-carbon alternative fuel vehicles. Under Stream 2, the program covers up to 50% of the incremental cost for purchasing low-carbon alternative fuel vehicles or 50% of total project costs, with a maximum cap of $5 million per project. It is important to note that Stream 2 is currently closed, and submitted proposals are under review.

[20] Zero-emission vehicles. (2024). Transport and Infrastructure, Government of Canada. Zero-emission vehicles - Incentives - Canada.ca Retrieved on February 12th, 2024.
[21] Funding opportunities. (n.d.). Green Municipal Fund. Funding opportunities | Green Municipal Fund. Retrieved on February 12th, 2024.

[22] Green Freight Program. (2023). Natural Resources Canada. Green Freight Program (canada.ca). Retrieved on February 12th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1**.

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory. | • Continue maintaining the fleet inventory and updating it as assets are acquired or disposed of.<br>• Keep tracking mileage/hours for vehicles and equipment in the fleet asset inventory to better align with the actual asset condition. |
| 2. | Establish and implement a data information management strategy | • Asset data will be centralized, digitized and accessible to all staff.<br>• Annual updates for the state of infrastructure data attributes such as the asset inventory, including the age and condition of the assets.<br>• Staff will have the ability to collect and update asset data in the field and in real time.<br>• Workflows will be documented and digitized |
| 3. | Track the vehicle operational data within the Computerized Maintenance Management System (CMMS) | • The operation data for vehicles should be recorded within the CMMS.<br>• Vehicle operational data including:<br>- Monthly odometer reading<br>- Fuel consumption<br>- Vehicle service date and next service date forecast<br>- Any vehicle inspection and diagnosis reports<br>- Parts replacement and vehicle repair history<br>- Factory warranty expiration dates<br>- Vehicle insurance policy and expiration date<br>- Insurance claims history<br>• Keeping track of the vehicle's operational data is beneficial for monitoring the vehicle status, preventing critical malfunction and service interruption, planning adequate vehicle service, retaining moderate insurance premiums, and making decisions on lifecycle activities, such as vehicle renewal, replacement, and retirement. |
| 4. | Develop a formalized fleet condition assessment process and use condition grading schemes for fleet assets. | • Currently, the condition of the fleet is not tracked with a well-developed asset condition rating grading system specialized for fleet assets.<br>• The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>• Perform condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council. |
| 5. | Refine the LoS Framework. | • Collect current asset performance data for key performance indicators (KPIs) that are not currently being tracked.<br>• Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engage in discussions with key stakeholders to establish service level targets and identify associated costs to meet those targets.<br>• Once LoS targets have been decided upon, the City should develop strategies on how to meet service level targets, considering its existing operating environment (i.e., staff availability, current funding, resources, etc.).<br>• Develop a Customer Consultation Plan to engage the public and other stakeholders on the LoS framework and better understand customers' willingness to pay for enhanced service levels. |

| Index | Improvement Initiative | Description |
|---|---|---|
| 6. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a comprehensive criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while low-risk assets could be accepted with caution. |
| 7. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication. |
| 8. | Update AM Plans | • Updates to the performance measures, and targets for the LoS framework, every 2 to 5 years.<br>• Annual updates to the lifecycle strategies, including the O&M, renewal, upgrades, growth, and regulatory compliance strategies.<br>• Updates to the financial strategies, such as asset valuations, long-term capital plans, operating budgets, and revenue sources. |
| 9 | Grant application program | • The city should initiate an internal program for developing grant applications tailored to organizational objectives and align to the criteria of various funding programs. (refer to **Section 5.6** for available grant options).<br>• Guidance includes:<br>- Aligning with grant-specific criteria: prepare the grant application align with the requirements, and place emphasis on the key aspects relevant to the grant objectives.<br>- Developing a grant application proposal: the application will be a project proposal that resonates with the grant agencies' goals, which should articulate clear objectives and expected outcome.<br>- Budget planning: the financial plans must resonate with the grant's objectives, presenting transparency in fund utilization and emphasizing the project's viability and long-term financial sustainability.<br>- Demonstrating feasibility and organization capacity: presenting a realistic project timeline, clear milestones, and a well-thought-out implementation plan.<br>- Compliance, Reporting, and Effective Project Management: a robust project management strategy should be devised, illustrating the City's capacity to effectively manage, oversee, and report on the project's progress, in accordance with the grant's stipulations.<br>- Preparing and Organizing Supporting Documents: these documents will be organized and presented in a manner that lucidly supports and enhances the application.<br>- Final Review and Submission Process: prior to submission, each application should undergo a thorough review to ensure it meets the specific criteria and guidelines of the respective grant program. |

# Appendix A - Fleet MS Excel Lifecycle Model

FINAL

# City of Sault Ste Marie Parks and Cemetery AMP

AUGUST 2024

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Delivering a better world

# Statement of Qualifications and Limitations

The attached Report (the “Report”) has been prepared by AECOM Canada Ltd. (“AECOM”) for the benefit of the Client (“Client”) in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations, and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents AECOM’s professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made, or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental, or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time..

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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop asset management plans to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, parks and cemetery, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an asset management plan to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protection services, solid waste, parks and cemetery, facilities, parks and cemetery, roadway appurtenances, and active transportation.

## 1.2 Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's parks and cemetery assets and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of O. Reg. 588/17.

Organizations that implement good AM practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024, deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the level of service that the municipality proposes to provide, the activities required to meet those level of service, and a strategy to fund activities. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**)
- The City's level of service objectives, stakeholder identification, levels of service (LoS) framework, and future demand drivers (**Section 3**)
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Section 4** and **Section 5**)

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. Figure 1-1: The City's Asset Management Line of Sight demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

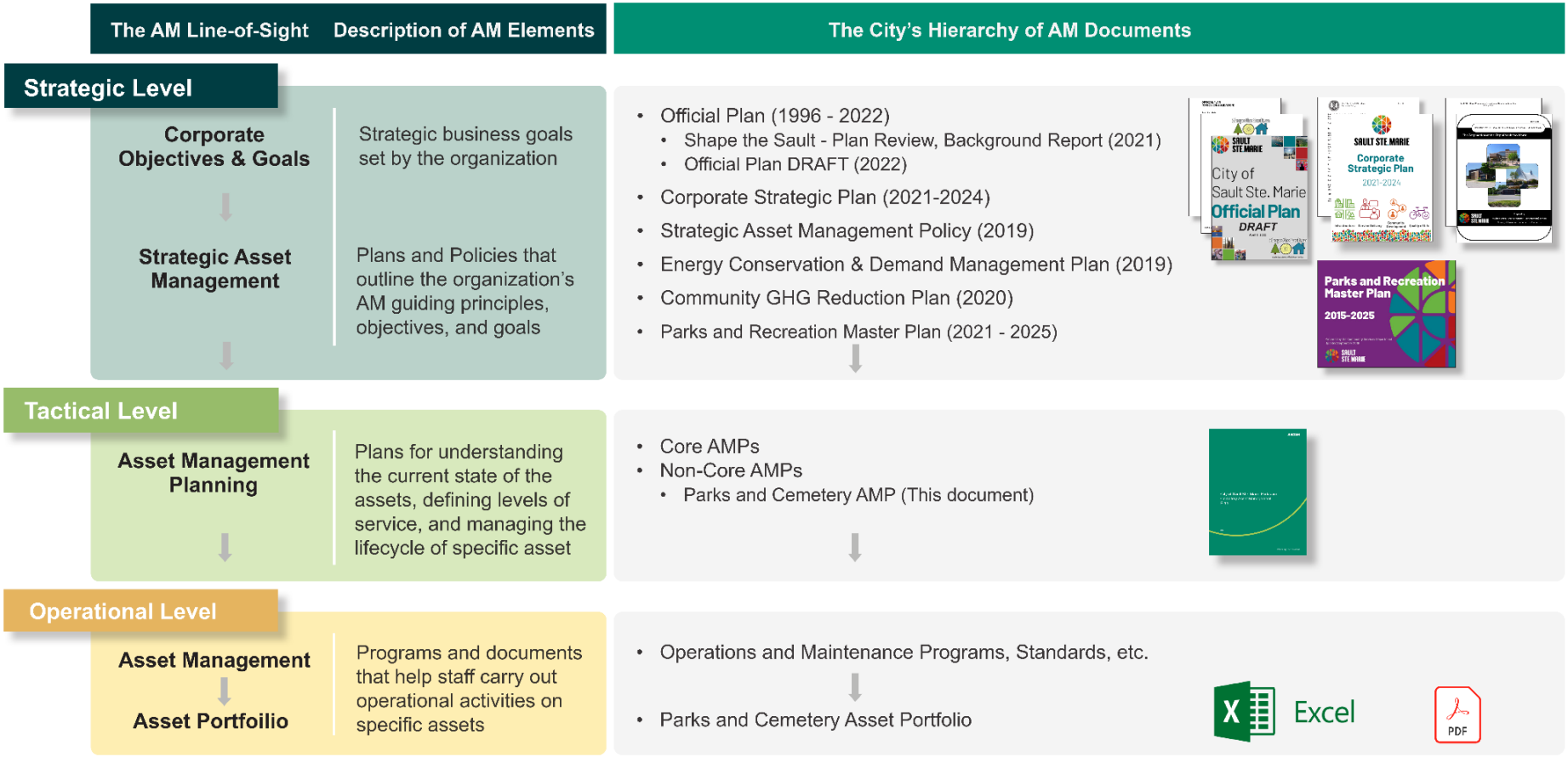


**Figure 1-1: The City's Asset Management Line of Sight**

# 2. State of Infrastructure

Parks and cemetery assets are managed by the City's Public Work - Park Division, who is responsible for the maintenance of grounds and assets at municipal parks, sports complexes, and various other facilities, including park structures, recreation facilities, park buildings parklands, park equipment, drinking water treatment facilities. Cemetery Assets, including cemetery equipment, are managed by the Community Services Department. The cemetery offices, columbaria and mausoleums are covered in the Facility AMP. Currently, the Park Division manages 83 parks including the Strathclair, Queen Elizabeth and Elliott Park outdoor sports complex, and the assets range significantly in both complexity and value. The types of service work that the Park division carries out include grass cutting, fielding lining, floral bed, playground maintenance, tree management, refuse collection, and dock and building maintenance.

The inventory of the parks and cemetery is a comprehensive catalogue detailing the quantity, condition, and specifications of these components within the City. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into the maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range asset management planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of parks and cemetery assets, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of parks and cemetery is illustrated, showcasing four main categories: park structure, recreation, parkland, park equipment, sewage, and cemetery equipment. The parks and cemetery buildings are covered in the Facility AMP, and the parks and cemetery fleets are covered in the Fleet AMP.

Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's parks and cemetery assets, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or track costs at the asset level or higher levels.

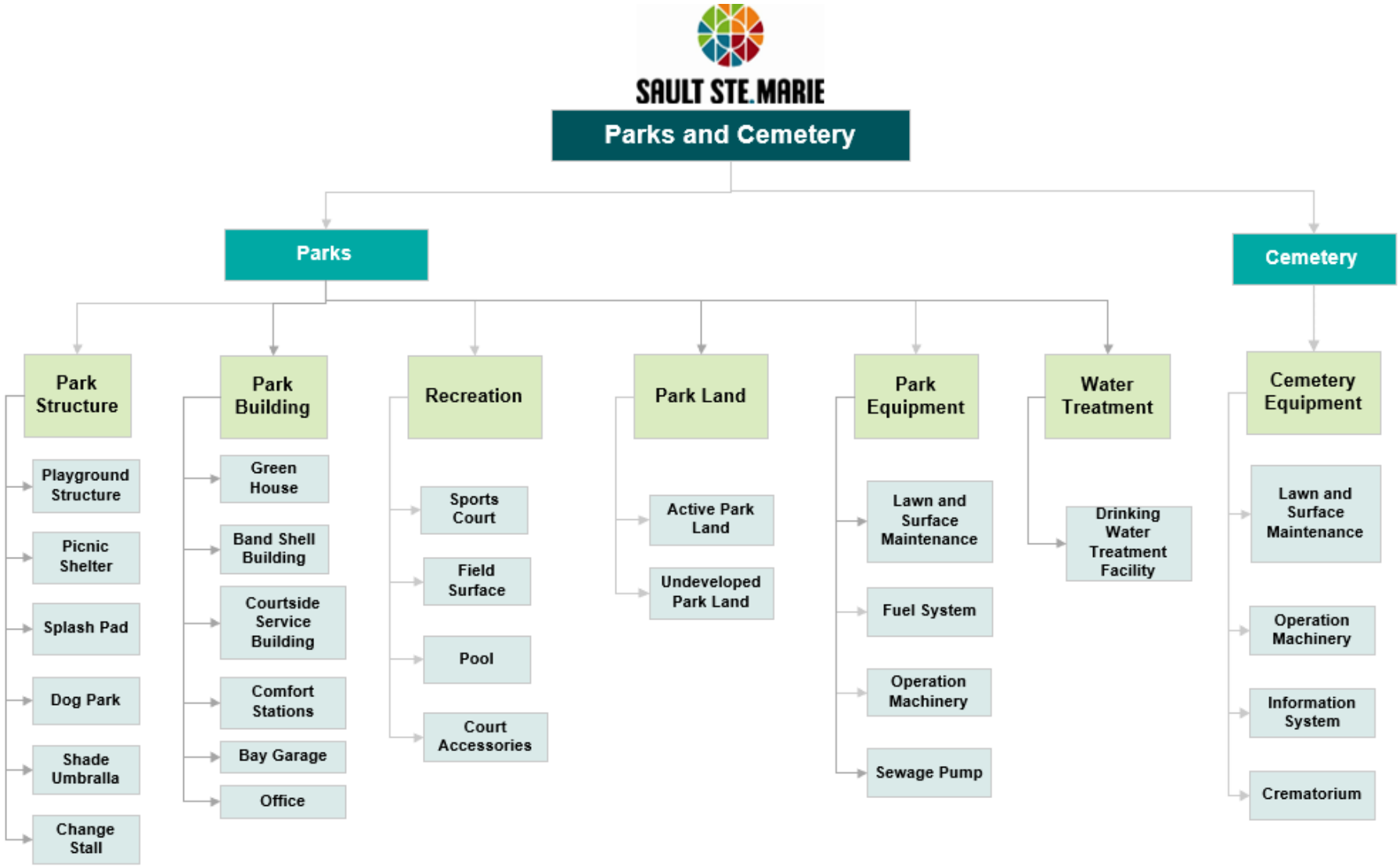


**Figure 2-1: City of Sault Ste. Marie Parks and Cemetery Asset Hierarchy**

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

A completed parks and cemetery asset inventory is compiled based on the raw data provided by the City at the initial stage of the project, which was obtained from the following sources:

- Recreation and Culture Assets Phase 2
- Copy of Equipment Cemetery 2022
- Cemetery Fleet & Assets, Feb 16, 2023
- Active Capital Assets 2021
- FINAL 2023 UPDATE SSM Public Works Replacement Plan Workbook updated 20230309
- 2022 Biennial Structure Inspections

**Table 2-1** presents the summary of the City's Parks and Cemetery asset inventory.

**Table 2-1: Parks and Cemetery Summary**

| Asset Group | Asset Class | Asset Categories | Quantity | Unit | Inventory Details |
|---|---|---|---|---|---|
| Parks | Park Structure | Park Amenities | 76 | Ea. | 67 Playgrounds<br>1 Dog park<br>4 Picnic Shelter<br>2 Splash pad<br>1 Change Stall<br>1 Shad Umbrella |
| | Recreation | Sports Courts | 45 | Ea. | 8 Basketball courts<br>3 Bocce courts<br>2 Disc golf courses<br>5 Outdoor rinks<br>8 Pickleball courts<br>2 Skate park<br>6 Slow-pitch field<br>10 Tennis courts<br>1 Track |
| | | Field Surface | 43 | Ea. | 1 Cricket pitch<br>2 Football field<br>4 Intermediate Soccer Fields<br>7 Junior Soccer Fields<br>9 Mini Soccer Fields<br>6 Senior Soccer Fields<br>13 Slow-Pitch Field<br>1 Ultimate Frisbee Field |
| | | Pools | 660 | m2 | 2 Outdoor swimming pool |
| | | Court Accessories | 84 | Ea. | 8 Bleachers<br>5 Field Irrigation System<br>31 Small Bleacher<br>39 Track and field lights |
| | Park Building | Green House | 787 | m2 | Bellevue Park green house |
| | | Office | 460 | m2 | Pointe De Chenes Park offices<br>Bellevue Park staff operation building |
| | | Band Shell Building | 444 | m2 | Bellevue Park band shell |

| Asset Group | Asset Class | Asset Categories | Quantity | Unit | Inventory Details |
|---|---|---|---|---|---|
| | | | | | building |
| | | Courtside Service Building | 1,193 | m2 | Strathclair Park slow-pitch courtside service buildings<br>Strathclair Park soccer courtside service buildings<br>Elliott Sport Complex courtside service buildings<br>North Street courtside service buildings<br>Esposito Park courtside buildings |
| | | Comfort Stations | 450 | m2 | Pointe De Chenes Park comfort stations |
| | | Bay Garage | 369 | m2 | Pointe De Chenes Park bay garages |
| | Park Land | Active Park Land | 377 | Ha | 147 Active park land |
| | | Undeveloped Park Land | N/A | N/A | 17 Undeveloped park land |
| | Park Equipment | Fuel System | 6 | Ea. | 1 Fuel leak detection system<br>2 Fuel pumps<br>2 Fuel tanks<br>1 Fuel system |
| | | Lawn & Surface Maintenance | 11 | Ea. | 11 Equipment include sweepers, weeder eaters, tillers, brooms, riding mowers, sander spreaders and seeders |
| | | Operation Machinery | 1 | Ea. | 1 Post driver |
| | | Sewage Pump | 2 | Ea. | 2 Vacuum pumps |
| | Water Treatment | Drinking Water Treatment Facility | 2 | Ea. | 1 Water treatment plant<br>1 Secondary water treatment plant |
| Cemetery | Cemetery Equipment | Lawn & Surface Maintenance | 40 | Ea. | 40 Equipment include sweepers, weeder eaters, tillers, brooms, riding mowers, sander spreaders and seeders |
| | | Operation Machinery | 21 | Ea. | 21 Equipment include air compressors, generators, lift, hammers, wackers, welders, lowering devices, etc. |
| | | Crematorium | 2 | Ea. | 1 Cremator<br>1 Emission monitoring system |
| | | Information System | 1 | Ea. | 1 Server |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices or construction costs. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

The finalized asset replacement values were determined with the largest numbers of the following:

- Escalating the original asset purchase costs to 2024 dollars, by the average inflation rate of the past 10 years (2014-2023) at 2.11%.
- Current replacement cost from AECOM cost library.

**Table 2-2** presents the unit replacement cost and the total replacement value for parks and cemetery asset categories within the City. The final asset replacement values were applied with 15% engineering (Design & Contract Administration) markup and 30% contingencies. In this AMP, the park land value is not treated as a capital asset that requires replacing as typically land can be re-used or replaced for a similar cost to that achieved in sale. Land for cemeteries by their nature treat land as a consumable asset and therefore the condition and remaining ESL should be tied directly to the forecast remaining capacity and life expectancy.

Notably, the recreation constitutes the most significant portion, accounting for a replacement value of approximately $27 million, followed by the park structure at $20 million, the park buildings at $6.2 million, cemetery equipment at $2.1 million, water treatment at $0.80 million, and park equipment at $0.65 million. The combined replacement value for all these categories amounts to approximately $57.8 million. Note that all total replacement values are rounded to the nearest thousand.

**Table 2-2: Current Replacement Value**

| Asset Group | Asset Class | Asset Categories | Replacement Cost Range | Total Replacement Value (2024 Dollar) With Markup |
|---|---|---|---|---|
| Parks | Park Structure | Park Amenity | $19,900-$977,800 | $20,330,000 |
| | **Subtotal** | | | **$20,330,000** |
| | Recreation | Sports Court | $68,700-$2,316,400 | $8,817,000 |
| | | Field Surface | $42,800-$2,581,600 | $14,517,000 |
| | | Pool | $870,000-$1,044,000 | $1,914,000 |
| | | Court Accessories | $12,700-$373,500 | $2,464,000 |
| | **Subtotal** | | | **$27,712,000** |
| | Park Buildings | Green House | $53,000-$230,700 | $485,000 |
| | | Office | $45,500-$262,400 | $1,174,000 |
| | | Band Shell Building | $92,600-$411,100 | $1,040,000 |
| | | Courtside Service Building | $18,000-$230,500 | $2,122,000 |
| | | Comfort Stations | $77,000-$286,600 | $801,000 |
| | | Bay Garage | $39,100-$273,400 | $552,000 |
| | **Subtotal** | | | **$6,174,000** |
| | Park Land | Active Park Land | N/A | N/A |
| | | Undeveloped Park Land | N/A | N/A |
| | Park Equipment | Fuel System | $15,800-$71,000 | $232,000 |
| | | Lawn & Surface Maintenance | $9,200-$121,200 | $380,000 |
| | | Operation Machinery | $10,200 | $11,000 |
| | | Sewage Pump | $12,000-$14,800 | $27,000 |
| | **Subtotal** | | | **$650,000** |

| Asset Group | Asset Class | Asset Categories | Replacement Cost Range | Total Replacement Value (2024 Dollar) With Markup |
|---|---|---|---|---|
| | Water Treatment | Drinking Water Treatment Facility | $797,800 | $798,000 |
| | **Subtotal** | | | **$798,000** |
| Cemetery | Cemetery Equipment | Lawn & Surface Maintenance | $600-$195,000 | $868,000 |
| | | Operation Machinery | $2,100-$131,300 | $762,000 |
| | | Crematorium | $227,500 | $455,000 |
| | | Information System | $18,300 | $19,000 |
| | **Subtotal** | | | **$2,104,000** |
| **Total Parks** | | | | **$55,664,000** |
| **Total Cemetery** | | | | **$2,104,000** |
| **Total Parks and Cemetery** | | | | **$57,768,000** |

It is noted that the replacement costs are estimated based on the Class 4[1] cost estimation approach. These estimates are typically prepared with limited information, resulting in wide accuracy ranges. Class 4 estimates serve various purposes, including project screening, feasibility assessment, concept evaluation, and preliminary budget approval. They are utilized for detailed strategic planning, business development, project screening at more advanced stages, alternative scheme analysis, confirmation of economic and technical feasibility, and approval to proceed to the next stage. Typically, depending on the construction complexity of the project, relevant reference information, and other associated risks, the accuracy ranges for Class 4 estimates fall within the following bounds (could exceed based on various criteria):

- On the lower side, -10% to -20%
- On the higher side, +20% to +30%

It is also worth noting that the total replacement values are presented in inflated dollars and have been marked up by 45% for parks and cemetery assets, which accounts for engineering markup and any contingency cost.

## 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modelling may be justified. Conversely, for low-value assets, the cost of deterioration modelling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Some assets are operated intermittently or even infrequently or are being operated at a lower demand than their designed capacity. Thus, the actual operating “age” of the asset is reduced.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., corrosive chemicals), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.

[1] Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Cost Estimate Classification System - As Applied In Engineering, Procurement, and Construction for the Building and General Construction Industries, 2020, Retrieved in February 2024

- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as the cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical.

**Figure 2-2 and Figure 2-3** show the weighted average asset age and RSL as a proportion of average ESL for each asset class. The ESL and RUL data for assets except park equipment and cemetery equipment are counted in years. The ESL and RUL data for park equipment and cemetery equipment are counted in months.

Overall, the weighted average age of pools, and sports courts, is equal to or beyond the weighted average ESL. The drinking water treatment facility, green houses, and court accessories have relatively longer RUL compared to the other asset classes, because of their smaller weighted average age (26 years old for sewage facility, 10 years old for green house, and 12 years old for court accessories).

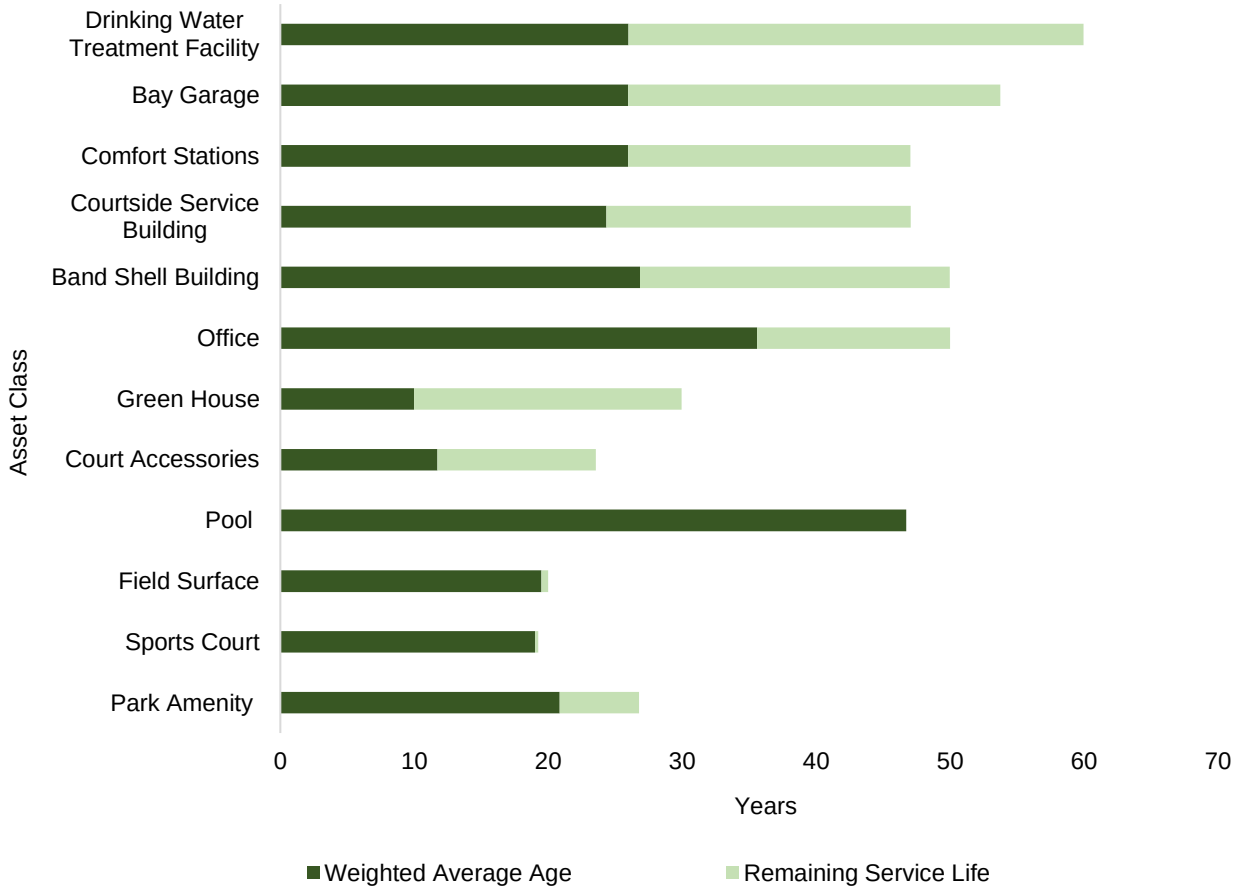


**Figure 2-2: Parks and Cemetery Weighted Average Age and Remaining Service Life (Years)**

Of the parks and cemetery equipment, most of the equipment has their weighted average age equal to or beyond the weighted average ESL, except the park sewage pumps, crematorium equipment and cemetery lawn & surface maintenance equipment.

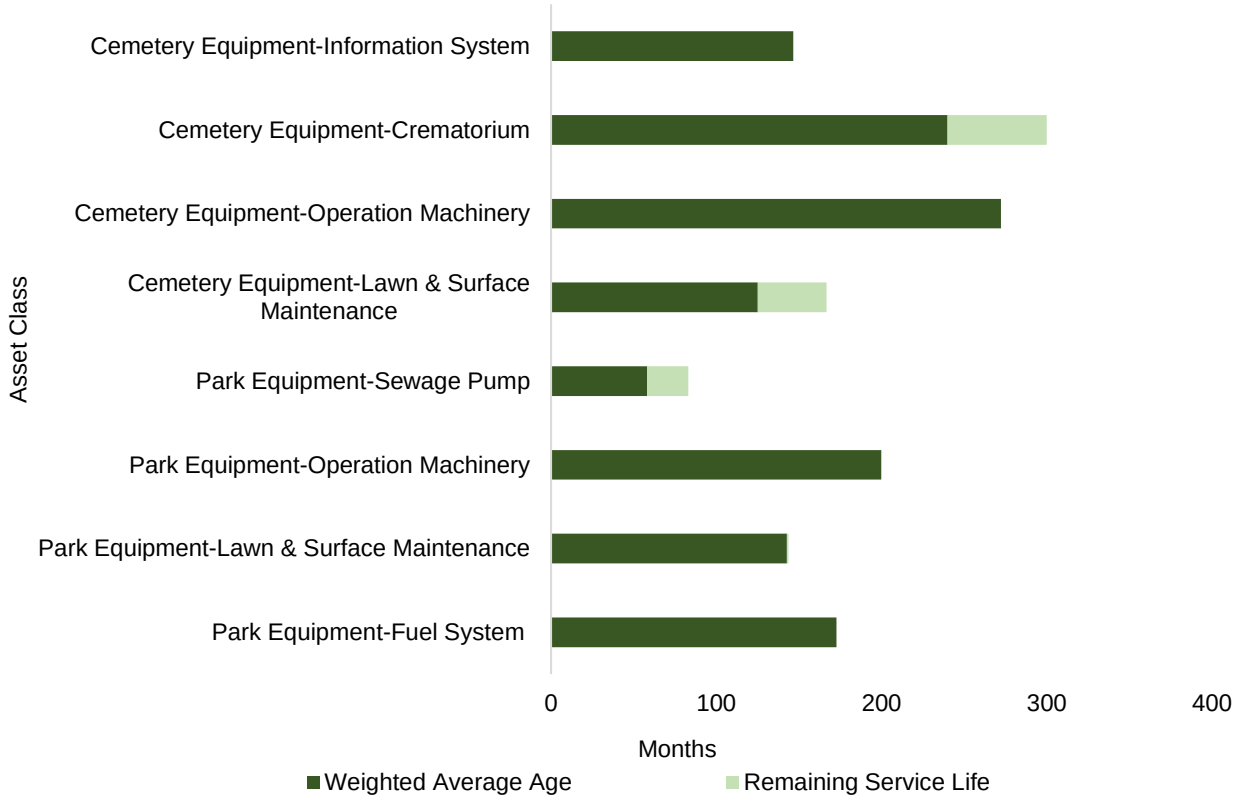


**Figure 2-3: Parks and cemetery Weighted Average Age and Remaining Service Life (Months)**

## 2.2.4 Asset Condition

Regular condition assessments for parks and cemetery assets are recommended to monitor the condition and support the asset management decision. For other asset categories that do not have condition assessment results, the two-parameter Weibull distribution function was used to assess the current condition and to project the future condition of the City's parks and cemetery assets. The Weibull distribution has been used extensively in reliability studies and lifetime prediction models in industries ranging from automotive to oil & gas and provides a suitable distribution for this type of analysis.

The underlying premise of the Weibull-shaped deterioration is that while some assets fail prematurely due to severe conditions or improper installation, other assets are very long-lived and function well beyond their theoretical ESL. In order to perform a high-order network-level analysis, it was assumed that assets would fail (and require replacement) within a deterioration envelope/curve approximated by a Weibull probability distribution. The two-parameter Weibull cumulative distribution has two parameters for scale and shape, as set out in Equation [1]:

$$f(x;\alpha,\beta) = e^{-\left(\frac{x}{\beta}\right)^{\alpha}} \quad [1]$$

Where: $x$ = Age
$\alpha$ = Shape parameter (or slope)
$\beta$ = Scale parameter

A set of Weibull cumulative distribution functions was leveraged to simulate a set of deterioration curves for assets with different ESLs as shown in **Figure 2-4**.

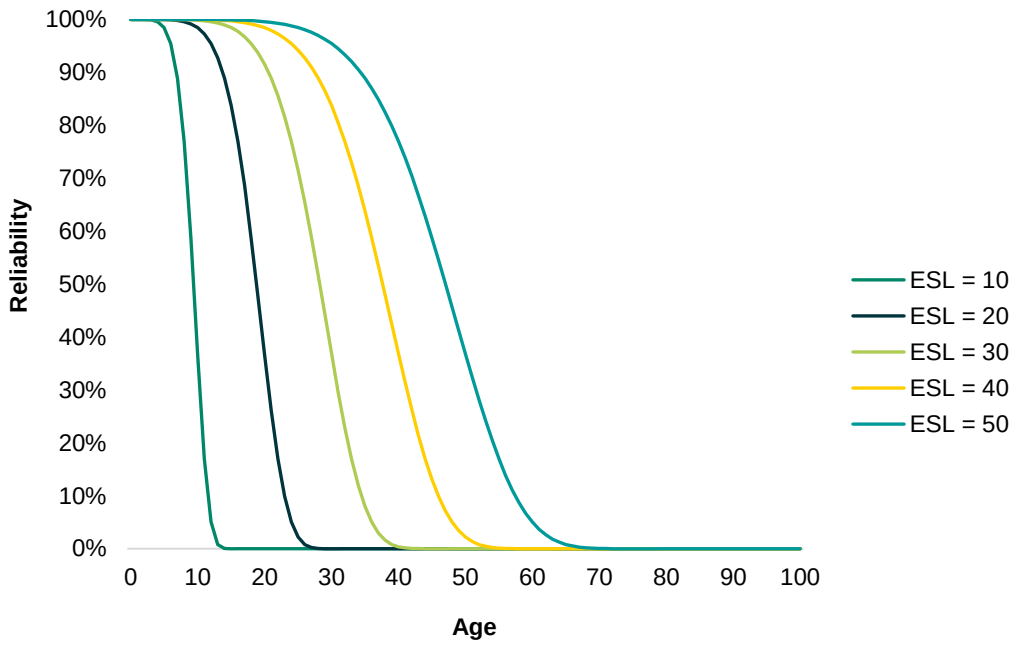


**Figure 2-4: Asset Deterioration Curve Samples**

The asset condition ratings were based on the five-point condition rating scale presented in **Table 2-3.**

**Table 2-3: Condition Assessment Rating Details**

| Physical Condition Rating | Condition Description |
|---|---|
| **1 - Very Good** | The asset is new or in new condition, meets or exceeds all current standards of practice, shows no signs of deterioration, and is fully operable. |
| **2 - Good** | The asset has minimal signs of deterioration, generally meets all current standards of practice, and is fully operable. |
| **3 - Fair** | The asset may show moderate signs of deterioration, generally meets the current standard of practice, asset performance may decrease and cause service interruptions and is fully operable. |
| **4 - Poor** | The asset is approaching its end-of-life expectancy, shows significant signs of deterioration, major components may need to be rebuilt or replaced, may be functioning at an acceptable level is expected to deteriorate further. |
| **5 - Very Poor** | The asset is beyond its life expectancy, may no longer meet the current standard of practice, major component may no longer be serviceable, shows significant deterioration, functions at a limited capacity, and may pose a safety hazard if used. |

**Table 2-4** and **Figure 2-5** present the condition ratings of the City's parks and cemetery with respective replacement values in non-inflated dollars. The known condition ratings span from "Very Good" to "Very Poor," with "Very Good" and "Good" collectively contributing 38% to the overall replacement value. 43% of the assets are in "Poor" and "Very Poor" condition.

**Table 2-4: Parks and Cemetery Condition Summary**

| Rank | Condition Rating | Replacement Value | % of Replacement Value |
|---|---|---|---|
| 1 | Very Good | $14,412,000 | 25% |
| 2 | Good | $7,189,000 | 13% |
| 3 | Fair | $11,184,000 | 19% |
| 4 | Poor | $4,764,000 | 8% |
| 5 | Very Poor | $19,859,000 | 35% |
| **Total** | | **$57,408,000** | **100%** |

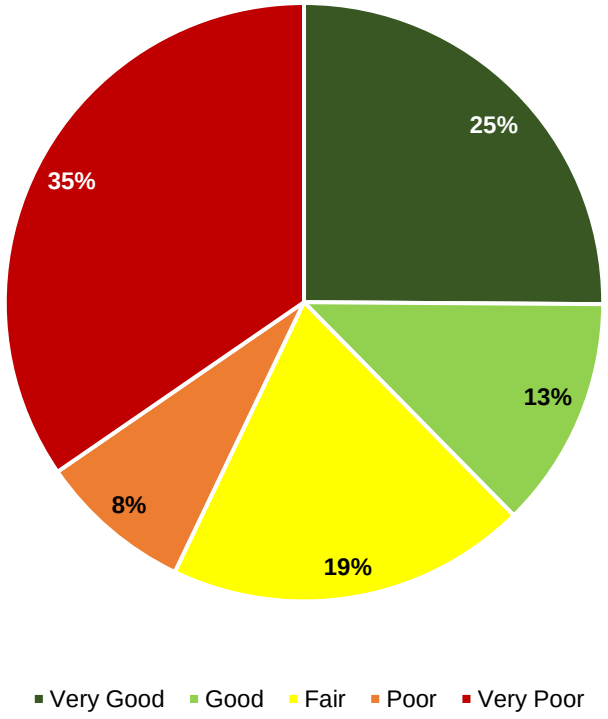


**Figure 2-5: Parks and Cemetery Asset Condition Weighted by Replacement Value**

**Figure 2-6** shows the condition summary breakdown for each asset class, weighted by replacement value. For the court accessories, green houses, band shell buildings, courtside service buildings, bay garage, over 50% of the assets are in “Very Good” condition. The green houses are in “Very Good” condition. For park amenity, pool, over 50% of the assets are in “Very Poor” condition. The drinking water treatment facility has over 50% of assets in “Good” condition.

As for the park equipment and cemetery equipment, the park fuel system equipment, park lawn & surface maintenance equipment, park operational machinery, cemetery operational machinery and cemetery information system equipment (one server of $19 thousand), over 50% of the assets are in “Very Poor” condition. The park operation machinery, park sewage pumps. cemetery lawn & surface maintenance equipment and cemetery crematorium are in relatively better condition with over 50% of assets in “Good” and “Very Good” condition.

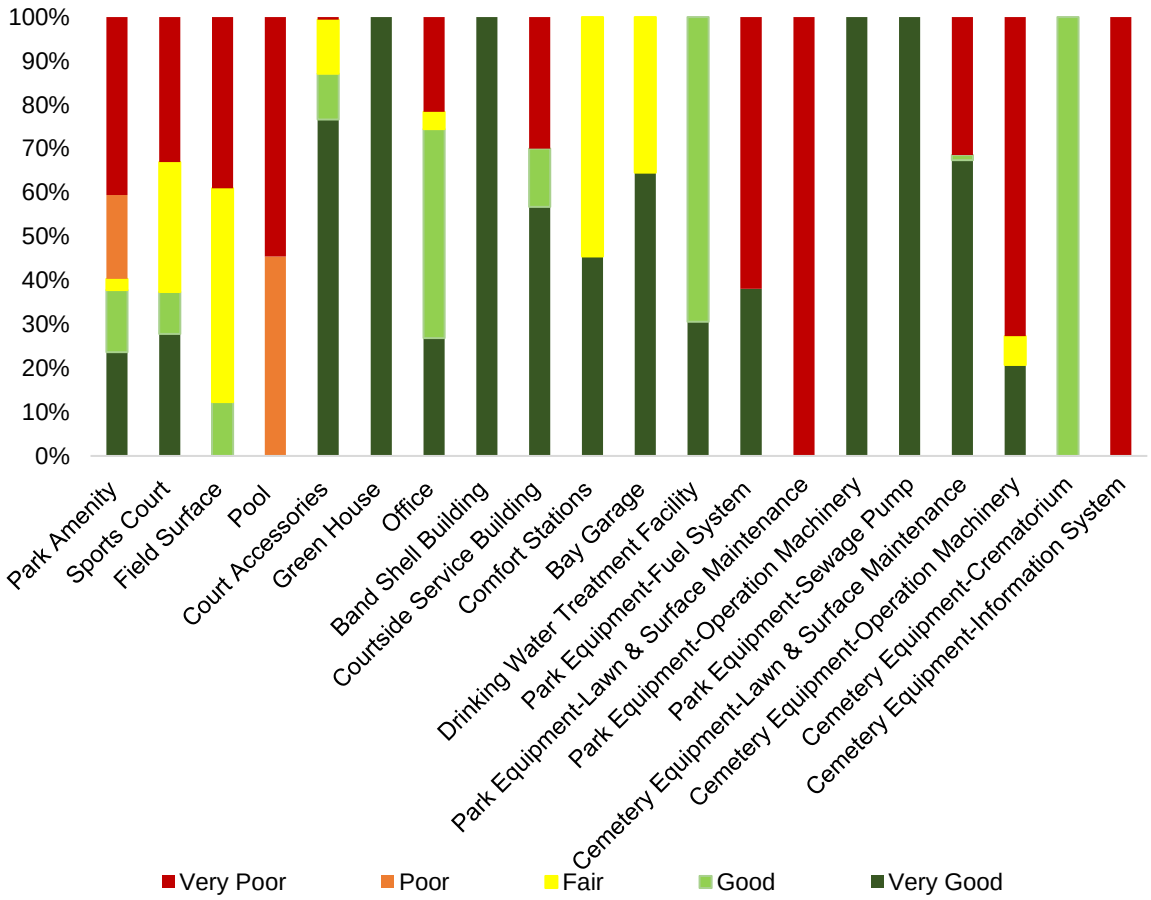


**Figure 2-6: Condition Summary for Each Asset Class Weighted by Replacement Value**

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's parks and cemetery assets were previously stored across multiple spreadsheets. This project has successfully centralized the data into a single inventory. Additionally, it has addressed and filled gaps in key data, such as expected service life and replacement costs, achieving a 100% completeness rate. **Table 2-5** provides a summary of data completeness levels in the compiled parks and cemetery inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-5: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Parks and Cemetery** | 52% | 50% | 100% | 100% | 100% | 100% |

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the parks and cemetery assets. **Table 2-6** provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data. A brief summary and explanation of the available data can be seen in

**Table** 2-7. Overall, The parks and cemetery asset inventory data are comprehensive in terms of the four key parameters required for the AM data analysis.

**Table 2-6: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

**Table 2-7: Asset Data Confidence**

| Asset Group | Inventory Confidence | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Parks and Cemetery** | C | C | A | A | A | A |

## 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[2]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-7**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

[2] TechTarget Network, Definition: Data Life Cycle, 2020.

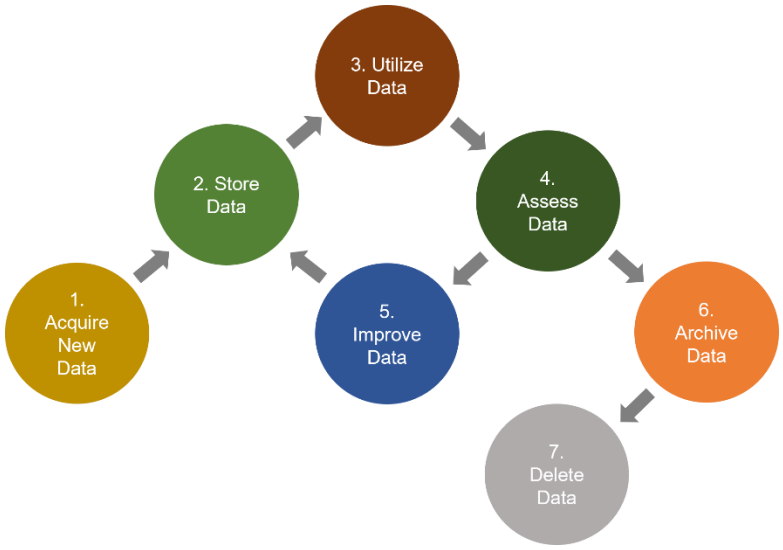


**Figure 2-7.Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment, and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data but also to migrate and merge data from other sources.
    - New parks and cemetery assets should be consistently added to the inventory and a minimum required data set defined to maintain inventory accuracy and reliability. The required data includes the asset material, size, specification, new equipment make, model, Vehicle Identification Number, fuel type, original purchase price, purchase dates, purchase location, etc.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
    - Assets are typically stored in either the Computerized Maintenance Management System (CMMS) or the maintained asset inventory spreadsheet. For parks and cemetery assets, typical information including park structure specification, sports courts and field surface material and size, parks and cemetery buildings' frame type, story and associated mechanical and electrical equipment need to be captured and maintained to be updated during the daily data management process.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
    - The City should conduct regular inspections and condition assessments for its playground structure, sports courts and field surfaces, benches, picnic tables, parks and cemetery buildings, swimming pools, and lighting poles to adequately support the associated asset lifecycle activities decision-making including renewal, repair, and replacement.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:

- Poor asset performance due to lack of information and understanding of asset behaviour.
- Non-compliance with statutory regulations or safety requirements.
- Safety incidents due to risks not being identified or reported.
- Asset failure due to gaps in maintenance planning.

- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
    - Consider what data should be archived and articulate the reasons behind the archival decisions.
    - Examine any legal obligations pertaining to the retention of data records.
    - Determine the appropriate duration for retaining different categories of data records.
    - Evaluate the risks associated with the inability to retrieve specific data records.
    - Specify the authorized individuals or entities who should have access to archived data records.
    - Establish the expected timeframe for retrieving archived data records.
    - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.
- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations, there is resistance to permanently delete data, otherwise known as data “squirrelling”, due to the overall capacity of storing data increasing and the cost decreases. However, within the organization’s data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report the current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and noncore assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[3] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1** Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

**Table 3-1: The City’s Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe, and accessible for all ages and abilities (the “8 to 80 Cities” concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |

[3] City of Sault Ste Marie. 2021. Comprehensive Background Report.

| Overarching Themes | Corporate Objective |
|---|---|
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the City's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the Sault's history, diverse communities, and natural and cultural heritage, with the Downtown as the Sault's core destination for arts and culture. |

# 3.3 Stakeholders Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for parks and cemetery at the LoS workshops. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups for parks and cemetery service are identified below.

- Residential Customers
- Industrial, Commercial & institutional (ICI) Customers
- Visitors
- Regulatory Agencies
- Neighbouring Municipalities
- Developers
- First Nations
- Environmental Groups
- Internal City Departments
- Council Committees
- Parks and Recreation Advisory Committee
- Environmental Sustainability Committee

## 3.3.1 Legislated and Regulatory Requirements

Parks and cemetery assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., clean drinking water and safe roads, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • Canadian Environmental Protection Act (CEPA)<br>• Fisheries Act | • Environmental Protection Act (EPA)<br>– Ontario Regulation 351 – Marinas<br>• Public Parks Act<br>• Cemeteries Act<br>• Pesticides Act<br>• Ontario Drainage Act<br>• Accessibilities for Ontarians with Disabilities Act<br>• Health Protection and Promotion Act<br>– Ontario Regulation 565 - Public Pools<br>• Recreational Water Protocol<br>• Bereavement Authority of Ontario<br>• Ministry of Environment<br>• Conservations Authority Act<br>– Ontario Regulation 97 – Conservation Authorities Regulation |

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 identifies levels of service metrics for core assets. A number of key LoS performance measures for parks and cemetery assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5.**

## 3.5 Levels of Service Performance Metrics

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS Framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.
- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

A summary of the City's parks and cemetery service level metrics are presented in **Table 3-3**.

### Table 3-3: Levels of Service Performance Metrics (Parks and Cemetery)

| | Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) |
|---|---|---|---|---|---|
| 1. | Parks | Customer Service & Responsiveness | Number of Hours of Sport Fields Booked Annually | # | Y |
| 2. | Parks | Customer Service & Responsiveness | Total Number of New Trees Planted Annually | # | N |
| 4. | Parks | Health & Safety | Percentage of Playgrounds Inspected Monthly | % | N |
| 5. | Cemetery | Customer Service & Responsiveness | First Treatments | # | N |
| 6. | Cemetery | Environment & Sustainability | Annual Cremator Natural Gas Consumption | GJ | N |
| 7. | Cemetery | Health & Safety | # of Grave Repairs | # | Y |

# 3.6 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social, and technological landscape.

A summary of factors identified from the LoS workshop that would impact parks and cemetery service levels include, but are not limited to, the following:

- Energy and demand management.
- Aging park infrastructure
- Active living customer demands
- Funding level.
- Climate change.
- Staffing expertise.
- Cemetery demands.
    - Mausoleum sales
    - Green burials

On November 2, 2021, the City of Sault Ste. Marie's Planning Division released the Comprehensive Background Report for updating the Official Plan[4]. The City's Official Plan guides the local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to roughly reach to 80,000 (by 2031), and 83,300 people by 2036. Employment is projected to grow by about 6,000 jobs, from approximately 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training, and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the July 1, 2025, deadline.

[4] City of Sault Ste Marie. 1996. Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

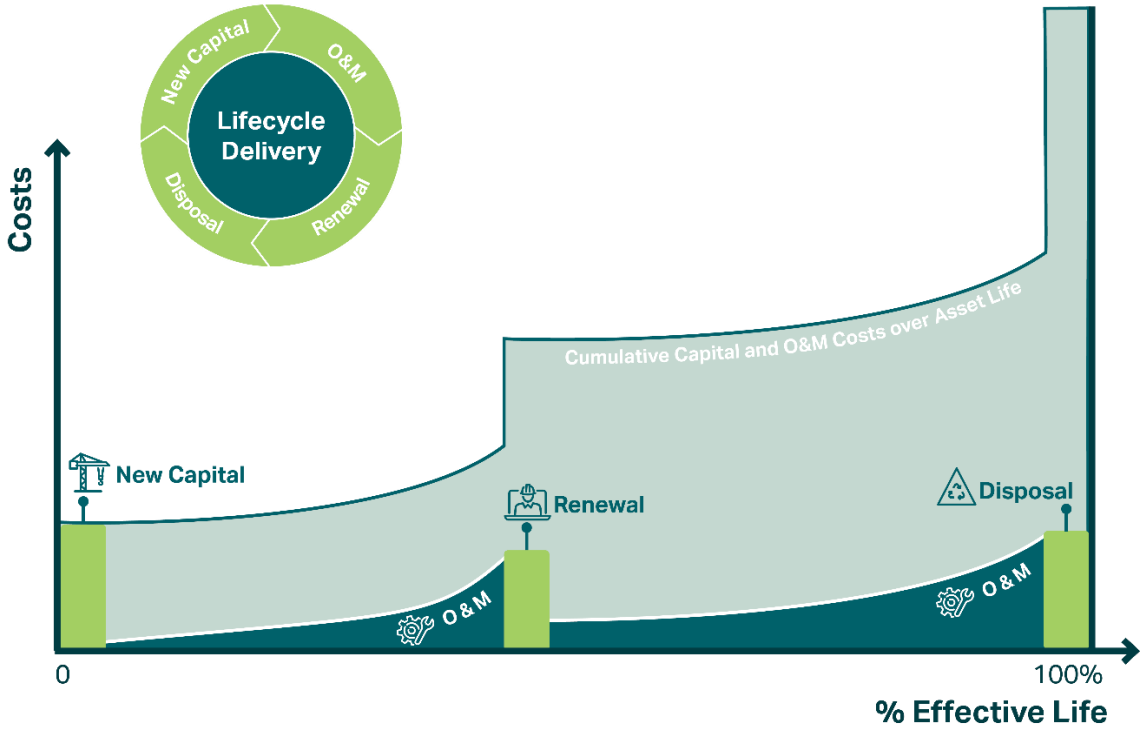


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:
    - The asset's operability and maintainability.
    - Supply chain considerations.

- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, renew or refurbish the aging playground structure, and resurface the court surfaces. Reconstruction activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes to leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment (e.g., playground structure with persistent settlement problems in areas with extremely erodible soils), or assets no longer suitable for their original purpose (e.g., aging service buildings repurpose as storage facility).

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

The City's need for new parks and cemetery assets is propelled by both aging infrastructure and a growing demand for services and additional facilities. The aging infrastructure, characterized by wear and tear over time, poses challenges in maintaining the safety and functionality of existing parks and cemetery assets. Acquiring new assets becomes imperative to ensure that the City continues to deliver safe and well-maintained facilities for residents.

In addition, the City recognizes the diverse recreational needs of the residents. With a strong interest in activities such as cricket, pickleball, skateboarding, and hiking, residents expect the City to add new park amenities. Furthermore, residents emphasize a desire for neighborhood-based play options, reflecting a preference for localized and community-centric recreational opportunities. Essential support amenities, including benches and washrooms, are also vital to enhance residents' experiences. Last but not least, the City acknowledges the growing interest in physical activity among senior residents, with a dedicated effort to ensure accessibility and ease for this demographic.

**Table 4-1** summarizes the acquisition activities associated with the City's parks and cemetery assets.

**Table 4-1: Acquisition Activities for Parks and Cemetery Assets**

| Asset Group | Activities Undertaken by the City | Notes |
|---|---|---|
| Parks | • Develop more space:<br>– Build neighborhood parks.<br>– Develop sports fields, ball courts, and bike/skate parks.<br>• Add new park structures:<br>– Acquire new senior-friendly facilities and park structures.<br>– Add new signs to raise environmental awareness. | • The City's master plan underscores the intention to implement a park revitalization program, which, despite lacking recent support, has been pursued through collaborations with non-profit organizations. The City is currently revitalizing two parks.<br>• The City's park density, measured in hectares per 1,000 residents, stands at 5.16, surpassing the City of Toronto's 2.8 and slightly higher than the City of Sudbury's 4. |
| Cemetery | • Purchase and lease new equipment. | • The City has established a Mausoleum Strategic Plan for the next decade, allocating $1.5 million to $2 million for new builds. |

# 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in parks and cemetery AM also contribute to cost-effectiveness over the asset's lifecycle. **Table 4-2** summarizes the O&M activities associated with the City's parks and cemetery assets.

**Table 4-2: O&M Activities for Parks and Cemetery Assets**

| Asset Group | Activities Undertaken by the City |
|---|---|
| Parks | • Conduct condition assessments every 3-5 years with following exceptions:<br>– Playground equipment is inspected monthly by certified playground practitioners (City Staff), as regulated by the Canadian Standards Association (CAN/CSA-Z614-14: Children's Play spaces and Equipment).<br>– Bi-annual inspections are conducted for buildings, bridges on hub trails, bleachers, and high mass lighting.<br>– Structural assessments are completed by external engineering consultants alongside the bi-annual bridge inspections.<br>• Conduct safety and condition inspection periodically.<br>• Conduct scheduled repair and maintenance:<br>– Re-coat the structure with peeling paints or corrosion.<br>– Fix or replace the damaged parts.<br>– Conduct court/field surface cleaning and patch repairs.<br>– Conduct park parking lots surface cleaning and patch repairs.<br>– Rent mobile washrooms during peak seasons at popular sites.<br>– Conduct routine maintenance, including plant maintenance, lawn trimming, snow removal, utility maintenance, garbage cleaning, and pest and animal controls. |
| Cemetery | • Conduct equipment repair.<br>• Conduct oil and filter changes for cemetery equipment<br>• Maintain bearing structures annually.<br>• Rent equipment during peak seasons and contract out maintenance as needed. |

# 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs.

In line with the acquisition of parks and cemetery assets, the City's choice to renew and replace these assets is prompted by factors such as aging infrastructure and increasing demand. **Table 4-3** summarizes the renewal and replacement activities associated with the City's parks and cemetery assets.

**Table 4-3: Renewal and Replacement Activities for Parks and Cemetery Assets**

| Asset Group | Activities Undertaken by the City |
|---|---|
| Parks | • Replace the old park structures.<br>• Resurface the old courts/fields.<br>• Replace the tiles for the swimming pools.<br>• Restore and expand visitor amenities, including garbage bins. |
| Cemetery | • Replace equipment on a regular basis or at the end of its service life. |

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic AM. As the City's parks and cemetery assets approach the end of their lifecycle or become obsolete, a systematic approach to their removal and decommissioning becomes imperative. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements.

However, the disposal of assets within the realm of parks and cemetery demands unique consideration due to their special nature. According to the City, parks or cemetery that have been developed and named are highly unlikely to be disposed of. This sentiment is reinforced by strong support from both residents and the council for safeguarding municipal parks and green spaces, reflecting a shared commitment to preserving these vital community spaces. Therefore, there is a consensus that the bar for the disposal of parkland should be set exceptionally high to ensure careful scrutiny and thoughtful decision-making, thus maintaining the integrity and purpose of these valued public spaces.

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-4**.

**Table 4-4: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

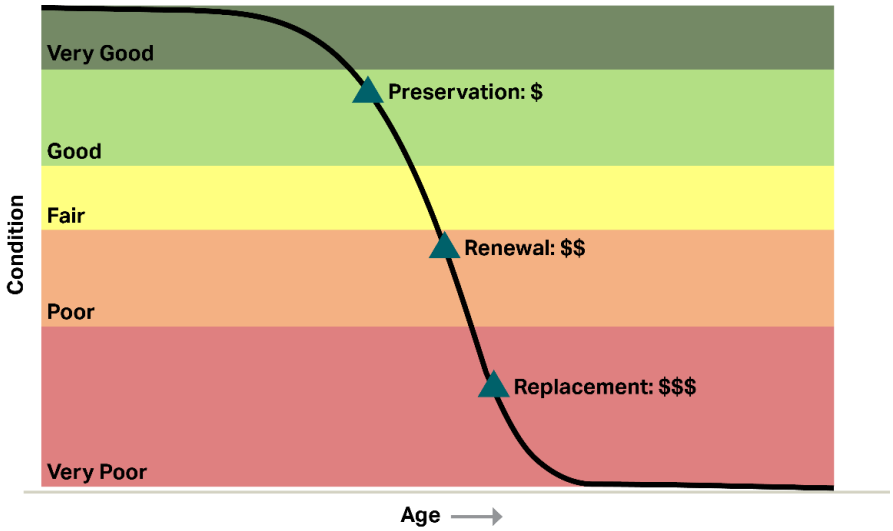


**Figure 4-2: Asset Deterioration Curve and Renewal Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City's risk management process, AECOM recommends taking into account the following key considerations:

1. **Navigating the Challenge of Excess Park Land**

   This situation arises from the necessity of striking a delicate balance between providing ample green spaces for the community and managing these areas efficiently. While parks play a crucial role in enhancing residents' quality of life, an excess may lead to challenges such as increased maintenance costs, potential underutilization, or other financial considerations. The council's desire to reduce park land reflects the need to align the city's resources with the optimal size and functionality of its park system. This ensures that the available land is used effectively and efficiently to meet the evolving needs of the community."

2. **Filling the Data Gaps for Parks Asset Inventory**

   The City's current inventory assessment emphasizes land officially named as parks, thereby excluding areas without this designation or zoning. Notably, instances exist where the City has zoned land for parks that currently lack an official name. In response to this, AECOM recommends that the City conduct a comprehensive review to assess the complete park inventory. Furthermore, AECOM suggests distinguishing between wood lots (non-servicing parks) and officially named parks to enhance the accuracy and nuance of data management.

# 5. Funding Needs Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment and replacement decisions for each subcategory of parks and cemetery assets.

**Section 5.2** massages the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

**Section 5.4** summarizes the City's parks and cemetery asset funding strategies and available grants for supporting the parks and cemetery AM lifecycle activities.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each parks and cemetery asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's parks and cemetery assets. A financial dashboard was developed to present the results of the lifecycle modelling (**Appendix A**).

The annual reinvestment needs for the parks and cemetery assets were determined based on their age and ESL in years in inflated dollar values and are based on the following assumptions:

- Base year: the base year used is 2024. Any historic asset valuations have been inflated using the experienced inflation rate.
- Analytical Period: the analysis period for capital reinvestment needs is from 2024 to 2043, and the analysis period for full funding needs is from 2024 to 2033.
- Funding Restriction: no funding restrictions are applied.
- Replace at the End of ESL: Assets will be replaced when their theoretical end of useful life is reached.
- Cost markup: 15% engineering (Design & Contract Administration) markup and 30% contingencies.
- Backlog Smooth-out: replace assets that are in Very Poor condition and have already exceeded their ESL, depending on their designated replacement year (Designated Replacement Year = Asset Install Year + Estimated Service Life), The backlog replacements were planned to be allocated within the first four years of the analysis period, determined by applying the following logic:
    - If the designated asset replacement year is between 1975 and 1990, they will be replaced on 2024-06-01.
    - If the designated asset replacement year is between 1991 and 2005, they will be replaced on 2025-01-01.
    - If the designated asset replacement year is between 2006 and 2010, they will be replaced on 2026-01-01.
    - If the designated asset replacement year is between 2011 and 2015, they will be replaced on 2027-01-01.
    - If the designated asset replacement year is between 2011 and 2015, they will be replaced on 2027-01-01.
    - If the designated asset replacement year is between 2016 and 2020, they will be replaced on 2028-01-01.

- If the designated asset replacement year is between 2021 and 2023, they will be replaced on 2029-01-01.

- Future Inflation: AECOM applied an annual inflation rate forecast to this analysis, as presented in **Table 5-1**

**Table 5-1: Inflation Rate for Different Years Throughout 20 Years**[5]

| Year | Inflation Rate |
|---|---|
| 2024 | 7% |
| 2025 | 6% |
| 2026 | 5% |
| 2027 | 4% |
| 2028 | 4% |
| 2029 | 3% |
| 2030 - 2043 | 3% |

- For the reinvestment of large polygon surface areas, such as parkland and soccer/football field surface, the partial surface patch repair and replacement are more feasible than the full replacement approach. In this case, the annual reinvestment needs for parklands and soccer/football field are estimated based on the assumption listed in **Table 5-2**.

**Table 5-2: Parks and Cemetery Asset Capital Reinvestment Assumptions**

| Asset Categories | Annual Reinvestment Rate (2024-2033) | Annual Average Reinvestment Cost (2024-2033) * | Assumption |
|---|---|---|---|
| Active Parkland | $200/Ha of parkland | $75,000 | $200/Ha of park land annually to cover the patch repair or partial replacement of hard pavement surface and lawn reseeding |
| Field Surface | 1% | $146,000 | 1% of the full replacement values annually to cover the patch repair or partial replacement of the field surface |
| Pointe De Chenes Park Drinking Water Treatment Plant | 1.5% | $12,000 | 1.5% of the full replacement values annually to cover the repair or partial replacement as needed |

**Note: The annual average reinvestment costs are presented in non inflated dollar value.*

- Capital Expansion and O&M Funding Needs: The annual new asset acquisition (expansion) funding and operation & maintenance (O&M) funding needs are forecasted by escalating the City of SSM's average historical expansion expenditure from 2019 to 2023 with the inflation rate forecast presented in **Table 5-1.**

- Asset Disposal Funding Needs: The annual disposal and decommissioning (disposal) funding needs are forecasted by annual capital reinvestment needs multiplied by the disposal rate, which is assumed as 1% in this exercise.

- The cost numbers are rounded to the nearest $1,000.

[5] AECOM Analysis, "Rising Inflation", June 2022, Retrieved in October 2022

# 5.2 Capital Reinvestment Need Analysis

The City's parks and cemetery assets require an average annual reinvestment of $3.9 million over the period 2024-2033 and $1.7 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $55.3 million over the next 20-year period. Notably, the reinvestment funding needs for the park structures and recreation account for the largest share, with first 10-year average of $1.8 million and $1.4 million, which incur the expenditure spikes in the years 2025, 2026, 2028 and 2029.

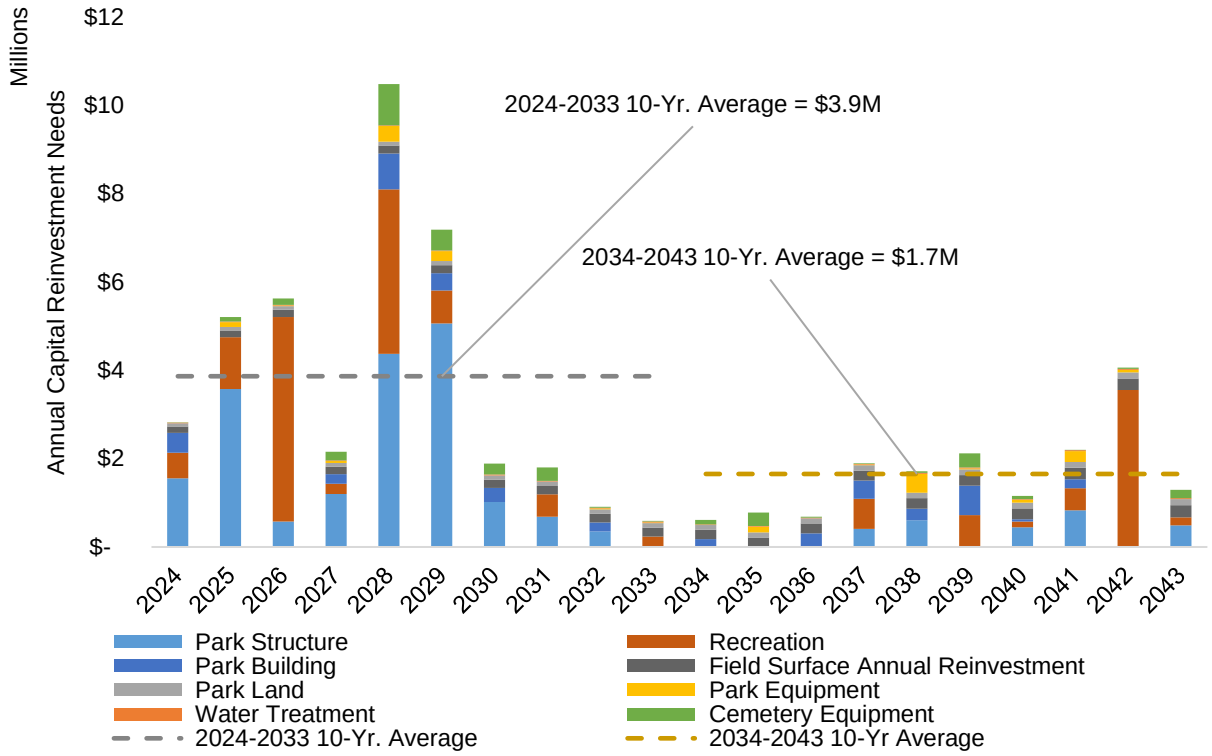


**Figure 5-1: Parks and Cemetery 20-Year Reinvestment Need**

The detailed 20-year reinvestment needs for parks and cemetery assets are presented in **Table 5-3** in inflated dollar values according to the business case values.

**Table 5-3: Parks and Cemetery Asset 20-Year Total and Annual Average Reinvestment Needs**

| Asset Class | 20-Year Average Annual Reinvestment Need (Inflated Dollar) | 20-Year Total Reinvestment Needs (Inflated Dollar) |
|---|---|---|
| Park Structure | $1,060,000 | $21,189,000 |
| Recreation | $880,000 | $17,584,000 |
| Field Surface Annual Reinvestment | $210,000 | $4,184,000 |
| Park Buildings | $224,000 | $4,461,000 |
| Park Land | $108,000 | $2,152,000 |
| Water Treatment | $18,000 | $351,000 |
| Park Equipment | $93,000 | $1,844,000 |
| Cemetery Equipment | $178,000 | $3,544,000 |
| **Total** | **$2,771,000** | **$55,309,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's parks and cemetery assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-2.** This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and steadier financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

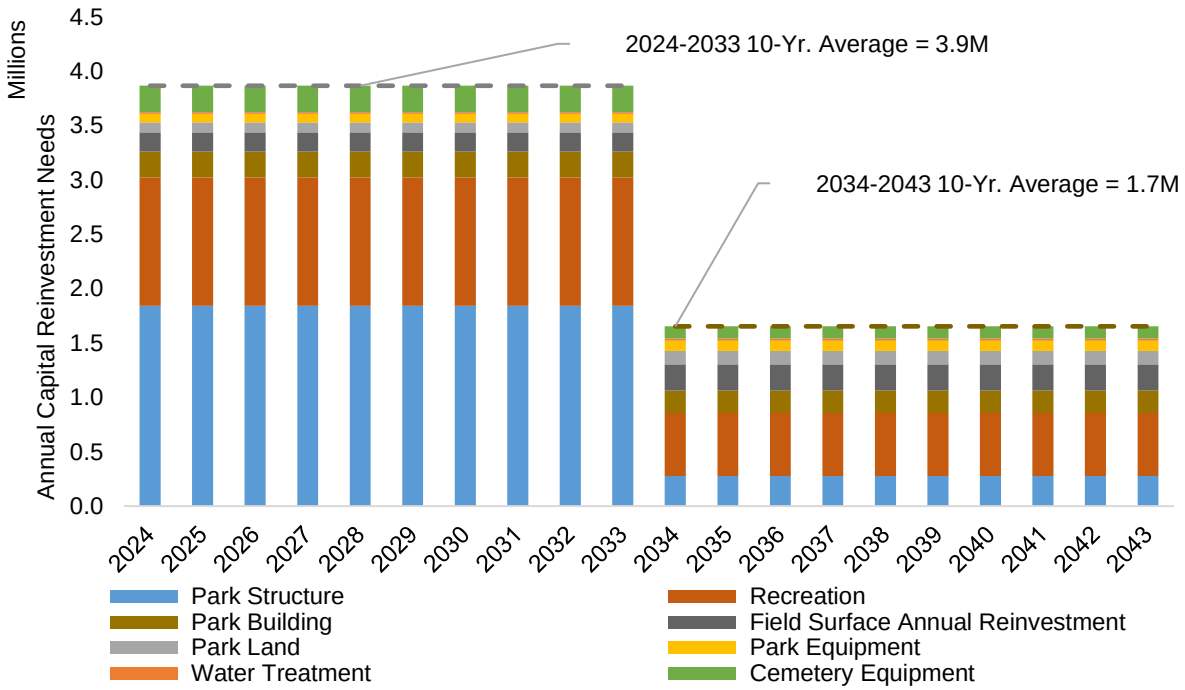


**Figure 5-2: Parks and Cemetery Asset 20-Year Smoothed Annual Reinvestment Needs**

For the assets already beyond their expected service life, their replacements (backlog) need to be prioritized within the years 2024 to 2029, based on their designated replacement years (refer to **Section 5.1**). The prioritization of the backlog replacements is the major reason for the significant difference between the 2024-2033 10-year average ($3.9 million) and the 2034-2043 10-year average ($1.7 million). **Figure 5-3** indicates the asset backlog replacement, on-time full replacement and annual reinvestment for the next 20 years. The total replacement values of backlogs for parks and cemetery assets are around $12.5 million (in 2024-dollar value), and over 80% of the backlog replacements are scheduled in the years 2028 and 2029, with expenditure of $6.1 million and $6.3 million (inflated dollar value), respectively.

Given that 43% of parks and cemetery assets are classified as "Poor" and "Very Poor" condition, with many surpassing their expected service life, the current average age (weighted by replacement value) of these assets stands at 21.7 years. The overall asset conditions will be improved with the completion of the backlog replacement, and the average age of the parks and cemetery assets reduced to 8.4 years in the year 2030, which is the lowest number in the next 20 years. The overall asset weighted average trends in the next 20 years is indicated in **Figure 5-3**.

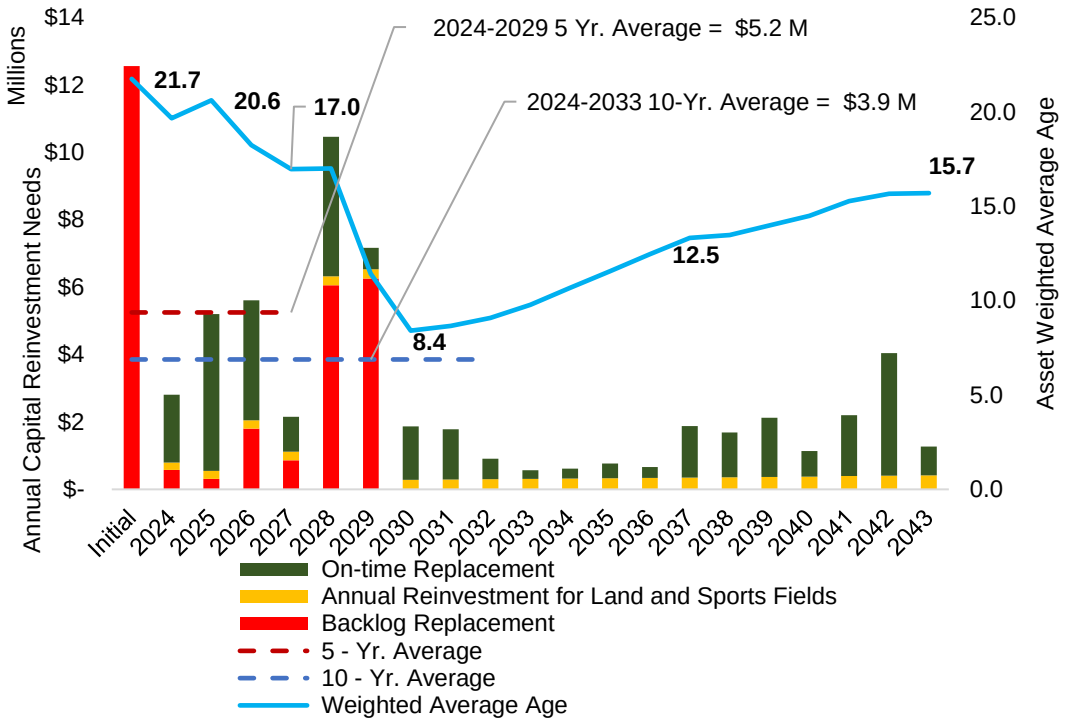


**Figure 5-3: Backlog Replacement, On-time Full Replacement and Annual Reinvestment for Parks and Cemetery Assets**

# 5.3 Full Funding Need Profile

**Figure 5-4** shows a full picture of the City's parks and cemetery funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual full funding needs were combined with the following:

- Capital reinvestment needs (**Table 5-3**)
- The annual O&M funding needs forecasted by escalating the City of SSM's average historical O&M expenditure with the inflation rate forecast presented in **Table 5-1**.
- The annual capital expansion funding needs forecasted by escalating the City of SSM's average historical capital expansion expenditure with the inflation rate forecast presented in **Table 5-1**.
- One percent of the annual replacement cost was added to account for the asset disposal cost. Note that *PS 3280 Asset Retirement Obligations*[6] is a new accounting standard covering asset retirement obligations that applies to all Canadian public sector entities that prepare their financial statements under PSAB.

With these additions, the City's parks and cemetery full funding requirement increases to approximately $113 million over the next 10 years, averaging $11.3 million per year in inflated dollar value.

[6] Public Sector Accounting Board (PSAB). (2021). PS 3280 - Asset Retirement Obligations.

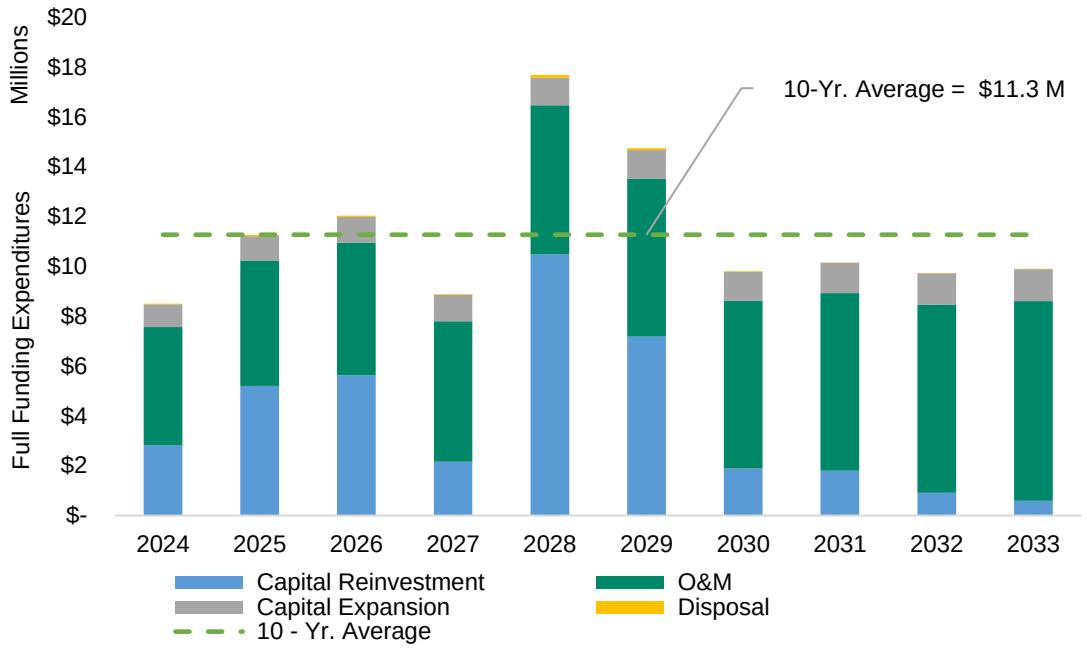


**Figure 5-4: Parks and Cemetery Asset Full Funding Needs**

## 5.4 Funding Strategies

The City secures funding for its park assets primarily through the property tax levy. As for the cemetery, the City is working towards achieving full funding for both capital and operating expenditures through user fees. Furthermore, the City actively ensures support for park infrastructure by engaging in grant applications and collaborative initiatives with community partners, agencies, and organizations. Impressively, the City has established a successful track record, garnering support from various groups and demonstrating a history of effective collaboration in their grant endeavors. Moreover, the City strategically engages with Federal grant sources, including the Canada Healthy Communities Initiative and Infrastructure Canada. In some instances, the City also secures multi-level funding for notable projects such as the downtown plaza and the Old Stone House.

In addition to the City's current funding sources, AECOM also suggests the following options that could be considered, acknowledging that the City's eligibility for these funds is subject to certain criteria:

- Canada Community-Building Fund (CCBF)
- Ontario Community Infrastructure Fund (OCIF)
- Green Municipal Fund (GMF)
- Municipal Asset Management Program (MAMP)
- Enabling Accessibility Fund (EAF)
- Northern Ontario Heritage Fund Corporation (NOHFC)

### 5.4.1 Canada Community-Building Fund (CCBF)

The CCBF, previously known as the Federal Gas Tax Fund, is a permanent source of upfront funding distributed twice a year to territories and provinces. The delivery of the CCBF to municipalities varies by province or territory, with allocation following a per-capita basis for provinces, territories, and First Nations[7].

The CCBF is administered in Ontario through a bilateral agreement with the Government of Ontario, the Association of Municipalities of Ontario (AMO), and municipalities. This program allocates approximately $816 million annually to 641 communities in Ontario, with an additional top-up of $816.5 million provided in 2020 to expedite communities' recovery from the COVID-19 pandemic. Notably, as of 2022, the City has received over $9 million through the CCBF, granting the City flexibility to strategically invest across 19 distinct project categories[8].

### 5.4.2 Ontario Community Infrastructure Fund (OCIF)

The OCIF is a program designed to support municipalities with small populations (less than 100,000), along with those situated in northern and rural areas. Its primary objective is to aid communities in overcoming challenges related to infrastructure maintenance and improvement while facilitating the development and updating of their asset management plans. Eligible communities receive annual allocations and have the option to accumulate these grants for up to five years to address substantial infrastructure projects. The fund is an essential component of the provincial government's commitment to fostering strong, resilient, and well-equipped communities across Ontario[9].

### 5.4.3 Green Municipal Fund (GMF)

The GMF is a financial initiative in Canada dedicated to supporting sustainability and environmental projects at the municipal level. Managed by the Federation of Canadian Municipalities (FCM), the GMF provides funding and resources to assist municipalities across the country in undertaking projects that contribute to environmental sustainability, energy efficiency, and the reduction of greenhouse gas (GHG) emissions[10].

In the context of parks and cemetery, the GMF allocates funds for feasibility studies and capital projects that allow local recreational and cultural facilities to achieve 50% GHG reductions within 10 years and 80% GHG reductions within the next 20 years. Some of the available funding opportunities are as follows:

- Study: GHG reduction pathway feasibility.
- Capital project: GHG impact retrofit.
- Capital project: GHG reduction pathway retrofit.

### 5.4.4 Municipal Asset Management Program (MAMP)

The MAMP is aimed at improving AM practices within municipalities. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program may offer funding to support the development or improvement of AM plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable AM practices[11].

[7] The Canada Community-Building Fund. (2022). Infrastructure Canada. Infrastructure Canada - The Canada Community-Building Fund. Retrieved on February 15th, 2024.

[8] Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts. (2021). Infrastructure Canada. Backgrounder: Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts - Canada.ca. Retrieved on February 15th, 2024.
[9] Ontario Community Infrastructure Fund. (2023). Ministry of Infrastructure, Ontario. Ontario Community Infrastructure Fund | ontario.ca. Retrieved on February 15th, 2024.
[10] Funding opportunities. (n.d.). Green Municipal Fund. Funding opportunities | Green Municipal Fund. Retrieved on February 14th, 2024.
[11] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 14th, 2024.

### 5.4.5 Enabling Accessibility Fund (EAF)

The EAF is a Federal government program aimed at supporting projects that enhance accessibility for individuals with disabilities. The fund provides financial assistance to eligible organizations for initiatives such as infrastructure improvements, renovations, and retrofitting to create more accessible spaces. Its goal is to contribute to a barrier-free and inclusive society by addressing physical barriers and promoting equal access in community spaces[12].

### 5.4.6 Northern Ontario Heritage Fund Corporation (NOHFC)

The NOHFC is an organization that provides financial support and promotes economic development in the northern regions of Ontario. Established to stimulate growth and sustainability, NOHFC offers funding for various projects, such as business expansion, job creation, infrastructure development, and community initiatives. Within the NOHFC, the Community Enhancement Program is an initiative aimed at supporting community-driven projects[13]. This program provides financial assistance for local initiatives that enhance community infrastructure, amenities, and services. Eligible projects may include the development or improvement of recreational facilities, community spaces, and essential services.

[12] About Enabling Accessibility Fund. (2023). Government of Canada. Enabling Accessibility Fund - Canada.ca. Retrieved on February 14th, 2024.

[13] Community Enhancement Program. (2024). Northern Ontario Heritage Fund Corporation. Community Enhancement Program | NOHFC. Retrieved on February 14th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 5-4**.

**Table 5-4: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory | • Continue to refine the asset inventory and close existing data gaps, to have a more accurate representation of the current state of the parks and cemetery assets; and, ultimately, to make more informed and defensible decisions.<br>• Incorporate and maintain all the inventory data within one database, for example, move the asset inventory recorded in various Word documents into the Excel spreadsheets.<br>• Trace the installation years of parks and cemetery assets.<br>• The City parks and cemetery team should allocate each asset within their physical locations and record the location information in the asset inventory. Such as recording all the basketball courts' addresses and the names of the parks where they are located. |
| 2. | Establish and implement a data information management strategy | • Asset data will be centralized, digitized and accessible to all staff.<br>• Annual updates for the state of infrastructure data attributes such as the asset inventory, including the age and condition of the assets.<br>• Staff will have the ability to collect and update asset data in the field and in real time.<br>• Workflows will be documented and digitized. |
| 3. | Develop a formalized parks and cemetery assets condition assessment process and use consistent condition grading schemes for these assets | • Currently, the condition of the parks and cemetery asset is not tracked with a well-developed asset condition rating grading system specialized for parks and cemetery assets.<br>• The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>• Perform condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council. |
| 4. | Refine the LoS Framework | • Collect current asset performance data for key performance indicators (KPIs) that are not currently being tracked.<br>• Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engage in discussions with key stakeholders to establish service level targets and identify associated costs to meet those targets.<br>• Once LoS targets have been decided upon, the City should develop strategies on how to meet service level targets, considering its existing operating environment (i.e., staff availability, current funding, resources, etc.).<br>• Develop a Customer Consultation Plan to engage the public and other stakeholders on the LoS framework and better understand customers' willingness to pay for enhanced service levels. |
| 5. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a comprehensive criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while low-risk assets could be accepted with caution. |

| Index | Improvement Initiative | Description |
|---|---|---|
| 6. | Establish a sustainable park and cemetery funding model that fits the needs of the community | • In light of the annual funding need outlined in **Figure 5-2** it is recommended that the City allocate an average of $3.9 million per year over the next 10 years for capital reinvestment in parks and cemetery. Additionally, a total of $6.2 million should be budgeted annually for O&M expenditures during the same period.<br>• Review financial modeling assumptions on reinvestment rate and replacement values and update the financial model with new information as it becomes available. The financial model is based on several key assumptions that could have a significant impact on the outcomes of the model. |
| 7. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication. |
| 8. | Update AM plans | • Updates to the performance measures, and targets for the LoS framework, every 2 to 5 years.<br>• Annual updates to the lifecycle strategies, including the O&M, renewal, upgrades, growth, and regulatory compliance strategies.<br>• Updates to the financial strategies, such as asset valuations, long-term capital plans, operating budgets, and revenue sources. |
| 9. | Grant and funding application program | • The City should initiate an internal program for developing grant applications tailored to organizational objectives and align to the criteria of various funding programs. (refer to **Section 5.4** for available grant options).<br>• Guidance includes:<br>- Aligning with grant-specific criteria: prepare the grant application align with the requirements, and place emphasis on the key aspects relevant to the grant objectives.<br>- Developing a grant application proposal: the application will be a project proposal that resonates with the grant agencies' goals, which should articulate clear objectives and expected outcome.<br>- Budget planning: the financial plans must resonate with the grant's objectives, presenting transparency in fund utilization and emphasizing the project's viability and long-term financial sustainability.<br>- Demonstrating feasibility and organization capacity: presenting a realistic project timeline, clear milestones, and a well-thought-out implementation plan.<br>- Compliance, Reporting, and Effective Project Management: a robust project management strategy should be devised, illustrating the City's capacity to effectively manage, oversee, and report on the project's progress, in accordance with the grant's stipulations.<br>- Preparing and Organizing Supporting Documents: these documents will be organized and presented in a manner that lucidly supports and enhances the application.<br>• Final Review and Submission Process: prior to submission, each application should undergo a thorough review to ensure it meets the specific criteria and guidelines of the respective grant program. |

# Appendix A Parks and Cemetery MS Excel Lifecycle Model and Inventory

# City of Sault Ste. Marie
# Solid Waste
# Asset Management Plan

August 2024



Delivering a better world

# Statement of Qualifications and Limitations

The attached Report (the “Report”) has been prepared by AECOM Canada Ltd. (“AECOM”) for the benefit of the Client (“Client”) in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents AECOM’s professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time..

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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop an asset management plan (AMP) to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an AMP to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protection services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Scope and Objectives

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's solid waste sites and assets, and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of Ontario Regulation (O. Reg.) 588/17.

Organizations that implement good asset management (AM) practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

The City has previously created a business plan to support the long-term operation and demand planning of the City's landfill assets and waste collection assets. This business plan has continuously evolved but is limited in its coverage of all infrastructure.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024 deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the LoS that the municipality proposes to provide, the lifecycle activities and associated costs needed to achieve those LoS, available funding, any funding shortfalls, and the risk of failing to meet the proposed LoS. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service (LoS) objectives, stakeholder identification, LoS framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Sections 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. **Figure 1-1** demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

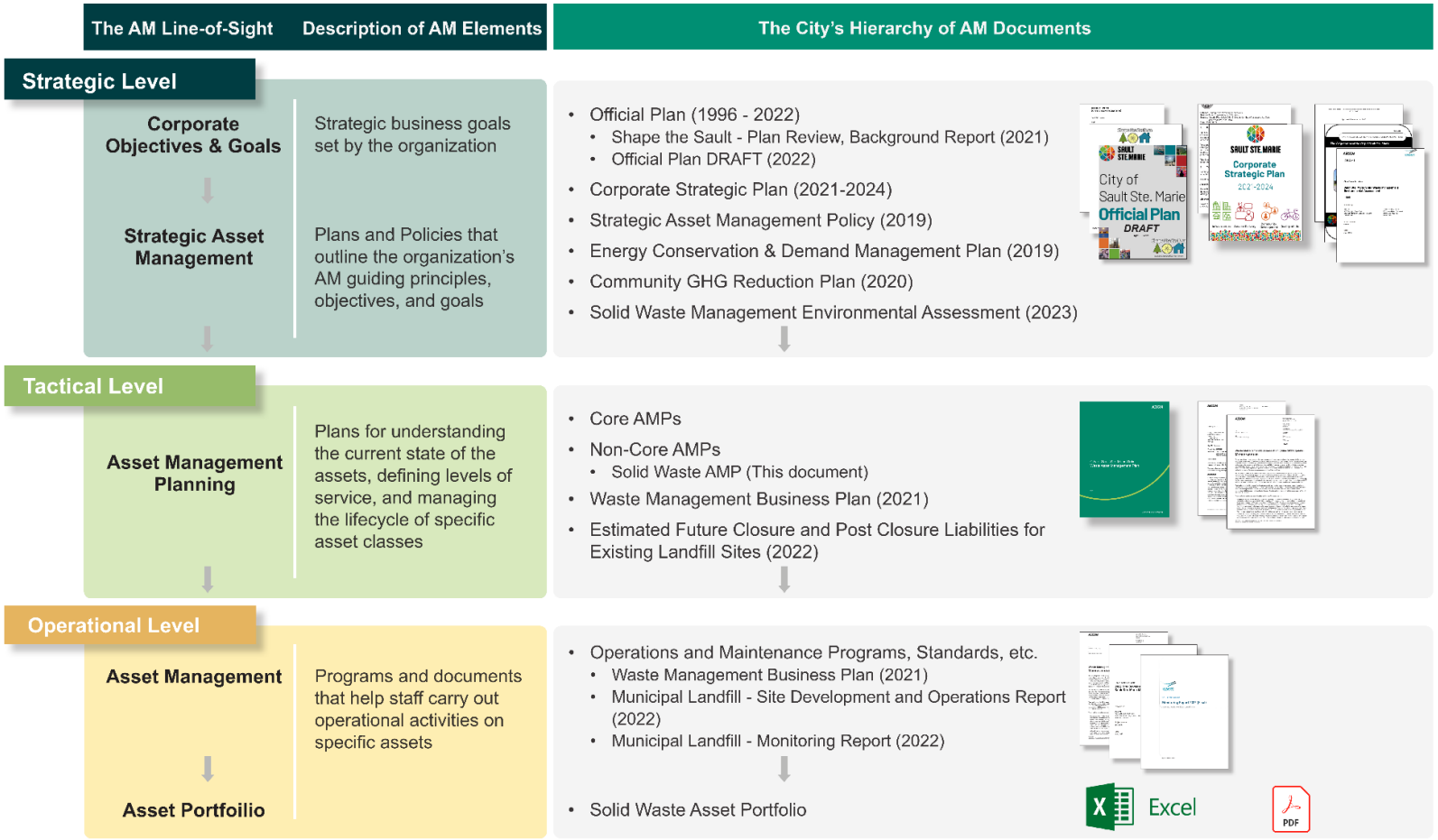


**Figure 1-1: The City's AM Line of Sight**

# 2. State of Infrastructure

Solid waste sites and assets encompass a diverse range of equipment crucial to the functionality, safety, and reliability of the City's solid waste sites and services. The City's solid waste assets include heavy equipment, fixed infrastructure (such as roads and pipelines), gas and leachate collection, landfill cell cap and liners, as well as various supporting assets and structures.

The inventory of solid waste assets is the first time the City has assembled a comprehensive catalog detailing the quantity, condition, and specifications of all of the relevant components within the City. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into the maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range asset management planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of solid waste assets, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

The inventory submitted and analyses within this AMP was created using the following sources:

- City of SSM (2021) Active Capital Assets
- City of SSM (2021) Business Plan revised June 28 2021, and November 2023 revision
- AECOM (2022) Site Development and Operations Report
- AECOM (2021) Final Business Plan Update Memorandum
- Dillon Consulting (2022) Monitoring Report (Final)
- AECOM (2023) Draft Final EA – June 30 2023
- City of SSM (2023) CMMS Work orders for Methane Field
- Comcor Environmental (2023) Annual Proposal
- Comcor Environmental (2023) LFGCS Field Inspection

In **Figure 2-1**, the hierarchy of solid waste assets is illustrated, showcasing 10 main categories: storm/ground water, sanitary, buildings, leachate, landfill gas, environmental monitoring, waste collection, landfill infrastructure, landfill equipment, and liners & capping. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's solid waste assets, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or track costs at the asset level or higher levels.

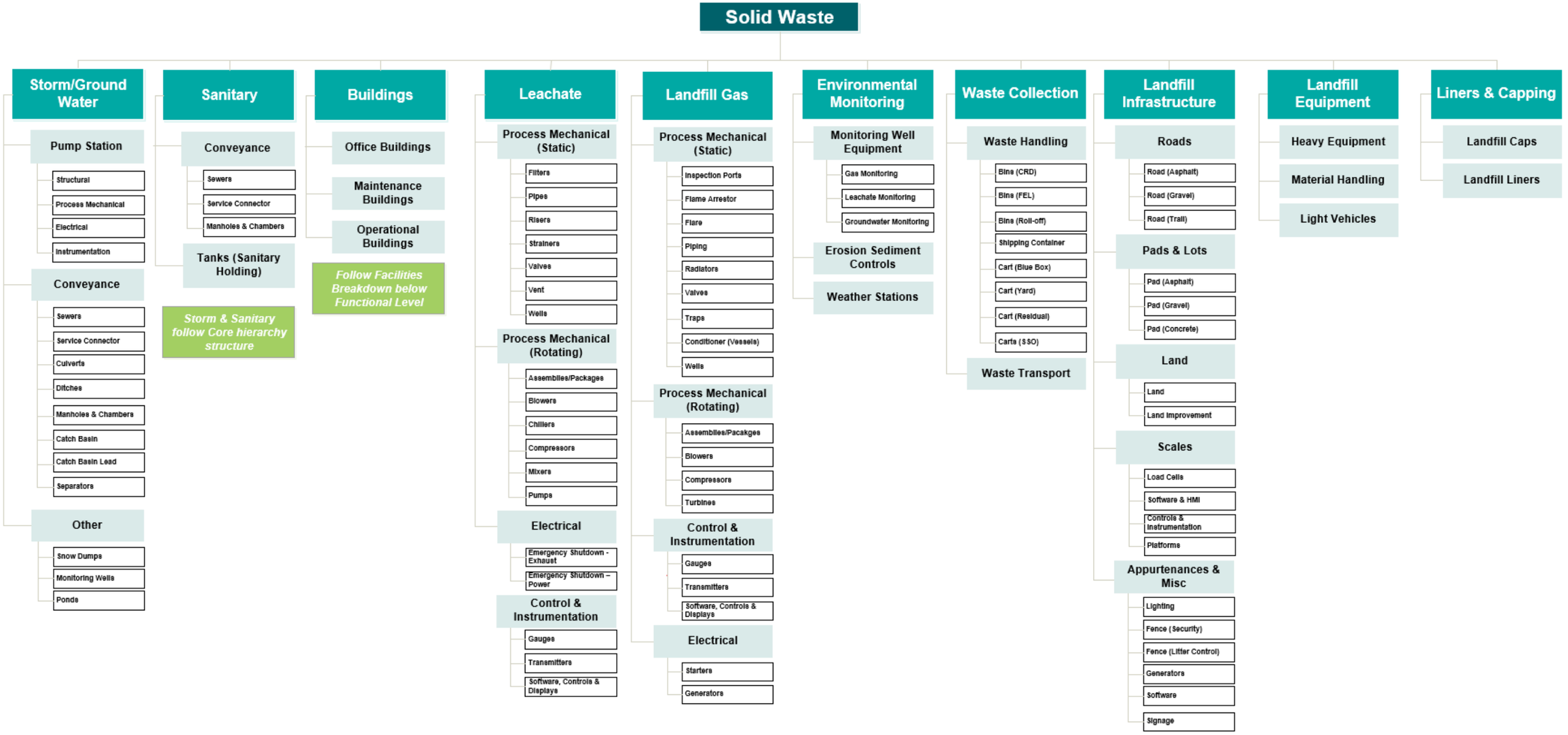


Figure 2-1: City of Sault Ste. Marie Solid Waste Asset Hierarchy

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

**Table 2-1** presents the summary of the City's solid waste inventory.

**Table 2-1: Solid Waste Inventory Summary**

| Asset Group | Asset Category | Count (entries in inventory) | Quantity (sum of assets in inventory) | Unit |
|---|---|---|---|---|
| Solid Waste | Storm/Ground Water | 4 | 1 / 411 | ea., m |
| | Sanitary | 1 | 370 | m |
| | Buildings | 6 | 493 | $m^2$ |
| | Leachate | 27 | 677 | ea. |
| | Landfill Gas | 29 | 1317 | ea. |
| | Environmental Monitoring | 9 | 17 | ea. |
| | Waste Collection | 21 | 27,982 | ea. |
| | Landfill Infrastructure | 18 | 15,126 / 1,518,615 / 2,838 | km, $m^2$, ea. |
| | Landfill Equipment | 18 | 21 | ea. |
| | Liners & Capping | 1 | 162,000 | $m^2$ |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices or construction costs. This value represents the monetary amount required to reproduce or procure an asset, equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

**Table 2-2** presents the unit replacement cost and the total replacement value for solid waste asset categories within the City. The most significant portion of the total replacement cost is for landfill infrastructure ($77 million). This includes approximately $70 million of estimated land costs due to the consumable nature of land in solid waste use. The combined replacement value for all these categories amounts to approximately $114 million.

For the purposes of this AMP there are several approaches that can be taken towards the valuation of the land costs. Options considered include the current market value based upon similar land sales (used as a basis in this AMP), the Municipal Property Assessment Corporation (MPAC) value, and the capacity use cost:

1. Use of the current market range for industrial land (found to be between $1.2 and $3.5 per square foot in January 2024 based upon available market data for similar land). Due to limitations on land and the relatively strong negotiation position of any seller the 75$^{th}$ percentile value of this range can be used. This is the preferred option but does have the drawback of lack of consideration for full replacement of landfill assets as a result of relocation.
2. MPAC value. This value is dated January 1, 2016 and is done on a cost approach basis. This value is unreliable as the majority of land improvements cannot be seen by the MPAC and the land value is outdated. The current land value is $1.35 million for the main landfill area (not including additional land) which equates to approximately $0.09 per square foot which is significantly below the current market range for industrial land. This option also has a lack of consideration for full replacement of landfill assets as a result of relocation.
3. Capacity usage cost. By determining the cost per cubic meter of landfill capacity and forecasting the volume used annually a pro-rata cost for replacement land per year can be arrived at. The drawback to this value is that

while it can assist in apportioning expenditure to land replacement value it does not give a forecast expenditure point for acquisition which is a key component of the financial forecast.

The capacity use cost would provide an accurate cost for the total replacement of land and the requisite upgrades but currently there is insufficient information to determine and end date for the useable life of the land as mining operations are planned to prolong life. Should the City ever reach a point where no more life extension is deemed possible the capacity use cost could be used as an approximate estimate of required land value and upgrades to acquire and make a site fit for use.

It should be noted that the total replacement values have been marked up by 45%, out of which 20% accounts for engineering and project management cost and 25% for contingency cost. This is the upper range for mark up and is used due to the immaturity of the asset inventory. As the inventory is used and further refined the City may decide to reduce the mark up applied to replacement values.

**Table 2-2: Current Replacement Value**

| Asset Group | Asset Category | Unit Replacement Cost ($/Unit) | Total Replacement Value (2024) |
|---|---|---|---|
| Solid Waste | Storm/Ground Water | $50 - $70,000 /m and ea. | $1,177,000 |
| | Sanitary | $380 – $100,000 ea. | $204,000 |
| | Buildings | $161 - $268 / $m^2$ | $2,582,000 |
| | Leachate | $500 - $28,750 ea. | $2,501,000 |
| | Landfill Gas | $285 - $48,175 ea. | $4,135,000 |
| | Environmental Monitoring | $540 - $5,600 ea. | $372,000 |
| | Waste Collection | $4300 - $1,011,345 ea. | $6,651,000 |
| | Landfill Infrastructure | $47.73 - $1,200,180 / $m^2$ and km | $76,342,000 |
| | Landfill Equipment | $253.41 - $458,471 / m and ea. | $5,052,000 |
| | Liners & Capping | $64 / $m^2$ | $14,935,000 |
| **TOTAL** | | | **$113,951,000** |

The asset sub-categories with the largest replacement costs not including land are summarized in **Table 2-3**. It is noted that the landfill caps are unlikely to be replaced under the current operating model and will likely by only maintained and repaired.

**Table 2-3: Current Replacement Value Sorted From High to Low by Asset Category**

| Asset Category | Asset Sub-Category | Total Replacement |
|---|---|---|
| Liners & Capping | Landfill Caps | $14,935,000 |
| Landfill Equipment | Heavy Equipment | $3,746,000 |
| Waste Collection | Waste Handling | $3,619,000 |
| Landfill Infrastructure | Roads | $3,238,000 |
| Waste Collection | Waste Transport | $3,032,000 |
| Landfill Gas | Process Mechanical (static - LFG) | $2,879,000 |
| Leachate | Process Mechanical (static - LEA) | $2,462,000 |
| Buildings | Maintenance Buildings | $1,727,000 |
| Landfill Infrastructure | Pads & Lots | $1,465,000 |
| Landfill Equipment | Material Handling | $1,306,000 |

### 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets or the assumed year if not available and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modeling may be justified. Conversely, for low-value assets, the cost of deterioration modeling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at an acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Operating Conditions and Demands:** Cell usage is determined by how much waste is produced by the City and its residents. With increased focus on recycling (through the source separated organics plant) and reuse the cell usage could be reduced. Thus, the actual operating “age” of the asset is reduced. It should also be noted that estimates of the volume of industrial and commercial wastes deposited at the SSM landfill are heavily impacted by the regulation, tipping fees and Canadian to US dollar exchange rate. Due to these, significant producers of waste are able to dispose for a lower cost in the United States.
- **Environment:** Some assets are exposed to very aggressive environmental conditions (e.g., corrosive chemicals), while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently. The City’s experience of the typically more aggressive services within the landfill (such as leachate) are still at the upper end of estimated serviceable life compared to other landfills within Canada. As the waste disposed of becomes more refined the corrosive nature of the landfill is expected to change although the extent and rate cannot be forecast.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset. Critical assets are maintained (some through service contracts) but many are yet to experience failure and require replacement.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical. The majority of solid waste assets are solid infrastructure that does not become technologically obsolete. Those assets at risk are software systems and instrumentation (such as the weigh scales). Some areas of technology may arise and become legislatively necessary such as landfill gas emissions control (either through recapture or flaring) or odour control.

**Figure 2-2** shows the weighted average asset age and RSL as a proportion of average ESL for the asset subcategories. It is recommended to collect accurate installation date information for all assets and include it in the next iteration of the AMP. There are several classes that are approaching or at the end of their ESL, however the ESL used in this AMP are reduced values of those used in the core asset AMPs due to increased rate of wear. These values may be increased based upon the experience of the City for all solid waste assets and therefore may present an improved asset condition.

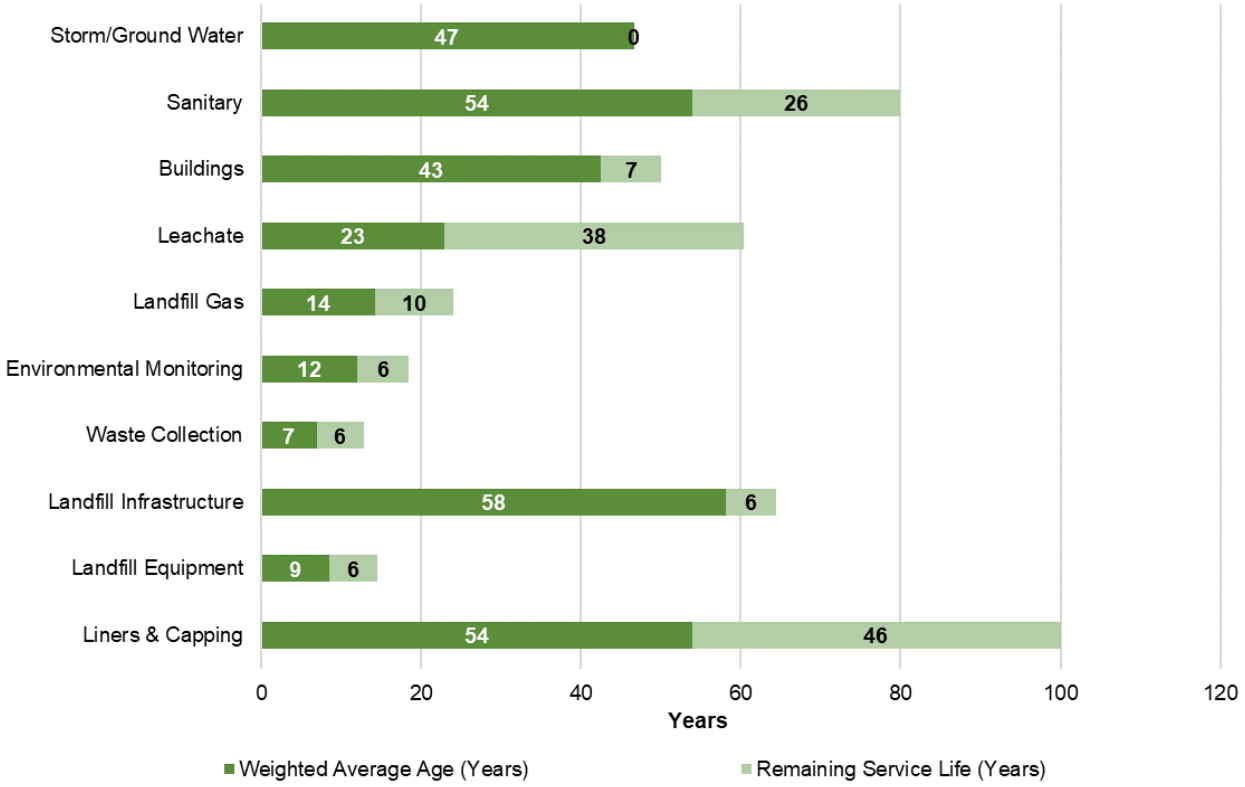


**Figure 2-2: Solid Waste Asset Weighted Average Age and Remaining Service Life**

## 2.2.4 Asset Condition

There are no regular field condition assessments for any solid waste assets that produce reliable condition gradings for AM purposes. To fill the gap with an interim data set to enable any financial forecasting to take place, the two-parameter Weibull distribution function was used to assess the current condition and to project the future condition of the City's solid waste assets. The Weibull distribution has been used extensively in reliability studies and lifetime prediction models in industries ranging from automotive to the oil & gas and provides a suitable distribution for this type of analysis.

The underlying premise of the Weibull-shaped deterioration is that while some assets fail prematurely due to severe conditions or improper installation, other assets are very long-lived and function well beyond their theoretical ESL. In order to perform a high order network-level analysis, it was assumed that assets would fail (and require replacement) within a deterioration envelope / curve approximated by a Weibull probability distribution. The two-parameter Weibull cumulative distribution has two parameters for scale and shape, as set out in Equation [1]:

$$f(x;\alpha,\beta) = e^{-\left(\frac{x}{\beta}\right)^{\alpha}} \quad [1]$$

Where: $x$ = Age
$\alpha$ = Shape parameter (or slope)
$\beta$ = Scale parameter

A set of Weibull cumulative distribution functions were leveraged to simulate a set of deterioration curves for assets with different ESLs as shown in **Figure 2-3**.

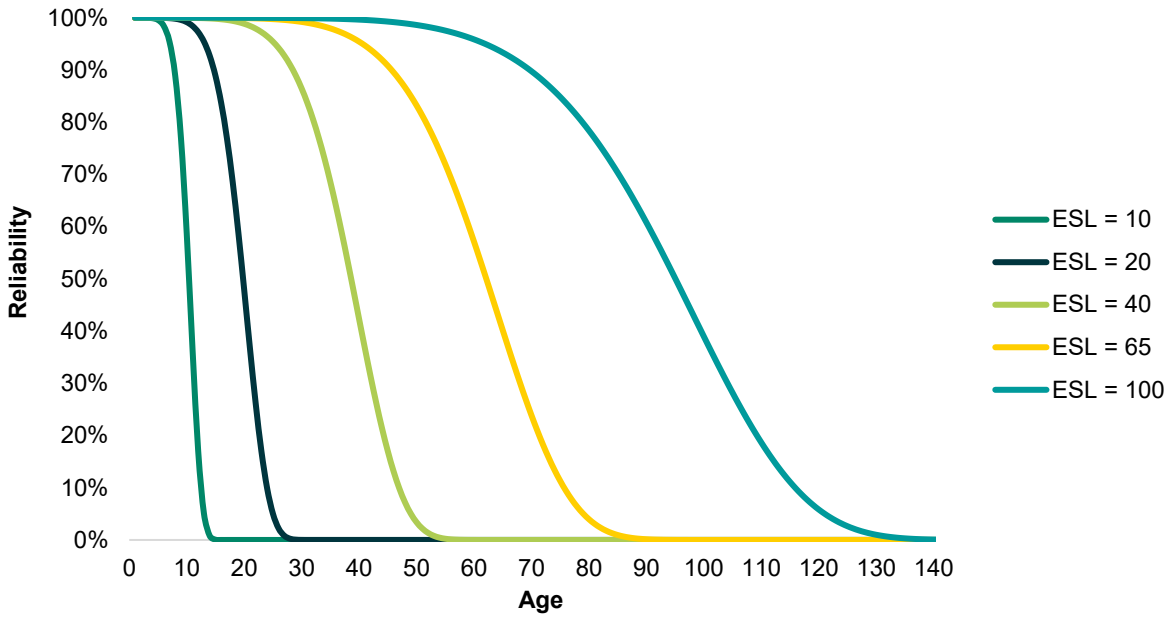


**Figure 2-3: Asset Deterioration Curve Samples**

**Table 2-4** and **Figure 2-4** present the condition ratings of the City's solid waste assets with respective replacement values. As stated previously, a substantial number of roadway appurtenances lack installation date information. A small data gap exists (amounting to less than 0.01% of replacement value) with these assumptions based on a small shortfall in available data for 3 items, these assets are labelled as "Unknown" condition. The assumed condition ratings span from "Very Good" to "Very Poor," with "Very Good" and "Good" collectively contributing 90% of the overall replacement value.

It is vital to note that due to the inclusion of land value within the total replacement value of assets due to its consumable nature, this represents a significant percentage of replacement value. Once this is removed from consideration the relative percentage of replacement value of assets graded in Poor condition increases from 9% to 24%.

As a considerable assumption for the basis of this AM plan it is recommended that the City consider a routine condition assessment program to increase the reliability of condition grades and therefore also increase the reliability of the financial forecasts.

**Table 2-4: Solid Waste Condition Summary**

| Rank | Condition Rating | Total Replacement Value | % of Total Replacement Value | Replacement Value excluding land cost | % of Replacement Value excluding land cost |
|---|---|---|---|---|---|
| 1 | Very Good | $38,329,855 | 34% | $32,195,625 | 73% |
| 2 | Good | $274,714 | 0% | $274,714 | 1% |
| 3 | Fair | $64,779,454 | 57% | $936,561 | 2% |
| 4 | Poor | $10,008,976 | 9% | $10,008,976 | 23% |
| 5 | Very Poor | $531,962 | 0% | $531,962 | 1% |
| 6 | Unknown | $0 | 0% | $0 | 0% |
| **TOTAL** | | **$113,924,960** | **100%** | **$43,947,838** | **100%** |

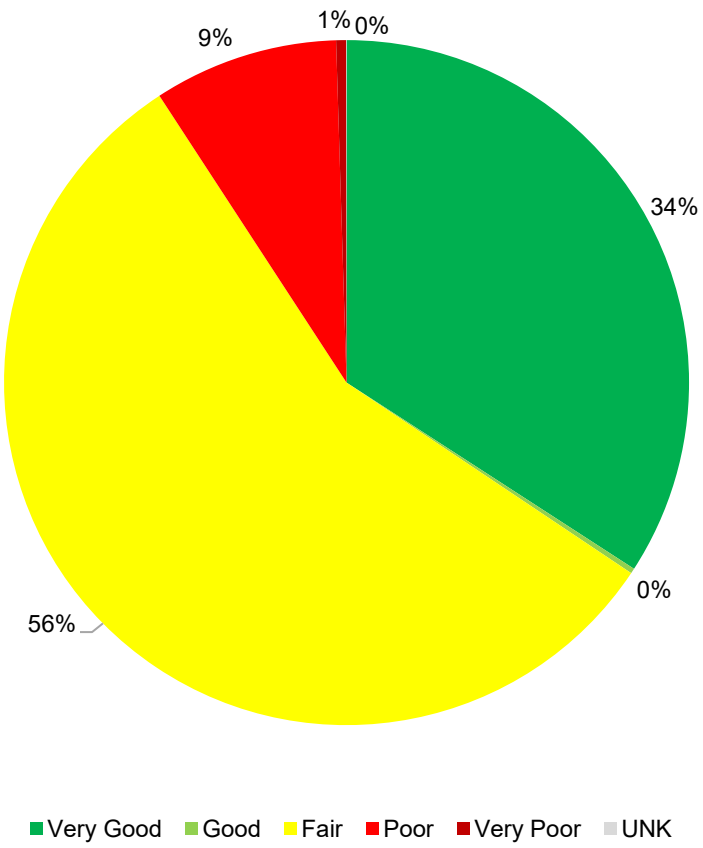


**Figure 2-4: Solid Waste Asset Condition Weighted by Replacement Value**

**Figure 2-5** demonstrates the condition of the assets based on asset subcategories and their respective replacement values. It is important to note that the land replacement costs ($64 million in Fair condition and $6 million in Very Good condition) are removed to allow better resolution of other assets. The replacement cost per condition is reliant on the calculated condition demonstrated previously. The largest groups of assets in Poor and Very Poor condition are found in buildings, waste collection, leachate, landfill infrastructure and landfill equipment.

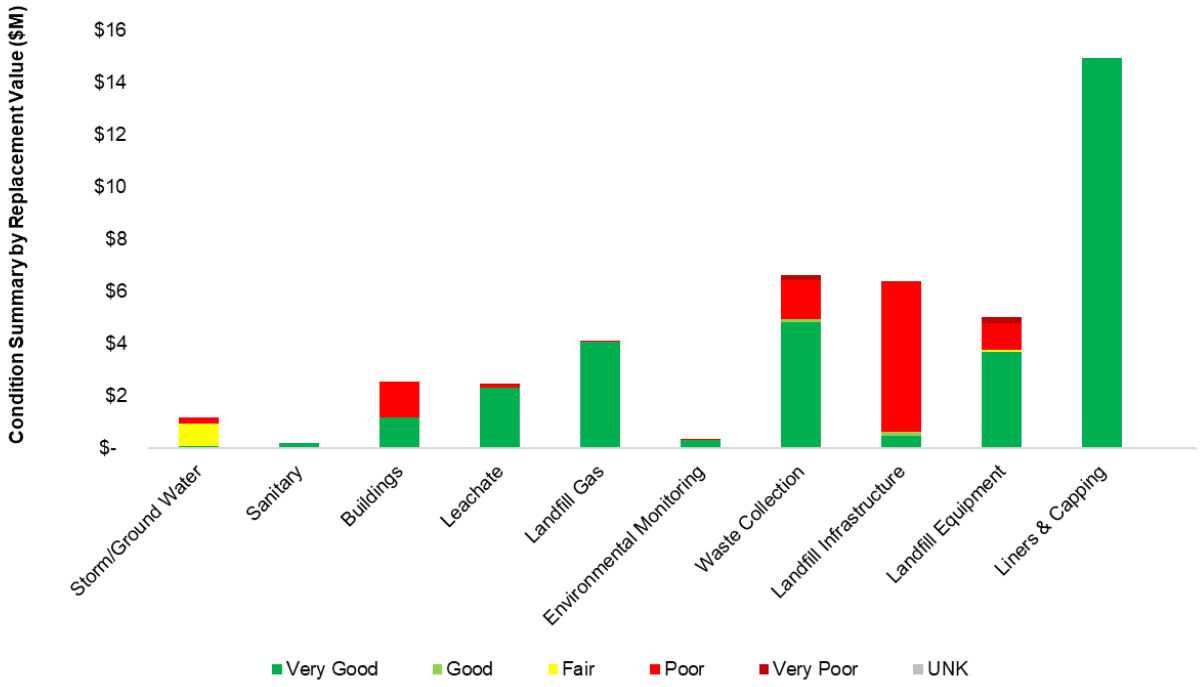


**Figure 2-5: Replacement Value per Condition and Category**

The top items in Very Poor condition are as follows:

1. Roll off bin containers (purchased 1998). Cost $0.21 million. Confirm if assets are still active and if so its current condition.
2. Sidewalk tractor with plow. Cost $0.16 million. Confirm if asset is still active and if so its current condition.
3. Odour control turbine costing $78 thousand. No installation date was provided. Confirm installation date and current condition.
4. Leachate Wells and Pumps costing $58 thousand. The acquisition or installation data assumes these are original. Confirm if asset is still active and if so its acquisition and installation date and current condition.

It should be noted that groundwater well condition has been estimated as Fair in the absence of detailed condition assessment and with consideration for the fact that the 40 currently in use can be used adequately.

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's solid waste assets were not previously stored in a single inventory. The multiple spreadsheets and GIS databases that did exist only housed a partial listing of the City's assets. This project has used the 3rd party reports provided to AECOM such as the annual monitoring report, the environmental assessment and the annual site development report, as well as consulting the authors of those reports to build the first solid waste asset inventory. Additionally, it has addressed and filled gaps in key data where available, such as expected service life and replacement costs based upon the City's own experience. This has been supplemented by additional data sources such as RS Means and experience from other solid waste operations.

Table 2-5 provides a summary of data completeness levels in the compiled solid waste inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-5: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Solid Waste** | 34% | 98% | 81% | 98% | 98% | 96% |

Note that installation date value does not include any asset with a date of installation equal to January 1, 1970 as this value is used as a placeholder based upon the original construction to baseline any asset installations not available.

Improvement activities that support continuous improvement of the asset inventory are:

- Asset ID: Add asset ID to new assets identified in the asset inventory and not previously recognized in the list of capital assets.
- Installation year: It is recommended to collect accurate installation date information for all assets and include it in the next iteration of the AMP.
- Installation date: Review all assets with a 1970-01-01 installation date and refine as far as practicable based upon available information.
- Condition Assessment: Consider a routine condition assessment program.

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the solid waste assets. Table 2-6 provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data. A brief summary and explanation of the available data can be seen in Table 2-7.

**Table 2-6: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

**Table 2-7: Asset Data Confidence**

| Asset Group | Inventory Confidence | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Solid Waste** | NA | A | C | E | B | B |

- Location data has been reviewed and confirmed by the City. The majority of asset entries are located within the fenced boundary of the City's main landfill site. By total% a significant volume are at unique locations not recorded as they are individual bins provided to City residents, as a result these location are not entered or considered.
- Installation dates as mentioned previously have been assumed to be 1970-01-01 where not available. The accuracy of the data to the year of installation where available is high but over 20% are assumed resulting in a lower confidence grade.
- Condition assessment data is graded E as all is extrapolated from the installation data (which itself has a confidence grade of C).
- Expected service life is deemed to be reliable as it is founded on available data accumulated for such a purpose (professional construction cost estimating software) and is supplemented with the City's own experience for specific assets that are not on available databases.
- Replacement cost is also graded reliable as it is derived from a combination of professional construction cost estimating software and supplemented with the City's own purchasing data. To include a tolerance for the imperfect data the upper range for mark up is used due to the immaturity of the asset inventory. As the inventory is used and further refined the City may decide to reduce the mark up applied to replacement values.

## 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[1]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-6**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

**Figure 2-6: Asset Information Lifecycle**

[1] TechTarget Network, Definition: Data Life Cycle, 2020.

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data, but to migrate and merge data from other sources.
    - New assets for solid waste should be consistently added to the inventory and a minimum required data set defined to maintain inventory accuracy and reliability.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring a new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
    - Assets are typically stored in either the CMMS or the GIS. For solid waste assets, due to the relative lack of linear infrastructure and the fact that the majority of assets are within the fence line, and those that aren't are located at private residences the GIS is not required but should be considered for use to align with other asset classes.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
    - Currently no analysis of the use of solid waste assets is carried out. Use of the core asset AM plans (such as sanitary and water) and mature inventoried non-core (such as fleet) should be considered to drive a better understanding of solid waste asset performance. This includes improved understanding of estimated serviceable life and true replacement cost value from the City's experience.
- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:
    - Poor asset performance due to lack of information and understanding of asset behaviour.
    - Non-compliance with statutory regulations or safety requirements.
    - Safety incidents due to risks not being identified or reported.
    - Asset failure due to gaps in maintenance planning.
- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives, and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
    - Consider what data should be archived and articulate the reasons behind the archival decisions.
    - Examine any legal obligations pertaining to the retention of data records.

  - Determine the appropriate duration for retaining different categories of data records.
  - Evaluate the risks associated with the inability to retrieve specific data records.
  - Specify the authorized individuals or entities who should have access to archived data records.
  - Establish the expected timeframe for retrieving archived data records.
  - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.

  When assets are formally disposed of, their entry in the inventory should be archived to maintain data integrity and to further build the City's understanding of its waste assets. Several instances of inactive assets were found during the creation of the inventory from available sources.

- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data "squirrelling", due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization's data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.
  - The retention period is driven by best practice for solid waste as the life of the asset is in far in excess of defined regulation or profession bylaw (such as Engineering document retention).

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report their current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and non core assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[2] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1.** Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

**Table 3-1: The City’s Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe, and accessible for all ages and abilities (the “8 to 80 Cities” concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |

[2] City of Sault Ste. Marie. 2021. Comprehensive Background Report.

| Overarching Themes | Corporate Objective |
|---|---|
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the city's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the City's history, diverse communities, and natural and cultural heritage, with the Downtown as the City's core destination for arts and culture. |

## 3.3 Stakeholder Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for solid waste during the LoS workshop held with City staff. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage. The City's key stakeholder groups are identified below:

- Residential Customers. For example, single family homes for waste collection and landfill usage. Multifamily homes are not considered as a stakeholder for waste collection as City bylaws require their waste collection to be contracted to an external agency.
- Industrial, Commercial & institutional (ICI) Customers. The most considerable potential customer from an ICI perspective currently does not utilize City facilities. Currently, exporting the waste to the USA is a more cost-effective solution. Should the exchange rate swing considerably or there is external regulatory change limiting waste transport across the border then ICI usage of the landfill may increase. This increase is accounted for as the worst-case scenario in the City's business plan.
- Regulatory Agencies.
- Neighbouring Municipalities.
- Developers.
- First Nations
- Environmental Groups
- Internal City Departments

### 3.3.1 Legislated and Regulatory Requirements

Solid waste assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., clean drinking water and safe roads, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**. Monitoring and development programs relevant to solid waste assets are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Federal | Provincial |
|---|---|
| • Canadian Environmental Protection Act (CEPA)<br>• Canadian Environmental Assessment Act (CEAA)<br>• Canadian Food Inspection Agency (CFIA)<br>• Migratory Birds Convention Act and Regulation<br>• Fisheries Act<br>• Fertilizers Act<br>• Environmental Contaminants Act<br>• Transportation of Dangerous Goods Act<br>• Federal Weight and Measures Act<br>• Canadian Food inspection Agency for composting | • Environmental Protection Act (EPA)<br>– Ontario Regulation 347 – General – Waste Management<br>– Ontario Regulation 232 – Landfilling Sites<br>– Ontario Regulation 267 – Compost<br>– Ontario Regulation 103 – Industrial, Commercial and Institutional Source Separation Programs<br>• Waste Diversions Transition Act (WDTA)<br>• Pesticides Act<br>• Ontario Drainage Act<br>– Ontario Water Authority Ontario<br>▪ Water Resources Act<br>▪ Ontario Regulation 903 – Wells<br>▪ Regarding monitoring of wells<br>• Resource Recovery and Circular Economy Act<br>– Food and Organic Waste Policy Statement |

### 3.3.1.1 Regulatory Change Impacts

The Food and Organic Waste Policy Statement (2018)[3] was issued to provide policy direction in reaching Ontario's interests of a circular economy. The policy statement aims to support the province's goals of zero waste and zero greenhouse gas emissions from the waste sector. In support of these goals, the policy statement has established waste reduction and recovery targets for municipalities and relevant sectors within Ontario. The policy statement targets and timelines relevant to the City are summarized below in **Table 3-3.**

The impact of this change has led the City to plan and initiate the design and construction of a Single Sourced Organics (SSO) facility (also referred to as the Biosolids Management Facility), the cost of which is split across City departments.

**Table 3-3: Food and Organic Waste Policy Statement Targets**

| Person or entity | Targets and Timelines |
|---|---|
| Municipalities subject to policy 4.1 | 70% waste reduction and resource recovery of food and organic waste generated by single-family dwellings in urban settlement areas by 2023 |
| Multi-unit residential buildings subject to policy 4.10 | 50% waste reduction and resource recovery of food and organic waste generated at the building by 2025 |
| Industrial and commercial facilities subject to policy 4.14 | 70% waste reduction and resource recovery of food and organic waste generated in the facility by 2025 |
| Industrial and commercial facilities subject to policy 4.15 | 50% waste reduction and resource recovery of food and organic waste generated in the facility by 2025 |
| Educational institutions and hospitals subject to policy 4.18 | 70% waste reduction and resource recovery of food and organic waste generated in the facility by 2025 |

- Additional benefits of the new facility are summarized as follows:
- Biosolids processing will increase projected landfill longevity and reduce the impact of the shortage of earthen cover materials for use at the landfill.

[3] Food and Organic Waste Policy Statement. (2018). Pursuant to section 11 of the Resource Recovery and Circular Economy Act (2016). Government of Ontario. https://www.ontario.ca/page/food-and-organic-waste-policy-statement. Retrieved on March 15, 2024.

- Mitigation of off-site environmental impacts , especially odour, water contamination, dust, noise and vermin.
- The design has sufficient redundancy and capacity to allow for routine maintenance of all equipment, equipment breakdowns and operational anomalies.

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 only identifies levels of service metrics for core assets. A number of key LoS performance measures for solid waste assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5**.

## 3.5 Levels of Service Performance Metrics

- The City's current practices to meet regulatory levels of service:
- Tracks odour complaints, and reports to the Ministry of Environment, Conservation and Parks as necessary,
- Established a biosolids management plan to improve odour management,
- Conducts water monitoring for surface water and at groundwater wells,
- Conducts gas monitoring.

Through a review of the legislated and regulatory requirements required for solid waste and collaboration with the City during the LoS workshop, three (3) LoS performance metrics were determined for solid waste, as presented in **Table 3-4.**

**Table 3-4: Solid Waste Levels of Service Performance Metrics**

| Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) |
|---|---|---|---|---|
| 1. Solid Waste | Environment & Sustainability | Curbside residential waste per capita | Tonnes / Capita | Yes |
| 2. Solid Waste | Environment & Sustainability | Amount of waste diverted from landfill at the Household Hazardous Waste Depot | % | Yes |
| 3. Solid Waste | Environment & Sustainability | GHG emissions | Tonnes | Yes |

## 3.6 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.

- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

## 3.7 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social and technological landscape.

A summary of factors identified from the LoS workshop that would impact Solid Waste service levels include, but are not limited to, the following:

- **Growth**. Projected growth anticipated to come predominantly from multi-family house holds which are a lower contributor to landfill capacity due to bylaw impacts previously stated and commercial design making by ICI stakeholders. General population growth is expanded upon below.
- **Inflation and Cost of Living**. Reduced disposable income due to interest rate rises and inflation for the life of this plan will negatively impact waste production as stakeholders become less likely to replace and more likely to repair, repurpose or reuse items that would typically go to landfill.
- **Technology**. Increasing use of electronics containing printed circuit boards will increase the volume of waste that cannot be recycled.
- **Electrification**. Predicted to have minimal impact on waste generation but will impact the waste collection fleet and the fueling costs. Regulations published by Federal Government in 2023 laid out plans to phase out passenger vehicles powered only by gasoline or diesel in 2035. As these vehicles are replace the City should be mindful of the increased maintenance and purchase costs of Hybrid Electric Vehicles (HEV) and Plug-In Electric Vehicles (PEV).
- **Funding level**. The future levy determined by the City for use will have an impact on total usage and fly-tipping around the city.
- **Climate Change**. Increase rainfall levels may require additional leachate control should levels occur beyond that which can be processed by existing equipment.
- **Per- and Polyfluorinated Substances (PFAS) contamination.** Limited impact to solid waste due to low occurrences on City land (except Fire service training pad near the airport).
- **Regulatory Changes**. Future changes to the source separated organics and other recycling regulation will impact the demand for solid waste service and the type of services required.

On November 2, 2021, the City's Planning Division released the Comprehensive Background Report for updating the Official Plan[4]. The City's Official Plan guides local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to reach 80,000 by 2031, and 83,300 people by 2036. Employment is projected to grow by approximately 6,000 jobs, from 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the 2025 deadline.

[4] City of Sault Ste. Marie. 1996. Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

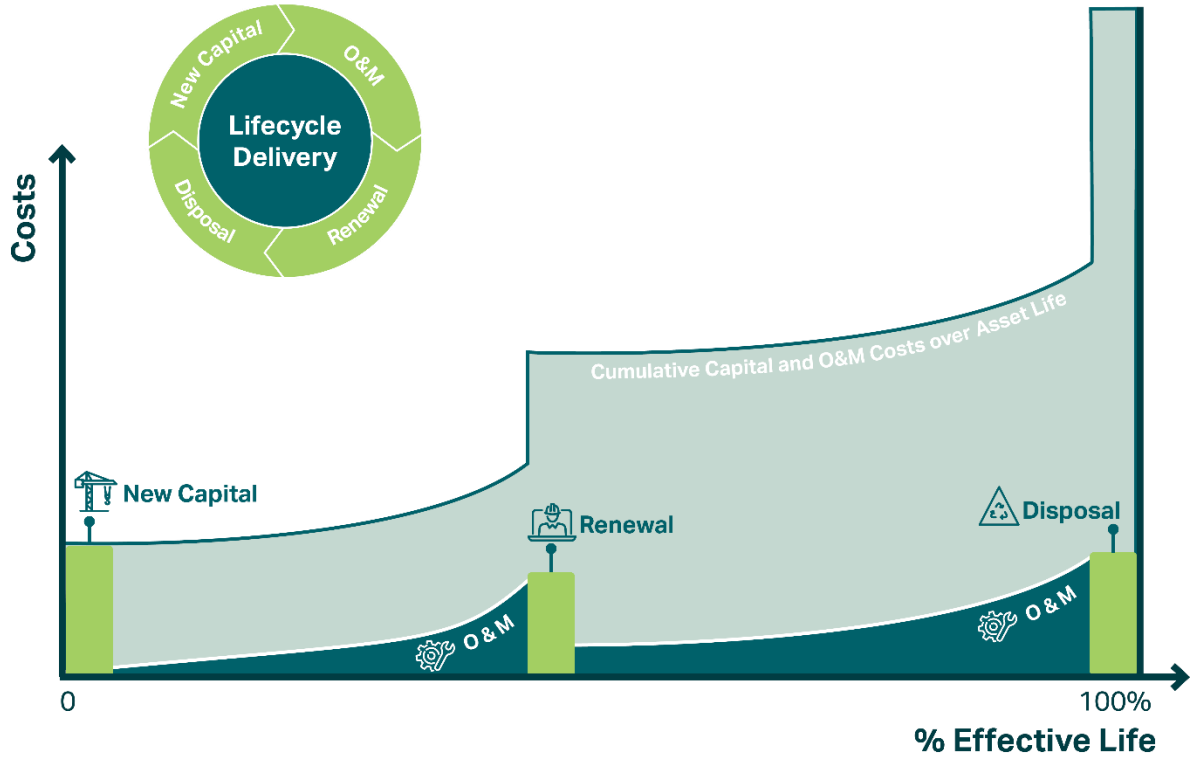


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

    - The asset's operability and maintainability.

- Supply chain considerations.
- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, resurfacing an access road or composting pad. Replacement activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment.

Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

The City has completed a Waste Management Environmental Assessment report and submitted it to the Ministry of the Environment Conservation, and Parks for review and approval. According to the report, the current landfill is projected to reach maximum capacity in 2027. As a solution, an expansion has been proposed to provide an additional disposal capacity of approximately 1.78 million tonnes of waste over a planning period of 25 years[5]. The comprehensive report is available on the City's website, and **Table 4-1** summarizes key activities associated with the proposed expansion.

[5] Solid Waste Management EA Final Report. (2024). City of Sault Ste. Marie. Solid Waste Management EA Final Report - City of Sault Ste. Marie (saultstemarie.ca). Retrieved on February 22nd, 2024.

**Table 4-1: Acquisition Activities for Solid Waste Assets**

| Asset Group | Asset | Activities Undertaken by the City | Guiding Documents |
|---|---|---|---|
| Solid Waste | Storm/Gound Water | • Planning to build two separate pump stations at the landfill in conjunction with landfill expansion.<br>– Leachate collection system for abandoned landfill site will require two pump stations installed as flow increases.<br>– One main station to be built within the next 5 years. Additional smaller pump station for leachate collection as part of the expansion, dependent on waste disposal rates over time. The final need will be assessed post-installation of the new station.<br>• Planning to add stormwater management ponds as part of landfill expansion.<br>– One will begin construction within the next 5 years, while the other two are proposed as part of the overall site and will be constructed based on need. | • Official Plan<br>• Corporate Strategic Plan<br>• Energy Conservation & Demand Management Plan<br>• Community GHG Reduction Plan<br>• Strategic Asset Management Policy<br>• Development & Operating Report<br>• Monitoring Report<br>• Environmental Assessment<br>• Solid Waste Business Plan<br>• Post Closure Plan |
| | Buildings | • Planning to demolish the existing buildings and initiate the construction of new facilities over the next 10 to 20 years. | |
| | Landfill Gas | • Acknowledging that more landfill gas wells are needed as part of landfill expansion. | |
| | Landfill Infrastructure | • Planning to hard surface a section of the road to manage dust emissions and may utilize asphalt millings from other reconstruction projects. | |
| | Landfill Equipment | • Ongoing update and revision of the business plan to reflect biosolids handling. | |

# 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. Managing O&M costs involves developing comprehensive strategies that optimize resource utilization while ensuring asset reliability. Proactive maintenance schedules and condition monitoring can help identify potential issues before they escalate, reducing unplanned downtime and minimizing repair costs. Implementing energy-efficient technologies and best practices in solid waste AM also contribute to cost-effectiveness over the asset's lifecycle. **Table 4-2** summarizes the O&M activities associated with the City's solid waste assets.

**Table 4-2: O&M Activities for Solid Waste Assets**

| Asset Group | Asset Category | Activities Undertaken by the City |
|---|---|---|
| Solid Waste | Storm/Gound Water | • Ongoing maintenance program for groundwater and purge wells, managed by an external contractor.<br>• An alert system to notify if purge wells are offline, requiring field staff to check and identify issues. |
| | Buildings | • Maintenance completed internally through public works facilities team.<br>– A building maintenance expert for the upkeep of air conditioning systems, heaters, plumbing, etc.<br>– Annual check on air conditioning units, which may involve topping up refrigerant or necessitate an upgrade due to availability. |
| | Leachate | • Public works checks (frequency not specified).<br>• Regular pump checks:<br>– Contractors will remove, clean, and re-install pumps.<br>– Cleaning is conducted on a regular basis.<br>– Overhaul is based on run-hours and condition.<br>• Periodic forcemain flushing. |

| Asset Group | Asset Category | Activities Undertaken by the City |
|---|---|---|
| | Environmental Monitoring | • Utilizing computer equipment to measure methane gas readings for environmental report.<br>• Sampling and testing at monitoring wells, documented in annual reports.<br>• Monitoring equipment within buildings, calibrated once a year as part of ventilation system inspections. |
| | Landfill Equipment | • Biosolids trailer washing is completed once a week on Fridays as a preventative measure. |

# 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs. **Table 4-3** summarizes the renewal and replacement activities associated with the City's solid waste assets.

**Table 4-3: Renewal and Replacement Activities for Solid Waste Assets**

| Asset Group | Asset Category | Activities Undertaken by the City |
|---|---|---|
| Solid Waste | Storm/Gound Water | • Pump Station renewal.<br>• Pump overhaul and replacement. |
| | Buildings | The buildings will be reconstructed as part of landfill expansion. |
| | Leachate | • Pump replacement.<br>• Handling system replacement. |
| | Landfill Gas | • Prefab well head and kanaflex replacement.<br>• Well replacement due to collapse.<br>• Occasional hose replacement if damaged.<br>• Welding material to extend the well to continue filling the landfill.<br>• Valve stem extension. |
| | Landfill Infrastructure | • Pads repair based on condition. |

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic asset management. As the City's solid waste assets approach the end of their lifecycle or become obsolete, a systematic methodology to their removal and decommissioning is essential. This process involves careful planning, environmental considerations, and adherence to the City's regulatory requirements.

In the realm of solid waste AM, the disposal of landfill sites necessitates additional considerations due to potential environmental impacts. The Province of Ontario has established regulatory requirements in O.Reg 232/98 under the Environmental Protection Act to address these concerns[6].

Site closure activities entail the progressive closure of portions of the fill area as they reach final approved contours. For smaller sites like natural attenuation sites, completion of the final soil cover and limited post-closure monitoring may suffice. In contrast, larger, highly engineered sites would likely require the completion of various constructed works and significant ongoing monitoring and maintenance. Regardless of the site's size, the overarching goal for all

[6] Landfill standards: A guideline on the regulatory and approval requirements for new or expanding landfilling sites. (2012). Government of Ontario. Landfill standards: A guideline on the regulatory and approval requirements for new or expanding landfilling sites | ontario.ca. Retrieved on February 22nd, 2024.

closure activities is to ensure the outcomes are aesthetically pleasing and can provide long-term protection to the environment.

Post-closure care is also mandatory, with the duration depending on factors such as the environmental setting, the level of engineering, the required service lives of any engineered works, and the type of waste and remaining contaminant concentrations. This post-closure period may extend from many decades to several hundred years.

**Table 4-4** summarizes the decommissioning and disposal activities associated with the City's solid waste assets.

**Table 4-4: Decommissioning and Disposal Activities for Solid Waste Assets**

| Asset Group | Asset Category | Activities Undertaken by the City |
|---|---|---|
| Solid Waste | Buildings | • The demolition is planned as part of the Waste Management Environmental Assessment report.<br>– Asbestos may present challenges during the process.<br>– Demolition and rebuild is required during Cell #3 mining operations. |
| | Roads | • Road demolition and reconstruction will also be required during expansion and mining operations. |
| | Waste Collection | • Recycle or landfill carts.<br>• Sell the old vehicles for residual value or scrapping. There is a market for old but functional municipal vehicles in smaller townships and villages that cannot afford or do not require brand new vehicles. |

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-5**.

**Table 4-5: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged

neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

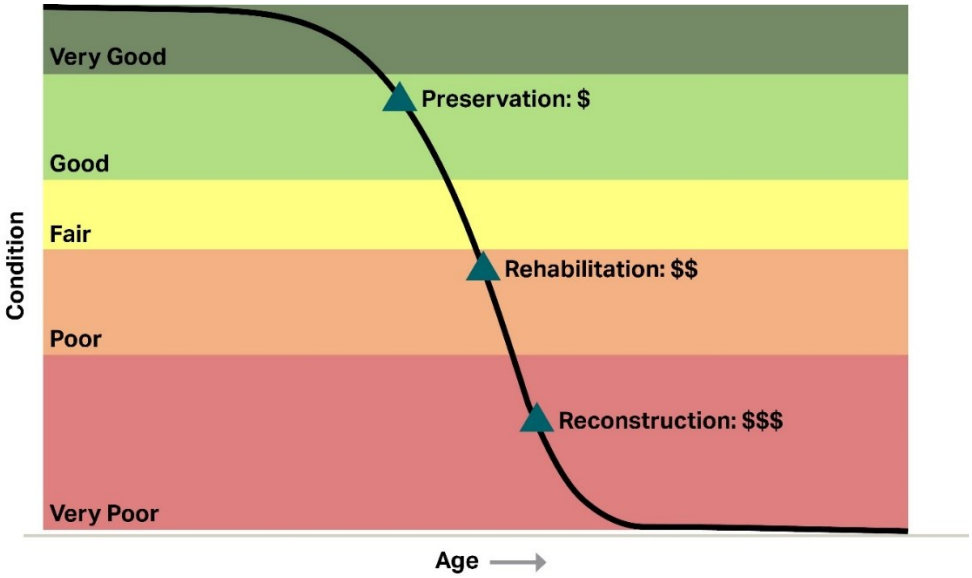


**Figure 4-2: Asset Deterioration Curve and Rehabilitation Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City's risk management process, AECOM recommends taking into account the following key considerations:

1. **Limited Specialist Vendors**: Specialist vendors for specific equipment maintenance are typically reliant on ongoing contracts and due to their size and specialist nature are more sensitive to losses of custom. Key vendors which are identified as of high importance to the City should be engaged proactively to build an improved relationship. Vendors which are identified as of high importance, and where the City is of significant importance to them, should be engaged proactively for a strategic relationship that can encourage improved efficiencies and reliability.
2. **Increasing Maintenance Costs**: By implementing consistent and proactive maintenance schedules for landfill assets, the City can identify and address potential issues before they escalate. This preventive approach reduces the likelihood of major breakdowns or emergency repairs, ultimately minimizing the overall O&M expenses. Additionally, regular maintenance extends the lifespan of assets, enhances their efficiency, and ensures that they comply with safety standards, contributing to a more sustainable and cost-effective management of municipal resources.
3. **Specialized Parts and Limited Vendor Pool**: The supply chain for specialty equipment, like waste collection trucks, often rely on a limited pool of specialized vendors, while few of them are located within Ontario. In many instances, the required parts need to be shipped from overseas. This dependency can result in vulnerability to disruptions, such as production delays, supply shortages, or unexpected events affecting the vendor's operations. Consequently, it may lead to longer lead times and potential delays in maintenance. Addressing these challenges requires a strategic approach to enhance local capabilities, streamline vendor dependencies, and optimize the supply chain, ensuring the efficient operation and maintenance of crucial fire service assets within the City.
4. **Stringent Safety Standards and Changes in Regulations**: Specialty equipment is subject to rigorous safety standards and regulations; however, regulatory frameworks are dynamic and prone to change due to technological advancements, lessons learned from incidents, and evolving societal expectations. Therefore, staying ahead of these changes is crucial for the City to proactively identify and mitigate potential risks associated with non-compliance.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment or replacement decisions for each sub-category of solid waste assets.

**Section 5.2** assesses the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements. Some assets already have funding for their replacement set aside by the solid waste business plan which was created by the City with AECOM's input. As no asset inventory was available at the time of creation there is a gap in coverage for asset replacement and reinvestment.

**Section 5.3** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for capital, O&M, and disposal.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each solid waste asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's solid waste assets. A financial dashboard was developed to present the results of the lifecycle modeling (**Appendix A**). Investments were also compared to the existing business plan to confirm alignment and understand gaps in planned expenditure.

The annual reinvestment needs for the solid waste assets were determined based on their age and ESL in years (i.e., replacing assets that have exceeded their ESL) in inflated dollar values and is based on the following assumptions:

- Base year: The base year used is 2024. Any historic asset valuations have been inflated using the experienced inflation rate.
- Reinvestment rate: The installation date was assumed to be 1970-01-01 for assets of unknown age as described previously in **Section 2** and historic and future replacements carried out using the available ESL. This method was used in preference to an averaged percentage reinvestment based on the total replacement value as the relatively small number of entries with a significant variance in value compared to other classes will require a volatile level of reinvestment which will not be demonstrated with an average value. For groundwater monitoring a reinvestment rate of 7% was used as this is approximately equivalent to the current expenditure which has been proven effective.
- The inflation value used was a flat 2%. This value aligns with that used in the most recent official solid waste business case. This is likely to be addressed in the next update of the case and therefore the financial model built for this plan includes the ability to use varying inflation figures as well as the current future forecast.
- Markup: The project management and engineering, and contingency mark ups are 20% and 25% respectively.
- Disposal Rate: 1% of the annual reinvestment is used as an allocation for disposal costs.

- Growth Rate: The same growth rate (0%) as the business plan has been used in the model. The model does include the ability to use the Statistics Canda forecast used in the community profile[7] available on the City website.
- Land costs are not accounted for as the remaining serviceable life is unclear. The option for inclusion of the land costs in forecasts is included in the master inventory in **Appendix A.** All forecasts in this section are exclusive of replacement land costs.

Key reinvestment sensitivities for the AMP forecast and their relative assumptions and impacts are provided in **Table 5-1**.

**Table 5-1: Solid Waste Asset Capital Reinvestment Sensitivities**

| Assumption | Forecasting Impact | Risk | Mitigation |
|---|---|---|---|
| **Short Term Future Scenarios** | | | |
| It is assumed that the City receives approval for expansion using the land previously purchased. The closure plan has not been considered as an option as should this be realized then an alternative site and business plan will be required | Should expansion not be approved then the closure plan will be put into effect and the costs outlined within will be actualized. There will also have to be a significant expenditure to acquire and construct a new facility for the residents of the City. | Determined to be low likelihood but high consequence by City staff. | None |
| **Long Term Future Scenarios** | | | |
| Long term future scenarios for Cell #2 and #3 are not currently built into the financial forecast as there is minimal definition to the current scope of any plans | It is anticipated that in approximately 2032 to 2033 cell #2 will be mined and in 2037-2038, cell #3. These dates are preliminary estimates based on historical usage of the landfill cells. When cell #3 is mined it will likely coincide with an expansion which will require full building replacement of the maintenance and administration buildings. | Likelihood is a certainty but the timeframe for which is currently uncertain. The consequence to the City's budget would be considerable as cell mining and building replacement will be greater than $1million. | Approximate costs are included in the Solid Waste business plan but not examined within the AMP. |
| **Business Plan** | | | |
| The November 2023 issue of the solid waste business plan has been used as the basis for comparison. | The business plan uses a flat 2% inflation rate which differs considerably from 2023-2024 and beyond. | All assumptions impact the current business case. The consequence of impact is more considerable for the gap in reinvestment. The gap in expenditure for large capital projects is yet to be determined. | The model has the ability to alter these variables.<br><br>Future revisions of the business plan should consider updated variables. |
| | Not all equipment or infrastructure has been included for reinvestment. An expenditure gap is reported within the AMP. | | |
| | No growth has been assumed – see "Growth" sensitivity for further assessment. This is mitigated in the AMP. | | |
| | The business plan includes partial expenditure for the SSO facility. This is used in the AMP full financial needs forecast. | | |
| **Growth** | | | |
| To align with the business plan, no growth is assumed | The City is forecasting growth based upon Statistics Canada and its community profile document[7]. | The upper limit of investment calculated by the financial forecast is | The model has the ability to account of growth |

[7] SSM-Community Profile (2023) City of Sault St Marie.

| Assumption | Forecasting Impact | Risk | Mitigation |
|---|---|---|---|
| | The ability to apply a growth factor aligned with published forecasts is included in the financial forecast. This growth factor does not consider the fact that a percentage of growth will not be single family homes and therefore not require a full level of service from the City. | likely to be more accurate than the any that does not. The forecast of any growth is limited by the use of total population and not household type. | should it be desired. |

## 5.2 Capital Reinvestment Need Analysis

The City's solid waste assets require an average annual reinvestment rate of $1.4 million over the period 2024-2033 and $1.8 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $31 million over the next 20-year period. Notably, the reinvestment funding needs for waste collection account for the largest share in most years.

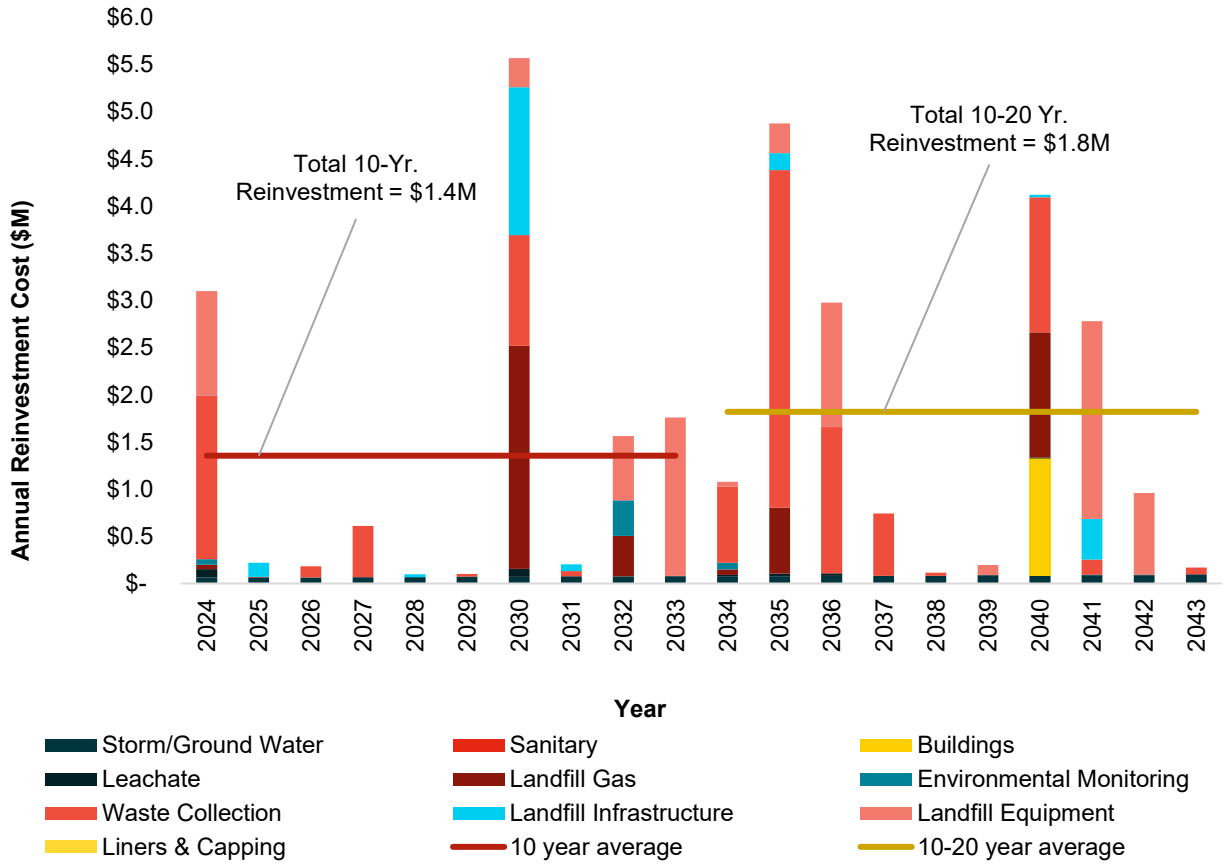


**Figure 5-1: Solid Waste 20-Year Reinvestment Need**

The detailed 20-year reinvestment needs for solid waste assets are presented in **Table 5-2** in inflated dollar values according to the business case values.

**Table 5-2: Solid Waste Assets 20-Year Total and Annual Average Reinvestment Need (inflated)**

| Asset Sub-Category | Annual Average Need | 20-Year Total |
|---|---|---|
| Storm/Ground Water | $75,500 | $1,510,000 |
| Sanitary | $- | $- |
| Buildings | $62,050 | $1,241,000 |
| Leachate | $15,050 | $301,000 |
| Landfill Gas | $246,550 | $4,931,000 |
| Environmental Monitoring | $- | $- |
| Waste Collection | $25,250 | $505,000 |
| Landfill Infrastructure | $614,300 | $12,286,000 |
| Landfill Equipment | $105,550 | $2,111,000 |
| Liners & Capping | $424,900 | $8,498,000 |
| **TOTAL** | **$1,569,150** | **$31,383,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's solid waste assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-2**. This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and steadier financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

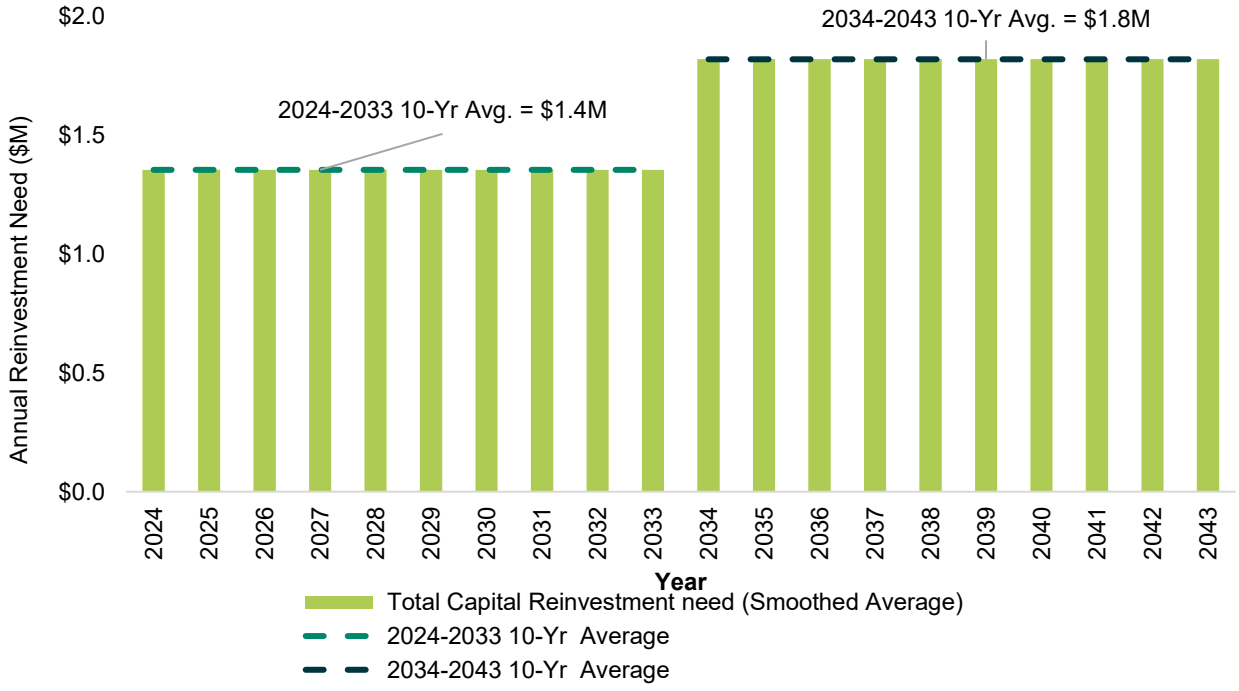


**Figure 5-2: Solid Waste 20-Year Smoothed Annual Reinvestment Needs**

## 5.2.1 Capital Reinvestment – Gap Analysis

It should be noted that some assets already have funding for their replacement set aside by the solid waste business plan. This business plan was created by the City with AECOM's input over a decade ago and has been continually updated to account for new funding sources, changes in demand, updated regulatory structure, and new recycling initiatives reducing the total waste to landfill. The assets included in the business plan are shown in **Table 5-3** below.

**Table 5-3: Assets Included and Excluded within the Solid Waste Business Plan**

| Business Plan Category | Asset Sub-Categories within AMP | |
|---|---|---|
| Infrastructure | • Paved Areas<br>• Administration Building<br>• Maintenance Garage<br>• Weigh Scales and Scale House<br>• Compost Pad<br>• Storm Management Ponds | • Public Drop-off<br>• Footprint Perimeter Road<br>• Landscaping/Reforestation<br>• Site Services (water, wastewater, electrical, gas, telecommunications)<br>• Pump Station and forcemain |
| Equipment | • Roll-off Containers<br>• Roll-off Truck<br>• Compost Turner<br>• Rock Truck<br>• Trommel Screen<br>• Loader<br>• Bulldozer<br>• Windrow Manager | • Pickup Trucks<br>• Odour Turbo Fan and Trailer<br>• Bobcat Including Attachments<br>• Madvac<br>• Compactor<br>• Plow Truck Including Attachments<br>• Farm Tractor<br>• Category – Waste Collection |
| **Not included** | • Storm/Groundwater<br>• Sanitary<br>• Leachate<br>• Landfill | • Category – Landfill Gas<br>• Category – Environmental Monitoring<br>• Category – Liners and Capping |

The business plan partially accounts for some equipment and infrastructure replacement. When this is taken into account the total gap is reduced to $0.8 million. The relevant assets have been removed from the total capital reinvestment needs and the 20-year need based on the gap is shown in **Figure 5-3**.

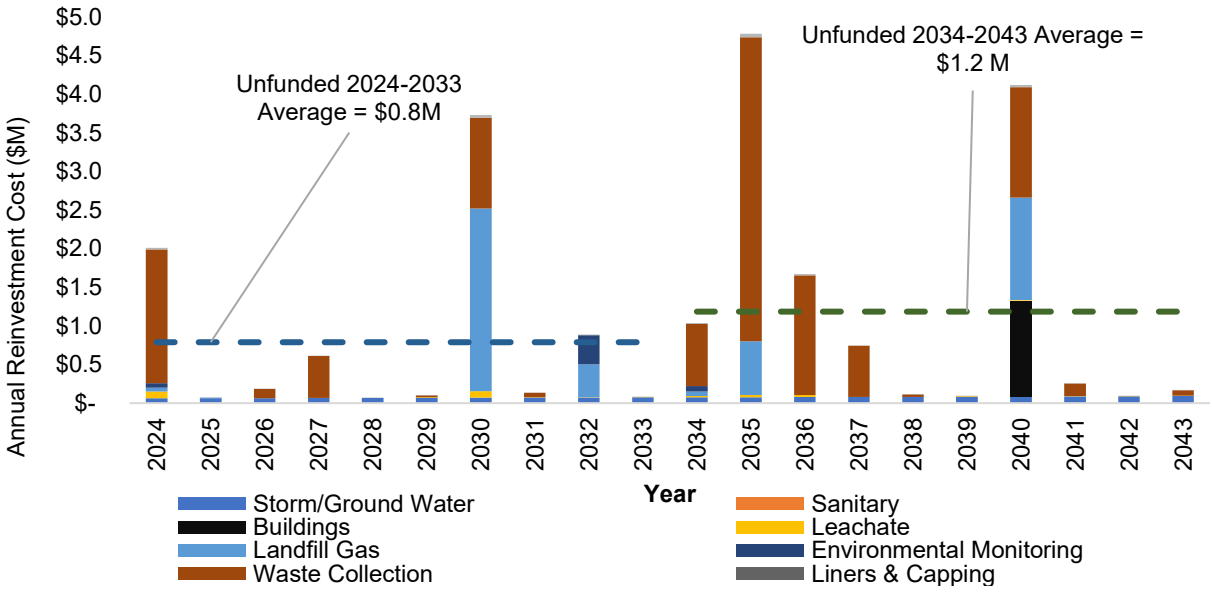


**Figure 5-3: Solid Waste 20-Year Reinvestment Need – Gap with Business Plan**

This equates to the following smoothed annual reinvestment to sustain the funding gap per remaining asset class shown in **Figure 5-4**.

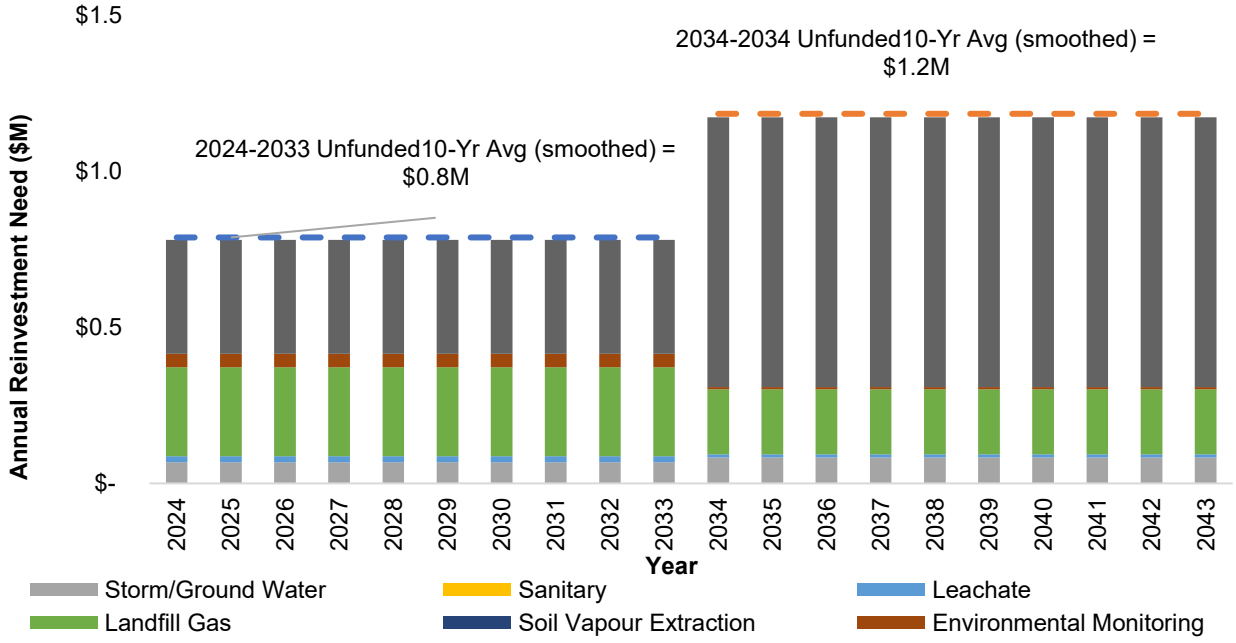


**Figure 5-4: Solid Waste 20-Year Reinvestment Need Smoothed Gap**

For the creation of the 10-year funding need, the solid waste business plan was used as a basis and was then combined with the total annual reinvestment need. Duplicated costs in the business plan were removed and consolidated into asset reinvestment costs. To validate this approach the duplicated costs were compared to those derive from the AMP approach and found to have the same 10-year average reinvestment for the same assets. This is shown in **Figure 5-5**.

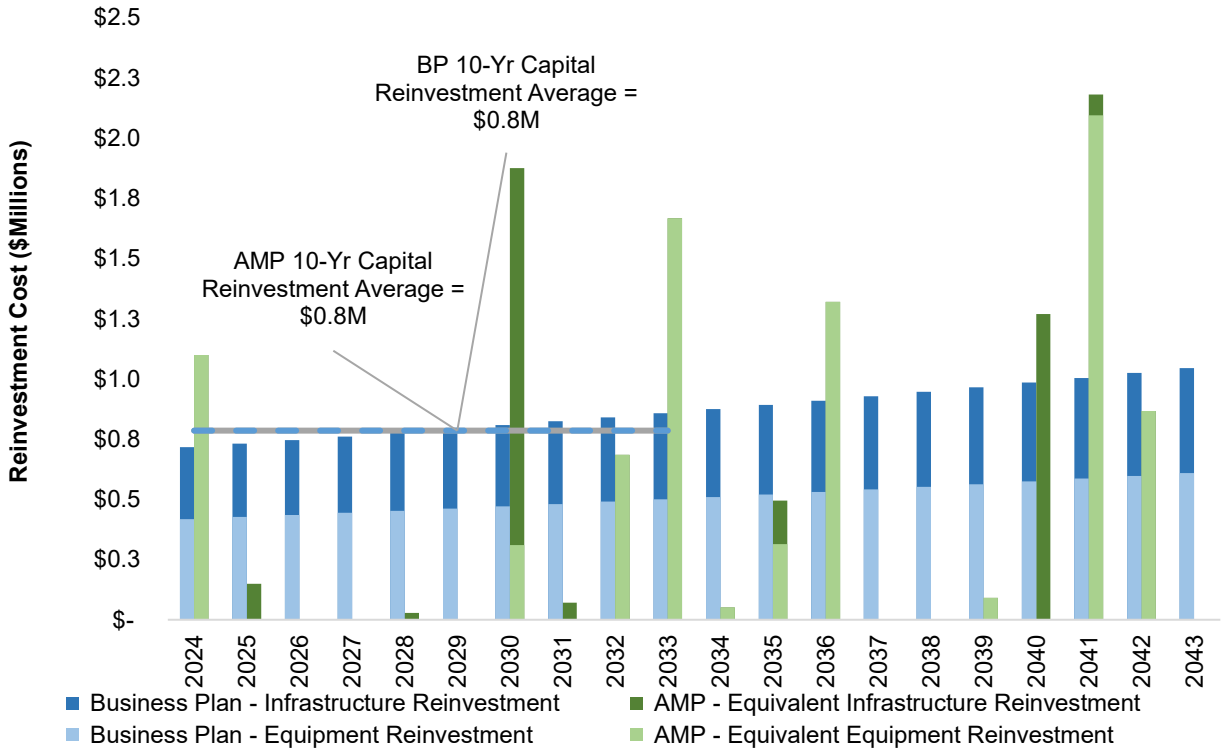


**Figure 5-5: Business Plan and AMP Reinvestment Comparison**

# 5.3 Full Funding Need Profile

**Figure 5-6** shows a full picture of the City's solid waste funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities.

One percent of the annual replacement cost was added to account for the asset disposal cost. With these additions, the City's solid waste full funding requirement is calculated to be approximately $118 million over the next 10 years, averaging $11.8 million per year in inflated dollar value (using the same inflation forecast as the business plan). This funding need is shown in **Figure 5-6** where alongside the disposal and reinvestment costs calculated by the AMP are the: total general, waste disposal engineering and capital, total waste diversion, and total waste disposal (O&M) costs from the solid waste business plan. Capital reinvestment costs have been fully removed from the business plan forecast so as not to duplicate values. All reinvestment is now captured within the Annual Capital Reinvestment values.

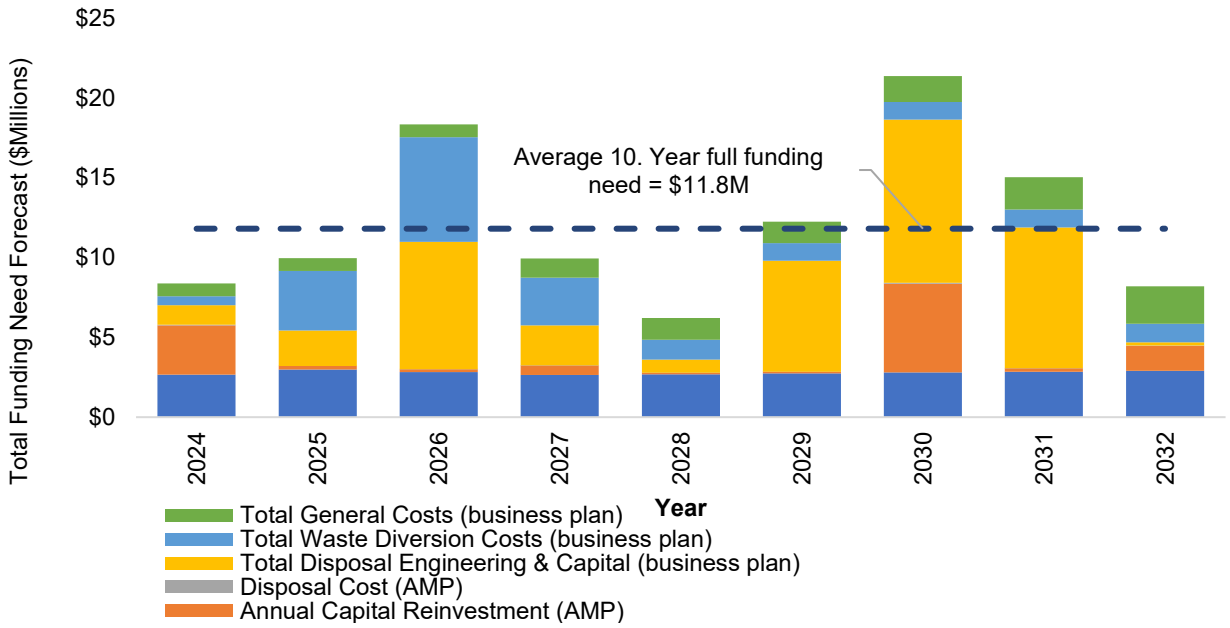


**Figure 5-6: Solid Waste Full Funding Need Profile**

It should be noted that total Engineering and Capital figure includes the following costs as they are forecast in the business plan. Annual Engineering costs are forecast on an inflationary basis after the end of the business plan coverage. Diversion and collection capital projects are as follows:

- Construction of the new Biosolids (SSO) Facility. This is apportioned 20% to Solid Waste over 2024 to 2027 as follows:
  - 2024 - $61 thousand
  - 2025 - $3.20 million
  - 2026 - $6.0 million
  - 2027 - $1.77 million

Waste Collection and Disposal capital projects are as follows:

- 2024 - Land Acquisition ($1.0 million), preliminary design of the new landfill pump station ($10 thousand), and annual Engineering ($160 thousand). Presumed EA submission and approvals are also accounted for ($50 thousand).

- 2025 – Design, tender and construction of Cell 1 ($1.6 million). The detail design, tender and construction of the landfill pump station ($432 thousand). Annual engineering budget ($165 thousand), and an RFP for Waste Collection ($50 thousand).
- 2026 - Construction of Cell 1 ($6.6 million), construction of the landfill pump station ($1.180 million), and the annual engineering budget ($170 thousand).
- 2027 – Finalization of landfill pump station ($112 thousand), finalize Cell 1 construction ($2.2 million) and an annual engineering budget ($170 thousand).
- 2028 – Detailed design and tender of Cell 1A ($643 thousand) and an annual engineering budget ($175 thousand).
- 2029 - Construction of Cell 1A ($6.8 million) and an annual engineering budget ($180 thousand).
- 2030 - Construction of Cell 1A ($10.032 million) and an annual engineering budget ($185 thousand).
- 2031 - Finalize Cell 1A construction ($8.6 million) and an annual engineering budget ($190 thousand).

After 2031 there is an annual engineering budget that increases $5 thousand annually from 2031 values.

### 5.3.1 Asset Retirement Obligations

The public sector accounting board (PSAB) approved changes to the asset retirement obligations for solid waste landfills in 2020. These changes replaced PS-3270: Solid Waste Landfill Closure with PS-3280: Asset Retiral Obligations. This impacts the timing of expense recognition by those responsible for accounting as PS-3280 recognizes expenses earlier in a landfill's operational life.

In the case of the City the liability for post closure costs are now recognized at the start of operation as the licensing obligations are incurred as soon as the landfill was put into service. Previously they were recognized incrementally as the landfill capacity is used.

This should be considered for all expansions of landfill capacity but does not have a material effect on the AMP or financial forecast.

## 5.4 Funding Strategies

The City's funding for solid waste assets relies significantly on user fees, constituting approximately 30% of the total revenue. User fees encompass charges for tipping, sewage sludge (indirect from sanitary), waste tags, and household waste. The remaining funding is subsidized through the property tax levy, which is forecasted to increase by 7.45% annually. Discussions are underway regarding the allocation of funds across departments, specifically between sanitary and solid waste. Notably, certain facilities, like biosolids/SSO facilities, already have funding divided between sanitary and landfill departments due to their service to separate waste processing streams. A notable concern for the City is the limited revenue from industrial or commercial sectors, with the residential sector being the primary contributor to the majority of its funding. In light of this concern, AECOM encourages the City to actively seek alternative funding sources to address potential challenges. This section introduces the following funding options, acknowledging that the City's eligibility for these funds is contingent upon specific criteria:

- TD Friends of the Environment Foundation Grant (TD FEF. etc.)
- Green Municipal Fund (GMF)
- Ontario Community Infrastructure Fund (OCIF)
- Municipal Asset Management Program (MAMP)

### 5.4.1 TD Friends of the Environment Foundation Grant (TD FEF)

The TD FEF is a national charity dedicated to supporting environmental initiatives in Canada. The foundation provides grants, typically ranging between $2,000 and $8,000, for projects with a primary focus on environmental

education and green space programs[8]. While the TD FEF primarily awards grants to communities and educational institutions, municipalities are also considered eligible applicants.

### 5.4.2 Green Municipal Fund (GMF)

The GMF is a financial initiative in Canada dedicated to supporting sustainability and environmental projects at the municipal level. Managed by the Federation of Canadian Municipalities (FCM), the GMF provides funding and resources to assist municipalities across the country in undertaking projects that contribute to environmental sustainability, energy efficiency, and the reduction of greenhouse gas (GHG) emissions. In the waste sector, the GMF offers combined loan and grant funding for business cases, feasibility studies, and capital projects related to organic waste-to-energy systems. To be eligible, these systems must use organic feedstocks for energy generation, employing methods such as landfill gas utilization, anaerobic digestion, or aerobic composting with heat recovery. Moreover, they should result in a net GHG emissions reduction compared to the current baseline[9].

### 5.4.3 Ontario Community Infrastructure Fund (OCIF)

The OCIF is a program designed to support municipalities with small populations (less than 100,000), along with those situated in northern and rural areas. Its primary objective is to aid communities in overcoming challenges related to infrastructure maintenance and improvement while facilitating the development and updating of their asset management plans. Eligible communities receive annual allocations and have the option to accumulate these grants for up to five years to address substantial infrastructure projects. The fund is an essential component of the provincial government's commitment to fostering strong, resilient, and well-equipped communities across Ontario[10].

### 5.4.4 Municipal Asset Management Program (MAMP)

The MAMP is aimed at improving AM practices within municipalities. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program may offer funding to support the development or improvement of AM plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable AM practices[11].

[8] TD Friends of the Environment Foundation Grant. (n.d.). TD Canada. FEF Grant (td.com). Retrieved on February 22nd, 2024.

[9] Funding opportunities. (n.d.). Green Municipal Fund. Funding opportunities | Green Municipal Fund. Retrieved on February 22nd, 2024.

[10] Ontario Community Infrastructure Fund. (2023). Ministry of Infrastructure, Ontario. Ontario Community Infrastructure Fund | ontario.ca. Retrieved on February 22nd, 2024.

[11] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 22nd, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1**.

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory. | • Continue to refine the asset inventory and close existing data gaps, so as to have a more accurate representation of the current state of the solid waste assets; and, ultimately, to make more informed and defensible decisions.<br>• A site validation exercise should be undertaken to confirm the site inventory. The site inventory for this AMP was created using desktop sources available to AECOM and are should therefore be validated. |
| 2. | Develop a formalized solid waste assets condition assessment process and use consistent condition grading schemes for these assets. | • The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>• Perform condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council.<br>• A specific approach for usage of landfill capacity should be used when treating the land as an asset. In all other AMPs the land value is not treated as a capital asset that requires replacing as typically land can be re-used or replaced for a similar cost to that achieved in sale. Landfills and cemeteries by their nature treat land as a consumable asset, and therefore the condition and remaining ESL should be tied directly to the forecast remaining capacity and life expectancy. |
| 3. | Refine the LoS Framework. | • Collect current asset performance data for key performance indicators (KPIs) that are not currently being tracked.<br>• Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engage in discussions with key stakeholders to establish service level targets and identify associated costs to meet those targets.<br>• Once LoS targets have been decided upon, the City should develop strategies on how to meet service level targets, considering its existing operating environment (i.e., staff availability, current funding, resources, etc.).<br>• Develop a Customer Consultation Plan to engage the public and other stakeholders on the LoS framework and better understand customers' willingness to pay for enhanced service levels. |
| 4. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a comprehensive criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while low-risk assets could be accepted with caution. |
| 5. | Funding Need | • The financial model is based on several assumptions previously outlined. It is recommended the City address each area to improve accuracy of the funding need projection.<br>– The funding needs and gap are reported in **Sections 5.2.1** and **5.3**<br>• Enhanced forecasting on the future demand is critical to financial planning. An understanding of the future growth of the City in relation to single family homes and multi family homes is required to accurately forecast the demand on waste collection services. |

| Index | Improvement Initiative | Description |
|---|---|---|
| 6. | Business plan update | At the next business plan update:<br>• Include a full allowance for all assets within the equipment and infrastructure budgets. The outstanding costs not included within the current business plan are discussed within **Section 5.2.1**.<br>• Account for forecasted growth within the City and consider the true impact of that particular growth (single family homes vs multi-family) on the demand for solid waste services.<br>• Use a true reflection of inflation, interest and financing rates. |
| 7. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication. |

# Appendix A – Solid Waste MS Excel Lifecycle Model and Inventory

FINAL

AECOM

# City of Sault Ste. Marie Protective Services Asset Management Plan

June 2024



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# 1. Introduction

AECOM Canada Ltd. (AECOM) was retained by The City of Sault Ste. Marie (the "City") to develop an asset management plan (AMP) to comply with the requirements of Ontario Regulation 588/17 (O. Reg. 588/17) in respect to its non-core municipal infrastructure assets. The scope of work for this investigation is outlined in AECOM's proposal dated May 25th, 2023, and subsequent project correspondence.

## 1.1 Background

Sault Ste. Marie is a city located on the St. Mary's River, north of the United States of America, bordering three of the Great Lakes with an estimated population of 72,051 (2021). The City provides a wide range of public services to their constituents, with the public expectation that these services function efficiently at a certain level. The provision of these services requires the management of the physical assets to meet desired service levels, manage risks, and provide long-term financial sustainability. These assets include, but are not limited to roads, bridges, sidewalks, wastewater assets, stormwater management assets, landfill, fleets, buildings, and parks.

In accordance with the terms of reference for this assignment, it is understood that the City is proceeding with an AMP to comply with the second phase of the regulatory requirements in respect to its non-core municipal infrastructure assets, in accordance with O. Reg. 588/17, by July 1st, 2024. The non-core assets to be covered in the scope, as defined by the regulation, include the City's protective services, solid waste, parks and cemetery, facilities, fleet, roadway appurtenances, and active transportation.

## 1.2 Objectives

In 2015, the City's first Asset Management Plan (AMP) was published. In 2019, approved by the City Council, the City's Strategic Asset Management (AM) Policy came into effect.

The objective of this AMP is to deliver a financial and technical roadmap for managing the City's protective services assets and to provide the means for the City to maximize value from its assets, at the lowest overall expense, while at the same time enhancing service levels for its residents. Furthermore, the objective of this AMP is to align with the guidelines laid out in the City's Strategic AM Policy and Section 5 of Ontario Regulation (O. Reg.) 588/17.

Organizations that implement good asset management (AM) practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

## 1.3 Asset Management Provincial Requirements

The O. Reg. 588/17 came into effect in 2018 and stipulates specific AM requirements to be in place within Ontario municipalities by certain key dates (**Table 1-1**). The development of this AMP is one of the steps to guide the City towards meeting the July 1st, 2024 deadline.

**Table 1-1: O. Reg. 588/17: AM Planning for Municipal Infrastructure**

| **Description:** A regulation made under the Infrastructure for Jobs and Prosperity Act, 2015, stating that every municipality shall prepare and update a Strategic AM Policy, and that every municipality shall prepare an AM Plan for its core infrastructure assets by July 1, 2022, and an AM Plan for all other infrastructure assets by July 1, 2024. The regulation outlines several requirements that each AM Plan must follow, such as including current and proposed level of service. Core municipal infrastructure assets include water, wastewater, stormwater, road, and bridge assets. | |
|---|---|
| **Deadline Date** | **Regulatory Requirement** |
| July 1st, 2019 | All municipalities are required to prepare their first Strategic AM Policy. |
| July 1st, 2022 | All municipalities are required to have an AM Plan for its entire core municipal infrastructure (i.e., water, wastewater, stormwater, roads, and bridges & culverts). |
| July 1st, 2024 | All municipalities are required to have an AM Plan for infrastructure assets not included under their core assets. |
| July 1st, 2025 | All AM Plans must include information about the level of service that the municipality proposes to provide, the activities required to meet those level of service, and a strategy to fund activities. |

## 1.4 Scope

The following elements are included within the scope of this AMP:

- A summary of the asset inventory, including the replacement cost of the assets, the average age of the assets, the condition of the assets, and data gap analysis (**Section 2**).
- The City's level of service (LoS) objectives, stakeholder identification, LoS framework, and future demand drivers (**Section 3**).
- Asset lifecycle management strategies and funding needs to maintain current LoS, minimize associated asset risks, and to optimize costs over the whole lifecycle of the asset (**Sections 4** and **5**).

# 1.5 Relationship to Other Corporate Documents

This AMP is a tactical plan which links "top-down" strategic objectives with "bottom-up" operational activities. **Figure 1-1** demonstrates the line-of-sight between AM strategic objectives and tactical and operational AM elements, including the relationship this AMP has to the other plans in the City's hierarchy of documents.

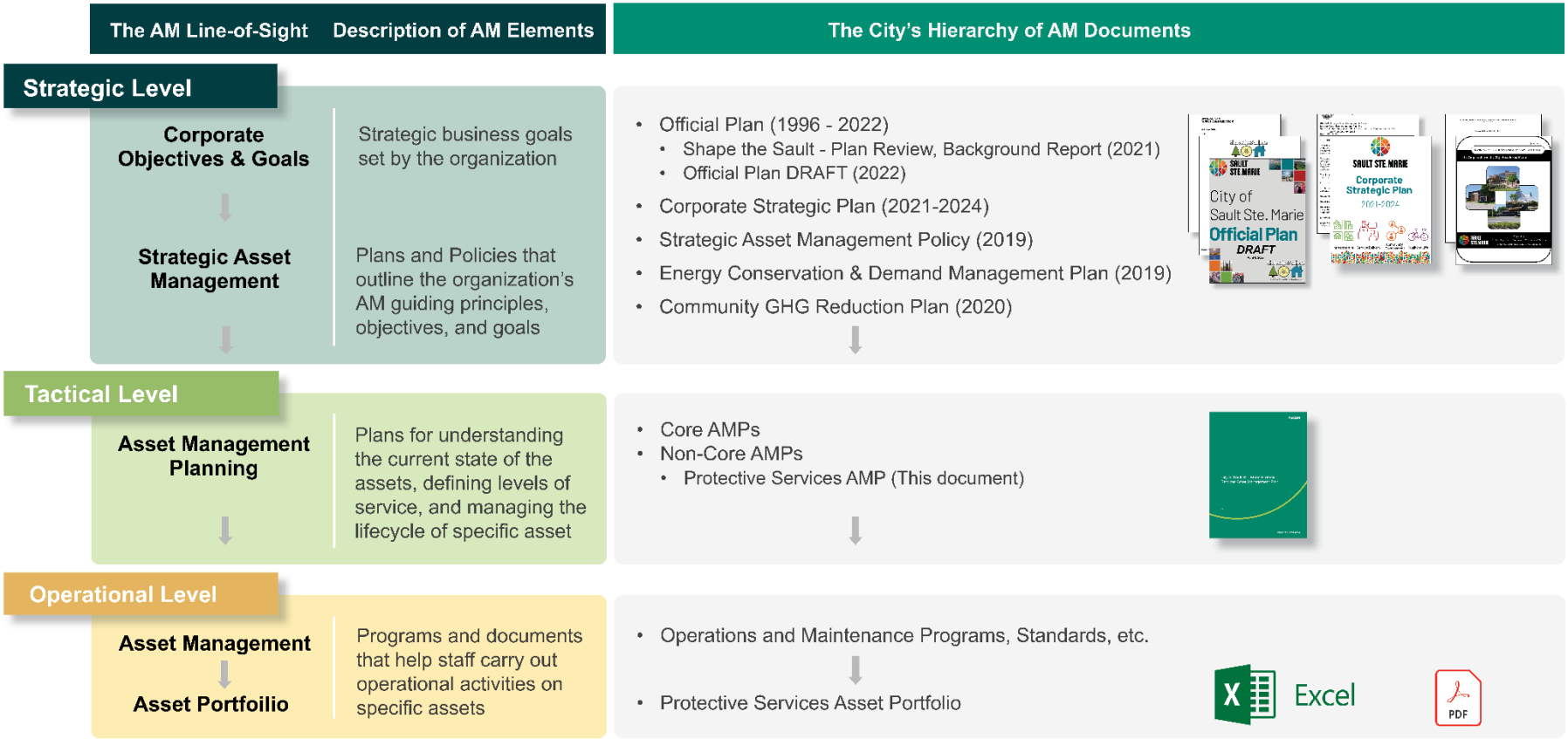


**Figure 1-1: The City's AM Line of Sight**

# 2. State of Infrastructure

Protective services encompass a diverse range of assets crucial to both the police department and fire department to ensures the optimal use of resources, enhancing operational efficiency and readiness. The City's protective services include essential assets such as vehicles, equipment, and communication devices, which are vital for emergency responses. The inventory of protective services is a comprehensive catalog detailing the quantity, condition, and specifications of these components within the City. By analyzing the inventory and assessing the data gaps, this section facilitates informed decision-making and strategic resource allocation, providing essential insights into the maintenance needs and financial requirements.

## 2.1 Asset Hierarchy

To fulfill the requirements of O. Reg. 588/17 and to pave the way for robust long range asset management planning, the City necessitates a logically segmented asset breakdown structure (hierarchy) within the ambit of this AMP. Achieving this requires a sufficiently granular classification of protective services' assets, enabling the identification of individual assets due for renewal. Striking the right balance is also crucial, as there is a fine trade-off between ensuring adequate granularity to provide essential information and avoiding excessive granularity that could make the effort to collect and manage information more burdensome than the usefulness derived from it.

In **Figure 2-1**, the hierarchy of protective services is illustrated, showcasing the two main departments: police services and fire services. Each category is further broken down into subcategories. This asset hierarchy establishes a logical indexing of the City's protective services' assets, categorizing them into primary (parent) and secondary (child- and grandchild) assets. Such a structure forms the foundational framework for subsequent discussions and analysis, enabling the drill-down to a specific asset within the hierarchy to support maintenance planning or track costs at the asset level or higher levels.

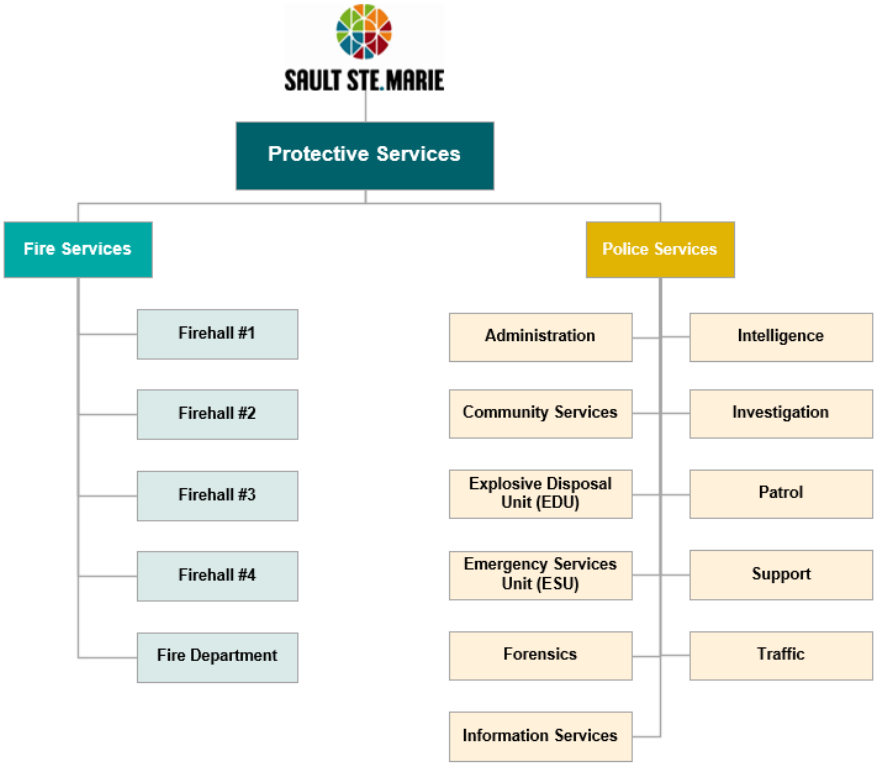


**Figure 2-1: City of Sault Ste. Marie Protective Services Asset Hierarchy***

*Firehall buildings are addressed in the Facilities AMP

# 2.2 Current State of the Assets

## 2.2.1 Asset Inventory

**Table 2-1** presents the summary of the City's protective services inventory.

**Table 2-1: Protective Services Inventory Summary**

| Asset Group | Asset Category | Asset Sub-Category | Quantity | Unit of Measure |
|---|---|---|---|---|
| Protective Services | Police Services | Administration | 32 | Ea. |
| | | Communication Services | 1 | Ea. |
| | | Explosive Disposal Unit (EDU) | 5 | Ea. |
| | | Emergency Services Unit (ESU) | 143 | Ea. |
| | | Forensics | 23 | Ea. |
| | | Information Services | 8 | Ea. |
| | | Intelligence | 3 | Ea. |
| | | Investigations | 71 | Ea. |
| | | Patrol | 100 | Ea. |
| | | Support | 642 | Ea. |
| | | Traffic | 25 | Ea. |
| | Fire Services | Firehall #1 | 93 | Ea. |
| | | Firehall #2 | 34 | Ea. |
| | | Firehall #3 | 49 | Ea. |
| | | Firehall #4 | 40 | Ea. |
| | | Fire Department | 67 | Ea. |

## 2.2.2 Current Asset Replacement Value

The asset replacement value is the estimated cost that would be incurred to replace an existing asset with a new one of similar functionality, at current market prices. This value represents the monetary amount required to reproduce or procure an asset equivalent to the one being assessed. Examining the distribution of asset replacement values allows the City to comprehend which asset categories hold the highest value for both the City and the public.

**Table 2-2** presents the unit replacement cost and the total replacement value for distinct protective services asset categories within the City. Notably, the support sub-category for police services constitutes the most significant portion, accounting for a replacement value of approximately $9 million, followed by the patrol sub-category at $3.3 million, investigations and emergency services unit (ESU) at $8 million each, and traffic equipment at $0.7 million. The combined replacement value for all these categories amounts to approximately $39 million.

It is noted that the replacement costs are estimated based on a Class 4[1] cost estimation approach. These estimates are typically prepared with limited information, resulting in fairly wide accuracy ranges. Class 4 estimates serve various purposes, including project screening, feasibility assessment, concept evaluation, and preliminary budget approval.

[1] Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Cost Estimate Classification System - As Applied In Engineering, Procurement, and Construction for the Building and General Construction Industries, 2020, Retrieved in March 2024

They are utilized for detailed strategic planning, business development, project screening at more advanced stages, alternative scheme analysis, confirmation of economic and technical feasibility, and approval to proceed to the next stage.

Typically, depending on the construction complexity of the project, relevant reference information, and other associated risks, the accuracy ranges for Class 4 estimates fall within the following bounds (could exceed based on various criteria):

- On the lower side, -10% to -20%
- On the higher side, +20% to +30%

It is worth noting that the total replacement values have been marked up by 45%, out of which 15% accounts for engineering and project management cost and 30% for contingency cost.

**Table 2-2: Protective Services Current Replacement Value**

| Asset Group | Asset Category | Asset Sub-Category | Total Replacement Value (2024) |
|---|---|---|---|
| Protective Services | Police Services | Administration | $967,000 |
| | | Communication Services | $38,000 |
| | | Explosive Disposal Unit (EDU) | $448,000 |
| | | Emergency Services Unit (ESU) | $1,091,000 |
| | | Forensics | $290,000 |
| | | Information Services | $32,000 |
| | | Intelligence | $183,000 |
| | | Investigations | $1,285,000 |
| | | Patrol | $3,317,000 |
| | | Support | $8,995,000 |
| | | Traffic | $240,000 |
| | Fire Services | Firehall #1 | $5,878,000 |
| | | Firehall #2 | $2,555,000 |
| | | Firehall #3 | $1,897,000 |
| | | Firehall #4 | $4,331,000 |
| | | Fire Department | $997,000 |
| **Total** | | | **$32,544,000** |

## 2.2.3 Age and Remaining Service Life

The asset age is based on the install year of the assets or the assumed year if not available and the remaining service life (RSL) is estimated by considering both the age and the expected service life (ESL) in years. In practice, different assets will deteriorate at varying rates, and their deterioration may not necessarily follow a linear pattern over time. However, it is crucial to consider the level of effort required to predict failure in relation to the asset value. For highly valuable assets, more sophisticated deterioration modeling may be justified. Conversely, for low-value assets, the cost of deterioration modeling might surpass the replacement cost of the asset. Moreover, the actual service life can vary significantly from the ESL. ESL is defined as the period over which an asset is available for use and able to provide the required LoS at an acceptable risk and serviceability (i.e., without unforeseen costs of disruption for maintenance and repair). In some instances, a variation in expected vs. actual service life is evident due to the following factors:

- **Environment:** Some assets are exposed to very aggressive environmental conditions, while other assets are in relatively benign conditions; thus, the deterioration of assets is affected differently.
- **Maintenance:** Assets are maintained through renewal or replacement of components, which prolongs the service life of the asset. Critical assets are maintained (some through service contracts) but many are yet to experience failure and require replacement.
- **Technological Obsolescence:** Some assets can theoretically be maintained indefinitely, although considerations such as cost to maintain the asset, its energy efficiency, and the cost to upgrade to an updated technology that would result in cost savings are likely to render this approach uneconomical. The majority of protective services assets are fleet and equipment that does not become technologically obsolete. Those assets at risk are software systems and IT assets (such as servers). Some areas of technology may arise and become legislatively necessary, but this is not likely in the immediate short term.

**Figure 2-2** shows the weighted average asset age and RSL as a proportion of average ESL for the asset subcategories. It is recommended to collect accurate installation date information for all assets and include it in the next iteration of the AMP.

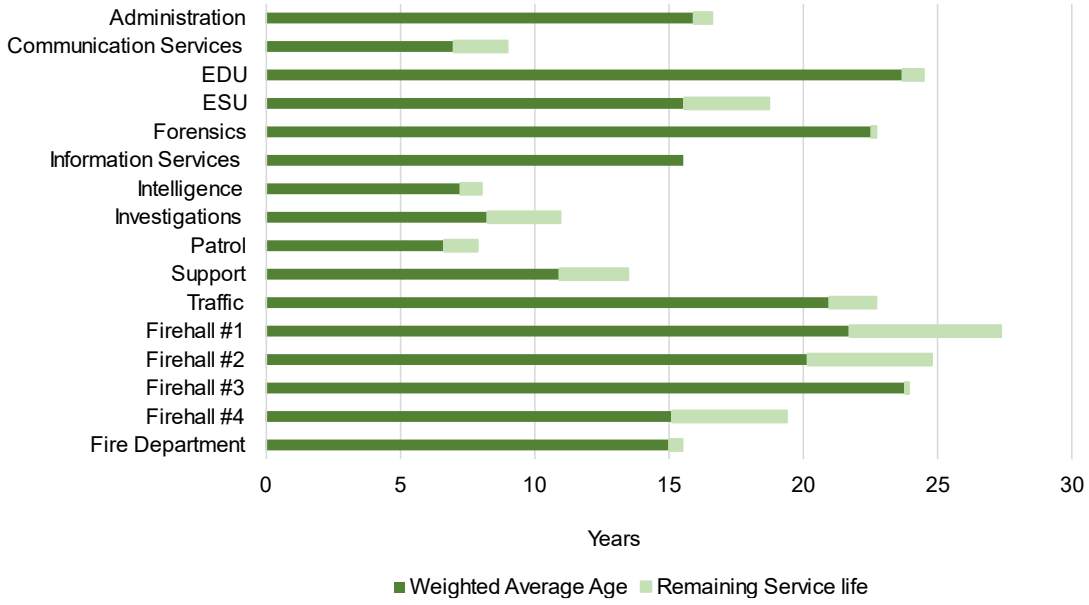


**Figure 2-2: Protective Services Weighted Average Age and Remaining Service Life**

## 2.2.4 Asset Condition

There are no regular condition assessments for protective services assets that produce reliable condition gradings for AM purposes. To fill the gap with an interim data set to enable any financial forecasting to take place, the two-parameter Weibull distribution function was used to assess the current condition and to project the future condition of the City's assets. The Weibull distribution has been used extensively in reliability studies and lifetime prediction models in industries ranging from automotive to the oil & gas and provides a suitable distribution for this type of analysis.

The underlying premise of the Weibull-shaped deterioration is that while some assets fail prematurely due to severe conditions or improper installation, other assets are very long-lived and function well beyond their theoretical ESL. In order to perform a high order network-level analysis, it was assumed that assets would fail (and require replacement) within a deterioration envelope / curve approximated by a Weibull probability distribution. The two-parameter Weibull cumulative distribution has two parameters for scale and shape, as set out in Equation [1]:

$$f(x;\alpha,\beta) = e^{-\left(\frac{x}{\beta}\right)^{\alpha}} \quad [1]$$

Where: $x$ = Age
$\alpha$ = Shape parameter (or slope)
$\beta$ = Scale parameter

A set of Weibull cumulative distribution functions were leveraged to simulate a set of deterioration curves for assets with different ESLs as shown in **Figure 2-3**.

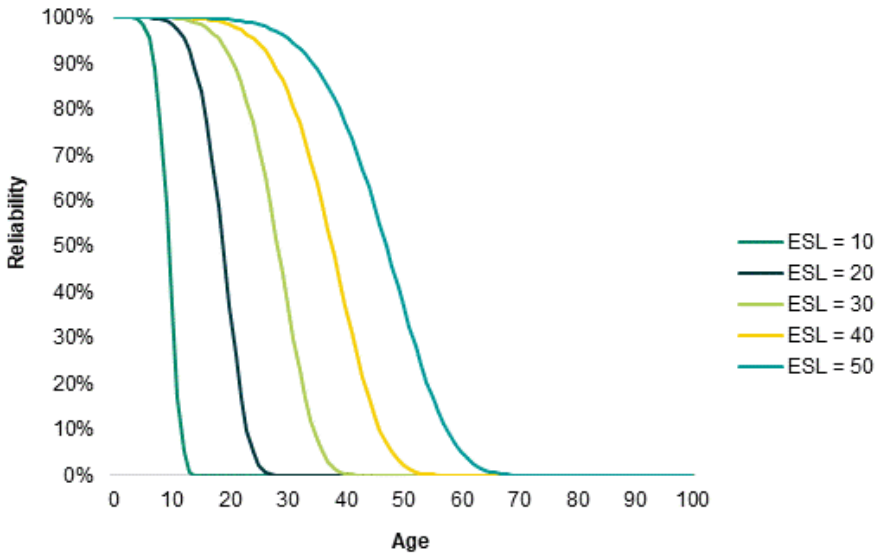


**Figure 2-3: Asset Deterioration Curve Samples**

**Table 2-3** and **Figure 2-4** present the condition ratings of the City's protective services assets with respective replacement values. As stated previously, a substantial number of assets lack installation date information and condition. The assumed condition ratings span from "Very Good" to "Very Poor," with "Very Good" and "Good" collectively contributing 44% of the overall replacement value.

As a considerable assumption for the basis of this AM plan it is recommended that the City consider a routine condition assessment program to increase the reliability of condition grades and therefore also increase the reliability of the financial forecasts.

**Table 2-3: Protective Services Condition Summary**

| Rank | Condition Rating | Replacement Value | % of Replacement Value |
|---|---|---|---|
| 1 | Very Good | $2,374,000 | 7% |
| 2 | Good | $11,914,000 | 37% |
| 3 | Fair | $1,741,000 | 5% |
| 4 | Poor | $3,516,000 | 11% |
| 5 | Very Poor | $2,384,000 | 7% |
| 6 | Unknown | $10,659,000 | 33% |

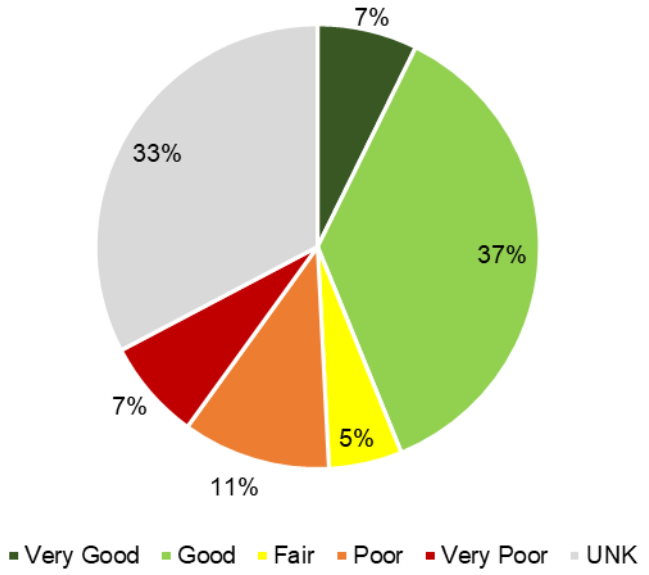


**Figure 2-4: Protective Services Asset Condition Weighted by Replacement Value**

**Figure 2-5** demonstrates the condition of the assets based on asset subcategories and their respective replacement values. The replacement cost per condition is reliant on the calculated condition demonstrated previously. The largest groups of assets in poor and very poor conditions are found in Support, Patrol and Administration for Police Services, whereas Fire Services have very little assets in poor condition as they are heavily regulated for maintenance and replacement.

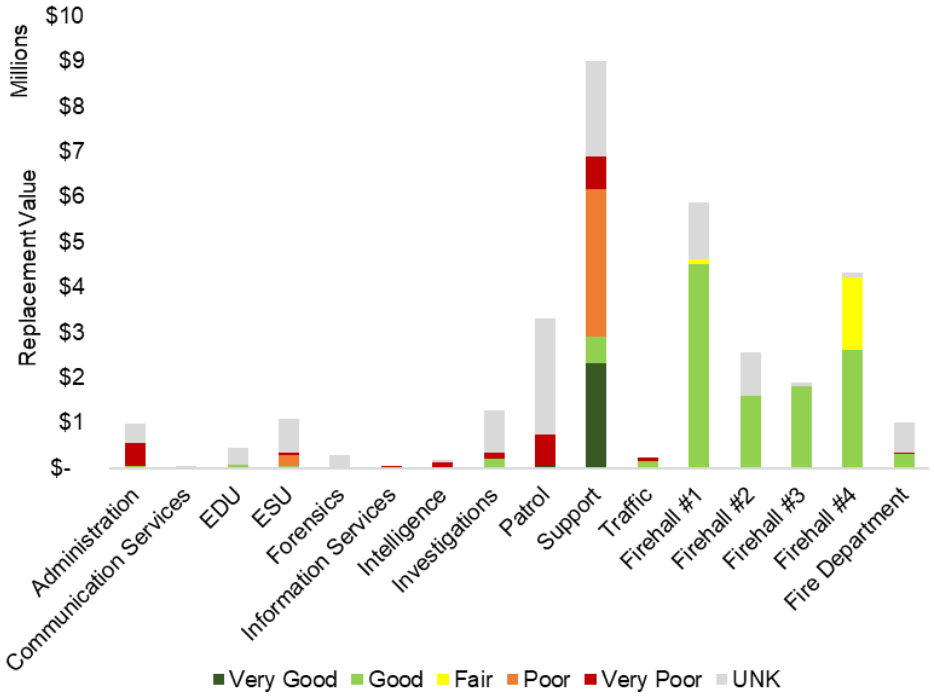


**Figure 2-5: Distribution of Protective Services Asset Condition**

The top items currently in very poor condition are as follows:

**For Police Services:**

1. A total of $1.1 million in total replacement value of various police fleet under the Intelligence, Investigations, Patrol and Support divisions.
2. $550k worth of office furniture purchased in the 2000s for the Administration division.
3. Firearms purchased in 2007 and 2008 for the Support division, worth $195k in total.
4. $90k worth of equipment (traffic radars and breathalysers) for the Traffic division, purchased from 1994 to 2003.
5. $65k worth of video surveillance, portable radio and other equipment for the Support division, purchased from 2001 to 2005.
6. Rifles and handguns (MP-5 and S&W handguns) purchased in 1999 and 2005, worth $51k in total, for the Emergency Services Unit (ESU).

**For Fire Services:**

1. $30k worth of computers purchased in 2004.

# 2.3 Asset Data Gap Analysis

This section summarizes the current state of the City's asset data by assessing the quality of the asset inventory. Specifically, this section identifies existing data gaps, determines the overall confidence in the current asset data, and introduces good practices of data management.

## 2.3.1 Data Gap Observations

The City's protective services assets were not previously stored in a single inventory. The multiple spreadsheets provided by the City that did exist only housed a partial listing of the assets. The police assets in particular had numerous data gaps because of a recent cyber attack in 2021, when the City lost capital asset listings and related records. AECOM addressed these data gaps and filled in key information where possible, such as expected service lives and replacement costs. This has been supplemented by additional data sources such as RS Means and AECOM's prior experience from working with other municipalities.

Table 2-4 provides a summary of data completeness levels in the compiled protective services inventory across key data attributes. It is recommended that the City continue to work on filling any remaining gaps, ensuring a comprehensive and up-to-date database.

**Table 2-4: Asset Data Completeness**

| Asset Group | Inventory Completeness (%) | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| Protective Services | 87% | 100% | 92% | 34% | 69% | 100% |

Improvement activities that support continuous improvement of the asset inventory are:

- Asset ID: Add asset IDs to assets currently without them, especially for Fire Services, as only 20% of Fire Services assets are identified with unique asset IDs.
- Installation date: It is recommended to collect accurate installation date information for all assets and include them in the next iteration of the AMP. In the current iteration, many installation years are calculated based on the estimated service years remaining provided by the City, subtracted from the expected service lives estimated by AECOM.
- Condition: Consider a routine condition assessment program, and track asset condition over time in the CMMS, especially for assets regulated by legislations.

## 2.3.2 Data Confidence

The quality of asset data is critical to effective AM, accurate financial forecasts, and informed decision-making. For this reason, it is important to know what the reliability of the information is for the State of Infrastructure analysis of the protective services assets. **Table 2-5** provides a description for the data confidence grades used to classify the reliability of the asset data. This can serve as a reference for the City to assess the quality of their asset data. A brief summary and explanation of the available data can be seen in **Table 2-6**.

**Table 2-5: Data Confidence Grading Scale**

| Confidence Grades | Description |
|---|---|
| A - Highly reliable | Data is based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2% |
| B - Reliable | Data is based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10% |
| C - Uncertain | Data is based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25% |
| D - Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40% |
| E - Unknown | None or very little data held. |

**Table 2-6: Asset Data Confidence**

| Asset Group | Inventory Confidence | | | | | |
|---|---|---|---|---|---|---|
| | Asset ID | Location | Install Date | Condition | Expected Service Life | Replacement Cost |
| **Protective Services** | NA | A | C | D | B | B |

- Location data has been reviewed and confirmed by the City and are in a reliable state.
- Installation dates as mentioned previously have been calculated from estimated service life remaining and expected service life. The accuracy of the data to the year of installation where available is high but over half are calculated resulting in a lower confidence grade.
- Condition data is graded D as a lot of it is extrapolated from the installation data (which itself has a confidence grade of C). There are some condition data provided by the City, and these are high in accuracy confidence.
- Expected service life is deemed to be reliable as it is founded on available data accumulated for such a purpose (professional construction cost estimating software) and is supplemented with the City's input on estimated service life remaining.
- Replacement cost is also graded reliable as it is derived from a combination of similar cost used by other municipalities and supplemented with the City's own purchasing data. To include a tolerance for the imperfect data the upper range for mark up is used due to the immaturity of the asset inventory. As the inventory is used and further refined the City may decide to reduce the mark up applied to replacement values.

### 2.3.3 Data Management Practice

The asset data lifecycle is a sequence of stages that data goes through from its initial build (i.e., data capture and entry) to its eventual archival and/or deletion at the end of its useful life[2]. A clear definition and understanding of the organization's process for acquiring, storing, utilizing, assessing, improving, archiving, and deleting data (see **Figure 2-6**) will ensure good data management practices and help to sustain levels of data quality required to support AM activities.

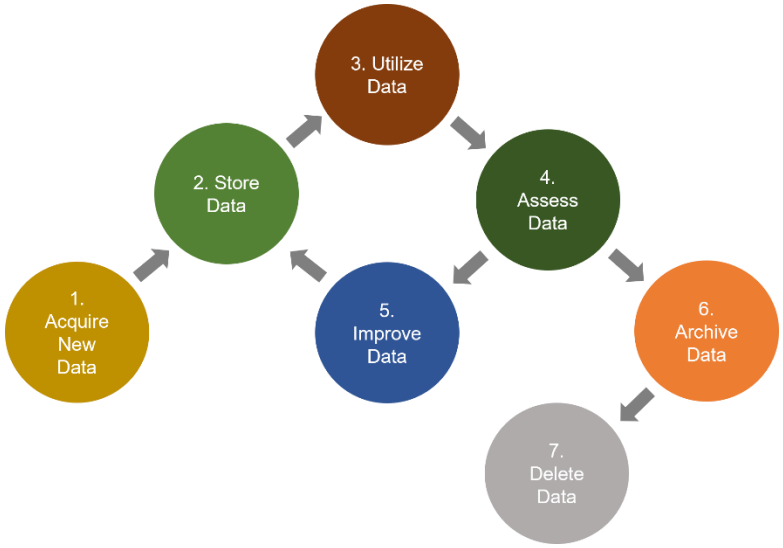


**Figure 2-6: Asset Information Lifecycle**

The seven key stages of the asset data lifecycle are described in more detail below:

- **Acquiring New Data**: The majority of new asset data arises from asset creation, refurbishment and overhaul activities. New data may also come by way of inheritance or transfers from other business units, organizations, or third parties. As such, it is important to have clearly defined processes in place not only to add or update asset data, but to migrate and merge data from other sources.
    - New assets for protective services should be consistently added to the inventory and a minimum required data set defined to maintain inventory accuracy and reliability.
- **Storing Data**: The way asset data is stored is an important consideration for overall data quality. Having a planned approach to data storage will inevitably reduce the likelihood of duplication and inconsistencies across datasets within the organization. Depending on the needs of the organization, this stage may involve procuring a new software to adequately house the data, along with a data backup and recovery plan to ensure that the necessary data protection and privacy standards are met.
    - Assets are typically stored in the CMMS or fleet management system. For protective services assets, due to having a lot of mobile fleet and equipment assets, it is important to store data and track the assets back to the physical location where the asset is stored and the division it's kept with.
- **Utilizing / Analysing Data**: This aspect of the asset information lifecycle is where users encounter the data to support data-driven activities within the organization. Data can be viewed, processed, edited, and published to allow users to access the data outside the organization. Critical data that has been modified should be fully traceable to maintain the integrity of the data. As such, it is important to communicate to the users why asset data is so important, and how it is used to inform decisions within the organization.
    - Currently no analysis of the use of protective services assets is carried out. Use of the core asset AM plans (such as sanitary and water) and mature inventoried non-core (such as fleet) should be considered to drive a better understanding of protective services asset performance. This includes

[2] TechTarget Network, Definition: Data Life Cycle, 2020.

improved understanding of estimated service lives and true replacement cost value from the City's experience.

- **Assessing Data**: Assessing the data quality helps to determine the level of confidence in the information and ensures that decision-makers are making informed decisions based on the quality of data available to them. Moreover, it is important to fully understand the availability and quality of the asset data before issuing information publicly. Some of the results of data degradation, due to improper or lack of assessment, may include:
    - Poor asset performance due to lack of information and understanding of asset behaviour.
    - Non-compliance with statutory regulations or safety requirements.
    - Safety incidents due to risks not being identified or reported.
    - Asset failure due to gaps in maintenance planning.
- **Improving Data**: Improving data quality involves establishing clear targets which are intended to be communicated widely across the organization. It is imperative that the organization understands the costs, benefits, and risks associated with any data improvements since the cost of the improvement may outweigh the overall benefit. It is also important to note that *more* data does not necessarily mean *better* data. It is very possible to collect data that does not add value to the organization. As such, it is critical that the organization aligns its data improvement targets with its AM objectives, and considers the data-driven decisions staff need to make at the operational and strategic level, to ensure that the *right* data is being improved upon.
- **Archiving Data**: Archiving data is the process of storing data that is no longer active or required but is able to be retrieved in case it is needed again. Data that is archived is stored in a location where no usage or maintenance occurs. It is recommended that a data archive strategy exists within an organization in order to lay out the data archival requirements, which includes the following factors:
    - Consider what data should be archived and articulate the reasons behind the archival decisions.
    - Examine any legal obligations pertaining to the retention of data records.
    - Determine the appropriate duration for retaining different categories of data records.
    - Evaluate the risks associated with the inability to retrieve specific data records.
    - Specify the authorized individuals or entities who should have access to archived data records.
    - Establish the expected timeframe for retrieving archived data records.
    - Communicate these requirements across the organization to ensure staff understand why records are being archived, how they can access archived data records, and for how long archived data records can still be accessed.
    - When assets are formally disposed of, their entry in the inventory should be archived to maintain data integrity and to further build the City's understanding of its protective services assets. Several instances of inactive assets were found during the creation of the inventory from available sources.
- **Deleting Data:** The deletion of data is the final component of the asset information lifecycle. Typically, within organizations there is a resistance to permanently delete data, otherwise known as data "squirrelling", due to the overall capacity of storing data increasing and the cost decreasing. However, within the organization's data archive strategy, a retention period should be specified to indicate when data should be deleted, along with any processes to follow, such as obtaining prior authorization.

# 3. Levels of Service

## 3.1 Purpose

Level of Service (LoS) supports every aspect of the overall AM System. The objective of establishing clearly defined service levels is to help the City meet stakeholder values, achieve its strategic goals, make informed decisions, and implement effective asset lifecycle activities.

Documenting LoS is a proven practice that will enable the City to:

- Link corporate strategic objectives to customer expectations and technical operations.
- Balance customer needs and expectations while evaluating the effectiveness of operations and whether the right LoS is being provided at the right cost.
- Transition from an “Asset Stewardship” approach that focuses on making decisions based on maintaining assets in an acceptable condition to a “Serviceability” approach that is geared towards making decisions based on balancing the costs, risks, and goals for the LoS being provided by the City’s assets.
- Communicate the physical nature of infrastructure that the City owns and is financially responsible for while promoting the use of LoS to enable effective consultation with stakeholders regarding alternative funding options according to desired LoS outcomes.
- Make recommendations on strategies that the City can take now to minimize future renewal costs while ensuring that adequate LoS can be delivered without burdening future generations.
- Assess internal (e.g., program changes) and external (e.g., climate change) factors that have the potential to impact the City’s ability to deliver services and how these factors may impact the LoS being provided.
- Implement a corporate continuous improvement program to further optimize AM across all service areas.

O. Reg. 588/17 mandates that Ontario municipalities must report their current LoS by July 1, 2024. Additionally, the proposed LoS for all municipal assets including core and non-core assets should be reported by July 1, 2025.

## 3.2 Objectives

Defining LoS objectives is important for drawing a line of sight between the City’s corporate objectives and the tangible asset performance outcomes. To do so, the LoS objectives must take into consideration stakeholder interests to develop asset performance measures that aim to meet the needs and expectations of the community. By doing this, the City will ensure that their assets are striving towards optimal performance, not only operationally, but economically, socially, and sustainably as well.

Every stakeholder has certain interests in the service being provided and in general. The City’s corporate objective is to lift up the community and build pride, and attract people (visitors, employers, and employees). The City’s Comprehensive Background Report[3] for the New Official Plan outlined the overarching themes that reflect the City’s value, as shown in **Table 3-1**. Each overarching theme is also assigned a corporate service objective.

The development of level of service targets should be aligned with these corporate objectives which will be addressed in the next iteration of the AMP.

[3] City of Sault Ste Marie. 2021. Comprehensive Background Report.

**Table 3-1: The City's Overarching Themes and Objectives**

| Overarching Themes | Corporate Objective |
|---|---|
| Healthy Community | Supports healthy living, active transportation, access to passive and active recreation, social interaction and the creation of spaces that are comfortable, safe, and accessible for all ages and abilities (the "8 to 80 Cities" concept). |
| Environmental Sustainability | Supports energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaptation. |
| Integrated Mobility | Supports accessibility and choice of a diversity of transportation modes. |
| Sense of Place | Fosters a welcoming place for all that establishes connection and provides a memorable experience to visitors. |
| Sustainable Growth | Stimulates reinvigoration of neighbourhoods to provide a complete range of housing, services, employment, and recreation. |
| Economic Resiliency | Supports the growth and diversification of the City's economy. |
| Social Equity | Contributes to creating a welcoming and inclusive community, focusing on the removal of systemic barriers so that everyone has access to an acceptable standard of living and can fully participate in all aspects of community life. |
| Cultural Vitality | Celebrates the City's history, diverse communities, and natural and cultural heritage, with the Downtown as the City's core destination for arts and culture. |

## 3.3 Stakeholder Identification

A stakeholder is any person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or an activity. Stakeholder analysis is the process of understanding stakeholder needs, expectations, and perceptions relative to the stakeholder's level-of-interest and level-of-influence over the organization. The organization typically engages with their stakeholders to:

- Establish which activities or services matter most to them.
- Understand their risk appetite and risk threshold.
- Understand their willingness to pay for services.

Stakeholders can take many forms and may be internal (i.e., staff, Council) or external (i.e., the public, regulatory agencies, suppliers, neighbouring municipalities, etc.) to the organization. The following groups were identified as key stakeholders for fleet during the LoS workshop held with City staff. This is not intended to be an exhaustive list; however, the following groups provide a good starting point for the City to move forward to the next stage:

- Residential Customers
- Industrial, Commercial & institutional (ICI) Customers
- Regulatory Agencies
- Neighbouring Municipalities
- Internal City Departments
- School Boards

### 3.3.1 Legislated and Regulatory Requirements

Protective service assets are critical to the City's ability to provide essential services to the community, and for protecting the health and safety of the public. As such, key legislative requirements exist for the City's infrastructure assets, which ensure that minimum requirements are met and standards are in place that promote a high quality of life (i.e., protective citizens when situations arise, etc.). A sample of key Federal and Provincial legislated requirements are outlined below in **Table 3-2**. Monitoring and development programs relevant to protective services assets are also listed.

**Table 3-2: Legislated and Regulatory Requirements**

| Protective Service | Federal | Provincial |
|---|---|---|
| **Fire Services** | • National Fire Code of Canada<br>• National Fire Protection Association (International Organization, Legislation adopted in Canada) | • Ontario Fire Code<br>• Fire Protection and Prevention Act (FPPA)<br>• Ontario Regulation 379/18 (Training and Certification)<br>• Emergency Management and Civil Protection Act |
| **Police Services** | • Royal Canadian Mounted Police Act | • Community Safety and Policing Act (formerly known as the Police Services Act, prior to April 2024) |

## 3.4 O. Reg 588/17 Levels of Service Metrics

Currently, O. Reg 588/17 only identifies levels of service metrics for core assets. A number of key LoS performance measures for protective services assets have been identified in consultation with City staff through workshops, are detailed in **Section 3.5**.

## 3.5 Levels of Service Performance Metrics

Through a review of the legislated and regulatory requirements required for protective services and collaboration with the City during the LoS workshop, seven (7) LoS performance metrics were determined for fire & rescue protective services, and three (3) performance metrics were determined for police protect services. A summary of the City's protective services service level metrics are presented in **Table 3-3**.

### Table 3-3: Levels of Service Performance Metrics (Protective Services)

| | Asset Category | Universal Service Value | LoS Performance Measure | Unit | Is Data Available? (Y/N) |
|---|---|---|---|---|---|
| 1. | Fire & Rescue | Affordability | Total Fire Operating Cost per 1,000 Population | $ / 1,000 People | TBD |
| 2. | Fire & Rescue | Affordability | Cost of Maintenance/Repairs per Vehicle | $ / Vehicle | TBD |
| 3. | Fire & Rescue | Affordability | Fuel Cost per Vehicle | $ / Vehicle | TBD |
| 4. | Fire & Rescue | Quality & Reliability | Percentage of Fire & Rescue Equipment in Very Good or Good Condition | % | TBD |
| 5. | Fire & Rescue | Quality & Reliability | Percentage of Fire & Rescue Equipment Required for Health and Safety | % | TBD |
| 6. | Fire & Rescue | Quality & Reliability | Hours of Operation per Vehicle | Hrs / Vehicle | TBD |
| 7. | Fire & Rescue | Quality & Reliability | Mileage of Operation per Vehicle | km / Vehicle | TBD |
| 1. | Police Service | Access & Capacity | Number of Police Staff (Officers and Civilians) per 100,000 Population | # | TBD |
| 2. | Police Service | Customer Service & Responsiveness | Number of complaints against police officers | # | TBD |
| 3. | Police Service | Health & Safety | Number of police officer training hours | Hour | TBD |

## 3.6 Levels of Service Performance Targets

Establishing LoS targets is an important part of continual improvement and performance management. Without performance targets, it is difficult to ascertain whether goals are being met, or the extent of the gap if they are not. Incorporating targets into the City's LoS framework helps to ensure that targets are reasonable, aligned with customer expectations, and evaluated on an objective basis by considering cost-benefit trade-offs.

One of the key challenges in setting infrastructure performance targets in a municipal environment is that they can often become biased and/or politically motivated. Therefore, it is important to review LoS targets with internal and external stakeholders, especially the customers who will be impacted the most by changes in service delivery. An important aspect of evaluating LoS targets is determining how the user is willing to pay for the service. Regulatory requirements are an exception; however, they only provide the minimum service standard. Cost is still an important parameter to consider when assessing the merits of service improvements. To deal with the financial realities, it is necessary to:

- Calculate how much the service costs based on current LoS.
- Determine the cost associated with varying the LoS.
- Assess the customers' willingness to pay.

It is important that any targets set be realistic and achievable. Therefore, it is not advisable that the City sets any firm targets until their current performance has been fully assessed. O. Reg. 588/17 requires AMPs to include proposed levels of service and a formalized financial strategy by July 1, 2025.

## 3.7 Future Demand Drivers

Demand management is a critical component of managing the desired LoS in a sustainable manner, now and into the future. Understanding demand drivers enables the City to proactively develop effective, long-term strategies that are suitable for the City's unique political, environmental, social and technological landscape.

A summary of factors identified from the LoS workshop that would impact fleet service levels include, but are not limited to, the following:

- Technology.
- Electrification.
- Energy and Demand Management.
- Funding level.

On November 2, 2021, the City's Planning Division released the Comprehensive Background Report for updating the Official Plan[4]. The City's Official Plan guides local decision-making on land use, development, and public infrastructure over the next 20 years. The City's population is expected to reach 80,000 people by 2031, and 83,300 people by 2036. Employment is projected to grow by approximately 6,000 jobs, from 31,000 jobs in 2016 to 36,900 jobs in 2036.

When additional assets to accommodate this population and employment growth are introduced to the City's portfolio, additional human resources, training and funding are required to maintain and operate, and renew or replace those assets. O. Reg. 588/17 requires municipalities by July 1, 2025, to estimate capital expenditures and significant operating costs to achieve the proposed LoS and accommodate projected increases in demand caused by population and employment growth. This includes the estimated capital expenditures and significant operating costs related to new construction and / or to upgrade existing municipal infrastructure assets. The City will have to address these aspects during the later phases of the AM regulatory compliance process and before the 2025 deadline.

[4] City of Sault Ste Marie. 1996. Official Plan

# 4. Asset Management Strategies

## 4.1 Asset Lifecycle Management Introduction

Asset lifecycle management focuses on the specific activities that should be undertaken during all phases of the asset lifecycle. Considering the entire asset lifecycle ensures that the City makes sound decisions that take into account present and future service delivery needs.

The overarching goal of lifecycle management is to maximize the long-term benefits and services that the City's assets deliver while minimizing the associated costs and risks in the long run. Every asset has a lifecycle cost, which is the total cost of all activities undertaken throughout its service life. Part of the purpose of the AM planning process is to fully understand and predict the long-range financial requirements for the City's infrastructure, facilitating planning and resource management in the most cost-effective manner possible. **Figure 4-1** illustrates how costs typically accumulate over an asset's life. It is worth noting that the ongoing operations and maintenance, renewal & replacement, and disposal costs accumulate up to many multiples of the initial acquisition costs. As such, it is important to fully understand the entire lifecycle costs before proceeding with asset acquisition.

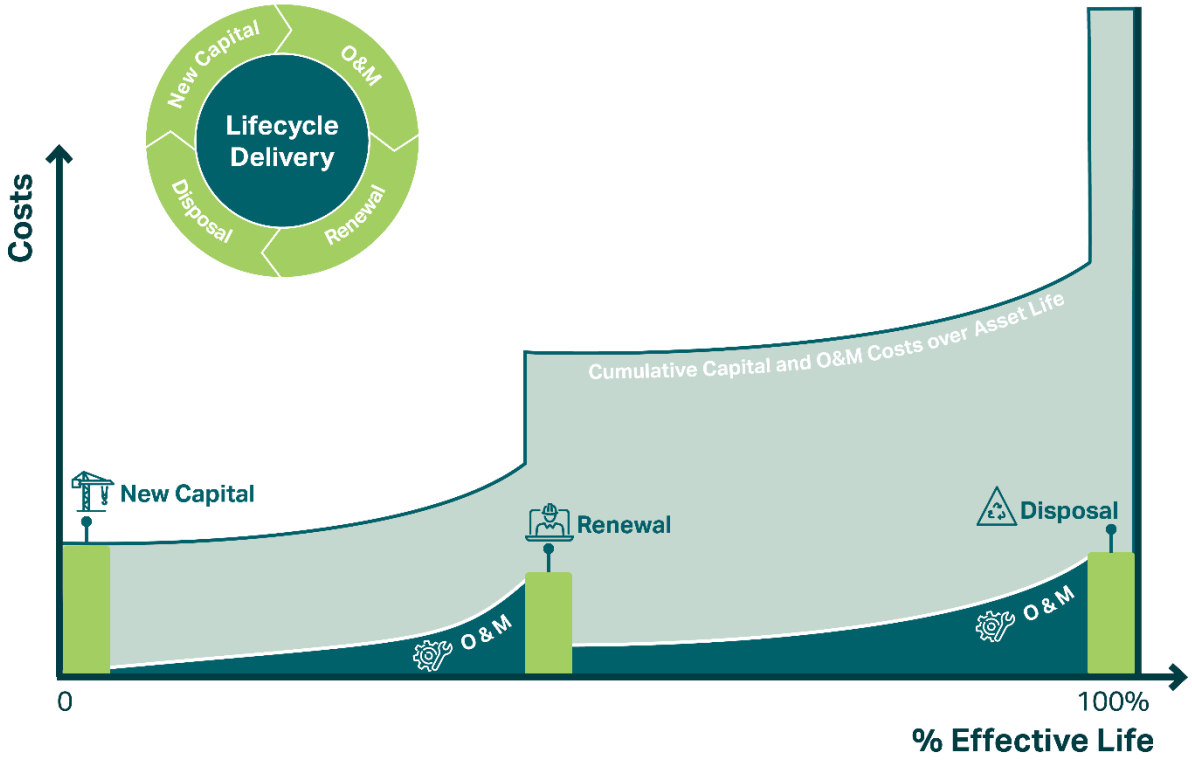


**Figure 4-1: Lifecycle Cost Accumulation Over Asset Life**

Asset lifecycle management strategies are typically organized into the following categories.

1. **Asset Acquisition / Procurement / Construction**: Acquisition includes expansion activities and upgrading activities to extend services to previously unserved areas or meet the demands of growth and functional requirements. When acquiring new assets, the City should evaluate credible alternative design solutions, considering how the asset will be managed at each of its lifecycle stages. AM and full lifecycle considerations for the acquisition of new assets include, but are not limited to, the following:

    - The asset's operability and maintainability.

- Supply chain considerations.
- Availability and management of detours.
- Staff skill and availability to manage the asset.
- The manner of the asset's eventual disposal.

2. **Asset Operations and Maintenance (O&M)**: As new infrastructure is commissioned, the City assumes the responsibility of operating and maintaining the infrastructure according to O&M standards to ensure its safety and reliability. The operations staff provides the necessary day-to-day support for operating the assets. Maintenance expenses include periodic preventive maintenance to ensure that the infrastructure can provide reliable service throughout the life of the asset and corrective maintenance that is required to repair defective assets as needed. Inadequate funding for O&M will adversely impact the lifespan of assets. The number of O&M resources required in any period is a function of the current inventory of infrastructure and the total O&M needs for each asset. As the inventory of infrastructure grows, total O&M requirements will also increase.

3. **Renewal and Replacement:** The third aspect of full lifecycle costing pertains to the renewal and replacement of assets that have deteriorated to the point where they no longer provide the required service. Renewal or rehabilitation costs may be incurred during the life of an asset where an investment is made to improve its condition and/or functionality, for example, renewing turnout gear. Reconstruction activities are expected to occur once an asset has reached the end of its useful life, and renewal is no longer a viable option.

4. **Decommissioning and Disposal:** There will inevitably come to a point in time when an asset must be removed from service, and depending on the type of asset, there may be significant costs associated with its decommissioning and disposal. Factors that may influence the decision to retire an asset include changes leading to non-compliance, the inability of the asset to handle increased LoS, technological advances rendering the asset obsolete, the cost of retaining the asset exceeding the benefits gained, the current risk associated with the asset's failure becoming intolerable, assets negatively impacting service delivery or negative impacts on the environment.

   Normally, major costs that may be incurred during disposal and decommissioning derive from the environmental impact of the disposal and, if required, the rehabilitation and decontamination of land. However, some cost savings may be achieved through the residual value of the asset or by exploring alternative uses for the asset. In all cases, it is important to consider disposal and decommissioning as the strategy employed has the potential to attract significant stakeholder attention. For that reason, the costs and risks associated with disposal and decommissioning should be equally considered in the City's capital investment decision-making process.

## 4.2 Asset Acquisition Strategies

The City's approach to acquiring protective services assets adheres to relevant regulations, standards, and the City's strategic plans. These documents outline criteria for selecting assets, based on factors such as service levels and cost-effectiveness. Furthermore, the City's acquisition strategy aligns with their dedication to environmental sustainability, as notably demonstrated through the Green Fleet Initiative. **Table 4-1** summarizes the acquisition activities associated with the City's protective services assets.

**Table 4-1: Acquisition Activities for Protective Services Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Guiding Documents |
|---|---|---|---|
| Protective Services | Fire Services<br>Police Services | • Acquisition of new equipment.<br>• Expansion, updating, and restoration of current assets. | • Official Plan.<br>• Corporate Strategic Plan.<br>• Energy Conservation and Demand Management Plan.<br>• Strategic Business Plan.<br>• Strategic Asset Management Policy.<br>• Green Fleet Initiative.<br>• Fleet Management Services Report. |

## 4.3 Asset Operations and Maintenance Strategies

Effective O&M of assets is crucial for sustainable performance and longevity. The City's O&M of protective services assets is conducted with a primary focus on regulatory compliance. The City follows a meticulous maintenance schedule, incorporating regular inspections and adherence to best practices. **Table 4-2** summarizes the O&M activities associated with the City's protective services assets.

**Table 4-2: O&M Activities for Protective Services Assets**

| Asset Group | Asset Category | Activities Undertaken by the City | Compliances |
|---|---|---|---|
| Protective Services | Fire Services | • Annual service tests.<br>• Daily and weekly visual checks.<br>• Operational inspections.<br>• Road test and annual weight verification.<br>• Performance testing.<br>• Re-testing and correction for defective apparatus. | • National Fire Protection Association (NFPA).<br>• Occupational Safety and Health (OHS)<br>• Best practices: International Fire Service Training Association (IFSTA), Fire Underwriters Survey (FUS), Underwriter's Laboratories of Canada (ULC).<br>• Emergency Management and Civil Protection Act. |
| | Police Services | • Regular maintenance and inspections for equipment. | • Community Safety and Policing Act (formerly known as the Police Services Act, prior to April 2024) – O. Reg. 405/23 Police Uniforms and Equipment. |

## 4.4 Renewal and Replacement Strategies

Renewal often involves upgrading or refurbishing existing assets to extend their lifespan, while replacement entails acquiring new assets. The costs associated with these activities include not only the direct expenses of acquisition but also indirect costs such as downtime during the transition, training for new technologies, and potential disposal or recycling costs.

The City's decisions to renew or replace protective services assets are driven by various factors. These include commitments to enhancing asset condition, implementing upgrades to meet LoS, ensuring accessibility, and adapting to changes in regulations. Additionally, the City considers guidance from insurance policies, ensuring that assets meet coverage criteria. **Table 4-3** summarizes the renewal and replacement activities associated with the City's protective services assets.

**Table 4-3: Renewal and Replacement Activities for Protective Services Assets**

| Asset Group | Asset Category | Activities Undertaken by the City |
|---|---|---|
| Protective Services | Fire Services | • Replace at the end of life:<br>– Replaced $450k rescue truck in 2021.<br>– Received $850k tanker truck in 2022.<br>– Replaced $300k bunker gear in 2023.<br>– In progress: $2.6M aerial truck replacement. |
| | Police Services | • Switched car model due to improved vehicle availability and enhanced fuel efficiency. |

# 4.5 Decommissioning and Disposal Strategies

Effective asset decommissioning and disposal are integral components of strategic asset management. The City's choices to dispose of protective services assets are influenced by several key factors. These include responsiveness to evolving regulations, alignment with insurance, retirement plans for assets like fire apparatus, and adherence to predefined out-of-service criteria. Additionally, factors such as assets no longer in service, uneconomical conditions due to limited spare parts availability or obsolescence, and the pursuit of newer technologies contribute to the strategic approach the City takes in responsibly managing the lifecycle of protective services assets.

# 4.6 Risk Associated with Lifecyle Activities

In the context of AM, risk is defined as the consequence or impact of uncertainties on AM objectives. These uncertainties span a spectrum of events, including financial market fluctuations, unexpected asset failures, changes in regulatory environments, and other factors capable of influencing the performance or condition of assets. Risk management, developed to handle uncertainties in a systematic and timely manner, is a practical framework that ensures thoughtful decision-making and protects the achievement of goals. The risk management process generally follows a series of steps, as outlined in **Table 4-4**.

**Table 4-4: Key Steps in the Risk Management Process**

| Step | Description |
|---|---|
| 1. Establish the context | • Define the scope of the risk management process and the objectives that the City seeks to achieve through effective risk management.<br>• Consider the City's internal and external factors and understand stakeholder expectations. |
| 2. Risk identification | • Identify potential risks that could impact the City's AM objectives. |
| 3. Risk analysis | • Utilize qualitative or quantitative analysis methods to assess risks. |
| 4. Risk evaluation | • Evaluate the likelihood and impact of identified risks.<br>• Prioritize risks based on their criticality. |
| 5. Risk treatment | • Develop strategies to reduce the likelihood and impact of identified risks.<br>• Implement preventive measures to address potential issues proactively.<br>• Establish contingency plans for managing risks that cannot be eliminated. |
| 6. Monitor and review | • Regularly update risk assessments to reflect evolving circumstances.<br>• Develop KPIs and monitoring tools to track the effectiveness of risk treatment strategies.<br>• Learn from the City's past experiences and continuously improve risk management strategies. |

Over the course of an asset's service life, the accelerating rate of deterioration with age poses inherent risks, inevitably leading to a corresponding increase in maintenance costs. **Figure 4-2** illustrates a general asset deterioration curve. This trend becomes particularly pronounced in the final phase of the asset's service life, where the cost of maintenance experiences a rapid escalation, highlighting the financial risks associated with prolonged neglect. This phenomenon underscores the critical importance of preventive maintenance in the early stages of an

asset's service life. By addressing risks proactively during these initial periods, the potential financial burden tied to accelerated deterioration in later stages can be effectively mitigated.

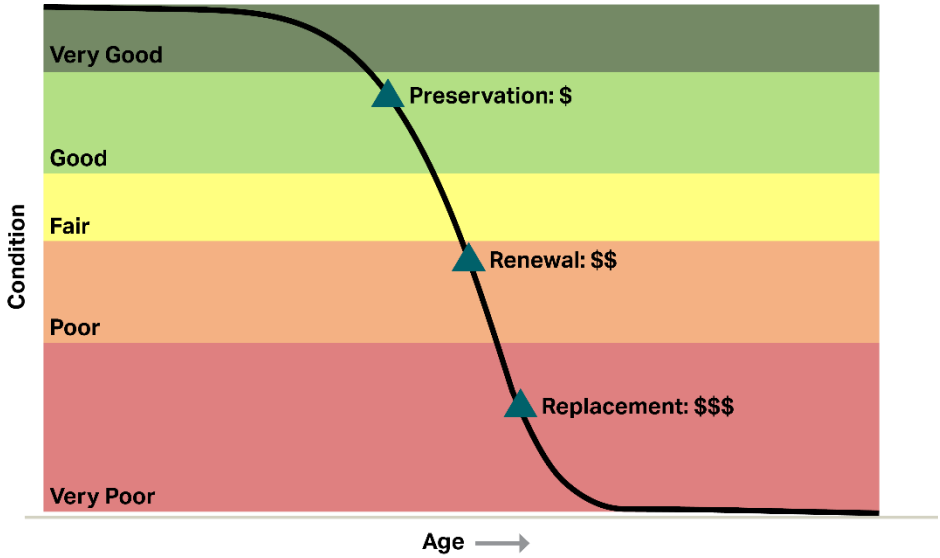


**Figure 4-2: Asset Deterioration Curve and Renewal Costs**

Beyond the general guidance, the City's approach to risk management should be tailored to their overarching goals, financial resources, and willingness to tolerate uncertainties. To help shape the City's risk management process, AECOM recommends taking into account the following key considerations:

**1. Specialized Parts and Limited Vendor Pool**

The supply chain for specialty equipment, like fire trucks, often relies on a limited pool of specialized vendors, while few of them are located within Ontario. In many instances, the required parts need to be shipped from overseas. This dependency can result in vulnerability to disruptions, such as production delays, supply shortages, or unexpected events affecting the vendor's operations. Consequently, it may lead to longer lead times and potential delays in maintenance. Addressing these challenges requires a strategic approach to enhance local capabilities, streamline vendor dependencies, and optimize the supply chain, ensuring the efficient operation and maintenance of crucial fire service assets within the City.

**2. Stringent Safety Standards and Changes in Regulations**

Specialty equipment is subject to rigorous safety standards and regulations; however, regulatory frameworks are dynamic and prone to change due to technological advancements, lessons learned from incidents, and evolving societal expectations. Therefore, staying ahead of these changes is crucial for the City to proactively identify and mitigate potential risks associated with non-compliance.

# 5. Funding Need Analysis

Financial forecasting and capital planning are a critical element of ensuring the efficient and sustainable management of infrastructure. This involves estimating future financial needs and developing a strategic plan to secure the necessary funding for maintenance, renewal, or expansion of assets. By accurately forecasting financial requirements and implementing a well-structured capital plan, the City can not only ensure the long-term viability of their infrastructure systems but also effectively manage costs, reduce environmental risks, and protect public health.

The financial projections presented in the subsequent sections provide visualizations of the results from the financial model. The subsequent sections are structured as follows:

**Section 5.1** shows the assumptions adopted in the financial model to determine the reinvestment and replacement decisions for each subcategory of protective services assets.

**Section 5.2** assesses the annual funding requirements for the next 20 years (2024-2043). Additionally, a smoothed allocation of annual funding is provided to align with the City's budgeting requirements.

**Section 5.3** presents the full funding needed over the next 10 years (2024-2033). The full funding expenditure profile includes the budget required for Capital, O&M, and disposal.

## 5.1 Reinvestment Forecast and Lifecycle Modeling

The lifecycle analysis was conducted using an MS Excel Asset Lifecycle Model that integrated asset inventory, age, ESLs, replacement values, and condition to establish a theoretical replacement cycle for each protective services asset. The reinvestment forecasts prepared for this assessment provide estimates of the costs required over the next 20 years to sustain each of the City's protective services assets. A financial dashboard was developed to present the results of the lifecycle modeling (**Appendix A**). Investments were also compared to the existing business plan to confirm alignment and understand gaps in planned expenditure.

The annual reinvestment needs for the protective services assets were determined based on their age and ESL in years (i.e., replacing assets that have exceeded their ESL) in inflated dollar values and is based on the following assumptions:

- Base year: The base year used is 2024. Any historic asset valuations have been inflated using assumed inflation rates.
- Reinvestment rate: Reinvestment rate is calculated as the average annual expenditure for asset replacement and renewal divided by the total replacement value. For example, a 10% reinvestment rate would mean, on average, all assets would be replaced and renewed in the span of 10 years.
- The inflation rates used are as follows:

**Table 5-1: Projected Inflation Rates**

| Year | Inflation Rate[5] |
|---|---|
| 2024 | 7% |
| 2025 | 6% |
| 2026 | 5% |
| 2027 | 4% |
| 2028 | 4% |
| 2029 onwards | 3% |

[5] AECOM Analysis, "Easing Inflation and Construction Costs – Q2 2023", June 2023

- Markup: The project management and engineering, and contingency mark ups are 15% and 30% respectively.
- Disposal Rate: 1% of the annual reinvestment is used as an allocation for disposal costs.

## 5.2 Capital Reinvestment Need Analysis

The City's protective services require an average annual reinvestment of $3.4 million over the period 2024-2033 and $4.5 million over 2034-2043 in inflated dollar values, as presented in **Figure 5-1**. This is equivalent to a total of approximately $79 million over the next 20-year period. Notably, the reinvestment funding needs for Police Services is the Support division and for Fire Services is Firehall #1.

Furthermore, the large spike in 2038 is because a number of big-ticket items needing replacement for Fire Services, such as the Smeal 100 ft Aerial Platform fire truck, the Smeal Rescue Pumper P3, and various turnout gear.

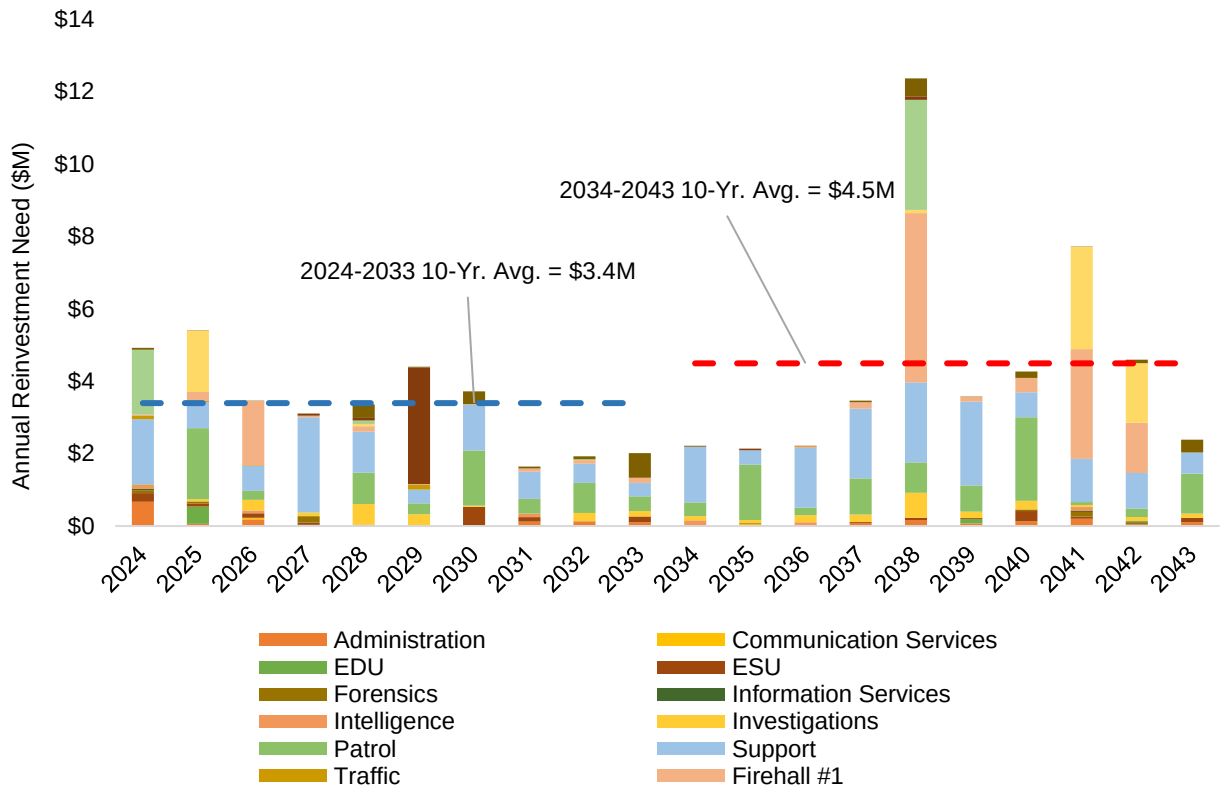


**Figure 5-1: Protective Services 20-Year Reinvestment Need**

The detailed 20-year reinvestment needs for protective services are presented in **Table 5-2** in inflated dollar values.

**Table 5-2: Protective Services 20-Year Total and Annual Average Reinvestment Need**

| Asset Category | Asset Sub-Category | Annual Average Need | 20-Year Total |
|---|---|---|---|
| Police Services | Administration | $106,000 | $2,114,000 |
| | Communication Services | $5,000 | $100,000 |
| | EDU | $30,000 | $601,000 |

| Asset Category | Asset Sub-Category | Annual Average Need | 20-Year Total |
|---|---|---|---|
| | ESU | $99,000 | $1,980,000 |
| | Forensics | $28,000 | $555,000 |
| | Information Services | $4,000 | $89,000 |
| | Intelligence | $34,000 | $683,000 |
| | Investigations | $187,000 | $3,735,000 |
| | Patrol | $748,000 | $14,967,000 |
| | Support | $1,185,000 | $23,708,000 |
| | Traffic | $13,000 | $269,000 |
| Fire Services | Firehall #1 | $624,000 | $12,483,000 |
| | Firehall #2 | $316,000 | $6,317,000 |
| | Firehall #3 | $248,000 | $4,961,000 |
| | Firehall #4 | $174,000 | $3,488,000 |
| | Fire Department | $141,000 | $2,822,000 |
| | **Total** | **$3,944,000** | **$78,872,000** |

To better align with the City's budgeting requirements, the annual capital reinvestment needs for the City's protective services assets have been evenly distributed over the next 20 years, as illustrated in **Figure 5-2**. This smoothing of reinvestment requirements aims to facilitate the City's budgeting processes by providing a more predictable and steadier financial outlook. Rather than experiencing significant fluctuations in capital expenditure from year to year, this approach allows for a more consistent and manageable financial planning for the City throughout the period of 2024-2043.

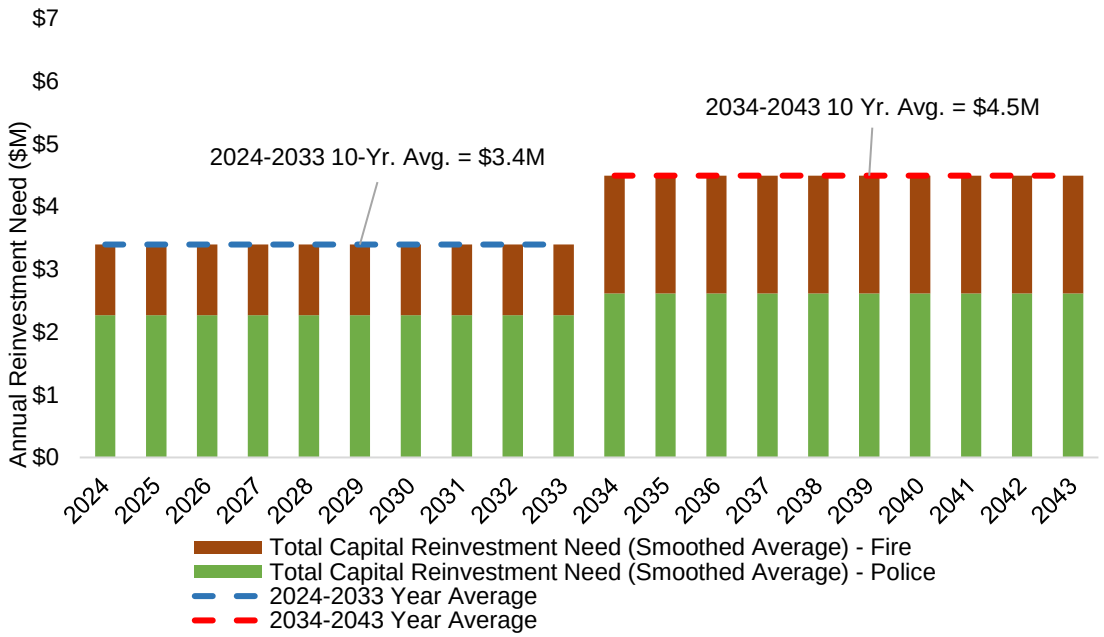


**Figure 5-2: Protective Services 20-Year Smoothed Annual Reinvestment Needs**

Of the $3.4M annual average for 2024-2033, fire services will require $1.1M and police services will require $2.3M. For 2034-2043's annual average of $4.5M, it consists of $1.9M and $2.6M annually for fire and police services, respectively.

See **Appendix A** for additional graphs and detailed breakdown of reinvestment needs for both Police Services and Fire Services.

## 5.3 Full Funding Need Profile

**Figure 5-3** shows a full picture of the City's protective services funding forecast for the next 10 years. This graph provides the City with a comprehensive understanding of the full funding requirements, essential for effective financial planning activities. The total annual reinvestment cost (**Figure 5-1**) was combined with the City's projected O&M cost. Additionally, one percent of the annual replacement cost was added to account for the asset disposal cost. With these additions, the City's protective services full funding requirement increases to approximately $62 million over the next 10 years, averaging $6.2 million per year in inflated dollar value. Of the total $62 million annual average, fire services will need $19.8 million and police services will need $42.6 million.

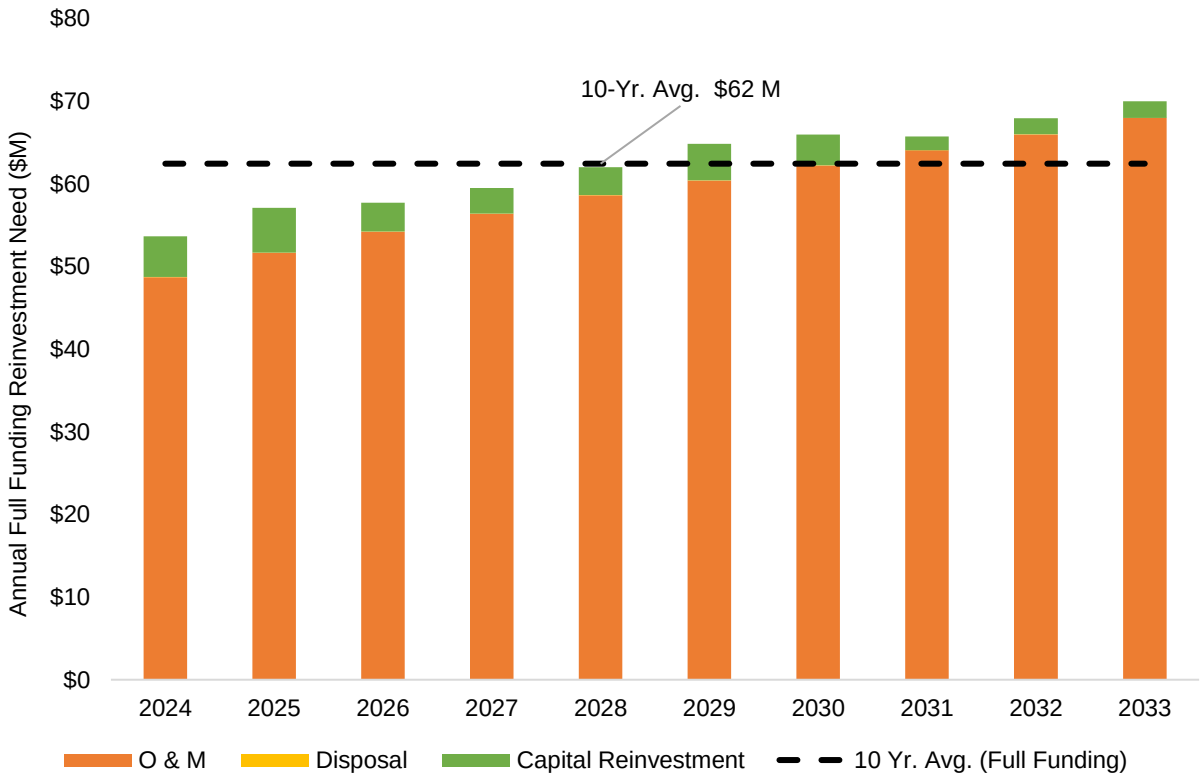


**Figure 5-3: Protective Services Full Funding Need Profile**

## 5.4 Funding Strategies

The City's protective services primarily funded through the property tax levy. While the City affirms the current security of this funding source and expresses confidence in its sustainability over the next 10 to 20 years, there is a noted awareness of potential challenges. The City acknowledges concerns about rising costs and supplier issues, underscoring the importance of continuous strategic planning and financial. In response to these challenges, the City is actively seeking funding opportunities through various means and has successfully established the following connections:

- The City currently provides servicing for the District Social Services Administration Board (DSSAB) fleet, with associated costs offset by them.
- The City secures green funding for small equipment pieces, including lawnmowers, grass-cutting equipment, and snow equipment, along with some funding allocated for firefighting equipment.
- The City receives a provincial grant supporting 12 officers' Full-Time Equivalents (FTEs).
- The City obtains funding through the Community Safety Program.
- The City generates income from record checks or freedom of information requests.

In addition to the City's current funding sources, AECOM also suggests the following options that could be considered, acknowledging that the City's eligibility for these funds is subject to certain criteria:

- Canada Community-Building Fund (CCBF).
- Ontario Community Infrastructure Fund (OCIF).
- Municipal Asset Management Program (MAMP).
- Fire Prevention and Public Education (FPPE) Grant.
- Proceeds of Crime Front-Line Policing Grant.

### 5.4.1 Canada Community-Building Fund (CCBF)

The CCBF, previously known as the Federal Gas Tax Fund, is a permanent source of upfront funding distributed twice a year to territories and provinces. The delivery of the CCBF to municipalities varies by province or territory, with allocation following a per-capita basis for provinces, territories, and First Nations[6].

The CCBF is administered in Ontario through a bilateral agreement with the Government of Ontario, the Association of Municipalities of Ontario (AMO), and municipalities. This program allocates approximately $816 million annually to 641 communities in Ontario, with an additional top-up of $816.5 million provided in 2020 to expedite communities' recovery from the COVID-19 pandemic. Notably, as of 2022, the City has received over $9 million through the CCBF, granting the City flexibility to strategically invest across 19 distinct project categories[7].

### 5.4.2 Ontario Community Infrastructure Fund (OCIF)

The OCIF is a program designed to support municipalities with small populations (less than 100,000), along with those situated in northern and rural areas. Its primary objective is to aid communities in overcoming challenges related to infrastructure maintenance and improvement while facilitating the development and updating of their asset management plans. Eligible communities receive annual allocations and have the option to accumulate these grants for up to five years to address substantial infrastructure projects. The fund is an essential component of the provincial government's commitment to fostering strong, resilient, and well-equipped communities across Ontario[8].

### 5.4.3 Municipal Asset Management Program (MAMP)

The MAMP is aimed at improving AM practices within municipalities. Designed to assist municipalities in gaining a better understanding, planning, and efficient and sustainable management of their infrastructure assets, the program

[6] The Canada Community-Building Fund. (2022). Infrastructure Canada. Infrastructure Canada - The Canada Community-Building Fund. Retrieved on February 15th, 2024.

[7] Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts. (2021). Infrastructure Canada. Backgrounder: Ontario's 2021–22 federal Canada Community-Building Fund allocations and top-up amounts - Canada.ca. Retrieved on February 15th, 2024.

[8] Ontario Community Infrastructure Fund. (2023). Ministry of Infrastructure, Ontario. Ontario Community Infrastructure Fund | ontario.ca. Retrieved on February 15th, 2024.

may offer funding to support the development or improvement of AM plans. This financial support is intended to incentivize municipalities to adopt and implement sustainable AM practices[9].

### 5.4.4 Fire Prevention and Public Education (FPPE) Grant

The FPPE Grant is a funding initiative that typically awards $1,000 to three fire departments in good standing with the Ontario Municipal Fire Prevention Officer's Association (OMFPOA). The awarded money is intended to be used towards on fire prevention and public education[10].

### 5.4.5 Proceeds of Crime Front-line Policing Grant

The Proceeds of Crime Front-Line Policing Grant stands as the cornerstone of the Ontario government's commitment to investing over $6 million in the mission to combat crime and cultivate safer communities. This grant is set to be extended to 16 police services across the province, empowering them to implement 21 crime prevention and community safety initiatives aimed at addressing issues such as gun and gang violence, human trafficking, and sexual violence and harassment. This strategic allocation of funds underscores the government's dedication to proactively utilize resources garnered from criminal activities to strengthen law enforcement efforts and foster safer communities[11].

[9] Municipal Asset Management Program. (n.d.). Federation of Canadian Municipalities. Municipal Asset Management Program | FCM. Retrieved on February 15th, 2024.

[10] Fire Prevention and Public Education Grant. (2023). Ontario Municipal Fire Prevention Officer's Association. Grants - Ontario Municipal Fire Prevention Officer's Association (omfpoa.com). Retrieved on February 15th, 2024.

[11] Ontario Investing $6 Million to Boost the Fight Against Crime. (2020). Government of Ontario. Ontario Investing $6 Million to Boost the Fight Against Crime | Ontario Newsroom. Retrieved on February 15th, 2024.

# 6. Implementation Plan and Continuous Improvement

Continuous improvement is an important component of any AM program and is achieved through the implementation of recommended improvement initiatives which support sustainable service delivery. AECOM has identified a set of activities that represents the next stage of AM planning and implementation within the City, as shown in **Table 6-1**.

**Table 6-1: Recommended AM Improvement Initiatives**

| Index | Improvement Initiative | Description |
|---|---|---|
| 1. | Refine the asset hierarchy and inventory. | • Continue to refine the asset inventory and close existing data gaps, to have a more accurate representation of the current state of the protective services assets; and, ultimately, to make more informed and defensible decisions.<br>• Incorporate and maintain all the inventory data within one database, for example, move the asset inventory recorded in various spreadsheets into one master spreadsheet.<br>• Trace the installation years of protective services assets.<br>• Record the physical location of each asset in the asset inventory. This would for easier management of each of the lifecycle phases. |
| 2. | Establish and implement a data information management strategy | • Asset data will be centralized, digitized and accessible to all staff.<br>• Annual updates for the state of infrastructure data attributes such as the asset inventory, including the age and condition of the assets.<br>• AM staff should have the ability to collect and update asset data in the field and in real time.<br>• Workflows will be documented and digitized. |
| 3. | Develop a formalized protective services assets condition assessment process and use consistent condition grading schemes for these assets. | • Currently, the condition of the protective services asset is not tracked with a well-developed asset condition rating grading system specialized for fire and police assets.<br>• The grading system should include a description directly tied to each condition grade, along with details about the asset's performance and the necessary level of corrective and preventive maintenance required for assets falling within a certain condition rating category. This process will enable the City to keep track of and better forecast asset renewal needs.<br>• Perform condition assessments on the most critical assets first. This ensures that assets are assessed using the same methodology and prioritized based on their criticality. It facilitates a more defensible business case when addressing issues of asset degradation with senior management and the Council. |
| 4. | Refine the LoS Framework. | • Collect current asset performance data for key performance indicators (KPIs) that are not currently being tracked.<br>• Analyze asset performance data to identify trends and establish annual performance benchmarks.<br>• Engage in discussions with key stakeholders to establish service level targets and identify associated costs to meet those targets.<br>• Once LoS targets have been decided upon, the City should develop strategies on how to meet service level targets, considering its existing operating environment (i.e., staff availability, current funding, resources, etc.).<br>• Develop a Customer Consultation Plan to engage the public and other stakeholders on the LoS framework and better understand customers' willingness to pay for enhanced service levels. |
| 5. | Incorporate risk assessment for future iterations of the AM plan, and use the risk assessment results to drive future condition assessments and financial needs forecasting | • Conduct a comprehensive criticality and risk assessment of assets to inform work prioritization.<br>• Review risk attribute values periodically to ensure alignment with business objectives and risk appetite.<br>• Overlay the risk model with the current state of the assets (i.e., condition) and the financial forecast. Using this approach, the City could focus its monitoring, maintenance, and renewal and replacement budget and |

| Index | Improvement Initiative | Description |
|---|---|---|
| | | activities on high-risk assets. Medium-risk infrastructure could be addressed through the mitigation of failure via regular monitoring, while low-risk assets could be accepted with caution. |
| 6. | Continue to find ways to improve AM initiatives across the City by maintaining a high level of AM awareness through training, communication, and knowledge sharing. | • Conduct an AM Software Assessment to identify future system requirements, which may involve enhancing existing software, adding new features, or replacing the current system.<br>• Develop a Knowledge Retention Strategy and Internal Communications Plan to document staff AM knowledge and experience for reporting and succession planning purposes. Communicate AM improvement initiatives and enhance AM awareness internally through internal communication. |
| 7. | Update AM Plans | • Updates to the performance measures, and targets for the LoS framework, every 2 to 5 years.<br>• Annual updates to the lifecycle strategies, including the O&M, renewal, upgrades, growth, and regulatory compliance strategies.<br>• Updates to the financial strategies, such as asset valuations, long-term capital plans, operating budgets, and revenue sources. |
| 8. | Grant application program | • The City should initiate an internal program for developing grant applications tailored to organizational objectives and align to the criteria of various funding programs. (refer to **Section 5.4** for available grant options).<br>• Guidance includes:<br>- Aligning with grant-specific criteria: prepare the grant application align with the requirements, and place emphasis on the key aspects relevant to the grant objectives.<br>- Developing a grant application proposal: the application will be a project proposal that resonates with the grant agencies' goals, which should articulate clear objectives and expected outcome.<br>- Budget planning: the financial plans must resonate with the grant's objectives, presenting transparency in fund utilization and emphasizing the project's viability and long-term financial sustainability.<br>- Demonstrating feasibility and organization capacity: presenting a realistic project timeline, clear milestones, and a well-thought-out implementation plan.<br>- Compliance, Reporting, and Effective Project Management: a robust project management strategy should be devised, illustrating the City's capacity to effectively manage, oversee, and report on the project's progress, in accordance with the grant's stipulations.<br>- Preparing and Organizing Supporting Documents: these documents will be organized and presented in a manner that lucidly supports and enhances the application.<br>• Final Review and Submission Process: prior to submission, each application should undergo a thorough review to ensure it meets the specific criteria and guidelines of the respective grant program. |

# Appendix A – Protective Services MS Excel Lifecycle Model and Inventory

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Karen Marlow, Manager of Purchasing |
| DEPARTMENT: | Corporate Services |
| RE: | Asset Management Plan Phase III |

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## Purpose

The purpose of this report is to obtain Council approval to continue with Phase III of Asset Management Plan to comply with regulatory requirements by July 1, 2025 in respect to Ontario Regulation 588/17 (as amended by Ontario Regulation 192/21) under the *Infrastructure for Jobs and Prosperity Act*, as required by Public Works and Engineering Services.

## Background

The Ontario Regulation 588/17 has four key milestones related to the asset management planning process. The City's strategic asset management policy was finalized June 3, 2019 which addressed the first milestone.

In May 2021 a Request for Proposal was issued for the provision of professional services for development of the Asset Management Plan Phase I – Core Assets including Wastewater Assets; Stormwater Management Assets; Roads; and Bridges and Culverts.

At the July 12, 2021 Council meeting the following resolution was passed:

> Resolved that the report of the Manager of Purchasing dated July 12, 2021 concerning RFP Asset Management Planning – Consulting Engineering be received and that the proposal submitted by AECOM Canada Ltd. with fees of $210,000 plus HST as outlined in their proposal submitted as required by Public Works and Engineering Services, be approved

At the June 19, 2023 Council meeting a request was submitted for Asset Management Plan Phase II Non-Core municipal infrastructure assets to authorize AECOM Canada Ltd. to continue work building on Phase I developments for fee of $214,700 plus HST.

> Resolved that By-law 2023-99 being a by-law to authorize the execution of the AECOM Canada Ltd. fee addendum for non-core municipal infrastructure assets be passed in open Council this 19th day of June, 2023.

**Analysis**
The Manager of Development and Environmental Engineering requests that single source non-competitive approval be considered to utilize AECOM Canada Ltd. for final Phase III of the asset management plan. This next milestone under the Regulation includes build-out of the current asset management plan to incorporate all assets, proposed levels of service, lifecycle management strategy and financial strategy by July 1, 2025.

AECOM Canada Ltd. having been selected through proposal process and completing the initial regulation requirement phases provides value in continuing accordingly.

This single source request is in accordance with Purchasing By-law Non-Competitive item 22.3 h) in the best interests of City for continued services with AECOM Canada Ltd for completion of this program on final Phase III requirements.

**Financial Implications**
AECOM Canada Ltd. proposed fee of $229,000 for Phase III will result in a total expenditure of $233,031 including the non-rebatable portion of HST.

The 2024 approved Capital Budget included $200,000 for Asset Management Plan Phase III. It is recommended the $33,031 shortfall be funded from the Asset Management Reserve.

**Strategic Plan / Policy Impact / Climate Impact**
This project is linked to the Infrastructure focus area of the Corporate Strategic Plan, and specifically maintaining existing infrastructure.

**Recommendation**
It is therefore recommended that Council take the following action:

Resolved that the report of the Manager of Purchasing dated September 9, 2024 concerning Asset Management Plan Phase III be received and the recommendation to retain AECOM Canada Ltd. at the total proposed fee of $229,000 plus HST be approved with additional funding of $33,301 allocated from the Asset Management Reserve.

The relevant By-law 2024-131 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Karen Marlow
Manager of Purchasing
705.759.5298
k.marlow@cityssm.on.ca

**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Melanie Borowicz-Sibenik, Assistant City Solicitor/Senior Litigation Counsel |
| DEPARTMENT: | Legal Department |
| RE: | Property Declared Surplus – 149 Gore Street |

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## Purpose

The purpose of this report is to recommend to Council that the property described as PIN 31576-0095 (LT) PT LT 1-2 PL 4050 ST. MARY'S AS IN T362161; S/T & T/W INTEREST IN T362161 & T/W T362161; SAULT STE. MARIE, being civic 149 Gore Street be declared as surplus and offered for sale by the City in accordance with the City's policy for the disposition of land.

## Attachment

Attached as Schedule "A" is a map of the subject property.

## Background

The Legal Department received a request on March 21, 2024 from Mark A. Lepore (Spadafora Johnson Lepore LLP) on behalf of his client Marc Muto and Carmen Muto Plumbing & Heating Inc. to ascertain if 149 Gore Street would be declared surplus. Mr. Lepore advised that his client is interested in the Subject Property to support the unit at 147 Gore Street currently occupied by Grocer 4 Good. His client intends to allow space to install garden beds to provide food security and support their Monday Meals and other programs with a patio and greenspace. Carmen Muto Plumbing & Heating Inc. owns the abutting land at 163 Gore Street.

The request was circulated to various City Departments and the Sault Ste. Marie Region Conservation Authority for comment ("SSMRCA").

The Public Works and Transportation Department supports declaring this property surplus.

The Engineering Department provided the following information:

- Enbridge Gas – No interest in the subject lands.
- Hydro One – No response.
- Bell – No issues.
- Shaw/Rogers – No issues.

- Algoma Power – No infrastructure in the area.
- PUC – No objections to sale, there is an electrical service to the property that may need to be removed, upgraded, or account transferred to the new owner depending on the future use of the property.
- Engineering and Construction – Engineering has no objections to the sale of this property.

The Planning Department has no issues.

The Building Department has no objections or comments.

The SSMRCA advised that the Subject Property described as 149 Gore Street is not located within an area under the jurisdiction of the Conservation Authority, with regard to the *Conservation Authorities Act*, Part IV and O. Reg. 41/24 subsection 7(1) Prohibited Activities, Exemptions and Permits. SSMRCA does not object to this request.

The Community Development and Enterprise Services Department has no objections or further comments.

The District of Sault Ste. Marie Social Services Administration Board has no objections or comments.

**Analysis**
If Council declares the property surplus, the property will be advertised on the City's web page with the notation that it will be sold to Carmen Muto Plumbing & Heating Inc.

**Financial Implications / Policy Impact**
If the City decides to dispose of the Subject Property, it would be consistent with the City's plan to dispose of surplus property. As this property is presently City owned the City does not receive any revenues from taxes. Upon sale of the property, it may be assessable depending upon its ultimate use.

**Strategic Plan / Climate Impact**
Not applicable.

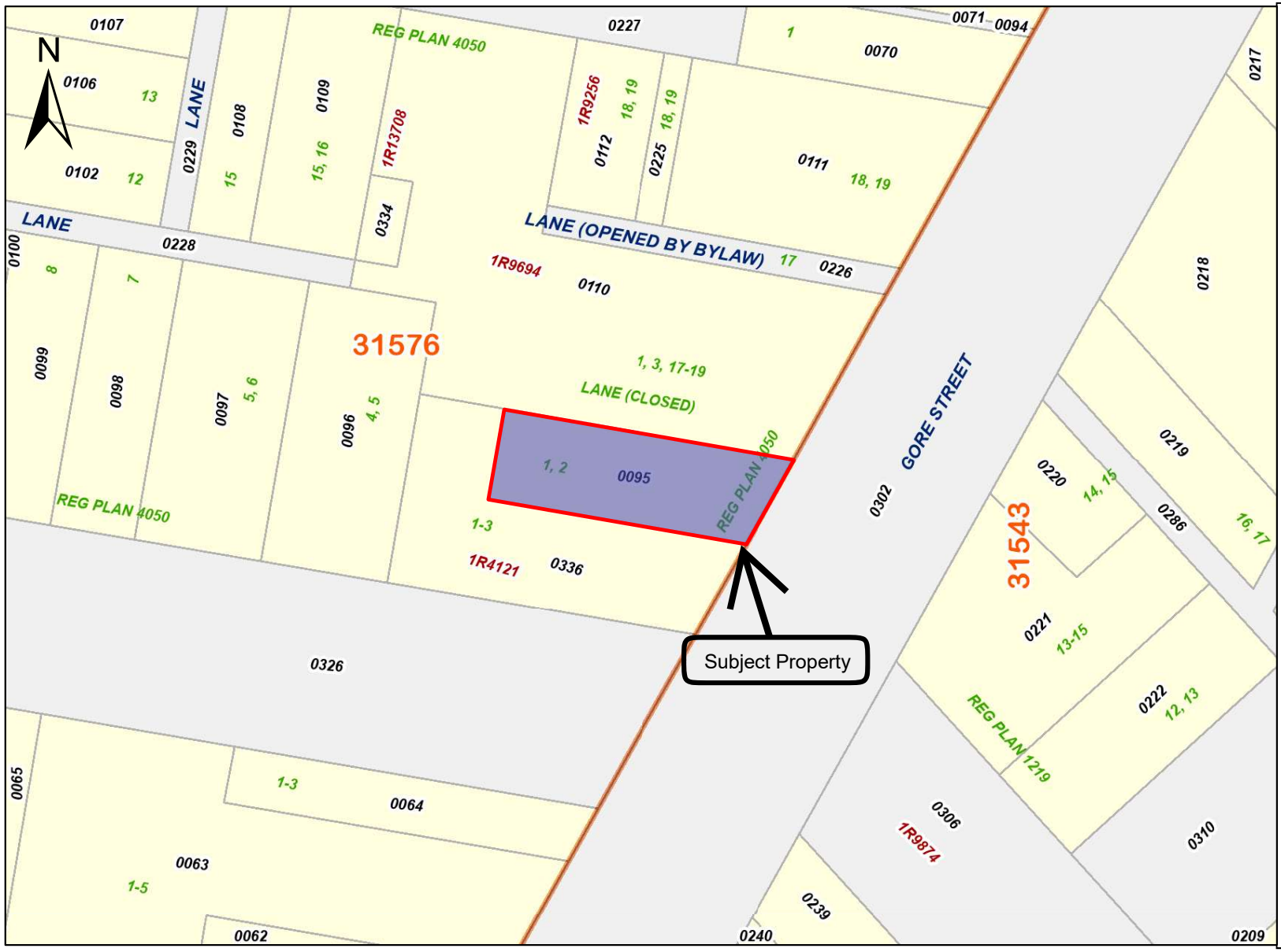
**Recommendation**
It is therefore recommended that Council take the following action:

The relevant By-law 2024-118 is listed under item 12 of the Agenda and will be read with all by-laws under that item.

Respectfully submitted,

Melanie Borowicz-Sibenik
Assistant City Solicitor/Senior Litigation Counsel
705.759.5403
m.borowiczsibenik@cityssm.on.ca

Schedule "A"




ServiceOntario

PRINTED ON 21 MAR, 2024 AT 18:01:03
FOR MARKLEPORE

**SCALE**

0 4 8 12 16 20 24 meters

## PROPERTY INDEX MAP

ALGOMA(No. 01)

**LEGEND**

| | |
|---|---|
| FREEHOLD PROPERTY | |
| LEASEHOLD PROPERTY | |
| LIMITED INTEREST PROPERTY | |
| CONDOMINIUM PROPERTY | |
| RETIRED PIN (MAP UPDATE PENDING) | |
| PROPERTY NUMBER | 0449 |
| BLOCK NUMBER | 08050 |
| GEOGRAPHIC FABRIC | |
| EASEMENT | |

**THIS IS NOT A PLAN OF SURVEY**

**NOTES**

**REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS**

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED

Ontario

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**The Corporation of the**
**City of Sault Ste. Marie**

# C O U N C I L  R E P O R T

September 9, 2024

| | |
|---|---|
| TO: | Mayor Matthew Shoemaker and Members of City Council |
| AUTHOR: | Jonathan Kircal, Planner |
| DEPARTMENT: | Community Development and Enterprise Services |
| RE: | A-11-24-Z – 418 Fourth Line West (Crimson Ridge Golf Course) |

---

## PURPOSE

The applicant, D.S. Urso (Monument – Urso Surveying LTD) c/o Dave Urso, has submitted an application to rezone a portion of 418 Fourth Line West (the Crimson Ridge Golf Course) from Parks and Recreation Zone (PR) to Estate Residential Zone (R1) to construct a single-detached house (Residential Structure).

A special exception to reduce the required lot area from 0.4 hectares to 0.378 hectares is also being requested as part of this application.

## PROPOSED CHANGE

Rezone a portion of 418 Fourth Line West, referred to as the "Area to be Rezoned", which has approximately 64 metres of frontage along Fourth Line and a depth of 78 metres, from Parks and Recreation Zone (PR) to Estate Residential Zone (R1.S) with the following Special Exception:

- Reduce the required minimum lot area size from 0.4 hectares to 0.37 hectares.

**'Area to be Rezoned':**

- Location: Located on the north side of Fourth Line West, approximately 388 metres (1273') west of the intersection of Fourth Line and Brule Road.
- Approximate Size: Irregular shaped, frontage of 62.4m (205') along Fourth Line and a depth of 76m (250'), but flaring inward. Area is 0.378 hectares.
- Present Use: Forms part of the landscaping for the golf course.
- Owner: 2707728 Ontario Inc. (Crimson Ridge Golf Club).

## BACKGROUND

Over the course of 20 years, this property has been severed to accommodate the Crimson Ridge subdivision and the Crimson Ridge Condominium. More recently, in 2022, a consent application was approved for the purposes of implementing utility easements to benefit the Crimson Ridge Condominium.

## ANALYSIS

### Conformity with Official Plan

The subject property is designated “Rural Area” on Land Use Schedule C of the Official Plan. Rural Area policies speak to limited residential development in the Rural Area and in some cases, promoting higher density development conditional on the existence of municipal services such as water and sewer.

Further, in 2014, Official Plan Amendment 203 was passed, which limited lot creation to two new lots in addition to the original parcel in areas zoned and designed as Rural Area. The previous severances and plans of subdivisions that took place on the lot occurred before 2014 and therefore, the subject property can still be severed to create no more than two new lots. Upon approval of this application, only one more severance can occur on the property as of right for residential purposes.

The overall affect of these policies is to keep rural residential development at limited numbers.

This application is proposing a single-detached home on a relatively large parcel, adjacent to other rural-like lots and subdivisions. The reduced lot area is supportable as the developer will connect the lot to municipal water and sewer that directly abut the property along Fourth Line.

Therefore, this proposal is consistent with the policies of the Official Plan.

### Conformity with Provincial Policy Statement 2020

The PPS contains high level policies which speak to efficient development and land use patterns that avoid the uneconomical expansion of municipal infrastructure.

The proposal represents rural residential infilling as the development is located within an established rural area. Expanding municipal infrastructure is also not required.

Therefore, this proposal is consistent with the policies of the PPS.

### Conformity with Growth Plan for Northern Ontario 2011

This proposal does not conflict with the GPNO.

## COMMENTS

The applicant plans to rezone a portion of the property to allow for the construction of a detached house. Once zoning approval is granted, the property owner will seek to sever this portion of the land from the golf course property to establish a new lot. Municipal addressing will then follow.

Official Plan policies restrict development in the rural area to no more than 3 lots inclusive of the original parcel. This is a non-retroactive regulation that was implemented in 2014. All of the developments that have occurred on former golf course property occurred before 2014, and therefore, do not factor into the development limit.

Further, the proposed residential development will be connected to municipal water and sewer, eliminating the need to provide sufficient on-site space and separation distances between a private well and septic field.

To preserve the golf course features and landscaping, the rear of the proposed lot will be designed with an inward flare to avoid impacting these elements. As a result, the lot will be slightly smaller than the R1 minimum area regulations. Planning staff support this minor reduction, as the lot will still align with the rural residential character of the area, will be serviced by municipal water and sewer, and no adverse impacts are anticipated.

Sanitary Sewer Capacity

The proposed development will connect to a low-pressure sanitary sewer system servicing the area. Unlike traditional gravity-based sewer systems, which rely on natural land slopes to move wastewater, low-pressure systems use small-diameter pipes and grinder pumps. New service connections can pose issues such as blockages in small pipes, costly pump failures due to added strain, sewage backups, and overall reduced performance. Further, individual grinder pumps that do not meet the City's specifications may be unable to effectively discharge into the pressurized sewer line, especially during peak usage times.

This area is already experiencing such issues and therefore, as part of this application, the applicant was required to submit a preliminary servicing assessment from a qualified engineer with this rezoning application. As per Section 4, Sanitary Servicing, of the applicant-submitted Preliminary Servicing Report (see attachments), the consulting engineer noted that based on a preliminary review, there would be negligible impacts to the existing sanitary force main from adding the proposed single detached development.

Based on a preliminary review, the assessment does not anticipate significant impact on the sanitary sewer line as a result of an added connection from a single-detached home. The assessment also noted that the lot would be equipped with a grinder pump to City specifications.

Further, prior to the issuance of a Building Permit, a sanitary servicing study to the satisfaction of the Director of Engineering must be submitted. The servicing study will be required to determine the downstream impacts on the low-pressure sanitary system and whether the system can handle the increased flows from the proposed development.

Few public comments were received by Planning staff at the time of preparing this report, but a common concern was the potential impact on the sewer system, especially with the anticipated further residential development of Crimson Ridge, which could add several new units to the area.

Although anticipated development is not the focus of this report, it should be noted that it too will require the same preliminary and additional technical studies to assess the downstream sewer impacts on the low-pressure sanitary system and whether the system can handle increased flows from development.

**CONSULTATION**

Public notices were mailed to all neighbouring properties within 120m (400') of the subject property on August 16, 2024. The notice is attached to this report. The notice was also advertised on the City website and in the Sault Star on August 17, 2024.

**Public Comments**

A neighbouring property owner observed that the area was being cleared of trees and contacted Planning staff to inquire about the development and permitting requirements. There was also concern about the removal of trees; however, the City has no by-laws or restrictions in place that prohibit the removal of trees. The comments received from this individual were not specific to the proposed development.

Two additional comments raised concerns about the area's sanitary service capacity, particularly in reference to the potential second phase of residential development at the Crimson Ridge golf course. While other developments are not the subject of this application, staff are aware of the existing sanitary servicing issues and as a result, have imposed additional requirements to ensure the functionality of the sewer system.

As noted in the Sanitary Servicing section of the Preliminary Servicing Report, the applicant's consulting engineer anticipates negligible impact on the sewer line as a result of the development of this lot. As part of the Building Permit stage, a more detailed downstream capacity study will be required to further evaluate the ability of the sanitary system to handle additional flows. This topic is further discussed in the previous subsection titled 'Sanitary Sewer Capacity'.

**Application Circulation**

This application was circulated to relevant departments and outside agencies. The following comments were received:

The Engineering Department will require a sanitary servicing study to the satisfaction of the Director of Engineering. The servicing study must determine the downstream impacts on the low-pressure sanitary system and whether the system can handle the increased flows from the proposed development. Secondly, a lot

grading and drainage plan must be completed by a Lot Grading Professional, to ensure that drainage is dealt with appropriately.

The PUC noted that prior to the lot being serviced by water, the applicant, through a qualified professional, will be required to confirm if the booster pump station located at Brule Road has adequate capacity to service the proposed lot. Planning staff have informed the applicant of this requirement.

The Building Division noted that prior to the issuance of a Building Permit, the following will be required: a Record of Site Condition (RSC), and a permit from the Sault Ste. Marie Region Conservation Authority. Further, it was noted that all structures including detached garages must adhere to the R1 Estate Residential Building Regulations as per section 9.5 of the Zoning By-law.

Aside from the Record of Site Condition (RSC) requirement, these comments do not impact the proposal. The conversion of the golf course to residential use necessitates the RSC. The applicant is aware and is actively in discussions with their consultant and the Building Division to address this requirement.

The Sault Ste. Marie Region Conservation Authority (CA) noted that the ‘Area to be Rezoned’ falls within an area under the jurisdiction of the CA and therefore, the applicant must obtain a permit from their office prior to obtaining a Building Permit.

Transit Services has noted that this area is outside the conventional bus route coverage; however, parabus service is still available. Where parabus service is needed, main entrance doors and paths should be kept accessible

Public Works reminds the applicant that all driveways, roadways, and other infrastructure on the property will be privately owned and maintained. Additionally, due to wash-outs in the area, it is advised that the driveway be constructed with a hard surface, such as asphalt, between the edge of the road and the property line.

Bell Canada submitted a standard response regarding development agreements for applications involving a Draft Plan of Subdivision/Condo and Site Plan Agreements. Since no development agreements are required for this proposal, Bell Canada's comments do not affect this application or the development proposal.

The following departments commented that they had no objections: Accessibility Advisory Committee, Economic Development Corporation, Fire Services, and the Heritage Committee.

**FINANCIAL IMPLICATIONS**
No incremental increases to municipal finances are anticipated.

**STRATEGIC PLAN / POLICY IMPACT**
Approval of this application is not directly linked to any strategic directions contained within the Corporate Strategic Plan, or to any significant environmental impacts.

**SUMMARY**
An application has been submitted to rezone a small section of the Crimson Ridge Golf Course to allow for the construction of a single-detached home on Fourth Line West. Although this area is rural, it will be connected to municipal water and sewer services that are adjacent to the property.

The consulting engineer has conducted a preliminary assessment and anticipates no major impacts as a result of development. Further capacity studies will be required prior to the issuance of a Building Permit.

Planning staff recommend approving this application.

**RECOMMENDATION**
It is therefore recommended that Council take the following action:

Resolved that the report of the Planner dated September 9, 2024 concerning rezoning application A-11-24-Z be received and that Council approve the application as follows:

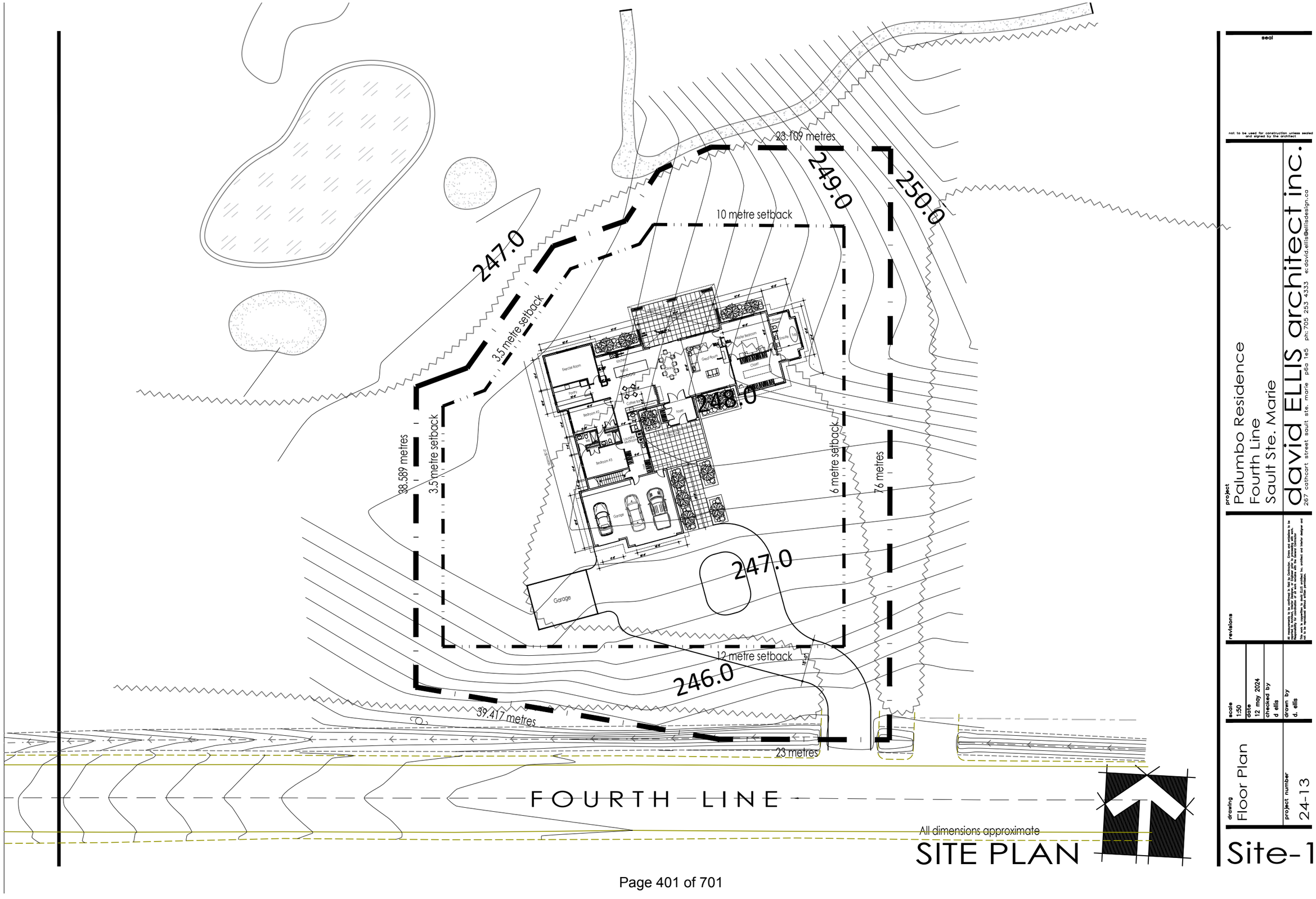
Rezone a portion of 418 Fourth Line West, referred to as the “Area to be Rezoned”, which has approximately 64 metres of frontage along Fourth Line and a depth of 78 metres, from Parks and Recreation Zone (PR) to Estate Residential Zone (R1) with the following Special Exceptions:

- Reduce the required minimum lot area from 0.4 hectares to 0.37 hectares.
- The driveway between the edge of the road and the lot line must be paved with a hard surface, such as asphalt.
- Development be connected to both municipal water and sewer services.

And that the Legal Department be requested to prepare the necessary by-law(s) to effect the same.

Respectfully submitted,

Jonathan Kircal, RPP
Intermediate Planner
705.759.6227
j.kircal@cityssm.on.ca




All dimensions approximate

# SITE PLAN

seal

not to be used for construction unless sealed and signed by the architect

david ELLIS architect inc.
267 cathcart street sault ste. marie p6a 1e5 ph: 705 253 4333 e: david.ellis@ellisdesign.ca

project
Palumbo Residence
Fourth Line
Sault Ste. Marie

revisions

scale 1:50
date 12 may 2024
checked by d. ellis
drawn by d. ellis

drawing Floor Plan
project number 24-13

Site-1

all measurements to be confirmed in field by Contractor. Drawings and specifications are the property of the architect and may not be reproduced without permission. The Contractor is responsible for coordination of all work between all trades. The Owner Contractor will not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the work. All drawings are not to be used for construction unless sealed and signed by the architect. Do not scale drawings. Verify all dimensions on site. Any discrepancies must be reported to the architect before proceeding with the work. Drawings not to be reproduced without written permission.

TOPOGRAPHIC PLAN OF

# PART OF SECTION 14

IN THE

## TOWNSHIP OF KORAH

NOW IN THE

## CITY OF SAULT STE. MARIE

DISTRICT OF ALGOMA

SCALE: 1 : 750

0 9 30

METRES

N

T O W N S H I P  O F  K O R A H

S E C T I O N  1 4

P I N  3 1 5 9 9 – 0 2 2 0

2707728 ONTARIO INC.

P I N  3 1 5 9 9 – 0 2 0 7

CORPORATION OF CITY OF SAULT STE MARIE

PART 2, PLAN 1R–12377

PART 2, PLAN 1R–12415

PART 1, PLAN 1R–12426

PART 18, PLAN 1R–12426

SIB(SLM)

N86°31'50"E

REFERENCE BEARING

126.126

341.980

N84°22'40"W

37.739

GUARDRAIL

UTILITY POLE AND ANCHOR

UTILITY POLE AND ANCHORS

TOP OF DITCH

BOTTOM OF DITCH

CENTRELINE OF ROAD

MANHOLE

TRAVELLED ROAD KNOWN AS FOURTH LINE

N86°31'50"E 46.238

CART PATH

60.960

14.722

3.048

13.804

N64°44'40"E

8.311

N28°12'50"E

9.884

N66°48'35"E

3.048

10.141

N31°12'10"E

9.087

N65°39'20"E

EDGE OF VEGETATION

N3°52'50"W 34.438

N3°52'50"W 73.000

LOT 1

AREA = 0.378 Ha.

WEST LIMIT REGISTERED PLAN 1M–540

REGISTERED PLAN 1M–540

LOT 1

LOT 2

35.335

76.000

N3°52'50"W (M)

N3°50'10"W (P)

3.000(P,S)

89°33'00" (P,S)

N86°31'50"E (P) 32.000

N86°34'10"E (M) 32.038

IB(MFT)

SIB(MFT)

TOP OF DITCH

BLOCK 32

DRIVEWAY

23.000

77.156

39.417

6.227

440.100(P)

440.119(M)

60.960

245.158

MANHOLE

UTILITY POLE

244.850

244.931

244.775

245.103

244.689

243.971

244.225

243.630

243.934

244.214

242.691

243.151

242.253

242.022

241.830

241.355

240.950

240.556

240.741

240.984

240.864

242.793

243.229

242.764

243.823

243.318

244.168

243.705

244.325

244.868

244.174

244.524

## METRIC

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

## ELEVATION NOTE

ELEVATIONS ARE ORTHOMETRIC HEIGHTS BASED FROM ON SITE RTK GPS OBSERVATIONS

## ROTATION NOTE

FOR BEARING COMPARISONS, A ROTATION OF 1°53'40" COUNTER CLOCKWISE WAS APPLIED TO REGISTERED PLAN 1M–540 TO CONVERT TO GRID BEARINGS.

## BEARING NOTE

BEARINGS ARE GRID AND ARE REFERRED TO PART OF THE NORTHERLY LIMIT OF FOURTH LINE ROAD AS SHOWN ON REGISTERED PLAN 1M–540 HAVING A BEARING OF N86°31'50"E FROM ON SITE GPS OBSERVATIONS.

## LEGEND

| | | |
|---|---|---|
| ■ | DENOTES | FOUND MONUMENT |
| □ | DENOTES | PLANTED MONUMENT |
| IB | DENOTES | IRON BAR |
| SIB | DENOTES | STANDARD IRON BAR |
| SSIB | DENOTES | SHORT STANDARD IRON BAR |
| M | DENOTES | MEASURED |
| P | DENOTES | REGISTERED PLAN 1M–540 |
| S | DENOTES | SET |
| SLM | DENOTES | S.L. MacDOUGALL, O.L.S. |
| MFT | DENOTES | M.F. TULLOCH, O.L.S. |
| PIN | DENOTES | PROPERTY IDENTIFICATION NUMBER |
| //// | DENOTES | NOT TO SCALE |

## SURVEYOR'S CERTIFICATE

I CERTIFY THAT

1. THE SURVEY WAS COMPLETED ON AUGUST 18, 2020.

August 2, 2024
SAULT STE. MARIE, ONT.

D.S. URSO
ONTARIO LAND SURVEYOR


D.S. Urso Surveying Ltd.
Ontario Land Surveyors ♦ Canada Land Surveyors
Planning Consultants
10 KING ST.
SAULT STE. MARIE ONT, P6A 2T1
TEL: (705) 254–7851
FAX: (705) 254–5571


| CLIENT: | DRAWN BY: KF<br>CHECKED BY: DSU<br>FIELD: ZP / LL | FILE: |
|---|---|---|
| CRIMSON RIDGE | | U–11670 |

CENLO ENGINEERING INC.
*Civil / Structural / Architectural*

# PRELIMINARY SERVICING REPORT
**FOR**
# FOURTH LINE EAST
# PROPOSED PALUMBO RESIDENCE

**PREPARED FOR:**

CITY OF SAULT STE. MARIE
99 Foster Drive,
Sault Ste. Marie, ON
P6A 5X6

PREPARED BY:

CENLO ENGINEERING Inc.
815 Great Northern Road
Sault Ste. Marie, ON
P6A 5K7

(705) 256-0398
info@cenlo.ca

DATE:

August 29, 2024

## Revision Log

| Revision # | Date | Description |
|---|---|---|
| 0 | 2024-08-2 | Initial Submission |
| 1 | 2024-08-29 | Revised Sanitary Servicing statement |
| | | |
| | | |

**Report Prepared by:**

Jordan Williams, P.Eng.

**TABLE OF CONTENTS**

1.0 INTRODUCTION ..... 1

2.0 SITE ACCESS ..... 2

3.0 WATER SUPPLY ..... 2

4.0 SANITARY SERVICING ..... 3

**APPENDICES**

A: References

A1: Municipal Servicing Report For 418 Fourth Line, Cenlo (2022)
A2: Technical Memo: Crimson Ridge Development – PZ2 Impact Analysis, AECOM (2016)
A3: Technical Memo: Booster Pumping Station at Brule Road and Fourth Line, WSP (2014)

B: Proposed Site Plan

C: Statement of Qualifications & Limitations

# 1.0 INTRODUCTION

Mr. Frank Palumbo plans to construct a residential residence on a proposed single-family lot on Fourth Line East in the City of Sault Ste. Marie. The proposed lot will be severed from the Crimson Ridge Golf course lands and will need to be rezoned. The lot must be connected to both city water and sewer services and partial services is not supportable. This is a requirement that would be added as a condition to obtain a building permit.

The proposed lot may be serviced by tapping into an existing 150mm watermain and tapping into an existing sanitary sewer force main. The existing 150mm water main is supplied from the booster pumping station on Brule Road where the booster station feeds from a 200mm watermain. There are two sanitary force mains that run parallel along Fourth Line at the location of the lot. The South side sanitary force mains services the Crimson Ridge Golf Course developments. The North side sanitary force main services lots along Fourth Line. Both sanitary force mains plus an additional from Brule Road that join at the intersection of Brule Road and Fourth line. This is directed to a single force main that outfalls at Peoples Road and Fourth Line at gravity sewer system.

In general, all services and infrastructure that are proposed to be installed must be designed to meet applicable codes, standards and regulations including the Ministry of the Environment, and the Ontario Building Code.

# 2.0 SITE ACCESS

Access to the proposed site will be directly off Fourth Line East through a driveway. A proposed site plan for the lot is included in **Appendix B**. A servicing plan has not yet been created for the proposed development, but new buried services would be tied into the existing services on Fourth Line.

# 3.0 WATER SUPPLY

PUC's water distribution system provides the water supply in the area. Water volumes and pressures in this area are regulated by a booster pumping station at Fourth Line and Brule Road. This booster station should have sufficient capacity to meet the requirements of the proposed Palumbo Residence since the total peak demand from the booster pumping station is less than the capacity, provided in **Appendix A**. A 25 mm water service to the residence is proposed due to known low pressure allegedly noticed by neighbours in the area. A shut off valve must be installed at the property line from the Fourth Line connection. Per the appended documents, the water system should be able to support an additional water service to more than one (1) additional single-family lot. PUC application for general water services will be required to support the proposed service tie in.

# 4.0 SANITARY SERVICING

To service the proposed lot service, it appears feasible to connect into the North side sanitary force main along Fourth Line. To connect into the single-residence lot, a live tap is required into the existing sanitary force main. The residence's sanitary sewer service is to be discharged into the force main by a suitable sanitary grinder pump, with sufficient pressure to exceed the force main pressure. Based on this preliminary review, there would be negligible impacts to the existing sanitary force main from adding the proposed single family detached development. With reference to the attached servicing report by Genivar, there may still be existing residences with undersized pumps, they should be considered during the review. A detailed design must be submitted by a Professional Engineer prior to servicing the lot and must include a review of the existing force main system, sizing of the lot service and pump requirements. With reference to the attached servicing report by Genivar, there may (still) be neighbouring residences with undersized pumps, their impacts (if any) should be considered during the detailed design as well.

# *Appendix A*

*References*

CENLO ENGINEERING
*Civil / Structural / Architectural*

815 Great Northern Rd
Sault Ste. Marie, ON
P6B 0B8
705-256-0398
info@cenlo.ca

September 26, 2022

Project #: 21005

City of Sault Ste. Marie
99 Foster Drive
Sault Ste. Marie, ON
P6A 5X6

**Attention:** **Michelle Kelly, ACST**
**Secretary-Treasurer Committee of Adjustment**
**Community Development & Enterprise Services**

**Subject:** **Proposed Crimson Ridge Phase 1B Development**

This correspondence is to clarify the development conditions of Phase 1B of the Crimson Ridge subdivision, particularly the sanitary sewage system.

It is understood that concerns have been brought to your attention regarding the capacity of the 50mm forcemain that services residents along Fourth Line. Please note that this 50mm forcemain precedes the Crimson Ridge residential subdivision and provisions were mandated upon initial approval to accept Phase 1 development (50 lots) in its entirety.

As part of the Phase 1A residential subdivision development (initial 33 lots), a dedicated pump station and new 75mm low pressure forcemain were installed. It is our understanding this 75mm forcemain is dedicated and serves only buildings on the Crimson Ridge property, which conveys sewage downstream to the 50mm forcemain, where it can accept the additional sewage load. Please refer to the "*Crimson Ridge Condominium Development Municipal Servicing Report"* (Genivar, 2012) for details and concurrence.

The current development group now wishes to complete Phase 1B by developing the remaining 17-lots. As the current proposed design does not deviate from the original design intent and municipal servicing regarding capacity, it will be capable of accepting this second phase of development.

For details, regarding Phase 1A, we would direct you to the original engineers as they would contain the proprietary design documents, Genivar (now WSP Canada Inc.), however, the Servicing Report is appended to this letter.

Regarding elevated water pressures, the PUC should be notified of potential concerns. There will be no effect on water pressure resulting from the service connection to the Phase 1B development.

Signed,

Andrew Mallette, P. Eng.
Principal Engineer – Cenlo Engineering

Crimson Ridge
Condominium Development

# MUNICIPAL SERVICING REPORT

Prepared for:
Maple Leaf Forest Products Inc.

GENIVAR
185 East Street, Sault Ste. Marie, ON P6A 3C8
Phone: (705) 942-2070 Fax: (705) 942-3532

Date: July 6, 2012

Job No. 121-20853-00

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3. STORM DRAINAGE AND STORMWATER MANAGEMENT .....2
4. WATER SUPPLY .....2
5. ELECTRICAL SUPPLY .....3
6. ROADWORKS .....3

## LIST OF FIGURES

| | | |
|---|---|---|
| Figure 1 | Sanitary Servicing Plan | Follows Page 1 |
| Figure 2 | Water Servicing Plan | Follows Page 3 |
| Figure 3 | Brule Road to West Dunrobin Bay Watermain Connection | Follows Page 3 |

# 1. INTRODUCTION

Maple Leaf Forest Products Inc. plan to develop residential condominiums on the Crimson Ridge Golf Course property at 418 Fourth Line West in the City of Sault Ste. Marie.

Residential development will consist of 50 condominium units comprised of a mix of semi-detached lots and single-family residential lots.

Services installed within the golf course property will be privately owned by the condominium corporation and the operation and maintenance of these services will be the responsibility of the corporation.

Services installed within municipal right-of-ways will be dedicated to the City of Sault Ste. Marie for sanitary sewage works and to the Sault Ste. Marie Public Utilities Commission for waterworks.

In general, all services installed will be designed to standard policies of the City of Sault Ste. Marie, the Ministry of the Environment, and the Ontario Building Code.

# 2. SANITARY SEWERAGE

This area of the City of Sault Ste. Marie is serviced by a low-pressure sanitary sewer system. The layout of the low-pressure system is shown in Figure 1. The small diameter pressure sewer discharges to a 250 mm diameter gravity sanitary sewer at the intersection of Peoples Road and Fourth Line. The small diameter pressure sewers extend westerly from the Peoples Road / Fourth Line intersection all the way to the entrance to the Crimson Ridge Golf Course. There is also a branch extending northerly from the intersection of Fourth Line and Brule Road along Brule Road approximately 690 metres.

This low-pressure sewer system was originally designed to accommodate approximately 120 residential connections, including future extensions on Aronson Drive, Brule Road north of the original Crimson Ridge Subdivision, Brule Road south of Fourth Line, and Fourth Line west of the Crimson Ridge Golf Course entrance. At present, there are less than 35 connections to this system.

The proposed servicing for the Crimson Ridge Condominium Development is shown on Figure 1 and consists of the following:

- Gravity sanitary sewers within the Crimson Ridge Golf Course property;
- A new private sanitary sewage pumping station on Crimson Ridge Golf Course property near the entrance at Fourth Line. This sewage pumping station would be designed to pump the Maximum Day flows from the proposed development plus the existing Clubhouse. It will also include storage capacity to temporarily store periodic Peak Flows in this system. In this way, flows to the City's low-pressure sewer system will be moderated.

- A new dedicated forcemain constructed along the south side of Fourth Line from the pumping station at the Crimson Ridge property to the intersection of Fourth Line and Brule Road. This forcemain will connect to the existing low-pressure sewer system at this intersection.

The existing low-pressure system will accommodate the additional condominium units provided the following measures are implemented:

- At several residences located along the north side of Fourth Line, west of Brule Road and the west side of Brule Road north of Fourth Line, improper sewage grinder pumps were installed that were not those specified in conjunction with the original design of the low-pressure sewer system. At these locations, centrifugal pumps were installed rather than the specified semi-positive displacement pumps. These centrifugal pumps have a much lower shut-off head (approximately 32 metres) than the specified semi-positive displacement pump (approximately 56 metres). At most locations on the system, this is not a problem because the expected discharge pressures are below the 32 metre shut-off head. However, there are approximately four (4) houses located on Fourth Line west of Brule Road, and one (1) house on Brule Road north of Fourth Line where the installed pumps will have to be replaced with the proper semi-positive displacement pumps in order to operate satisfactorily.

- Also as a result of the centrifugal pumps on the system, and the additional flows from the Crimson Ridge Development, there are approximately two lots at the very south end of Brule Road that will require pumps that can generate a shut-off head greater than 56 metres. If the low pressure system ever gets extended to this location, these residences will require Hydromatic HPD 200 grinder pump in order to operate satisfactorily.

# 3. STORM DRAINAGE AND STORMWATER MANAGEMENT

Storm drainage within the condominium development will consist of a system of storm sewers and swales that will discharge into stormwater detention areas. It is expected each cluster of development will have a dedicated stormwater dry pond that will be designed and constructed in conformance with the standards and policies of the City of Sault Ste. Marie and the Sault Ste. Marie Region Conservation Authority. Dry ponds will outlet to existing drainage courses.

Dry ponds will be constructed in general conformance to the Ontario Ministry of the Environment's *Stormwater Management Planning and Design Manual* and to meet the City's criteria that post-development flows do not exceed pre-development flows. Stormwater facilities will be owned by the Condominium Corporation which will be responsible for their operation and maintenance.

# 4. WATER SUPPLY

Existing water supply in the area of the Crimson Ridge Golf Course is provided from the Sault Ste. Marie Public Utilities Commission's water distribution system via a booster pumping station located at the intersection of Fourth Line and Brule Road. This booster pumping station supplies properties on Brule Road north of Fourth Line and on Fourth Line west of Brule Road,

including the existing Clubhouse at the Crimson Ridge Golf Course. The layout of the water distribution system in the area is shown in Figure 2.

Water supply for the proposed condominium units will be provided from a connection to the 150 mm diameter watermain on Fourth Line at the entrance to the Crimson Ridge property. The existing water booster pumping station has sufficient capacity to meet the Peak Flow requirements of these condominium units, the existing Clubhouse and the previously allocated residential units in the service area of the booster station.

Private watermains and water services will be constructed on the condominium property to provide servicing to the individual condominium units. These facilities will remain the property of the Condominium Corporation.

Although the existing booster pumping station has sufficient capacity to accommodate the 50 units, the PUC has identified a need to supplement water supply to the area. An additional supply point to the area will provide additional flow capacity, better security in the event of a watermain break, and better flow circulation to improve water quality. In consultation with the PUC, the preferred alternative to supplement the water supply in the area is an extension of the existing watermain at the south end of Brule Road in a south and easterly direction to connect with the existing watermain at the north limit of East Dunrobin Bay Road. This entire watermain extension will be constructed on property currently owned by the PUC and the City of Sault Ste. Marie. The proposed watermain extension is shown in Figure 3.

# 5. ELECTRICAL SUPPLY

Electrical supply for the proposed subdivision will be provided from the existing PUC Services Inc. electrical distribution system. Electrical supply within the Condominium property will be underground.

# 6. ROADWORKS

No public roads will be constructed in conjunction with the proposed development. All roads providing access to the condominium units will be private roads constructed on the Crimson Ridge property.

AECOM
523 Wellington Street East
Sault Ste. Marie, ON, Canada P6A 2M4
www.aecom.com
705 942 2612 tel
705 942 3642 fax

# Memorandum

| | | | |
|---|---|---|---|
| To | Andrew Hallett, P.Eng., PUC Services Inc. | Page | 1 |
| CC | | | |
| Subject | **Crimson Ridge Development – PZ2 Impact Analysis** | | |
| From | Joshua Ashurst (Reviewed by: Rick Talvitie, P.Eng.) | | |
| Date | July 12, 2016 | 60509488 | |

## *1.0 Background Information*

The total required pump station capacity was provided to AECOM and is summarized as follows:

- Under the Peak Hour Demand (PHD) scenarios, the demands were established as follows:
  - 144 dwellings (100 lots on Crimson and 44 lots on Brule) with a peaking factor of 4.5 – Peak flow = 9.1 L/s
  - Banquet/Clubhouse with a capacity of 200 and a peaking factor of 8.9 - Peak flow = 3.1 L/s
  - Total peak flow = **12.2 L/s**
- Under the Maximum Day Demand (MDD) scenarios, the demands were adjusted as follows:
  - 144 dwellings – Peak flow = 9.1 L/s divided by 4.5 and multiplied by 3
  - Banquet/Clubhouse with a capacity of 200 - Peak flow = 3.1 L/s divided by 8.9 and multiplied by 3
  - Total MDD = **7.1 L/s**
- Overall system demands are as follows and are based on the 2016 Watermain Sizing demands (future scenario) with an adjustment to include the Crimson Ridge PS demands above:
  - MDD = 792 L/s
  - PHD = 1201 L/s
- A sensitivity analysis was also completed to assess the sensitivity of the results to the system MDD. The model was also run with MDD's of 701 L/s ( a more modest future growth scenario) and 609 L/s (existing maximum day demand).

## *2.0 Purpose*

The purpose of this analysis is to provide boundary conditions at the pump station under PHD and MDD + fire flow to assist the developer's engineer in establishing the required upgrades to the pump station.

## *3.0 Methodology*

Specific steps taken were as follows:

- Update of the model to include new infrastructure (Brule Road loop main from Brule Road South to East Dunrobin);
- Incorporate proposed demands as provided by PUC and setup model scenarios;
- Run EPS Simulations (MDD and MDD + fire - 720 USGPM fire flow at Algoma Residential Community Hospice - ARCH) and Steady State Simulation (PHD) to assess maximum transfer capacity at Crimson Ridge PS; and
- Tabulate results from all scenarios.

## *4.0 Model Update*

The new 200 mm watermain from Brule Road South to East Dunrobin Bay Road was added to the model as shown in Figure 1.

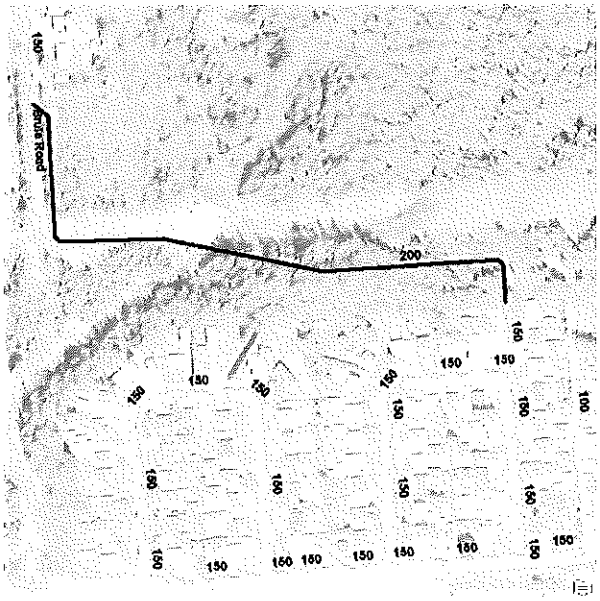



**Figure 1 - New 200mm Watermain from Brule Road South to East Dunrobin Bay Road**

This analysis only looks at the performance within Pressure Zone 2 and does not consider the design of the pumping station upgrades and watermains within the proposed development. A single demand node on the suction side of the station has been incorporated in the model to represent the Crimson Ridge demand. The pumping station itself has been inactivated in the model as shown in Figure 2.

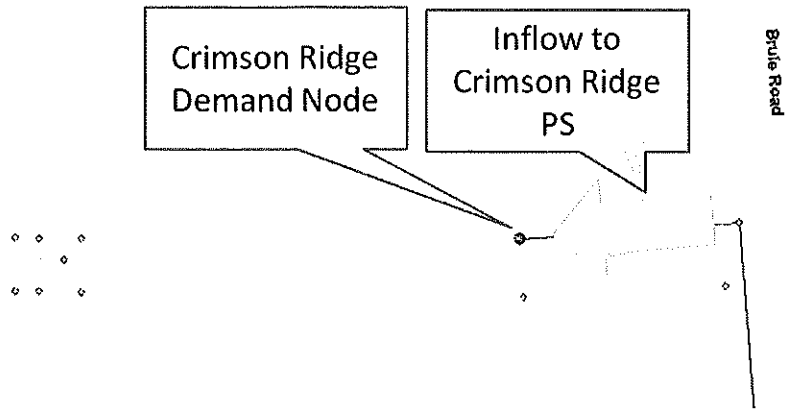



**Figure 2 - Configuration of Crimson Ridge in Model**

## *5.0 Analysis/Results*

The results from each of the modeled scenarios are presented in the following subsections.

### *5.1 EPS Simulation (MDD + 720 USGPM fire flow at ARCH)*

The intent of this simulation is to establish the maximum transfer capacity at Crimson Ridge Pumping Station under fire flow conditions in Pressure Zone 2. The maximum capacity was established by applying a fire flow of 720 GPM (45.43 L/s) at ARCH during a maximum day demand EPS scenario and then applying a demand to the Crimson Ridge PS.

The fire flow demand at ARCH was assigned to hydrant J05-P01. The available demand was initially established by running the fire flow simulation tool and then confirmed in an EPS simulation.

The results of the analysis indicate the maximum transfer capacity is dependent on the operation of Pressure Zone 2 Booster Station. Assuming the PZ2 Reservoir level is at 3.75m and there is no pumping at PZ2 BS, the available flow for Crimson Ridge PS is **6.4 L/s**. If PZ2 Reservoir is at 3.75m and one pump is operating at PZ2 BS then the available flow for Crimson Ridge PS is **11.1 L/s**. The sensitivity of these results was assessed relative to the overall system MDD. The model was rerun with system MDD's of 609 L/s (existing MDD) and 701 L/s (a more modest growth scenario). The results are summarized in **Table 1**.

**Table 1- Available Flow for Crimson Ridge during Fire Flow at ARCH**

| System Demand Including Crimson Ridge (L/s) | Pumping at Pressure Zone #2 Booster Station | Allowable Crimson Ridge MDD Demand (L/s) |
|---|---|---|
| **792** | One Pump On @ PZ2 BS | 11.1 |
| | No Pumps On @ PZ2 BS | 6.4 |
| **701** | One Pump On @ PZ2 BS | 11.4 |
| | No Pumps On @ PZ2 BS | 7.3 |
| **609** | One Pump On @ PZ2 BS | 11.7 |
| | No Pumps On @ PZ2 BS | 8.3 |

### *5.2 EPS Simulations (MDD)*

The maximum day demand scenario included a total system demand of 792 L/s. An additional scenario was run without the additional demand in Crimson Ridge. Refer to the attached maps for a summary of the minimum pressures and maximum velocities under these simulations.

Pressures are maintained above 40 psi for all nodes with the exception of the watermain along Old Goulais Bay Road, north of Fourth Line East as well as downstream of People's Road Booster Station. This is due to the elevation and is experienced regardless of the Crimson Ridge demand. Velocities throughout Pressure Zone 2 remain below 1.5 m/s under maximum day demands.

### *5.3 Steady State Simulation (PHD)*

The peak hour demand scenario included a total system demand of 1201 L/s. Refer to the attached map for a summary of the minimum pressures and maximum velocities under this simulation.

Results are similar to those seen in the Maximum Day Demand scenario with no significant losses in pressure or excessive velocities in the vicinity of the Crimson Ridge Pumping Station. It should be noted that the PHD scenario is simulated using steady state and therefore does not include the impact of reservoir and pumping changes over the course of a long period of time. Therefore there may be instances within the MDD scenario with lower pressures than the PHD scenario. This is reflected in the attached maps.

## *6.0 Conclusions*

Based on the above noted simulations the following conclusions have been made.

- The maximum transfer capacity from Pressure Zone 2 into the Crimson Ridge Pumping Station ranges from **6.4 to 8.3 L/s** whilst maintaining a minimum pressure of 20 psi in PZ2 with a fire flow of 720 GPM (45.43 L/s) at ARCH, no pumping at PZ2 BS and a system MDD ranging from 609 to 792 L/s respectively. There appears to be adequate system capacity to support the proposed additional MDD of 7.1 L/s under the modest system MDD growth scenario.
- The maximum transfer capacity from Pressure Zone 2 into the Crimson Ridge Pumping Station ranges from **11.1 to 11.7 L/s** whilst maintaining a minimum pressure of 20 psi in PZ2 with a fire flow of 720 GPM (45.43 L/s) at ARCH, one pump on at PZ2 BS and a system MDD ranging from 609 to 792 L/s respectively.
- Under MDD and PHD conditions, sufficient pressures can be maintained within PZ2 while servicing the peak demand of 12.2 L/s provided by the developer.
- Based on the results of the modeling further development beyond what is being proposed will likely require distribution system upgrades.
- The scope of work does not include field testing of the existing infrastructure. Hydraulic models are mathematical representations of existing and proposed systems and should be verified by flow tests prior to construction. We recommend that field testing be undertaken to confirm projected flow rates and modelled results.

Legend
Minimum Pressure (psi)
< 20
< 40
< 50
< 80
< 100
>= 100
Maximum Velocity (m/s)
< 0.25
< 0.50
< 1.00
< 1.50
< 2.00
>= 2.00
Street
Pressure Zone Boundary
Fifth Line West
Old Highway 17 North
Fifth Line East
Harris Street
Brule Road
Old Goulais Bay Road
Wigle Street
Fourth Line East
Fourth Line West
Peoples Road
Great Northern Road
Fish Hatchery Road
Landslide Road
Backcountry Court
Wishart Park Road
Glengary Gate Crescent
Goulais Avenue
Moss Road
Tallack Boulevard
Greenfield Drive
Beaumont Avenue
Konkin Avenue
Third Line East
Third Line West
Private
Industrial Court B
Ro Van Court
Blikshire Place
Foxborough Trail
Black Road
Westridge Road
Cabot Crescent
Mary Avenue
Killarney Road
Terrance Avenue
Fairview Avenue
St. Patrick Street
Silvia Avenue
Industrial Park Crescent
Old Garden River Road
Millcreek Drive
Rossmore Road
Langdon Road
Elliott Road
Bitonti Crescent
Johnson Avenue
Cooper Street
Westgate Drive
Rushmere Drive
Prentice Avenue
Korah Road
Doncaster Road
Sussex Road
Selby Road
Churchill Avenue
Everett Street
Second Line West
White Oak Drive West
North Street
LaSalle Court
Superior Drive
Sackville Road
Second Line East
N
Crimson Ridge Analysis
City of Sault Ste. Marie
MDD with No Crimson Ridge Growth Scenario
Date:
July 11, 2016
AECOM
Scale:
0 0.25 0.5 1 Km

Legend
Minimum Pressure (psi)
< 20
< 40
< 50
< 80
< 100
>= 100
Maximum Velocity (m/s)
< 0.25
< 0.50
< 1.00
< 1.50
< 2.00
>= 2.00
Street
Pressure Zone Boundary
Fifth Line West
Old Highway 17 North
Fifth Line East
Fish Hatchery Road
Harris Street
Brule Road
Old Goulais Bay Road
Wigle Street
Fourth Line East
Fourth Line West
Peoples Road
Great Northern Road
Glengary Gate Crescent
Backcountry Court
Wishart Park Road
Landslide Road
Goulais Avenue
Moss Road
Tallack Boulevard
Greenfield Drive
Beaumont Avenue
Konklin Avenue
Third Line East
Third Line West
Private
Industrial Court B
Ro Von Court
Blkshire Place
Foxborough Trail
Black Road
Westridge Road
Cabo R Crescent
Mary Avenue
Fairview Avenue
St Patrick Street
Silver Bell Avenue
Industrial Park Crescent
Killarney Road
Terrace Avenue
Old Garden River Road
Millcreek Drive
North Street
LaSalle Court
Superior Drive
Sackville Road
Second Line East
Second Line West
White Oak Drive West
Everett Street
Elliott Road
Rossmore Road
Langdon Road
Bitonti Crescent
Johnson Avenue
Churchill Avenue
Doncaster Road
Sussex Road
Selby Road
Korah Road
Prentice Avenue
Cooper Street
Westgate Drive
Rushmere Drive
Crimson Ridge Analysis
City of Sault Ste. Marie
MDD Scenario (7.1 L/s)
Date:
July 11, 2016
AECOM
Scale:
0 0.25 0.5 1 Km

Legend
Minimum Pressure (psi)
< 20
< 40
< 50
< 80
< 100
>= 100
Maximum Velocity (m/s)
< 0.25
< 0.50
< 1.00
< 1.50
< 2.00
>= 2.00
Street
Pressure Zone Boundary
Fifth Line West
Old Highway 17 North
Fifth Line East
Harris Street
Fish Hatchery Road
Brule Road
Old Goulais Bay Road
Wigle Street
Backcountry Court
Landslide Road
Fourth Line East
Fourth Line West
Peoples Road
Great Northern Road
Glengary Gate Crescent
Wishart Park Road
Goulais Avenue
Moss Road
Tallack Boulevard
Beaumont Avenue
Konkin Avenue
Third Line East
Private
Industrial Court B
Birkshire Place
Third Line West
Fairview Avenue
Westridge Road
Cabot Crescent
Mary Avenue
Industrial Park Crescent
Ro Van Court
Killarney Road
Terrance Avenue
Foxborough Trail
Black Road
Millcreek Drive
Old Garden River Road
Cooper Street
Rossmore Road
Langdon Road
Elliott Road
Bitonti Crescent
Johnson Avenue
Westgate Drive
Rushmere Drive
Prentice Avenue
Kopah Road
Doncaster Road
Churchill Avenue
Sussex Road
Selby Road
Everett Street
Second Line West
White Oak Drive West
North Street
LaSalle Court
Superior Drive
Sackville Road
Second Line East
Crimson Ridge Analysis
City of Sault Ste. Marie
PHD Scenario (12.2 L/s)
Date:
July 11, 2016
AECOM
Scale:
0 0.25 0.5 1 Km

January 13, 2014

121-20853-00

Mr. Andrew Hallett, P.Eng.
PUC Services Inc.
500 Second Line East
Sault Ste. Marie, ON P6B 4K1

**Subject: Technical Memo – Booster Pumping Station at Brule Road and Fourth Line**

Dear Mr. Hallett,

**General**

This purpose of this Technical Memo is to address the operation of the Sault Ste. Marie Booster Pumping Station at Brule Road and Fourth Line to provide the necessary flushing velocities for the water main servicing the Crimson Ridge condominium development.

The Water Services Design Brief (dated October 21, 2013) prepared for the above-noted project identified the maximum velocities achievable in the 150mm diameter watermain to be approximately 0.5 m/s. In order to achieve the minimum flushing velocity of 0.8 m/s, the booster pumping station at Brule Road and Fourth Line is required to run all three pumps. The booster pumping station has been designed to meet the maximum daily demands of the serviced area with two (2) of the three (3) pumps in operation. Discussions with the Ministry of Environment have confirmed that running the third pump in order to achieve the required flushing velocities would be an acceptable practice.

This Memo will address the following questions raised by PUC Services Inc. regarding the use of the third pump at the Brule Road Booster Pumping Station:

1) How will the operation of the third pump be managed?

2) Will the operation of all three (3) pumps affect the pressures in the booster pumping station?

3) Will the pumps overheat if all three pumps are running with low water demand?

The above questions will be addressed in the following sections.

WSP Canada Inc.
185 East Street
Sault Ste. Marie ON P6A 3C8
www.wspgroup.com

## Pump Selection and Operation

The booster pumping station currently operates one (1) booster pump in continuous operation. This is the lead pump. The second booster pump, called the lag pump, is energized when the pressure drops below a preset pressure. The third pump is a backup pump which can be used if the lead or lag pump were to fail.

The selection of the lead and lag pump is a manual operation. The operator selects which of the three pumps will be the lead pump, and which of the two remaining pumps will serve as the lag pump. Each pump has a selector switch that can be ON, OFF, of AUTO. In AUTO mode, the lead and lag pump will operate without user intervention.

There are two types of flushing for the watermains at Crimson Ridge. The first type will be to flush sufficient fresh water through the watermains to ensure a minimum chlorine residual is present in the water at all times. This flushing will be achieved by means of an automatic flushing station installed within the Crimson Ridge development. Flushing will occur several times per week however does not require a flushing velocity of 0.8 m/s.

The second type of flushing will be to flush the watermain after initial construction and to perform flushing to remove any buildup of sediment in the watermain during the years of operation. The frequency of flushing the watermain at Crimson Ridge, after it has been commissioned, is anticipated to be minimal and will only be flushed on an "as-required" basis. For this reason, it is recommended to leave the controls as-is and operate the third pump manually on an as-required basis. Installing automation on a system that is used infrequently can sometimes be problematic since the control system is not tested regularly.

## System Pressures

A pump manufacturer will define the cut-off pressure as the maximum pressure a pump will reach when there is no flow. An example would be if the pump was energized and the discharge valve was closed. The cut-off pressure for the pumps at the Brule Road Booster Pumping Station is approximately 60psi. Adding this pressure to the maximum incoming pressure yields approximately 108 psi. This pressure is less than the rated capacity of the pipe and fittings within the pumping station. The pressures in the pumphouse would be lower due to the recirculation of the water. We therefore have no concerns with running all three of the booster pumps.

It is recommended, however, that the repairs to the existing pipe supports be completed prior to running all three pumps.

**Pump Overheating**

The pumphouse currently has a high-temperature flushing valve that was installed when the pumping station was commissioned. At the time of commissioning, there was very little demand on the system thereby resulting in most of the water being re-circulated through the pumphouse. It is our understanding that this is no longer the case as development in the area has increased water flows through the pumping station. The discharge pipe into the sink in the pumphouse was dry at the time of our inspection which suggests the high-temperature flushing system has not been recently operated.

The increase in water temperature can be roughly calculated by the following formula:

$$\Delta T = \frac{\frac{H}{778}}{\frac{1}{E} - 1}$$

Where H = Total Pump Head (=33m)
C = Specific Heat of Water (taken to be 4.187 kJ/kgK)
E = Pump Efficiency (=70%)

With three (3) pumps running, the recirculation flow is approximately 4.9 L/s, which yields a velocity of 2.5m/s. Given the length of pipe, the number of recirculations is approximately 25 per minute.

Therefore, the temperature rise is expected to be approximately 0.6 degrees per minute.

Factors such as friction losses in the pipe and fittings, room temperature, and pipe material were not taken into account in the above calculations. However, they are not expected to drastically increase the water temperature.

The capacity of the existing high-temperature flushing valve will be sufficient to provide fresh water to the pumps. It is anticipated this would occur every 30 minutes if there was no demand on the pumping station (at which point the water would be approximately 26 degrees Celcius).

**Summary and Conclusions**

We do not anticipate any problems with the operation of the third booster pump in order to achieve the required flushing velocities for the Crimson Ridge condominium development. The repairs to the existing pipe supports should be completed prior to running all three pumps. The pumps should be operated manually to ensure an operator is present during the flushing operations and ensure the pumping station is behaving normally. The pumphouse is currently protected from over-heating with the existing high-temperature flushing system. This system will continue to provide protection should the pumps be inadvertently left on with very low water demands on the system.

Yours truly,

David Spacek, P.Eng.
Project Manager, Sault Ste. Marie, Infrastructure

DS/jlb

*Appendix B*

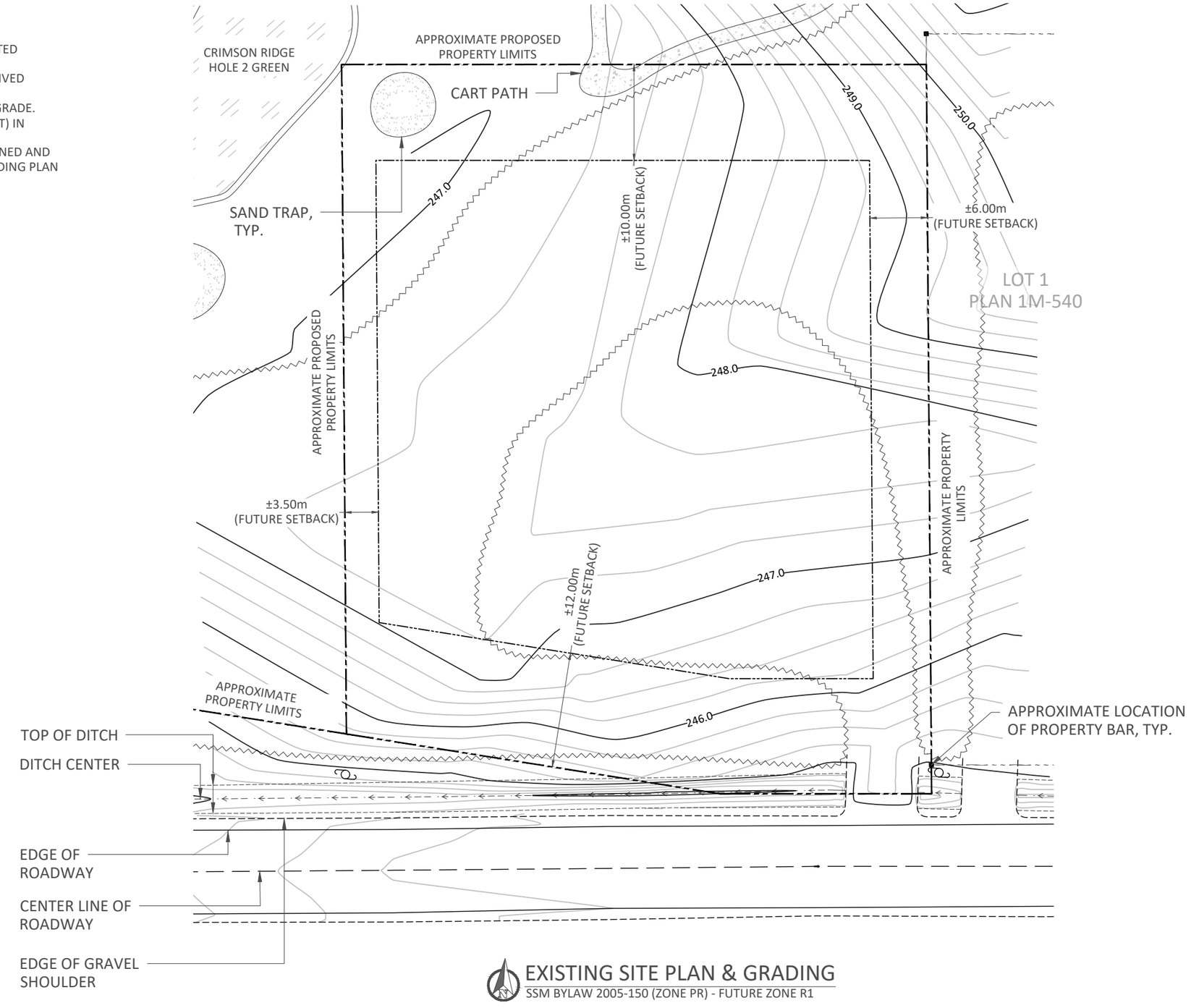
*Proposed Site Plan*

## GENERAL NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. ELEVATIONS ARE METRIC GEODETIC AND DERIVED FROM GPS (RTK) NAD83 CSRS ZONE 16T.
3. SPOT ELEVATIONS ARE PROPOSED FINISHED GRADE. COORDINATE FINISHED SURFACE (i.e. ASPHALT) IN SUBGRADE PREPARATION.
4. EXISTING WATERCOURSES SHALL BE MAINTAINED AND NOT COORDINATE THIS DRAWING WITH BUILDING PLAN DRAWINGS.
5. CONTOUR INTERVALS MAJ:1.0m MIN: 0.25m

## LEGEND

- TREE LINE
- EDGE OF CONCRETE
- DITCH CENTER LINE
- TOP OF DITCH
- CENTER LINE OF ROAD
- EDGE OF GRAVEL
- EDGE OF ASPHALT
- PROPERTY LINE
- DEVELOPMENT SETBACK
- PROPERTY BAR
- UTILITY POLE
- 100.00 MAJOR CONTOUR
- MINOR CONTOUR




EXISTING SITE PLAN & GRADING
SSM BYLAW 2005-150 (ZONE PR) - FUTURE ZONE R1

SEAL

CENLO ENGINEERING INC.
*Civil / Structural / Architectural*

NOTE:

- SURVEY CONDUCTED ON JULY 19, 2024
- PROPERTY LINE LOCATION DETERMINED FROM D.S. URSO SURVEYING LTD. DWG. U-11670

| REVISIONS | | |
|---|---|---|
| A | REVIEW & COMMENT | 2024-07-26 |
| REV # | DESCRIPTION | DATE |

CLIENT/PROJECT:

PROPOSED PALUMBO RESIDENCE

FOURTH LINE EAST
SAULT STE. MARIE, ON.

DRAWING TITLE:

EX. SITE AND GRADING

| | |
|---|---|
| DRAWN: | MJJ |
| CHECKED: | MJJ |
| DATE : | 2024-07-26 |
| PROJECT #: | 24083 |

SHEET 1 OF 1

SK1

SCALE: 1:450

*Appendix C*

*Statement of Qualifications & Limitations*

## LIMITATIONS OF LIABILITY

This report has been prepared by Cenlo Enterprises Inc. and is intended solely for the Client named. The disclosure of any information contained in this report is the sole responsibility of the intended recipient. The material in it reflects Cenlo's best judgment in light of its information at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Cenlo accepts no responsibility for damages, if any, suffered by any third party due to decisions made or actions based on this report. This limitations statement is considered part of this report. Since the file transmitted is now out of Cenlo's control and its integrity can no longer be ensured, no guarantee may be given regarding any modifications made to this document.

The material contained in the report:

- Reflects our judgment based on information reviewed at the time of preparation.
- Represents our professional judgment considering limitations and industry standards.
- Maybe based on information provided to Cenlo, which has not been verified.
- Shall not be used to imply warranties for a particular purpose unless otherwise agreed in writing.
- Is not a certification of compliance with past or present regulations.
- Must be read in its entirety, and sections should not be read out of context.
- Has not been updated since the date of issuance, and accuracy is limited to the time and circumstances in which it was issued.

Unless explicitly stated in the report:

- This assessment does not eliminate uncertainty regarding the potential for existing or future costs, hazards, or losses in connection with a property.
- No physical or destructive testing, intrusive exploration, or design calculations have been performed unless specifically recorded.
- Conditions existing but not recorded were not apparent given the level of study undertaken, and further investigation may be required.
- Any time allowance given for deterioration represents an educated guess based on current condition. Failure or the replacement requirements may vary from our estimates.
- Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

We accept no responsibility for any decisions made or actions taken as a result of this report unless we are advised explicitly of and participate in such action, in which case our responsibility will be as agreed to at that time. Any user of this report specifically denies any right to claims against the Consultant, Sub-Consultants, their officers, agents, and employees over the fee paid for professional services.

This Statement of Qualifications and Limitations is attached to and forms part of the report.

## Samir Thapa

**From:** Dan Perri
**Sent:** Wednesday, August 28, 2024 3:10 PM
**To:** Samir Thapa
**Cc:** Jonathan Kircal; Susan Hamilton Beach
**Subject:** RE: Request for Comment : 418 Fourth Line West (Crimson Ridge Golf Course)

Hi Samir,

Please see comments from Engineering below:

- A sanitary servicing study to the satisfaction of the Director of Engineering or their designate is required. The servicing study must determine the downstream impacts on the low-pressure sanitary system and whether the system can handle the increased flows from the proposed development; and
- A lot grading and drainage plan must be completed by a Lot Grading Professional, to ensure that drainage is dealt with appropriately. Lot Grading Professionals must be a Professional Engineer (civil), Architect, or Ontario Land Surveyor, experienced in lot grading design.

If you require anything further, please do not hesitate to contact me.

Regards,

**Dan Perri, P.Eng.**
Municipal Services & Design Engineer
Public Works and Engineering Services
705.759.5329 d.perri@cityssm.on.ca

**CITY OF SAULT STE. MARIE**
99 Foster Drive, Sault Ste. Marie, ON P6A 5X6
**saultstemarie.ca**

---

**From:** Samir Thapa <s.thapa@cityssm.on.ca>
**Sent:** Tuesday, August 6, 2024 11:58 AM
**To:** Dan Perri <d.perri@cityssm.on.ca>; Freddie Pozzebon <f.pozzebon@cityssm.on.ca>; Karen Fields <k.fields@cityssm.on.ca>; Brent Lamming <b.lamming@cityssm.on.ca>; Rick Van Staveren <r.vanstaveren@cityssm.on.ca>; Naomi Thibault <n.thibault@cityssm.on.ca>; eng dept <eng-dept@ssmpuc.com>; Virginia McLeod <v.mcleod@cityssm.on.ca>; Diane Morrell <d.morrell@cityssm.on.ca>; Susan Hamilton Beach <s.hamiltonbeach@cityssm.on.ca>; nature@ssmrca.ca; msonorth@ontario.ca; circulations@wsp.com; planninganddevelopment@bell.ca; newdevelopment@rci.rogers.com; Nicole Maione <n.maione@cityssm.on.ca>; Christine Pascall <c.pascall@cityssm.on.ca>; justin.pino@hscdsb.on.ca; landuseplanning@hydroone.com
**Cc:** Jonathan Kircal <j.kircal@cityssm.on.ca>; Amanda Cipriano <a.cipriano@cityssm.on.ca>
**Subject:** Request for Comment : 418 Fourth Line West (Crimson Ridge Golf Course)

**YOUR TRUSTED UTILITY FOR A BRIGHTER TOMORROW**
**PUC SERVICES INC.**
Engineering Department 500 Second Line East Sault Ste. Marie, ON P6A 6P2
ssmpuc.com File: Fourth Line W [418] Response

August 28, 2024
Peter Tonazzo
Director of Planning
The Corporation of the
City of Sault Ste. Marie
99 Foster Drive
Sault Ste. Marie, ON P6A 5X6

Dear Peter:

Re: 418 Fourth Line W – Application

With regards to the above referenced rezoning application, please refer to the below comments:
• PUC Distribution Inc. has no comments or concerns.

• The Public Utilities Commission of the City of Sault Ste. Marie has the following comments:

○ The Preliminary Servicing Report Section 3.0 Water Supply is inconclusive whether the booster pump station has adequate capacity to service the proposed lot. This must be confirmed by the developer before the proposed lot can be serviced from the municipal water distribution system.

○ The referenced 2012 Municipal Servicing Report by Genivar discusses water supply to the proposed Crimson Ridge condominium development and previously allocated residential units in the service area of the booster station (see page 3 of the Genivar report). From the information provided, it is unclear whether the proposed lot was considered in the noted “previously allocated residential units” in the Municipal Servicing Report. Please confirm if the proposed lot was considered.

○ Please confirm if the referenced 2012 Genivar Municipal Servicing Report aligns with current design standards and current conditions of the water distribution system.

○ The Preliminary Servicing Report Section 3.0 notes “known low pressure allegedly noticed by neighbors in the area”. This statement contradicts our records of the water distribution system pressure in the area.

○ It is noted that there is no municipal fire protection at this location.

We would also like to take the opportunity to request that the developer reach out to us early in the planning stages with respect to electrical servicing for the development.

Yours truly,
PUC Services Inc.
Mitchell Paradis, P.Eng.
Manager, Electrical Engineering

MP*km

**From:** Toni-Marie Streicher
**Sent:** Friday, August 23, 2024 3:57 PM
**To:** Samir Thapa
**Subject:** RE: Request for Comment : 418 Fourth Line West (Crimson Ridge Golf Course)

Good Afternoon,

The Building Division has the following comments;

- The property is under the jurisdiction of the Conservation Authority, approval from their office will be required prior to the issuance of a building permit.
- All structures including detached garages must adhere to the R1 Estate Residential Building Regulations as per section 9.5. of Zoning By-Law 2005-150.
- A record of site condition will be required prior to issuance of any building permits.

**Toni-Marie Streicher**
Senior Plans Examiner
Building Division
Public Works & Engineering Services

## Jonathan Kircal

**From:** Gerard Lavoie <glavoie@ssmrca.ca>
**Sent:** Thursday, August 8, 2024 11:34 AM
**To:** Samir Thapa
**Cc:** Dan Perri; Freddie Pozzebon; Karen Fields; Brent Lamming; Rick Van Staveren; Naomi Thibault; eng-dept@ssmpuc.com; Virginia McLeod; Diane Morrell; Susan Hamilton Beach; msonorth@ontario.ca; circulations@wsp.com; planninganddevelopment@bell.ca; newdevelopment@rci.rogers.com; Nicole Maione; Christine Pascall; justin.pino@hscdsb.on.ca; landuseplanning@hydroone.com; Jonathan Kircal; Amanda Cipriano; Anjum Amin
**Subject:** SSMRCA Comments - 418 Fourth Line West (Crimson Ridge Golf Course)

This email originated outside of the Corporation of the City of Sault Ste. Marie.
Do not open attachments or click links unless you verify the sender and know the content is safe.

August 8, 2024

Via Email: s.thapa@cityssm.on.ca

D.S. Urso (Monument - Urso Surveying LTD)
536 Fourth Line East, Sault Ste. Marie, ON P6A 6J8
705 284 7851
dave.urso@monument-urso.ca

Rezoning Application # (418 Fourth Line West)

The subject property, zoned as PR, specifically the portion located along the southern edge of 418 Fourth Line West is located within a regulated area regarding Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits under the Conservation Authorities Act, R.S.O. 1990, c. C.27. Any new developments for this property will require a site plan review, and a permit from the Sault Ste. Marie Conservation Authority.

SSMRCA does not object to this application.

Kind regards,

*Gerard Lavoie*
(he/him/his)
GIS Applications Specialist
Sault Ste. Marie Region Conservation Authority
1100 Fifth Line East
Sault Ste. Marie ON P6A 6J8
GLavoie@ssmrca.ca
www.ssmrca.ca
Phone 705-946-8530 ext. 1004

**From:** Nicole Maione
**Sent:** Tuesday, August 06, 2024 2:34 PM
**To:** Samir Thapa
**CC**: Dave Lamming: Brent Lamming; Peter Tonazzo; Christian Frost
**Subject:** RE: Request for Comment : 418 Fourth Line West (Crimson Ridge Golf Course)

Transit has no concerns as it is not in the service zone.

Having said that, it would be nice if a Parabus was able to access the front doors, should we ever need to pick a client up there that is out of service zone.

Nicole

**From:** Susan Hamilton Beach
**Sent:** Wednesday, August 14, 2024 10:09 PM
**To:** Samir Thapa
**CC**: Maggie McAuley
**Subject:** RE: Request for Comment : 418 Fourth Line West (Crimson Ridge Golf Course)

Hi Samir and Maggie,

PW supports this application and understands that no roadway or infrastructure shall be public. I do believe on some private driveways in this area there has historically been the requirement for a hard surface (ie. asphalt) for an adequate depth from the existing roadway. This may be required to prevent repetitive wash-outs etc. Maggie – can you confirm whether this has been considered and should be required?

Regards,

**Susan Hamilton Beach, P. Eng.**

Director, Public Works
Public Works and Engineering Services

**CITY OF SAULT STE. MARIE**

128 Sackville Road, Sault Ste. Marie, ON P6B 4T6
**saultstemarie.ca**

August 23, 2024

Samir Thapa
Planning and Enterprise Services
City of Sault Ste. Marie

**Re: Bell Canada Standard Response to Comment Requests for OPA, ZBLA, Part-lot Control, Temporary Use, and Interim Control By-law Applications**
**418 Fourth Line W., Sault Ste. Marie;**
**Your File No. N/A**

Samir Thapa,

Thank you for your e-mail. Bell Canada has received your follow-up request for comment(s) regarding the above noted application(s).

The information that municipalities provide to Bell Canada is instrumental to the provisioning of telecommunications infrastructure. Bell Canada also appreciates the opportunity to be proactively engaged in development applications and infrastructure and policy initiatives.

Bell Canada kindly requests to always be circulated on any future materials related to this development project as well as any other development projects and infrastructure and policy initiatives in your municipality. **Please note that while we require all such circulations to ensure that we have visibility to this development project for critical network provisioning and planning purposes, Bell Canada**:

- Does not generally comment on privately-initated or site-specific official plan and zoning by-law amendments, part-lot control, temporary use and interim control by-laws.
- Does generally comment on applications such as site plan approval, draft plan of subdivision and draft plan of condominium applications.

**Bell Canada is currently evaluating the most effective means to collaborate with municipalities towards the goals of the *'More Homes for Everyone'* and *'More Homes Built Faster' Acts*.** At this time, we can provide the following standard response to all follow-up requests from municipalities for requests for comment on official plan and zoning by-law amendments, part lot control, temporary use and interim control by-laws. If there are development proposal-specific concerns that are not addressed by our standard response, please forward your questions to planninganddevelopment@bell.ca. Bell Canada

wishes to reserve our right to request formal conditions once any downstream Draft Plan of Subdivision, Draft Plan of Condominium and/or Site Plan applications have been deemed complete.

**Bell Canada Standard Response to Comment Requests for OPA, ZBLA, Part-lot Control, Temporary Use, and Interim Control By-law Applications:**

- Upon receipt of this comment letter, the Owner / Applicant is to provide Bell Canada with servicing plans / Composite Utility Plan (CUP) at their earliest convenience to planninganddevelopment@bell.ca to confirm the provision of communication/telecommunication infrastructure needed to service the development.
- The following paragraphs are to be included as a condition of approval for any Draft of Plan of Subdivision, Draft Plan of Condominium and/or Site Plan application(s) relating to this development project:

  *"The Owner acknowledges and agrees to convey any easement(s) as deemed necessary by Bell Canada to service this new development. The Owner further agrees and acknowledges to convey such easements at no cost to Bell Canada.*

  *The Owner agrees that should any conflict arise with existing Bell Canada facilities where a current and valid easement exists within the subject area, the Owner shall be responsible for the relocation of any such facilities or easements at their own cost."*

  The above-noted conditions will remain in effect until said conditions are officially cleared by Bell Canada as part of the formal approval process.
- To ensure that we can provide detailed provisioning comments, and to subsequently clear conditions, please ensure that all servicing plans / CUP, including updates to such plans, are sent to planninganddevelopment@bell.ca.

**Concluding Remarks**

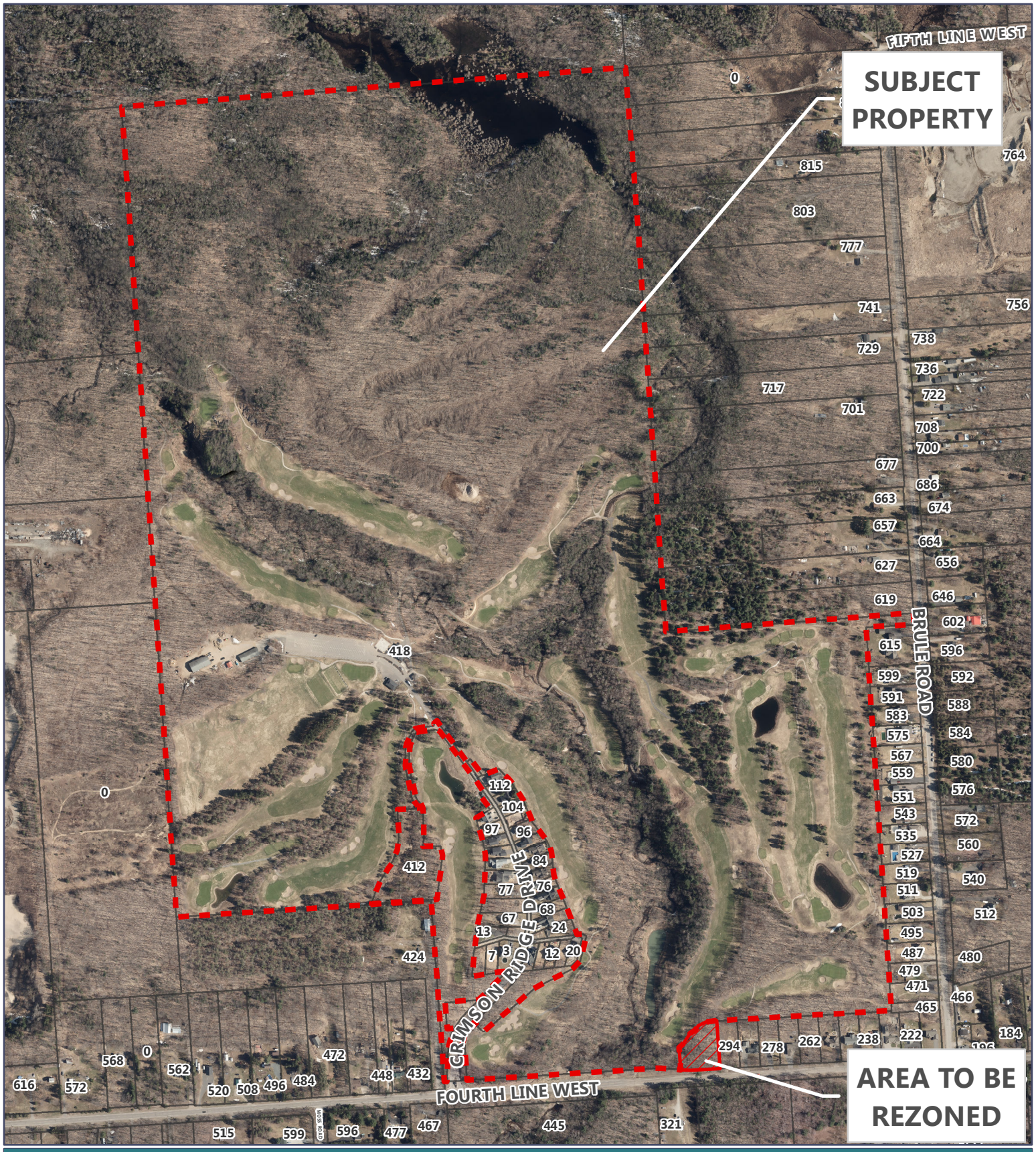
Thank you for the opportunity to actively participate in this process. To ensure that we can continue to monitor and actively participate in the planning process, please continue to circulate all planning applications, including formal circulations, pre-circulations and re-circulations to circulations@wsp.com.

We note that WSP operates Bell Canada's development tracking system, which includes the intake and processing of municipal circulations. **However, all responses to circulations and requests for information, such as requests for clearance, will come directly from Bell Canada, and not from WSP**. WSP is not responsible for the provision of comments or other responses.

Should you have any questions, please contact the undersigned.

Yours Truly,

**Juan Corvalan**
**Bell Canada**
Senior Manager – Municipal Liaison
Network Provisioning




## Application A-11-24-Z: Aerial Image

SAULT STE.MARIE

**Planning and Enterprise Services**


Community Development and Enterprise Services Department
99 Foster Drive, Sault Ste Marie, ON P6A 5X6
saultstemarie.ca | 705-759-5368 | planning@cityssm.on.ca


Area To Be Rezoned
Subject Property
Parcel Fabric

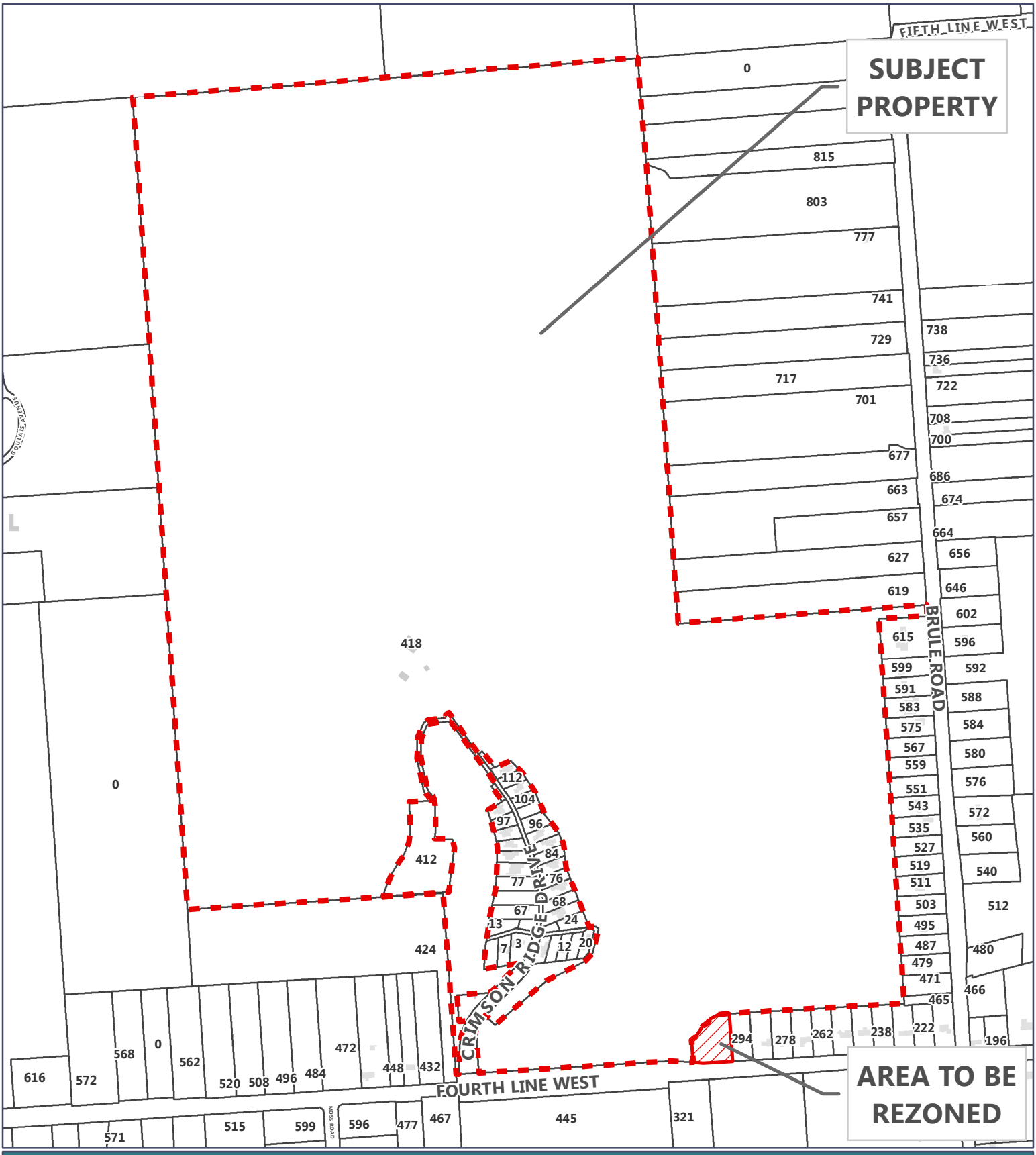
### Property Information

Civic Address: 418 Fourth Line West
Roll No.: 050050061000000
Map No.: 136/2-37
Date Created: August 14, 2024

0 80 160 m
1:8,000

This map is for general reference only
Orthophoto: 2022

N




## Application A-11-24-Z: Subject Property

**Planning and Enterprise Services**
Community Development and Enterprise Services Department
99 Foster Drive, Sault Ste Marie, ON P6A 5X6
saultstemarie.ca | 705-759-5368 | planning@cityssm.on.ca

Parcel Fabric
Area To Be Rezoned
Subject Property

**Property Information**

Civic Address: 418 Fourth Line West
Roll No.: 050050061000000
Map No.: 136/2-37
Date Created: August 13, 2024

0 80 160 m
1:8,000
This map is for general reference only.

# Application A-11-24-Z: Existing Zoning

## Property Information

Civic Address: 418 Fourth Line West
Roll No.: 050050061000000
Map No.: 136/2-37
Date Created: August 14, 2024

- C1 - Traditional Commercial Zone
- C2 - Central Commercial Zone
- CT2 - Commercial Transitional Zone
- C3 - Riverfront Zone; C3hp
- C4 - General Commercial Zone; C4hp
- C5 - Shopping Centre Zone
- HZ - Highway Zone
- M1 - Light Industrial Zone
- M2 - Medium Industrial Zone; M2hp
- M3 - Heavy Industrial Zone
- R1 - Single Detached Residential Zone
- R2 - Single Detached Residential Zone; R2hp
- R3 - Low Density Residential Zone
- R4 - Medium Density Residential Zone
- R5 - High Density Residential Zone
- R6 - Mobile Home Residential Zone
- I - Institutional Zone
- EM - Environmental Management Zone
- PR - Parks and Recreation Zone
- RA - Rural Area Zone
- RP - Rural Precambrian Uplands Zone
- REX - Rural Aggregate Extraction Zone
- AIR - Airport Zone
- Named Use - Commercial Dock

0 80 160 m
1:8,000
This map is for general reference only.

SAULT STE.MARIE
Planning and Enterprise Services
Community Development and Enterprise Services Department
99 Foster Drive, Sault Ste Marie, ON P6A 5X6
saultstemarie.ca | 705-759-5368 | planning@cityssm.on.ca

The Corporation of the City of Sault Ste. Marie
99 Foster Drive, Sault Ste. Marie, Ontario P6A 5X6
saultstemarie.ca | 705.759.2500 | info@cityssm.on.ca

# NOTICE OF APPLICATION & PUBLIC MEETING

## 418 Fourth Line West

**Application No.: A-11-24-Z**
**Applicant: D.S. Urso (Monument – Urso Surveying LTD)**

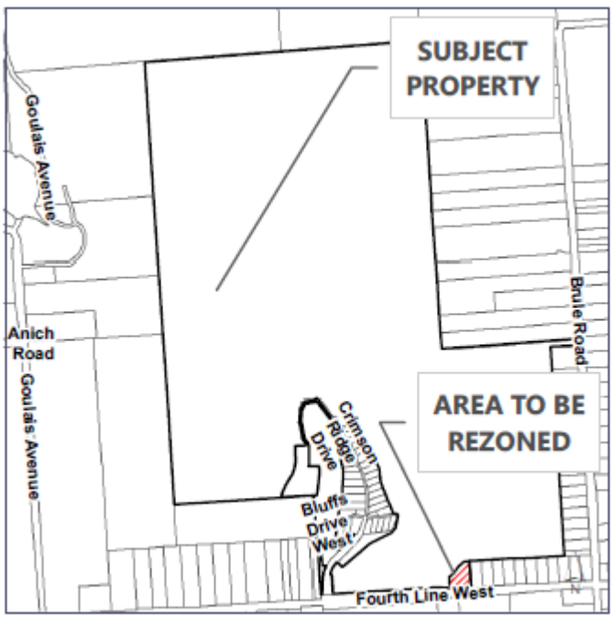
**Date: September 9, 2024**
**Time: 5:00 PM**

**Location: City of Sault Ste. Marie**
**Civic Centre, Council Chambers**
**99 Foster Drive**

### PURPOSE

An application has been filed to rezone a portion of 418 Fourth Line West (Crimson Ridge Golf Course) from Parks and Recreation Zone (PR) to Estate Residential Zone (R1) to construct a single-detached house (Residential Structure).

A special exception to reduce the required lot area from 0.4 hectares to 0.378 hectares is also being requested as part of this application.




### PROPOSED CHANGE

Rezone a 63 meter by 76 meter portion of the property (identified as Area to be Rezoned) from Parks and Recreation Zone (PR) to Estate Residential Zone (R1) with the following Special Exception:

- Reduce the required minimum lot size from 0.4 hectares to 0.37 hectares.

### HAVE YOUR SAY

Input on the proposed Zoning By-Law amendment is welcomed and encouraged. You can provide input by making a written submission or by making a public presentation.

**TAKE NOTICE THAT** the Council of The Corporation of the City of Sault Ste. Marie will hold a Public Meeting on Monday, September 9, 2024 at 5:00 PM to consider a proposed Zoning By-law Amendment (under sections 34 of the Planning Act, R.S.O 1990, c. P13, as amended).This meeting will be broadcast by Shaw Cable and may be viewed on Shaw Cable's Community Channel, Sootoday.com and on the City's YouTube Channel https://www.youtube.com/saultstemarieca
Any person wishing to present at the public meeting may do so electronically or in person. Electronic participants must contact the City Clerk at cityclerk@cityssm.on.ca or 705-759-5388 to register as a presenter. Registered presenters will be provided with instructions as to how to join the meeting in advance Any written submissions received in advance of the meeting will be included with Council's Agenda.

### MORE INFORMATION

The application may be reviewed in the Planning Division, Level 5, Civic Centre, 99 Foster Drive. The Report of the Planning Division will be available as part of the Council Agenda on the City's website at 4:30 p.m. on Thursday, September 05, 2024 and in person on Friday, September 06, 2024, during regular office hours in the Planning Division. Digital and physical copies of the report are available upon request. Inquiries should be directed to Jonathan Kircal, Planning Division, at 705.759.6227 or j.kircal@cityssm.on.ca Please refer to the application file number.

### WRITTEN SUBMISSION

To provide input in writing, or request notice if the proposed application is approved, please submit a letter to Jonathan Kircal, Planning Division, 99 Foster Drive, Sault Ste. Marie, ON P6A 5X6, or e-mail to j.kircal@cityssm.on.ca with your name, address and application file number on or before **Monday, September 09, 2024**.

If you wish to be notified of the Council of the City of Sault Ste. Marie decision to adopt or refuse the approval of an application, you must make a written request to the Planning Division at the address noted above.

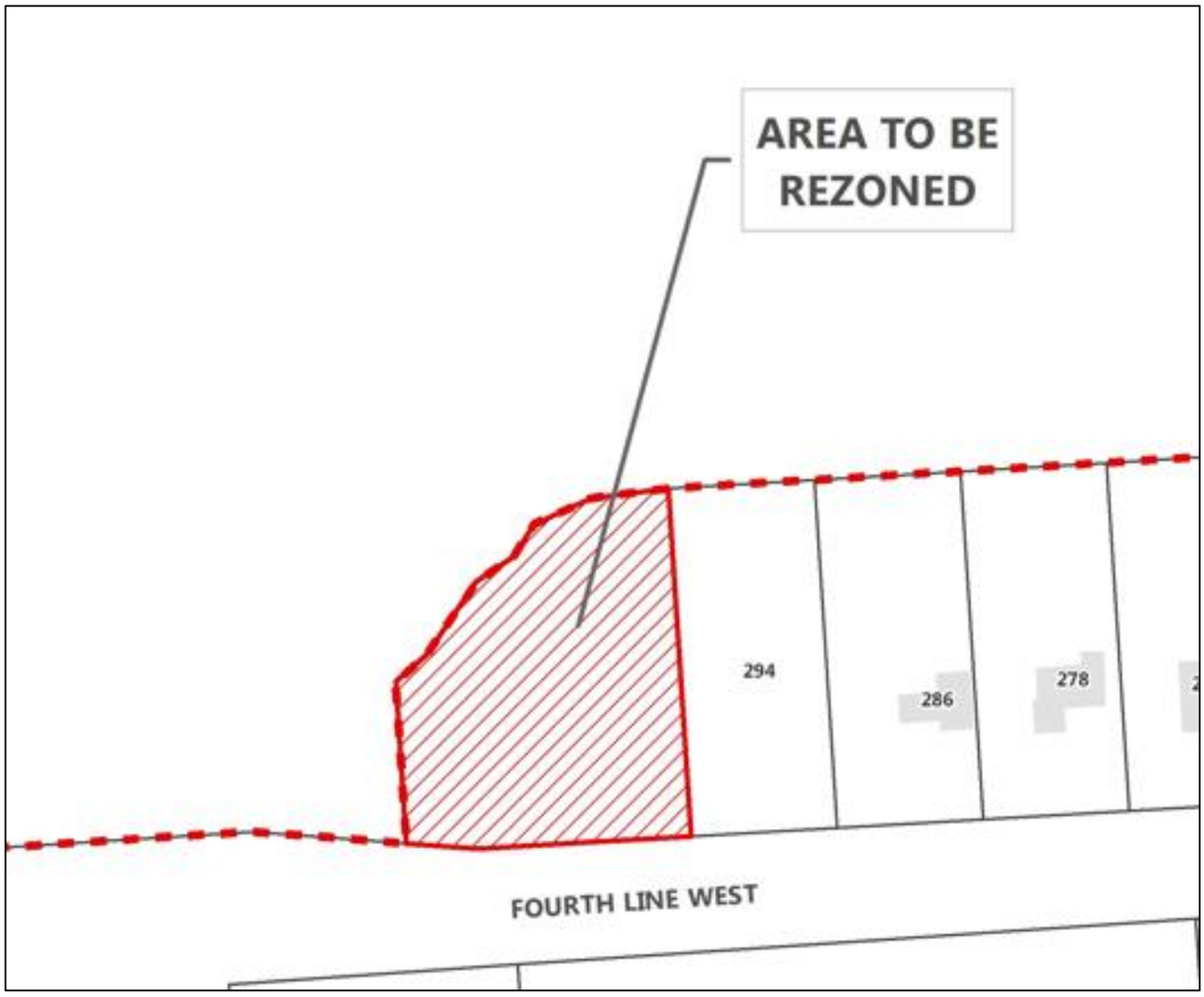
### LEGAL NOTICE CONCERNING YOUR RIGHT TO APPEAL

As per the Planning Act, appeal rights are only provided to specified persons, public bodies, applicants, registered owners of any land to which the by-law and/or plan would apply to, the Minister, and the appropriate approval authority.

If a specific person, public body, registered owner of a subject property does not make oral submission at a public meeting or make written submission to the City of Sault Ste. Marie before the By-law is passed, the specified person, public body or registered owner of a subject property may not be entitled to appeal the decision of the Council of the City of Sault Ste. Marie to the Ontario Land Tribunal.

If a person or public body does not make oral submissions at a public meeting, or make written submissions to the City of Sault Ste. Marie before the By-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Land Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to add the person or public body as a party.

## Zoomed in to the Area to be Rezoned



Living on 4th Line West and owning a grinder pump sewage system is my main opposition to this new added lot on Crimson Ridge property.

How many more lots are going to be added into the currently over used sewage system we have here.

Talking with a credited engineer who was involved in the original engineering of this Phase 1 plan, I truly believe that this system is already over burdened and that there should be no more additional hook ups to the grinder pump lines.

4 years ago Mr. Fremlin who built 4 homes on the east side of Brule road north was somehow allowed to tie into this system when his lots were originally designed for well and septic. - not sure how that all transpired but us home owners in my area were not pleased at all and now 418 wants to tie into this as well.-

With all the new buildings and now a Phase 2 at Crimson around the corner things are getting out of control and my info tells me that this system was not designed to handle this much capacity.- Id like to know if the city is going to help compensate me for future grinder pump issues or does the city have a plan to upgrade the infrastructure in our area to accommodate all the new builds. Sure hope one or both of these are in the city plans to keep adding builds to this over taxed sewage system. The grinder pumps at Crimson are constantly being worked on now with many issues.

Dave Antonello

Hello Mr. Kircal,

My wife Christine and I are owners of 254 Fourth Line West and 262 Fourth Line West. Our concern is the 2" sewer line that services Fourth Line West. It is our understanding that after completion of Phase 1 & 2 developments at Crimson Ridge that the 2" sewer line would be at full capacity.

There have also been several new homes built recently on Brule Road. Because of the small sewer line we have a grinder pump that was installed in our home at significant expense.

I know for a fact that the grinder pumps have already failed and were changed at the Crimson Ridge Pumping station.

How will the 2" sewer line handle all the additional sewage that will be coming from Crimson Ridge Phase 2 when it is complete in the future?

How will the increase in volume of sewage affect the existing grinder pumps in homes on Fourth Line?

I don't believe it's wise to allow more development along Fourth Line West until a proper sewer system is installed.

Sincerely,

Peter Aloe

Dear Mr. Kircal

With respect to this application to rezone a portion of the Crimson Ridge Golf Course to allow construction of a single-family home along 4th Line W:

I am a resident of the neighbourhood at 238 Fourth Line W, 6 or 7 lots east of the proposed development. I don't object to the application per se – but I am concerned about the additional loading it will create on the water and sewer systems that serve the neighbourhood. It is my understanding that the sewer system in particular is undersized to handle the additional housing that has been built on Crimson Ridge in the past 10-15 years (with an additional townhome development apparently planned but not begun yet).

This required that the homes along the north side of Fourth Line between Brule Rd and the golf course to be constructed with grinder pumps to reduce the solid waste loading on the system. One of my neighbours just had their pump fail, to the tune of $7000 in replacement costs. I am concerned about the implications of adding an additional load on the system through this new home development. Perhaps these concerns are unwarranted, but I wish to bring them to your attention.

Yours truly
Paul Ward
[redacted]

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW NO. 2024-118**

**PROPERTY**: A by-law to declare the City owned property legally described as PIN 31576-0095 (LT) PT LT 1-2 PL 4050 ST. MARY'S AS IN T362161; S/T & T/W INTEREST IN T362161 & T/W T362161; SAULT STE. MARIE, being civic 149 Gore Street, as surplus to the City's needs and to authorize the disposition of the said property.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to the *Municipal Act, 2001*, S.0. 2001, c. 25, **ENACTS** as follows:

1. **LANDS DECLARED SURPLUS**

   The lands more particularly described in Schedule "A" to this by-law are surplus to the requirements of the municipality.

2. **SALE AUTHORIZED**

   The Corporation of the City of Sault Ste. Marie shall sell the lands more particularly described in Schedule "A" hereto.

3. **SCHEDULE "A"**

   Schedule "A" hereto forms part of this by-law.

4. **EFFECTIVE DATE**

   This by-law takes effect on the day of its final passing.

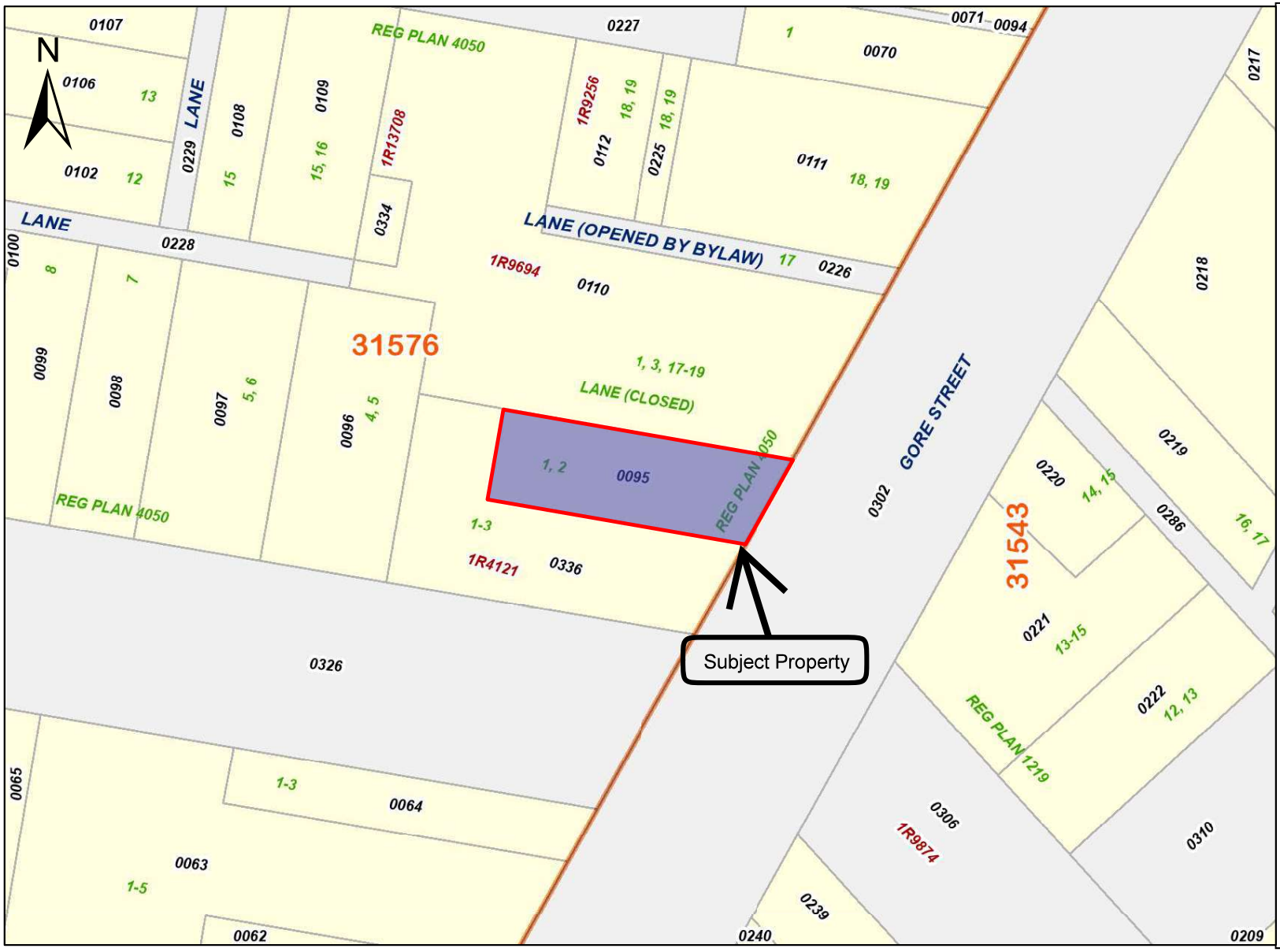
**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

ep \\citydata\LegalDept\Legal\Staff\COUNCIL\BY-LAWS\2024\2024-118 Property Declared Surplus 149 Gore Street.docx

Schedule "A"




ServiceOntario

PRINTED ON 21 MAR, 2024 AT 18:01:03
FOR MARKLEPORE

**SCALE**

0 4 8 12 16 20 24 meters

## PROPERTY INDEX MAP

ALGOMA(No. 01)

**LEGEND**

| | |
|---|---|
| FREEHOLD PROPERTY | |
| LEASEHOLD PROPERTY | |
| LIMITED INTEREST PROPERTY | |
| CONDOMINIUM PROPERTY | |
| RETIRED PIN (MAP UPDATE PENDING) | |
| PROPERTY NUMBER | 0449 |
| BLOCK NUMBER | 08050 |
| GEOGRAPHIC FABRIC | |
| EASEMENT | |

**THIS IS NOT A PLAN OF SURVEY**

**NOTES**

**REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS**

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED

Ontario

© Queen's Printer for Ontario, 2024

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW NO. 2024-120**

**LANE ASSUMPTION**: A by-law to assume for public use and establish as a public lane, the lane more particularly described as PIN 31609-0253(LT) PT LANE PL 1598 KORAH CLOSED BY T220708 PT 2 1R4911; S/T T221041; T226464E; SAULT STE. MARIE, Steel Plant Subdivision.

**THE COUNCIL** of the Corporation of the City of Sault Ste. Marie, pursuant to the *Municipal Act, 2001,* S.O. 2001, **ENACTS** as follows:

1. **LANE ESTABLISHED AND ASSUMED**

The Corporation of the City of Sault Ste. Marie hereby assumes for public use and establishes as a public lane, the lane more particularly described as PIN 31609-0253(LT) PT LANE PL 1598 KORAH CLOSED BY T220708 PT 2 1R4911; S/T T221041; T226464E; SAULT STE. MARIE, Steel Plant Subdivision.

2. **EFFECTIVE DATE**

The by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

_____
**MAYOR – MATTHEW SHOEMAKER**

_____
**CITY CLERK – RACHEL TYCZINSKI**

lv\\citydata\LegalDept\Legal\Staff\COUNCIL\BY-LAWS\2024\2024-120 Lane Assumption abutting 80 Glasgow.docx

THIS DRAWING DOES NOT FORM PART OF THE BY-LAW. IT IS FOR INFORMATION PURPOSES ONLY.

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW NO. 2024-123**

**PROPERTY SALE**: A by-law to declare the City owned property legally described as PIN 31544-0082 (LT) LT 86 PL 8454 ST. MARY'S; SAULT STE. MARIE being civic 60 London Street as surplus to the City's needs and to authorize the disposition of the said property to the District of Sault Ste. Marie Social Services Administration Board or as otherwise directed.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to the *Municipal Act, 2001*, S.0. 2001, c. 25, **ENACTS** as follows:

1. **LANDS DECLARED SURPLUS**

The lands more particularly described in Schedule "A" to this by-law are surplus to the requirements of the municipality.

2. **SALE AUTHORIZED**

The Corporation of the City of Sault Ste. Marie shall sell the lands more particularly described in the attached Schedule "A" to the District of Sault Ste. Marie Social Services Administration Board or as otherwise directed at the consideration shown in Schedule "A".

3. **EXECUTION OF DOCUMENTS**

The City Solicitor is hereby authorized by By-law 2018-55 for and in the name of the Corporation to execute and to affix the seal of the Corporation to all documents required to complete the sale.

4. **SCHEDULE "A"**

Schedule "A" hereto forms a part of this by-law.

5. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

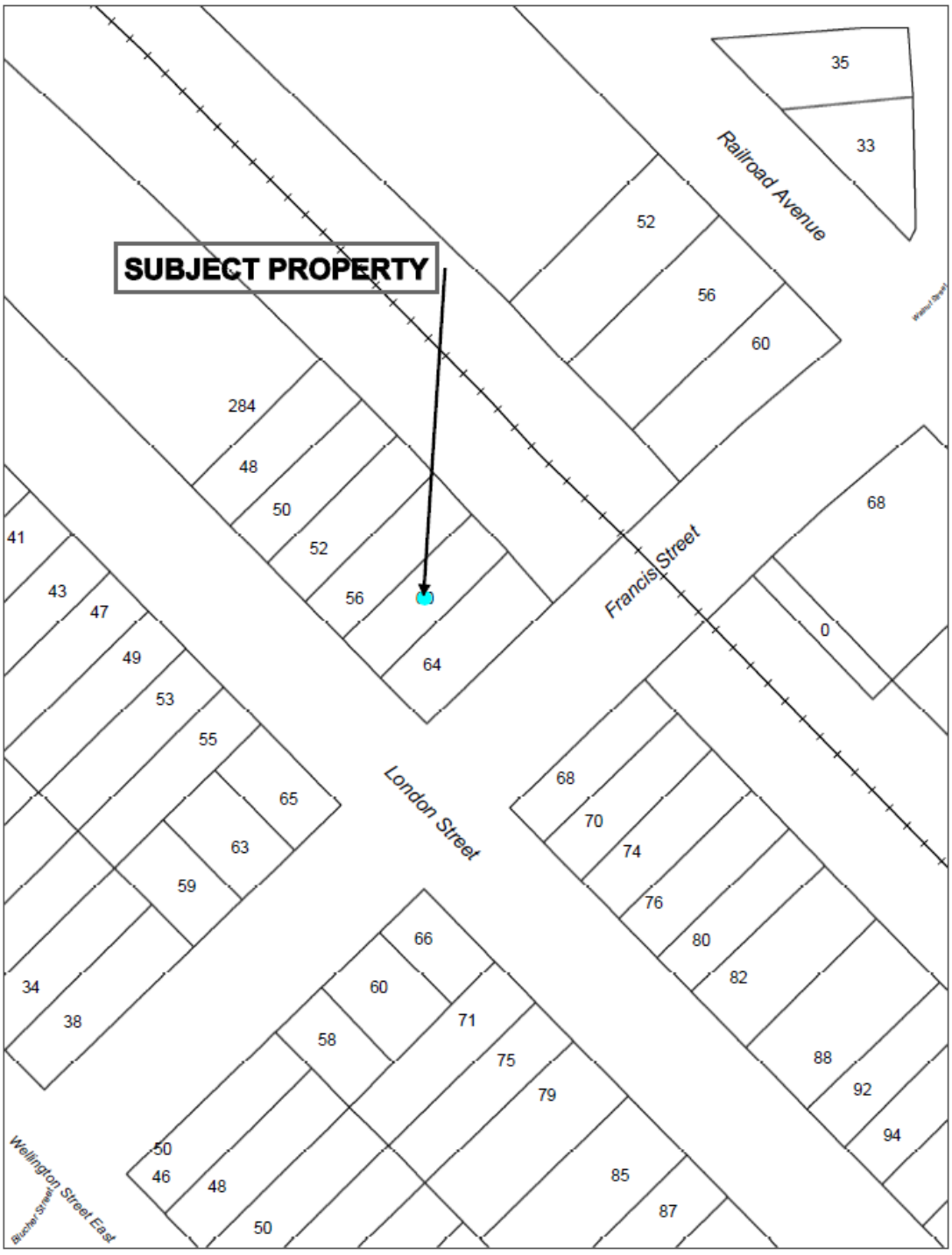
**CITY CLERK – RACHEL TYCZINSKI**

**SCHEDULE "A" TO BY-LAW 2024-123**

PURCHASER: District of Sault Ste. Marie Social Services Administration Board

LEGAL DESCRIPTION: PIN: 31544-0082 (LT)
LT 86 PL 8454 ST. MARY'S; SAULT STE. MARIE

CONSIDERATION: ONE ($1.00) DOLLAR



**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-124**

**AGREEMENT**: A by-law to authorize the execution of the Agreement between the City and Federation of Canadian Municipalities for funding for the completion of a Phase II Environmental Assessment and a Record of Site Condition for the remaining portions of the Gateway property.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement between the City and Federation of Canadian Municipalities, a copy of which is attached as Schedule “A” hereto. This Agreement is for funding for the completion of a Phase II Environmental Assessment and a Record of Site Condition for the remaining portions of the Gateway property.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

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FEDERATION OF CANADIAN MUNICIPALITIES | FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

**GREEN MUNICIPAL FUND GRANT AGREEMENT**
**DFC-23-0217**

This Grant Agreement is hereby made and entered into

**BETWEEN:**

**FEDERATION OF CANADIAN MUNICIPALITIES**, a not-for-profit corporation incorporated under the laws of Canada, acting as trustee of the Green Municipal Fund ("**GMF**"), and having a place of business at 24 Clarence Street, Ottawa, ON, K1N 5P3.

("**FCM**")

**and**

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**, an Ontario corporation and having a place of business at 99 Foster Drive, Sault Ste. Marie, ON, P6A 5X6

("**Recipient**")

FCM and the Recipient shall be referred to individually as a "**Party**" and collectively as the "**Parties**".

The Agreement, including all the schedules described below, constitutes the entire understanding and agreement between the Parties ("**Agreement**") and supersedes all prior correspondence, offers, negotiations, agreements, or other communications between the Parties relating to the subject matter hereof, whether oral, written or electronic. No changes or modification to the Agreement shall be binding upon a Party unless in writing and signed by both Parties.

The Agreement will be effective commencing on the date of last signature below (**"Effective Date**") and shall end on March 26, 2027 ("**Term**") unless earlier terminated in accordance with the provisions of the Agreement.

**The following Schedules are attached and incorporated in the Agreement by reference:**

Schedule A – General Terms and Conditions
Schedule B – Eligible and Ineligible Costs Table
Schedule C – Recipient's Specific Terms and Conditions
Schedule D – Request for Contribution Template
Schedule E – Project Progress Report Template
Schedule F – Project Completion Report Template

In witness whereof, the Parties have executed the Agreement through their duly authorized officials.

| **FEDERATION OF CANADIAN MUNICIPALITIES** | **THE CORPORATION OF THE CITY OF SAULT STE. MARIE** |
|---|---|
| Per:_____<br>Catherine Gardner, Director, Client and Funding Services \| Green Municipal Fund | Per:_____<br>Rachel Tyczinski<br>City Clerk |
| Date:_____ | Date:_____ |
| | Per:_____<br>Matthew Shoemaker<br>Mayor |
| | Date:_____ |

## SCHEDULE A - GENERAL TERMS AND CONDITIONS

### 1. DEFINITIONS

Whenever used in the Agremeent and unless the context otherwise requires, the following terms have the following meanings:

"**Advanced Contribution**" means the first disbursement of the Grant Amount, disbursed in advance of the Recipient having incurred sufficient Eligible Costs to request reimbursement from FCM, as set forth in Schedule C to the Agreement;

"**Business Day**" means any day other than a Saturday, Sunday or statutory holidays in the Province of Ontario;

"**Confidential Information**" has the meaning ascribed thereto in Section 8.3 of this Schedule A;

"**Contribution**" means each individual disbursement of the Grant Amount, as set forth in Schedule C;

"**Eligible Costs**" means the costs described in Schedule B of the Agreement, for which the Recipient may use the Grant;

"**Expense Claim**" means the expense claim in the form of the Project Workbook;

"**FCM's Accessibility Guidelines**" means the FCM guidelines to be followed by the Recipient, or the consultant hired by the Recipient, when preparing the Project Progress Report(s), Project Completion Report and Final Deliverable, to ensure that such reports are accessible to people with disabilities;

"**Final Contribution**" means the last disbursement of the Grant Amount. In the event that the Recipient receives the Grant Amount in a single contribution, FCM will advance the Grant Amount through the Final Contribution;

"**Final Deliverable**" means the final version of the plan or the final version of the report summarizing the results and activities undertaken in conducting the study or the pilot project, as applicable, as described in Schedule C;

"**GAAP**" means the generally accepted accounting principles for local governments as recommended, from time to time, by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants;

"**Material Change**" means any change to the description of the Project, forecasted Eligible Costs or particulars of the sources of funding, all as set forth in Schedule C;

"**Project**" means the plan, feasibility study or pilot project, as applicable, as described in Schedule C;

"**Project Workbook**" means the form of electronic spreadsheet provided by FCM to the Recipient, as amended by FCM from time to time, to be completed when providing information updates or submitting a Request for Contribution to FCM; and

"**Request for Contribution**" means the request for Contribution, in the form of Schedule D.

### 2. GRANT

2.1 Grant Purpose - FCM is providing the Grant to the Recipient for the sole purpose of assisting the Recipient in the preparation of the Project ("**Grant**").

2.2 Grant Amount - Subject to and in accordance with the terms and conditions of the Agreement and in reliance upon the representations, warranties and covenants of the Recipient hereinafter set forth, FCM agrees to contribute towards the Eligible Costs the maximum amount in Canadian Dollars (the "**Grant Amount**"), set forth in Schedule C of the Agreement. In the event that, if the aggregate amount of funding received or to be received from all sources of funding, other than the Recipient, as set forth in Schedule C of the Agreement or as updated in the Project Workbook (all as determined and calculated by FCM) is greater than the total costs incurred by the Recipient in respect of the Project, as evidenced by the delivery of documentation establishing Eligible Costs, then FCM may reduce the Grant Amount to such amount as it deems appropriate, in its sole and absolute discretion.

2.3 Grant Expiration Date – In the event that the Recipient fails to meet the conditions of Contribution set forth in the Request for Contribution and fails to obtain the Final Contribution before the end of the Term, then FCM may, at its sole and absolute discretion terminate any further requirement to make the Contribution(s), set forth in Schedule C.

2.4 Grant Disbursement – FCM will disburse the Contribution within 30 days of confirming that the Recipient has met all of FCM's conditions, to FCM's satisfaction.

2.5 Advanced Contribution – FCM will inform the Recipient, before signature of the Agreement, whether it is eligible for an Advanced Contribution, all as determined in FCM's sole and absolute discretion. In the event that the Recipient is eligible for an Advanced Contribution, FCM will disburse the Contribution within 30 days of receiving from the Recipient, a signed Agreement and a completed copy of FCM's Electronic Funds Transfer form, identifying the bank account where FCM should disburse the Advanced Contribution. The representations and warranties confirmed or made in the Agreement with respect to the Recipient will be true on and as of the date that FCM makes the Advanced Contribution, with the same effect as though such representations and warranties have been made on and as of the date that FCM makes the Advanced Contribution. If any confirmation, information or documentation provided to FCM is not true and correct, or if any act or event does or may materially and adversely affect the Project or the ability of the Recipient to perform its obligations under the Agreement or the Project or any of its other obligations that are material to the Recipient has occurred, the Recipient will immediately notify FCM prior to the making of the Advanced Contribution.

## 3. OBLIGATIONS OF THE RECIPIENT

Unless FCM shall otherwise agree in writing, the Recipient covenants and agrees that it: (i) shall use the Grant solely for expenditures that are Eligible Costs; (ii) shall carry out the Project and conduct the activities thereof in compliance with all applicable laws, regulations, order, rules, ordinances, permits, licenses, and without restricting the generality of the foregoing, in compliance with all labour, environmental, health and safety and human rights legislation applicable to the Project; (iii) shall carry out the Project with due diligence and efficiency and in accordance with sound engineering, scientific, financial and business practices; (iv) shall maintain industry standard insurance coverage which shall include general liability insurance; (v) shall not make any Material Change to the Project or in the nature or scope of its legal status; and (vi) shall not sell, assign, transfer, lease, exchange or otherwise dispose of, or contract to sell, assign, transfer, lease, exchange or otherwise dispose of, any of the real or personal property, whether movable or immovable, acquired, purchased, constructed, rehabilitated or improved, in whole or in part with the Grant, except if previously approved by FCM as described in Schedule C.

## 4. ELIGIBLE COSTS

Expenses that are eligible for partial reimbursement by FCM must be: (i) invoiced directly to the Recipient; (ii) incurred after the date set forth in Schedule C; (iii) an integral and an essential component of the Project and required to help achieve the environmental objective of the Project; and (iv) actually and reasonably incurred in accordance with applicable industry standards.

## 5. RECORD-KEEPING and AUDIT

5.1 Record-keeping – The Recipient shall: (i) maintain its accounts, management information and cost control system and books of accounts adequately to reflect truly and fairly the financial condition of the Project and to conform to GAAP; and (ii) **safekeep all such records for at least seven (7) years after the end of the Term**.

5.2 Audit – The Recipient shall: (i) upon FCM's request with reasonable prior notice thereto, permit representatives of FCM, during its normal office hours, to have access to its books of accounts and records relating to the Project and permit FCM to communicate directly with, including the receipt of information from, its external auditors regarding its accounts and operations relating to the Project; (ii) permit FCM to undertake, at any time, at its expense, any audit of the records and accounts of the Recipient in relation to the Project. The Recipient agrees to ensure that prompt and timely corrective action is taken in response to any audit findings and recommendations conducted in accordance with the Agreement. The Recipient will submit to FCM in a timely manner, a report on follow-up actions taken to address recommendations and results of the audit; and (iii) permit the Government of Canada, the Auditor General of Canada, and their designated representatives, to the extent permitted by law, to inspect the terms and conditions of the Agreement and any records and accounts respecting the Project and to have reasonable and timely access to sites, facilities and any documentation relevant for the purpose of audit.

## 6. ONGOING INFORMATION REQUIREMENTS

The Recipient shall provide to FCM the following information, in form and content satisfactory to FCM: (i) a Project Progress Report in the form of Schedule E within thirty (30) days of FCM making such requests; ii) prompt notice of any proposed change in the nature or scope of its legal status; (iii) prompt notice of any act or event which does or may materially and adversely affect the Project or may materially and adversely affect the ability of the Recipient to perform its obligations under the Agreement or the Project or any of the Recipient's other obligations that are material to the Recipient; (iv) prompt notice of any litigation or administrative proceedings, together with copies of any written legal documents as FCM may request, excluding legal documents subject to solicitor client privilege, before any court or arbitral body or other authority which might materially and adversely affect the Project or the ability of the Recipient to perform its obligations under the Agreement or in respect of the Project or any of the Recipient's other obligations that are material to the Recipient; (v) immediate notice of the occurrence of any breach of any term or condition of the Agreement and specifying the nature of such breach, and the steps, if any, that it is taking to remedy the same; and (vi) such other information as FCM may from time to time reasonably request from the Recipient by notice to the Recipient.

## 7. COPYRIGHT

7.1 Copyright – Copyright in all reports, documents and deliverables prepared in connection with the Agreement and set out in Schedule C, by or on behalf of the Recipient (the "**Recipient Documentation**") will be the exclusive property of, and all ownership rights shall vest in either the Recipient or, subject to the Recipient's ability to grant the license set out in this Article 7.2, a person or entity engaged to develop the Recipient Documentation on behalf of the Recipient. In the event that the Recipient receives a copyright license to the Recipient Documentation, such license shall include a complete waiver in favour of the Recipient of all non-assignable rights (including moral rights) that may exist in the Recipient Documentation.

7.2 License – The Recipient hereby grants to FCM an irrevocable, perpetual, non-exclusive, worldwide, royalty-free, license, to use, reproduce, distribute, adapt, change formats, display, publish, make improvements to, sub-license, translate and copy in any manner the Recipient Documentation. This license shall survive the expiration or termination of the Agreement.

7.3 Interview – FCM shall hold all right, title and interest, including all intellectual property rights, in and to all formats of the Interview, including but not limited to written, audio recorded or video recorded formats, and to have sole and exclusive rights to the use thereof. Prior to the Interview, the Recipient shall ensure that any person designated by the Recipient to participate in the Interview will execute and deliver to FCM a written agreement which effects the assignment to FCM of all right, title and interest therein, including all intellectual property rights, and provides that such person has waived all its non-assignable rights (including moral rights) therein and grants to FCM the right to use the individual's image, including but not limited to posting the Interview on a public website.

## 8. PUBLIC RECOGNITION, COMMUNICATION, CONFIDENTIALITY

8.1 Public Recognition – The Recipient shall incorporate the following language into the Project Completion Report and the Final Deliverable:

*"© 20XX, The Corporation of the City of Sault Ste. Marie. All Rights Reserved.*
*This project was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them."*

8.2 Communication – The Recipient shall comply with FCM's bilingual communication requirements until the date that is five (5) years following the Final Contribution and shall: (i) cooperate with FCM, who will lead the preparation and issuance of a news release announcing GMF funding for the Project and/or the coordination of a public announcement attended by FCM and the Government of Canada; (ii) promptly inform FCM of upcoming promotional events related to the Project and allow FCM and the Government of Canada to participate in such promotional events; (iii) cooperate with FCM in providing information on the Project to other interested persons to permit the sharing of knowledge and lessons learned about the Project; and (iv) cooperate with FCM in preparing one or more educational interviews, if required by FCM, showcasing the Project, that may be posted on FCM's public website or through other social media tools and made available through other mediums and in various formats (the "**Interview**").

8.3 Confidentiality – All processes, documents, data, plans, material, policies or information pertaining to either Party's operations which is obtained by the other Party ("**Receiving Party**") or furnished to the Receiving Party in connection with the Agreement and expressly identified as confidential thereby, including, without limitation, the terms of the Agreement, ("**Confidential Information**") shall be maintained by the Receiving Party in strict confidence and shall not be disclosed to any person or entity for any reason or used by the Receiving Party except as necessary for it to perform its obligations hereunder. The limitations contained in this section shall not apply to (a) Confidential Information which is in the public domain at the time of disclosure; (b) Confidential Information that becomes part of the public domain after disclosure through no fault of the Receiving Party; (c) Confidential Information that the Receiving Party can prove was known by the Receiving Party at the time of disclosure; (d) Confidential Information that the Receiving Party can prove was supplied to the Receiving Party by a third party or was independently developed by the Receiving Party; or (e) Confidential Information required to be disclosed pursuant to judicial process.

8.4 Two versions of confidential reports – The Recipient shall provide two versions of any Project Progress Report, Project Completion Report or Final Deliverable that might contain Confidential Information. The version containing Confidential Information shall be clearly labeled as confidential and will be treated as confidential by FCM. The version that does not contain Confidential Information may be posted on FCM's public website and/or made available through other social media websites or tools and otherwise made available to interested third parties.

## 9. REPRESENTATIONS AND WARRANTIES

The Recipient represents and warrants that: (i) it is duly established under the laws of the Province or Territory set forth in Schedule C of the Agreement and has the legal power and authority to enter into, and perform its obligations under, the Agreement and the Project; (ii) the Agreement has been duly authorized and executed by it and constitutes a valid and binding obligation of it, enforceable against it in accordance with its terms; (iii) neither the making of the Agreement nor the compliance with its terms and the terms of the Project will conflict with or result in the breach of any of the terms, conditions or provisions of, or constitute a default under any indenture, debenture, agreement or other instrument or arrangement to which the Recipient is a party or by which it is bound, or violate any of the terms or provisions of the Recipient's constating documents or any license, approval, consent, judgment, decree or order or any statute, rule or regulation applicable to the Recipient; (iv) it is not subject to any restructuring order under any applicable statutory authority; (v) no litigation, arbitration or administrative proceedings are current or pending or have been threatened, and so far as the Recipient is aware no claim has been made, which is likely to have an adverse effect on its preparation of the Project or its compliance with its obligations under the Agreement; and (vi) the Recipient has the right to grant the copyright license set out in Article 7 of this Schedule A.

**10. TERMINATION OF THE AGREEMENT**

(a) FCM may terminate this Agreement: (i) if the Recipient breaches any term or condition of this Agreement, and fails to remedy such breach upon the expiry of 15 Business Days' written notice from FCM of such breach or, with respect to a breach that cannot be remedied within the 15 Business Day period, such longer period of time as FCM may reasonably provide the Recipient to remedy the breach, provided the Recipient has commenced to remedy the breach within the 15 Business Day period and is actively and diligently taking appropriate measures to remedy the breach; (ii) if, in FCM's sole discretion, the Project cannot be completed as initially presented; (iii) if the Recipient fails to meet the conditions of Contribution set forth in the Request for Contribution and fails to obtain the Final Contribution before the end of the Term; (iv) if control and charge over the administration of all the affairs of the Recipient are vested in any person other than the Recipient; (v) if the Recipient becomes insolvent and/or proceedings have been commenced under any legislation or otherwise for its dissolution, liquidation or winding-up, or bankruptcy, insolvency or creditors' arrangement proceedings have been commenced by or against the Recipient; and (vi) if the Parliament of Canada fails to pass an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided.

(b) Either Party may, on not less than 30 days' prior written notice to the other Party, terminate this Agreement.

**11. EFFECT OF TERMINATION**

(a) If this Agreement is terminated pursuant to Article 10, the Recipient may be: (i) reimbursed for all or a portion of the Eligible Costs they have incurred in relation to the Project up to the effective date of termination; and (ii) required to pay back to FCM all or a portion of the Grant Amount that was disbursed by FCM to the Recipient prior to the effective date of termination.

(b) The rights contained in Sections 11(a) are subject to FCM's sole discretion and satisfaction, taking into consideration the Recipient's out-of-pocket Eligible Costs incurred and results reported by the Recipient in connection with the Project. In addition, FCM may take such action or proceedings in compliance with applicable laws or regulations as FCM in its sole discretion deems expedient to collect the amounts owing to FCM hereunder, all without any additional notice, presentment, demand, protest or other formality, all of which are hereby expressly waived by the Recipient.

**12. SAVING OF RIGHTS**

No course of dealing and no delay in exercising, or omission to exercise, any right, power or remedy accruing to FCM upon any default under the Agreement shall impair any such right, power or remedy or be construed to be a waiver thereof or any acquiescence therein; nor shall the action of FCM in respect of any such default, or any acquiescence by it therein, affect or impair any right, power or remedy of FCM in respect of any other default.

**13. APPROPRIATIONS**

Notwithstanding FCM's obligation to make any payment under the Agreement, this obligation does not arise if, at the time when a payment under the Agreement becomes due, the Parliament of Canada has not passed an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided. FCM may reduce, delay or terminate any payment under the Agreement in response to the reduction or delay of appropriations or departmental funding levels in respect of transfer payments, the project or program in relation to which the Grant is being provided, or otherwise, as evidenced by any appropriation act or the federal Crown's main or supplementary estimates expenditures. FCM will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, arising from any such reduction, delay or termination of funding.

**14. NO BRIBES**

The Recipient guarantees that no bribe, gift or other inducement has been paid, given, promised or offered to any person in order to obtain the Agreement. Similarly, no person has been employed to solicit or secure the Agreement upon any agreement for a commission, percentage, brokerage or contingent fee. The Recipient also guarantees that it has no financial interest in the business of any third party that would affect its objectivity in carrying out the Project.

**15. RELEASE AND INDEMNIFICATION**

15.1 Acknowledgment - The Recipient acknowledges and agrees that (i) the Recipient shall be solely and fully responsible for the Project or any element thereof; (ii) by accepting or approving anything required to be accepted or approved pursuant to this Agreement or the Project, FCM shall not be deemed to have warranted or represented the accuracy, sufficiency, legality, effectiveness or legal effect of the same, or of any term, provision or condition thereof, and such acceptance or approval thereof shall not constitute a warranty or representation to anyone with respect thereto by FCM; and (ii) FCM shall not be responsible in any way whatsoever for the Project or any element thereof.

15.2 Release - the Recipient releases and forever discharges FCM and its directors, officers, agents, servants and employees from any claims, demands, proceedings, losses, damages, liabilities, deficiencies, costs and expenses arising out of or in consequence of any loss, injury or damage to the Recipient or its property in any way relating to this Agreement and/or the Project.

15.3 Indemnification - The Recipient hereby agrees to indemnify and hold harmless FCM and its officers, directors, employees and agents from and against any and all liability, loss, costs, damages and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits or other proceedings (collectively, a "Claim"), by whomever made, sustained, incurred, brought or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with the Agreement, but only to the extent that such Claim arises out of or is in connection with the Recipient's breach of this Agreement or is caused by the negligence or wilful misconduct of the Recipient in the performance of its obligations hereunder or otherwise in connection with the Project.

15.4 Intellectual Property Indemnity. Recipient shall defend or settle at its expense any claim or suit against FCM arising out of or in connection with an assertion that the Recipient Documentation infringes any intellectual property right and the Recipient shall indemnify and hold harmless FCM from damages, costs, and attorneys' fees, if any, finally awarded in such suit or the amount of the settlement thereof; provided that (i) Recipient is promptly notified in writing of such claim or suit, and (ii) Recipient shall have the sole control of the defense and/or settlement thereof.

15.5 FCM's Limited Liability – In no event shall FCM, including its directors, officers, employees and agents, be liable under the Agreement for any indirect, special, incidental, consequential or punitive damages of any kind, however caused, including, but not limited to, loss of profits or revenue, loss of data, work interruption, increased cost of work, or any claims or demands against the Recipient by any other entity, whether such remedy is sought in contract, tort (including negligence), strict liability or otherwise and whether or not FCM, including its directors', officers', employees' and agents' liabilty for direct damages for any reason and upon any cause of action, whether in tort (including negligence), contract, or any other legal theory, exceed the Grant Amount that was disbursed under the Agreement. The Agreement shall not create for nor give to any third party any claim or right of action against FCM.

15.6 Further Assurances - The Recipient shall promptly execute and deliver, upon request by FCM, all such other and further documents, agreements, opinions, certificates and instruments as may be reasonably required by FCM to more fully state the obligations of either party to the Agreement or to make any recording, file any notice or obtain any consent.

**16. GENERAL**

16.1 Notices and Requests – Any notice, document or other communication required to be given under the Agreement shall be in writing and shall be sufficiently given if sent by personal delivery/courier, registered mail or email to the other Party at its address indicated in Schedule C. The notice shall be deemed to

have been delivered on the day of personal delivery, on the day received by email (as evidenced by a transmission confirmation), or on the fifth day following mailing.

16.2 Relationship of the Parties - The relationship between the Recipient and FCM is, and shall at all times be and remain, essentially that of a recipient and a grantor, and the Agreement does not and shall not be deemed to create a joint venture, partnership, and fiduciary or agency relationship between the Parties for any purpose. Neither the Recipient, nor any of its personnel are engaged as an employee, servant or agent of FCM.

16.3 Amendment - Any amendment of any provision of the Agreement, including the Schedules, must be in writing and signed by both Parties.

16.4 Choice of Language - It is the express wish of the Parties that the Agreement and any related documents be drawn up and executed in English. Les Parties reconnaissent avoir exigé que la présente convention et tous les documents connexes soient rédigés en anglais.

16.5 Governing Law -The Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

16.6 Choice of Forum - The Parties hereto agree and intend that the proper and exclusive forum for any litigation of any disputes or controversies arising out of or related to the Agreement shall be a court of competent jurisdiction located in the Province of Ontario, City of Ottawa.

16.7 Effectiveness - The Agreement shall be in force until such time as FCM has disbursed the Final Contribution or until the Agreement has been terminated in accordance with Article 10, whichever shall first occur.

16.8 Successors and Assigns - The Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, except that the Recipient may not assign or otherwise transfer all or any part of its rights or obligations under the Agreement without the prior written consent of FCM.

16.9 Severability - If any provision or clause of the Agreement is found by a court of competent jurisdiction to be invalid, void, null, illegal or unenforceable, that determination shall not affect the enforceability of the remaining provisions to the extent they can be given effect without the illegal or invalid provision. The Parties further agree to negotiate the severed provision to bring the same within the applicable legal requirements to the extent possible.

16.10 Waiver of Rights - Except as expressly provided in the Agreement, any waiver of, or consent to depart from, the requirements of any provision of the Agreement shall be effective only if it is in writing and signed by the Party giving it, and only in the specific instance and for the specific purpose for which it has been given. No failure on the part of a Party to exercise, and no delay in exercising, any right under the Agreement shall operate as a waiver of such right. No single or partial exercise of any such right shall preclude any other or further exercise of such right or the exercise of any other right.

16.11 Entire Agreement - The Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof and supersedes all prior correspondence, agreements, negotiations, discussions and understandings, if any, written or oral.

16.12 Headings - Headings are included in the Agreement for convenience of reference only and are not intended to be full or accurate descriptions of the contents thereof.

16.13 Gender and Number - All references in the Agreement to the masculine gender include the feminine gender; and all references to the singular include the plural and vice versa.

16.14 Counterparts - The Agreement may be executed and delivered (including by email transmission or by Portable Document Format ("PDF")) in one or more counterparts and, each of which when executed shall be deemed an original, but both of which together shall constitute one and the same agreement.

16.15 Survival - The provisions pertaining to Article 5, Article 7, Article 8, Article 15 and this Article 16, and any other provisions hereof expressly or impliedly intended to survive termination or expiry, will survive the termination of the Agreement.

## SCHEDULE B – ELIGIBLE AND INELIGIBLE COSTS TABLE

**Expenses that are eligible for partial reimbursement or for an Advanced Contribution must be:**

- incurred after the date the application is received by FCM (costs to write the application incurred up to 90 days prior to receipt of the application by FCM).
- invoiced directly to your organization.
- an integral and an essential component of the initiative required to achieve the environmental objective.
- actually and reasonably incurred in accordance with applicable industry standards.
- Labour costs must be documented in a manner that meets audit standards for verification of eligibility of cost and level of effort.

FCM reserves the right to audit financial statements or expenses incurred at a future date. **Please keep financial accounts and records, including but not limited to contracts, invoices, statements, receipts, timesheets, and vouchers, for at least seven years.** Financial records must be sufficiently detailed to enable verification of expenditure eligibility and level of effort.

| Cost Category | Eligible Costs | Ineligible Costs |
|---|---|---|
| **Section A: Costs incurred prior to date application received by FCM** | | |
| (1) Pre-application | Costs to write the GMF application incurred up to 90 days prior to application receipt date | All other costs incurred prior to application receipt date |
| **Section B: Costs incurred after date application received by FCM** | | |
| (2) Administrative | Administrative costs that are directly linked to and have been incurred for the Project, such as:<br>• communication costs (e.g. long-distance calls)<br>• permits or certifications required for the Project<br>• printing or photocopying by outside suppliers<br>• acquisition of documents used exclusively for the project<br>• document translation | Office space, supplies and general overhead costs incurred in the ordinary course of business. |
| (3) Advertising | Advertising costs essential to communicating the project to the public, as well as Project evaluation such as:<br>• fees for advertising development<br>• fees for media distribution<br>• website development<br>• public surveys | • Advertising costs for general education or publicity that is a result of ongoing or other business activity and not a specific requirement of the Project<br>• Promotional items |
| (4) Capital (Pilot Projects Only) | Rental or purchase of equipment or assets which are essential for conducting the small-scale activity. This would include specialized system hardware and software, construction costs, materials, renovation and modernization costs, and installations costs | • Any major capital costs<br>• Purchase or lease of real property |
| (5) Equipment rental | Rental of tools and equipment. | Rental of tools or equipment related to ongoing or other business activities. |
| (6) In-kind | N/A | Any goods and services that are received through donation or in-kind. |
| (7) Meetings and public gatherings | Costs related to meetings and public gatherings that communicate the project to the public and that collect feedback, such as:<br>• facility rental<br>• audiovisual equipment rental | Any hospitality expenses such as:<br>• food, drink an alcohol<br>• door prizes<br>• entertainment<br>• decorations, flowers, centrepieces |

| | | |
|---|---|---|
| (8) Services | Fees for professional or technical consultants and contractors. | Costs for engineering studies, audit studies or feasibility studies for which grants or contributions are provided by or committed to be provided by the Government of Canada. |
| (9) Staff remuneration | Daily rates actually paid by the Eligible Recipient to its employees (including permanent and contract employees) in Canada for time actually worked on the implementation of the Project. The daily rate per employee shall include the following costs:<br>• direct salaries: actual and justifiable sums paid by the Eligible Recipient to employees in accordance with the Eligible Recipient's pay scales as regular salary excluding overtime pay and bonuses.<br>• fringe benefit: in accordance with the Eligible Recipient's policies, as follows:<br>a) time-off benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): allowable number of days to be paid by the Eligible Recipient for the following payable absences: statutory holidays, annual vacation, and<br>b) paid benefits: actual sums paid by the Eligible Recipient for paid benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): the Eligible Recipient's contribution to employment insurance and workers' compensation plans (where applicable), health and medical insurance, group life insurance, or other mandatory government benefits<br>**N.B. For private sector entities only, as determined by FCM, the value of the total staff remuneration cannot exceed 10% of the Project's Eligible Costs.** | • In-kind contribution of services<br>• Overtime pay<br>• Bonuses/performance pay<br>• Fringe benefits such as: sick days, pension plan, maternity leave, parental leave, any other fringe benefits not listed as eligible<br>• Costs related to ongoing or other regular business activities and not specifically required for the Project.<br>• Staff wages while receiving training or attending learning events.<br>• Professional membership fees or dues.<br>• Staff remuneration for which a grant or contribution are provided by or committed to be provided by the FCM. This includes funding provided or committed through Climate Change Staff Grants from FCM's Municipalities for Climate Innovation Program. |
| (10) Supplies and materials | Supplies and materials that are specifically needed to undertake the project. | Costs related to ongoing or other business activities, and not a specific requirement of the Project. |
| (11) Transportation, shipping and courier charges | Transportation costs for delivery of materials and services essential for the Project. | Any transportation expense related to ongoing or other business activities. |
| (12) Travel and accommodation | Travel and project associated expenses for you and consultants to the extent that the travel and accommodation rates comply with Treasury Board of Canada guidelines. | • Travel and associated expenses of a partner in the Project.<br>• Travel, accommodation and fees to attend conferences, missions, trade shows, etc. |
| (13) Taxes | The portion of taxes for which your organization is not otherwise eligible for rebate. | The portion of taxes for which your organization is eligible for rebate (provincial, territorial or federal). |

## SCHEDULE C – RECIPIENT'S SPECIFIC TERMS AND CONDITIONS

### 1. PROJECT

The Recipient is receiving the Grant Amount to perform the following project:

The City of Sault Ste. Marie will undertake a feasibility study to advance the redevelopment of the Gateway Property site, a prominent waterfront property located in the downtown core. Previous land use at the site included a metal recycling operation, settling ponds for Algoma Steel and a CN rail line.

In 2022, city staff started work with Sault Ste. Marie Housing Corporation to assess the potential of the site for a high-density residential development. This study will support the development of a wood-based residential neighbourhood housing plan. The site could give a significant boost to downtown economic activity while helping to address the current shortage of housing in the community.

The study includes a Phase II Environmental Site Assessment and developing a strategy to remediate the property based on current techniques. The assessment will include soil and groundwater testing on sites on the property. The results will inform the development of a remediation action plan.

This initiative is supported by various strategic priorities of the city, including:

- Increasing residential density downtown
- Increasing the supply of affordable housing
- Developing a walkable community near transit facilities
- Revitalizing the waterfront

Upon completion of the project, the city will look to sell the land for its next intended use.

**Innovative aspect(s):**
The city is taking a holistic approach by starting with a remediation action plan for the land, which includes planning for the development of the property into high-density affordable housing. The current plan for affordable housing on this site, pending the remediation needed, will consider natural (wood-based) construction.

**Replicability:**
This initiative will increase staff and council's capacity and knowledge around brownfield remediation action plans by demonstrating the importance of looking at the land from remediation to redevelopment. The study's outcomes could support other municipalities with downtown sites that could be remediated to increase affordable housing supply.

### 2. PROJECT COSTS

The forecasted Eligible Costs that the Recipient included in its GMF funding application:

| WORK PLAN AND BUDGET | | | | |
|---|---|---|---|---|
| **Milestones** | **Cost Category** | **Eligible Cost ($)** | **Ineligible Cost ($)** | **Total Cost ($)** |
| **Milestone 1: Consultation Selection** | **Start date:** | 10/2023 | **End date:** | 12/2023 |
| Prepare RFP | (9) Staff remuneration | $735 | $0 | **$735** |
| Issue RFP | (9) Staff remuneration | $283 | $0 | **$283** |
| Answer any questions through defined question period | (9) Staff remuneration | $353 | $0 | **$353** |
| Review, rank and score submissions | (9) Staff remuneration | $1,422 | $0 | **$1,422** |

| | | | | |
|---|---|---|---|---|
| Select vendor and write Council Report authorizing contract | (9) Staff remuneration | $270 | $0 | **$270** |
| | | | **Milestone 1 Subtotal** | **$3,063** |
| **Milestone 2: Phase II ESA** | **Start date:** | 12/2023 | **End date:** | 07/2024 |
| Field Investigations (soil groundwater, surface water, soil gas sampling) | (8) Services | $14,286 | $0 | **$14,286** |
| Laboratory Analysis (analysis of samples) | (8) Services | $14,286 | $0 | **$14,286** |
| Data Interpretation and Reporting (interpretation of laboratory results, comparison with regulatory standards and comprehensive report preparation) | (8) Services | $14,286 | $0 | **$14,286** |
| Risk Assessment (conducting risk assessment and assessing need for remediation) | (8) Services | $14,286 | $0 | **$14,286** |
| Regulatory Compliance (ensuring compliance with regulations, submit reports to regulatory authorities) | (8) Services | $14,286 | $0 | **$14,286** |
| Remediation Planning (develop remediation plans and determine remediation measures) | (8) Services | $11,235 | $0 | **$11,235** |
| Monitoring and Follow-Up - discuss plans to move forward with monitoring (may be ongoing depending on type of remediation, conducting periodic reviews as required by regulatory authorities) | (8) Services | $11,236 | $0 | **$11,236** |
| Staff Coordination and Review | (9) Staff remuneration | $678 | $0 | **$678** |
| | | | **Milestone 2 Subtotal** | **$94,579** |
| **Milestone 3: Tier Three Risk Assessment and RSC Filing** | **Start date:** | 07/2024 | **End date:** | 05/2026 |
| Tier Three Risk Assessment and RSC documentation preparation and consultation | (8) Services | $100,000 | $0 | **$100,000** |
| Staff Coordination and Review | (9) Staff remuneration | $2,358 | $0 | **$2,358** |
| | | | **Milestone 3 Subtotal** | **$102,358** |
| | **Subtotal – All Phases** | **$200,000** | **$0** | **$200,000** |

| | |
|---|---|
| | **Total Eligible Costs** **$200,000** |

| Contingency costs: Have you included room for contingencies in some or all of your task costs? Please explain. |
|---|
| Yes |

FCM will only reimburse costs incurred after October 30, 2023, except for costs incurred to write the application, which are eligible for reimbursement if incurred after August 1, 2023.

### 3. PROJECT SOURCES OF FUNDING

The funding for the Project is planned as:

| Funding Source | Description | Date Confirmed | Amount | Percentage of Total Budget |
|---|---|---|---|---|
| Green Municipal Fund | Grant | 26-MAR-2024 | $100,000 | 50% |
| City of Sault Ste. Marie | Cash | 23-OCT-2023 | $100,000 | 50% |
| | | **TOTAL** | **$200,000** | **100%** |

## 4. GRANT AMOUNT

The Grant Amount, described in Article 2 of Schedule A, shall be equal to the lower of:

(i) the sum of one hundred thousand dollars ($100,000); or
(ii) fifty percent (50.00%) of Eligible Costs.

## 5. GRANT DISBURSEMENTS

The obligation of FCM to disburse the Grant to the Recipient, is subject to the Recipient fulfilling the applicable conditions of Contribution set forth below, to the satisfaction of FCM, in its sole and absolute discretion.

Payment and reporting table: The forecasted Contribution(s) amounts ($), reporting requirements and reporting dates as agreed upon by the Parties prior to Agreement signature.

| Contribution(s) and Deliverable(s) | Approximate Date of Submission | Approximate Date of Contribution | The Contribution shall be equal to the lesser of: |
|---|---|---|---|
| **Progress Report**<br>• Schedule E – Project Progress Report<br>• Evidence that Milestones 1 and 2 were completed:<br>• Consultant selection<br>• Phase II ESA<br><br>• Updated Project Workbook<br>o Sources of Funding<br>o Payment and reporting table<br>o Expense Claim<br>• Additional conditions: None | At FCM's Request | n/a | n/a |
| **Final Contribution**<br>• Schedule D – Request for Contribution<br>• Schedule F – Project Completion Report<br>• Evidence that Milestones 1,2,3 were completed:<br>• Consultant selection<br>• Phase II ESA<br>• Tier Three Risk Assessment and RSC Filling<br><br>• Updated Project Workbook<br>o Sources of Funding<br>o Payment and reporting table<br>o Expense Claim<br>• Final Feasibility Study<br>• Additional conditions: None | 1 June 2026 | 1 July 2026 | • $100,000 or<br><br>• 50% of Eligible Costs then incurred by the Recipient |

## 6. JURISDICTION

The jurisdiction applicable to Section 9 of Schedule A of the Agreement is the Province of Ontario.

## 7. CRA BUSINESS NUMBER

The Recipient's CRA Business number is 122023120

## 8. NOTICES

| To the Recipient: | To FCM: |
|---|---|
| The Corporation of Sault Ste. Marie<br><br>Attention: Rick Van Staveren<br>Director Economic Development<br><br>• telephone: 705-759-5428<br>• by electronic mail: r.vanstaveren@cityssm.on.ca<br><br>Alternate Contact:<br><br>Attention: Graham Atkinson<br>Manager Business Development<br><br>• telephone: 705-989-7075<br>• by electronic mail: g,atkinson@cityssm.on.ca | Federation of Canadian Municipalities<br>24 Clarence Street<br>Ottawa, Ontario<br>K1N 5P3<br><br>Attention: Victoria Hamilton<br>Project Officer for GMF<br><br>• telephone: 343-300-6980<br>• by facsimile: 613-244-1515<br>• by electronic mail: vhamilton@fcm.ca |

## SCHEDULE D – REQUEST FOR CONTRIBUTION TEMPLATE

**[LETTERHEAD OF THE RECIPIENT]**

**[Address]**
**[Date]**

Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Attention: Victoria Hamilton
Project Officer for GMF

The Recipient is requesting the following Contribution:

❒ Final

I am an authorized official of the Recipient and understand that all the information below must be submitted and accepted by FCM, in order to receive the Contribution. I hereby certify, in satisfaction of the terms and conditions of the Agreement, that:

- The Conditions of Contribution set forth in Schedule C have been met by the Recipient.
- The Project conforms to the description set forth in Schedule C of the Agreement.
- The Recipient has obtained, or has made other arrangements satisfactory to FCM for obtaining, all approvals, consents, authorizations and licences that are required under the laws of Canada and of the relevant Province or Territory, in order for the Recipient to enter into and comply with the Agreement and to undertake and complete the Project.
- No act or event does or may materially and adversely affect the Project or the ability of the Recipient to perform its obligations under the Agreement and the Project or any of its other obligations that are material to the Recipient has occurred.
- The representations and warranties confirmed or made in the Agreement with respect to the Recipient will be true on and as of the date that FCM makes the Contribution, with the same effect as though such representations and warranties have been made on and as of the date that FCM makes the Contribution.
- All the covenants, conditions and other obligations set forth in the Agreement, including its schedules, and the Project Workbook, to be performed or satisfied by the Recipient before the date that FCM makes the Contribution have been performed or satisfied, to FCM's satisfaction.
- All capitalized terms have the meaning attributed to them in the Agreement.
- If any confirmation, information or documentation provided to FCM is not true and correct, the Recipient will immediately notify FCM prior to the making of the Contribution.
- All expenses claimed:
    - have been submitted through the Expense Claim template, in the Project Workbook;
    - have been incurred and paid, or are to be paid, by the Recipient;
    - were integral and essential components of the Project and required to help achieve the environmental objectives of the Project;
    - were reasonably incurred in accordance with applicable industry standards; and

- are Eligible Costs as per Schedule B, that were incurred after the date set forth in Schedule C.

- I acknowledge and agree that the Recipient's records and accounts in relation to the Project, might be audited.

- I am attaching a completed copy of FCM's Electronic Funds Transfer form to identify the bank account where FCM should deposit the Contribution.

_____

Name and title of authorized officer of Recipient

_____ _____

Signature Date

## SCHEDULE E – PROJECT PROGRESS REPORT TEMPLATE

**VERY IMPORTANT:**

**Timing:** You need to email a report, to your GMF project officer (contact info is in Schedule C), on the dates indicated in Schedule C or whenever FCM asks for such a report.

**Copyright:** If you're hiring a consultant to prepare the report, please make sure to get the copyright (see FCM's copyright tips document), or else FCM will not be able to disburse the Grant Amount.

**Accessibility for people with disabilities**: Please do not change the format, font, layout, etc. of this report. This template has been specially designed, following FCM's Accessibility Guidelines, in order to be accessible to people with disabilities.

**Confidentiality:** If your report contains any Confidential Information that you would prefer not be made available to the public (e.g. through a case study or other materials produced by FCM that relate to your Project), please submit two versions of the report:

1. **Complete report including Confidential Information:** Please clearly label this report with the word "**Confidential**" or similar wording and FCM will treat it as confidential.

2. **Abridged report excluding Confidential Information:** This report may be posted on the FCM website and otherwise made available to interested third parties, to help FCM meet its knowledge sharing objectives.

**Purpose:** Your Project Progress Report has two main purposes:

1. **Project tracking:** This report enables FCM to confirm that your Project is proceeding as planned, or to be informed of any unforeseen delays.

2. **Knowledge sharing:** FCM shares the lessons and expertise gained through GMF-funded initiatives with other communities across Canada. The findings and lessons learned documented in your Project Progress Report could be valuable for other municipal governments that are seeking to address sustainability issues in their own communities. FCM may wish to supplement this information through an Interview with the Project lead.

**Content outline:** Your Project Progress Report should be approximately **one to two pages long** and include the information below. **Note: You may request a Microsoft Word version of this template from your GMF project officer.**

### Project information

GMF number:
Name of funding recipient:
Project title:
Date of Project Progress Report:

### 1. Project status

a) Please summarize the activities completed so far and indicate the activities currently in progress, as per Schedule C. **Note:** If you have previously submitted a Project Progress Report (for projects with multiple contributions), your summary should build on the information you included in your previous report.

b) Have there been any significant changes, or do you anticipate any significant changes, to the scope or costs of the Project as described in the Agreement or in a previously submitted Project Progress Report (if applicable)?

c) If your initiative is a feasibility study or pilot project, please indicate how the scope will change and, in general terms, how the changes will affect the **environmental benefits** you aim to achieve and the **budget** (e.g. increase or decrease; no precise figures required).

d) When do you expect to complete the Project (month/year)?

**2. Lessons learned to date**

a) Have you begun to implement any new technology or new approach (e.g. full-cost accounting)? Are there any benefits or drawbacks in using this new technology or approach that you have identified to date?

b) What barriers have you encountered so far and what solutions have you implemented to address them?

c) If you were planning this type of Project again, what would you do differently, knowing what you know now?

d) Do you have a Project champion who has been instrumental to the Project to date? If so, please include his or her name, title and contact information, and describe his or her role in the Project.

e) What advice would you give to someone in another community undertaking a similar project?

**3. Photos and materials**

FCM includes project photos and links to project materials in GMF case studies, website content, and other vehicles.

a) Identify and attach any materials resulting from the Project to date that would be useful to share with other communities, such as checklists, toolkits, guidelines, bylaws, videos or information brochures. If the material is available on your website, simply include the link to it.

For example, a water metering project might result in a new municipal water use bylaw, or a series of householder information brochures or online video clips on ways to reduce water use.

b) Attach any high-quality photographs of the Project if you have taken any to date. Where possible, include photos that feature people in action. The photos must be in jpeg or tiff format and at least 300 dpi (up to 10 MB/10,000 KB but no smaller than 1 MB/1,000 KB in file size). For each photo, please include:

i) A caption describing what is featured in the photo.
ii) A photo credit that indicates who owns the copyright to the photo and the photographer (e.g. © 2020, City of Ottawa/Madison Brown).
iii) A written release signed by the individuals depicted in the photo granting FCM permission to use the images. **Please request an FCM photo consent form from your GMF project officer.**

## SCHEDULE F – PROJECT COMPLETION REPORT TEMPLATE

**VERY IMPORTANT:**

**Timing:** You need to email a report, to your GMF project officer (contact info is in Schedule C), on the dates indicated in Schedule C or whenever FCM asks for such a report.

**Copyright:** Before you submit a report to FCM, make sure you hold the copyright for the report. If you're hiring a consultant to prepare the report, please make sure to get the copyright (see FCM's copyright tips document), or else FCM will not be able to disburse the Grant Amount.

**Accessibility for people with disabilities**: Please do not change the format, font, layout, etc. of this report. This template has been specially designed, following FCM's Accessibility Guidelines, in order to be accessible to people with disabilities.

**Confidentiality:** If your report contains any Confidential Information that you would prefer not be made available to the public (e.g. through a case study or other materials produced by FCM that relate to your Project), please submit two versions of the report:

1. **Complete report including Confidential Information:** Please clearly label this report with the word "**Confidential**" or similar wording and FCM will treat it as confidential.

2. **Abridged report excluding Confidential Information:** This report may be posted on the FCM website and otherwise made available to interested third parties, to help FCM meet its knowledge sharing objectives.

Please contact your project officer to receive an electronic copy of the Completion Report Template.

**Upon completion of the project, a copy of the Final Deliverable must be submitted along with this Completion Report.**

FCM will post your report on the Green Municipal Fund™ (GMF) website. This is because one of FCM's mandates is to help municipal governments share their knowledge and expertise regarding municipal environmental projects, plans and studies.

**How to complete the Completion Report**

The purpose of the Completion Report is to share the story of your community's experience in undertaking your project with others seeking to address similar issues in their own communities.

Please write the report in plain language that can be understood by people who are not specialists on the subject. A Completion Report is typically in the range of 5–10 pages, but may be longer or shorter, depending on the complexity of the project.

GMF grant recipients must enclose **final** copies of the Completion Report and the Final Deliverable with their final Request for Contribution. The reports, including all attachments and appendices, must be submitted in PDF format with searchable text functionality. Reports that are not clearly identifiable as final reports, such as those displaying headers, footers, titles or watermarks containing terms like "draft" or "for internal use only," will not be accepted by GMF. Additionally, reports must be dated. If you have questions about completing this report, please consult GMF staff.

| | |
|---|---|
| **GMF number** | |
| **Name of lead applicant (municipality or other partner)** | |
| **Name, title, full address, phone, fax and e-mail address of lead technical contact for this study** | |
| **Date of the report** | |

## 1. Introduction

a) Who was involved in doing the Feasibility Study, and what are their affiliations? Please include name, title and contact information. Those involved could include municipal staff, engineers and other consultants, a representative from a non-governmental organization, and others.

## 2. The Feasibility Study

a) Describe the process that you undertook to make this feasibility study a reality, from concept, to council approval, to RFP, to final deliverable.

b) What were the objectives of the Feasibility Study (what was it seeking to determine)?

c) What approach (or methodology) was used in the Feasibility Study to meet these objectives?

d) Please describe any public consultations conducted as part of the Feasibility Study and their impact on the Study.

## 3. Feasibility Study Findings and Recommendations

a) What were the environmental findings related to the options explored in the Feasibility Study? Please provide quantitative results and summary tables of these results (or the page numbers from the Feasibility Study report).

b) What were the financial findings related to the options explored in the Feasibility Study (for example, results of a cost-benefit analysis, financial savings identified, and so on)? Please provide quantitative results and summary tables of these results (or the page numbers from the Feasibility Study report).

c) Based on the environmental and financial findings above, what does the Feasibility Study recommend?

## 4. Lead Applicant's Next Steps

a) Taking the Feasibility Study's recommendations into account, what next steps do you as the municipality plan to take? What potential benefits or internal municipal improvements would result from these next steps?

## 5. Lessons Learned

In answering the questions in this section, please consider all aspects of undertaking the Study — from the initial planning through each essential task until the Final Study was prepared.

a) What would you recommend to other municipalities interested in doing a similar Feasibility Study? What would you do differently if you were to do this again?

b) What barriers or challenges (if any) did you encounter in doing this Feasibility Study? How did you overcome them?

**6. Knowledge Sharing**

a) Is there a website where more information about the Feasibility Study can be found? If so, please provide the relevant URL.

b) In addition to the Feasibility Study results, has your Feasibility Study led to other activities that could be of interest to another municipality (for example, a new policy for sustainable community development, a series of model by-laws, the design of a new operating practice, a manual on public consultation or a measurement tool to assess progress in moving toward greater sustainability)? If so, please list these outcomes, and include copies of the relevant documents (or website links).

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This project was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-125**

**ZONING:** A by-law to remove the Holding (H) Provision from Zoning By-laws 2005-150 and 2005-151 for a part of the lands known municipally as 10 Huron Street, 0 Huron Street, 29 Bay Street (1188004 Ontario Inc. c/o Tony Porco).

**WHEREAS** on August 12, 2024, the Council for the City approved the Report of the Director of Planning dated August 12, 2024 (the "Report") concerning Application No. A-8-24-HP (the "Application") which Report recommended that City Council approve the Application which sought the removal of the Holding Provision against a part of the Lands, which Subject Property was identified and marked as the "Subject Property" on the Subject Property Map attached as Map 16/1-27 to the said Report;

**AND WHEREAS** the Council for the City is empowered to enact By-laws by virtue of the provisions of Section 34 of the *Planning Act*, R.S.O. 1990, c. P.13, as amended, which permits Council to pass By-laws prohibiting the use of land, buildings or structures within a defined area or areas;

**AND WHEREAS** the Council for the City is empowered to enact this By-law by virtue of the provisions of Section 36 of the *Planning Act*, R.S.O. 1990, c. P.13;

**AND WHEREAS** notice of removal of the Holding Provision has been provided in accordance with the provisions of the *Planning Act*, R.S.O. 1990, c. P.13;

**NOW THEREFORE** the Council of the Corporation of the City of Sault Ste. Marie, pursuant to Section 36 of the *Planning Act*, R.S.O. 1990, c. P.13 and amendments thereto, **ENACTS** as follows:

1. **REMOVAL OF THE HOLDING PROVISION – PART OF LANDS COMPRISING 10 HURON STREET, 0 HURON STREET, 29 BAY STREET**

   (a) Holding "H" Provision be removed from the Subject Property, which lands are outlined and marked as the "Subject Property" on Map 16/1-27 attached hereto as Schedule "A" to this By-law.

   (c) City Zoning By-laws 2005-150 and 2005-151 are hereby amended to give effect to the foregoing and shall in all other respects remain in full force and effect.

2. **SCHEDULE "A"**

   Schedule "A" hereto forms a part of this by-law.

3. **CERTIFICATE OF CONFORMITY**

It is hereby certified that this by-law is in conformity with the Official Plan for the City of Sault Ste. Marie, authorized and in force on the day of the passing of this by-law.

4. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in Open Council this 9th day of September, 2024.

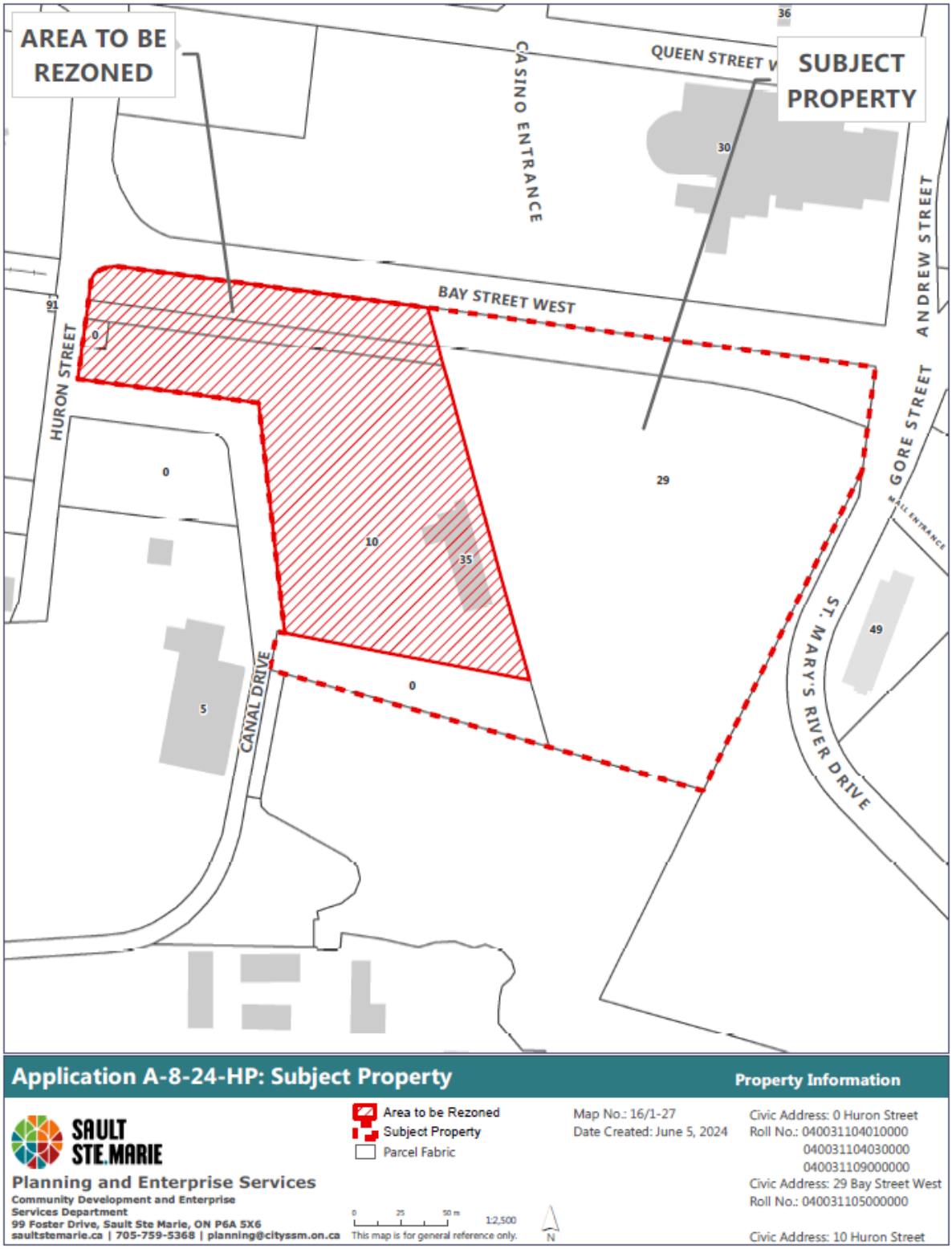
_____

**MAYOR – MATTHEW SHOEMAKER**

_____

**CITY CLERK – RACHEL TYCZINSKI**

SCHEDULE “A” TO BY-LAW 2024-125

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**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-126**

**AGREEMENT**: A by-law to authorize the execution of the Agreement between the City and His Majesty the King in Right of Canada, represented by the Minister of Infrastructure and Communities, hereinafter referred to as the Minister of Intergovernmental Affairs, Infrastructure and Communities to accept funds that have been allocated to Sault Ste. Marie and proceed with Hub Trail upgrades.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement between the City and His Majesty the King in Right of Canada, represented by the Minister of Infrastructure and Communities, hereinafter referred to as the Minister of Intergovernmental Affairs, Infrastructure and Communities, a copy of which is attached as Schedule “A” hereto. This Agreement is to accept the funds that have been allocated to Sault Ste. Marie and to proceed with Hub Trail upgrades.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

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**CANADA – THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**PERMANENT PUBLIC TRANSIT PROGRAM - ACTIVE TRANSPORTATION FUND CONTRIBUTION AGREEMENT FOR ACTIVE TRANSPORATION PROJECTS IN SAULT STE. MARIE, ONTARIO (2022)**

This Agreement is made as of the date of last signature

**BETWEEN**: **HIS MAJESTY THE KING IN RIGHT OF CANADA**, as represented by the Minister of Infrastructure and Communities, hereinafter referred to as the Minister of Intergovernmental Affairs, Infrastructure and Communities ("Canada")

**AND**

THE **CORPORATION OF THE CITY OF SAULT STE. MARIE**, continued or incorporated pursuant to the Act to Incorporate the City of Sault Ste. Marie, 1912 (the "Recipient"),

individually referred to as a "Party" and collectively referred to as the "Parties".

**RECITALS**

**WHEREAS** the Active Transportation fund is the first federal fund to target active transportation. It is making $400 million in federal funding available over 5 years to support a modal shift away from cars and toward active transportation, in support of Canada's National Active Transportation Strategy;

**WHEREAS** the Minister of Intergovernmental Affairs, Infrastructure and Communities is responsible for the Program entitled the Permanent Public Transit Program – Active Transportation Fund ("the Program");

**WHEREAS** the Recipient has submitted to Canada a proposal for the funding of the Project which qualifies for support under the Program;

**WHEREAS** Canada provided a letter on December 23, 2022 to the Corporation of the City of Sault Ste. Marie indicating an approval-in-principle of funding of the project proposal enabling the Corporation of the City of Sault Ste. Marie to begin undertaking project activities eligible for funding and subject to finalizing a contribution agreement with Canada;

**AND WHEREAS** the Recipient is responsible for carrying out the Project and Canada wishes to provide financial support for the Project and its objectives;

**NOW THEREFORE**, the Parties agree as follows:

Agreement Ordered to Follow By-law approval

# 1. INTERPRETATION

## *1.1 DEFINITIONS*

In addition to the terms defined in the recitals and elsewhere in this Agreement, a capitalized term has the meaning given to it in this Section.

"**Agreement**" means this contribution agreement and all its schedules, as may be amended from time to time.

"**Agreement End Date**" means March 31, 2026.

"**Asset**" means any real or personal property or immovable or movable asset acquired, purchased, constructed, rehabilitated or improved, in whole or in part, with funds contributed by Canada under the terms and conditions of this Agreement, including but not limited to any Non-owned Asset.[1]

"**Asset Disposal Period**" means the period commencing from the Effective Date and ending five (5) years after the Project Completion Date.

**"Communications Activity" or "Communications Activities"** means, but is not limited to, public or media events or ceremonies including key milestone events, news releases, reports, web and social media products or postings, blogs, news conferences, public notices, physical and digital signs, publications, success stories and vignettes, photos, videos, multi-media content, advertising campaigns, awareness campaigns, editorials, multi-media products and all related communication materials under this Agreement.

"**Contract**" means an agreement between the Recipient and a Third Party whereby the latter agrees to supply a product or service to the Project in return for financial consideration.

"**Declaration of Substantial Completion**" means a declaration in the form substantially prescribed in Schedule F (Declaration of Substantial Completion).

"**Effective Date**" means the date of last signature of this Agreement.

"**Eligible Expenditures**" means those costs incurred that are directly related to the Project and which are considered eligible by Canada as set out in Schedule A (Eligible and Ineligible Expenditures).

"**Final Claim Date**" means March 31, 2026.

"**Fiscal Year**" means the period beginning April 1 of a year and ending March 31 of the following year.

"**Interim Report**" means the report described in Schedule C.1.

**"Joint Communications"** means events, news releases and signage that relate to the Agreement and are collaboratively developed and approved by the Parties and are not operational in nature.

**"Non-Owned Assets"** means an Asset to which the Recipient does not hold the title and ownership.

"**Project**" means the project as described in Schedule B (The Project).

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1 Contact the COE if the Recipient does not own the Asset(s). The COE will consider a change to this representation and related sections of the Agreement, and may consult with legal Services as part of the review process.

"**Project Approval Date**" means December 22, 2022 which is the date indicated by Canada in writing to the Recipient following Canada's approval in principle of the Project.

"**Project Completion Date**" means the date at which all funded activities of the Project under this Agreement have been completed and which must be no later than February 1, 2026.

"**Substantial Completion Date**" means the date at which the Project can be used for its intended use as described in Schedule B.1 (Project Description) as will be set out in Schedule F (Declaration of Substantial Completion).

"**Third Party**" means any person or legal entity, other than a Party, who participates in the implementation of the Project by means of a Contract.

"**Total Financial Assistance**" means funding from all sources towards Eligible Expenditures of the Project, including funding from the Recipient and federal, provincial, territorial, and municipal governments as well as funding from all other sources.

### *1.2 ENTIRE AGREEMENT*

This Agreement comprises the entire agreement between the Parties in relation to the subject of the Agreement. No prior document, negotiation, provision, undertaking or agreement has legal effect, unless incorporated by reference into this Agreement. No representation or warranty express, implied or otherwise, is made by Canada to the Recipient except as expressly set out in this Agreement.

### *1.3 DURATION OF AGREEMENT*

This Agreement will be effective as of the Effective Date and will terminate on the Agreement End Date subject to early termination in accordance with this Agreement.

### *1.4 SCHEDULES*

The following schedules are attached to, and form part of this Agreement:

Schedule A – Eligible and Ineligible Expenditures

Schedule B – The Project

Schedule C – Reporting Requirements

Schedule D – Certificate(s) of Compliance for Claims

Schedule E – Communications Protocol

Schedule F – Declaration of Substantial Completion

## 2. PURPOSE OF AGREEMENT

The purpose of this Agreement is to establish the terms and conditions whereby Canada will provide funding to the Recipient for the Project.

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# 3. OBLIGATION OF THE PARTIES

## *3.1 CONTRIBUTION BY CANADA*

a) Canada agrees to pay a contribution to the Recipient of not more than sixty percent (60%) of the total Eligible Expenditures for the Project but only up to a maximum of eight hundred forty-one eight hundred dollars ($841,800).

b) Canada will pay the contribution in accordance with the terms and conditions of this Agreement and the Fiscal Year breakdown in Schedule B.2 (Project Budget).

c) If Canada's total contribution towards the Project exceeds sixty percent (60%) of the Project's total Eligible Expenditures or if the Total Financial Assistance received or due in respect of the total Project costs exceeds one hundred percent (100%) thereof, Canada may recover the excess from the Recipient or reduce its contribution by an amount equal to the excess.

d) The Parties acknowledge that Canada's role in the Project is limited to making a financial contribution to the Recipient for the Project and that Canada will have no involvement in the implementation of the Project or its operation. Canada is neither a decision-maker nor an administrator to the Project.

## *3.2 COMMITMENTS BY THE RECIPIENT*

a) The Recipient will complete the Project in a diligent and timely manner, as per the Project details outlined in Schedule B (The Project), within the costs and deadlines specified in this Agreement and in accordance with the terms and conditions of this Agreement.

b) The Recipient will be responsible for all costs of the Project including cost overruns, if any.

c) The Recipient will repay to Canada any payment received for disallowed costs, and all ineligible costs, surpluses, unexpended contributions and overpayments made under and according to the terms and conditions of this Agreement.

d) The Recipient will inform Canada promptly of the Total Financial Assistance received or due for the Project.

e) During the Asset Disposal Period, the Recipient will ensure that it acquires, secures and maintains all necessary rights, interests, permissions, permits, licences, approvals, registrations, and any other authorizations, to carry out the Project and to provide the ongoing operation, maintenance, and repair of any Asset in relation to the Project as per appropriate standards.

f) Canada may request that the Recipient declare to Canada any amounts owing to the federal Crown, under legislation or contribution agreements that constitute an overdue debt. The Recipient recognizes that any such amount owing is a debt due to the federal Crown and may be set-off by Canada in accordance with Section 19.6 (Set-off by Canada).

g) The Recipient will inform Canada immediately of any fact or event that could

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compromise wholly or in part the Project.

h) During the Asset Disposal Period the Recipient will ensure:

   i. that it acquires, secures and maintains all necessary rights, interests, permissions, permits, licences, approvals, registrations, and any other authorizations, to carry out the Project and to provide the ongoing operation, maintenance, and repair of any Asset, in accordance with this Agreement; and,

   ii. the ongoing operation, maintenance, and repair any Asset as per appropriate standards.

### *3.3 APPROPRIATIONS AND FUNDING LEVELS*

Notwithstanding Canada's obligation to make any payment under this Agreement, this obligation does not arise if, at the time when a payment under this Agreement becomes due, the Parliament of Canada has not passed an appropriation that is sufficient and constitutes lawful authority for making the payment. Canada may reduce or terminate any payment under this Agreement in response to the reduction of appropriations or departmental funding levels in respect of transfer payments, the program under which this Agreement was made or otherwise, as evidenced by any appropriation act or the federal Crown's main or supplementary estimates expenditures. Canada will promptly advise the Recipient of any reduction or termination of funding once it becomes aware of any such situation. Canada will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, arising from any such reduction or termination of funding.

### *3.4 FISCAL YEAR BUDGETING*

a) The amount of the contribution payable by Canada for each Fiscal Year of the Project is set out in Schedule B.2 (Project Budget).

b) If the actual amount payable by Canada in respect of any Fiscal Year of the Project is less than the estimated amount in Schedule B.2 (Project Budget), the Recipient may request that Canada re-allocate the difference between the two amounts to a subsequent Fiscal Year. Subject to Section 3.3 (Appropriations and Funding Levels), Canada agrees to make reasonable efforts to accommodate the Recipient's request. The Recipient acknowledges that requests for re-allocation of Project funding will require appropriation adjustments or federal Crown approvals.

c) In the event that any requested re-allocation of Project funding is not approved, the amount of Canada's contribution payable pursuant to Section 3.1 (Contribution by Canada) may be reduced by the amount of the requested re-allocation. If the contribution payable by Canada pursuant to Section 3.1 (Contribution by Canada) is so reduced, the Parties agree to review the effects of such reduction on the overall implementation of the Project and to adjust the terms and conditions of this Agreement as appropriate.

### *3.5 CHANGES DURING THE LIFE OF THE PROJECT*

a) Where a change to this Agreement is contemplated, the Recipient will submit

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to Canada a request for a change.

b) Where the change is approved by Canada, the Parties will execute the corresponding amendment to the Agreement in accordance with Section 19.14 (Amendments).

### *3.6 INABILITY TO COMPLETE PROJECT*

If, at any time during the term of this Agreement, one or all of the Parties determine that it will not be possible to complete the Project for any reason, the Party will immediately notify the other Party of that determination and Canada may suspend its funding obligation. The Recipient will, within thirty (30) business days of a request from Canada, provide a summary of the measures that it proposes to remedy the situation. If Canada is not satisfied that the measures proposed will be adequate to remedy the situation, then this will constitute an Event of Default under Section 16 (Default) and Canada may declare a default pursuant to Section 16 (Default).

### *3.7 CONDITION PRECEDENT*

a) Condition(s)

The Recipient agrees that Canada has no obligation to make payments under this Agreement unless and until:

i. In respect of an Asset, the Recipient secures and confirms to Canada the necessary rights or interests in the real property associated with that Asset.

ii. The Recipient has provided, and Canada has accepted, confirmation that all funding required to complete the Project has been secured.

b) Remedy

In the event that the Recipient is unable to meet the conditions set out in Section 3.7 (a) (Condition(s)), Canada may terminate the Agreement. Canada will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, arising from the termination of the Agreement.

## 4. RECIPIENT REPRESENTATIONS AND WARRANTIES AND UNDERTAKINGS[2]

The Recipient represents and warrants to Canada that:

a) the Recipient has the capacity and authority to enter into and execute this Agreement as duly authorized by by-law, dated September 9, 2024;

b) the Recipient has the capacity and authority to carry out the Project;

c) the Recipient has the requisite power to own the Assets or it has or will have

2 This section is a standard clause for contracts. Reps and warranties are statements by which one party gives certain assurances to the other, and on which the other party may rely. A representation is commonly a declaration of a specific fact that can be verified to be true or not, e.g., "recipient represents that it is a corporation duly organized and validly existing under the laws of the state of Delaware." A warranty may be more of an assurance, e.g. "lobbying". Canada may rely on certain remedies if the representations and warranties are not accurate or are not fulfilled.

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secured all necessary rights, interests, and permissions in respect of the Assets, during the Asset Disposal Period;

d) this Agreement constitutes a legally binding obligation of the Recipient, enforceable against it in accordance with its terms and conditions;

e) all information submitted to Canada as set out in this Agreement is true, accurate, and was prepared in good faith to the best of its ability, skill, and judgment;

f) any individual, corporation or organization that the Recipient has hired, for payment, who undertakes to speak to or correspond with any employee or other person representing Canada on the Recipient's behalf, concerning any matter relating to the contribution under this Agreement or any benefit hereunder and who is required to be registered pursuant to the federal *Lobbying Act*, is registered pursuant to that *Act;*

g) the Recipient has not and the Recipient will ensure that the Recipient will not make a payment or other compensation that is contingent upon or is calculated upon the contribution hereunder or the negotiation of the whole or any part of the terms and conditions of this Agreement to any individual, or corporation or organization with which that individual is engaged in doing business with, who is registered pursuant to the federal *Lobbying Act*;

h) there are no actions, suits, investigations or other proceedings pending or, to the knowledge of the Recipient, threatened and there is no order, judgment or decree of any court or governmental agency which could materially and adversely affect the Recipient's ability to carry out the activities contemplated by this Agreement. The Recipient will inform Canada immediately if any such action or proceedings are threatened or brought during the term of this Agreement; and

i) the Recipient is in good standing under the laws of the jurisdiction in which it is required to be registered.

# 5. INTENTIONALLY OMITTED

# 6. CONTRACT PROCEDURES

## *6.1 AWARDING OF CONTRACTS*

a) The Recipient will ensure that Contracts are awarded in a way that is transparent, competitive, consistent with value-for-money principles, or in a manner that is otherwise acceptable to Canada, and if applicable, in accordance with the Canadian Free Trade Agreement and international trade agreements.

b) If Canada becomes aware that a Contract is awarded in a manner that is not in compliance with the foregoing, upon notification to the Recipient, Canada may consider the expenditures associated with the Contract to be ineligible.

c) In addition to any other remedy available to Canada under this Agreement, if Canada considers the expenditures associated with a Contract to be ineligible under Section 6.1(b), the Recipient shall repay to Canada any funds

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that have been paid for Eligible Expenditures in relation to the Contract, at Canada's discretion.

### *6.2 CONTRACT PROVISIONS*

The Recipient will ensure that all Contracts are consistent with, and incorporate, the relevant provisions of this Agreement. More specifically but without limiting the generality of the foregoing, the Recipient agrees to include terms and conditions in all Contracts to ensure that:

a) the Third Party will keep proper and accurate financial accounts and records, including but not limited to its contracts, invoices, statements, receipts, and vouchers, in respect of the Project for at least six (6) years after the Agreement End Date and that the Recipient has the contractual right to audit them;

b) all applicable labour, environmental, and human rights legislation are respected; and

c) Canada and its designated representatives, to the extent permitted by law, will at all times be permitted to inspect the terms and conditions of the Contract and any records and accounts respecting the Project and will have free access to the Project sites and to any documentation relevant for the purpose of audit.

## 7. ENVIRONMENTAL AND IMPACT ASSESSMENT

### 7.1 *REQUIREMENTS UNDER APPLICABLE FEDERAL ENVIRONMENTAL OR IMPACT ASSESSMENT LEGISLATION*

The Recipient represents and warrants that there are no requirements under applicable federal environmental or impact assessment legislation for the Project.

### 7.2 *CHANGES TO PROJECT OR OTHERWISE*

a) If, as a result of changes to the Project or otherwise, Canada is of the opinion that the Project is subject to federal environmental or impact assessment legislation, the Recipient agrees that construction of the Project or any other physical activity to be carried out in relation to the Project, including site preparation or vegetation removal, will not be undertaken or will be suspended unless and until the legislative requirements are met and continue to be met.

b) The Recipient also agrees that no funds or additional funds for any Eligible Expenditure for the Project will become or will be payable by Canada to the Recipient unless and until the legislative requirements are met and continue to be met.

c) Canada may consent in writing that construction or any other physical activity, including site preparation or vegetation removal, be carried out for the portion of the Project not subject to federal environmental or impact assessment and that funds or additional funds for any Eligible Expenditure will be payable by Canada for the portion of the Project not subject to federal environmental or impact assessment.

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# 8. INDIGENOUS CONSULTATION

## *8.1 INDIGENOUS CONSULTATION*

Canada agrees that a legal duty to consult does not arise for this Project.

## *8.2 CHANGES TO THE PROJECT OR OTHERWISE*

a) If, as a result of changes to the Project or otherwise, Canada determines that Indigenous consultation is required, the Recipient will work with Canada to satisfy its legal duty to consult and, where appropriate, accommodate Indigenous communities.

b) The Recipient agrees that:

   a. It will consult with Indigenous communities that might be affected by the Project. Specifically, it will:

      i. Explain the Project to the Indigenous communities, including Canada's funding role; and

      ii. Provide a report to Canada, which will include:

         1. a list of all Indigenous communities contacted;
         2. a summary of all communications with the Indigenous communities;
         3. a summary of any issues or concerns that the Indigenous communities have raised, how they were addressed, and any outstanding concerns; and
         4. any other information Canada may consider appropriate.

   b. Accommodation measures, where appropriate will be carried out by the Recipient and these costs may be considered Eligible Expenditures.

   c. No construction or any other physical activity, including site preparation or vegetation removal may be carried out in relation to the Project, and no funds or additional funds for any Eligible Expenditure for the Project will be payable by Canada to the Recipient, unless and until Canada is satisfied that its legal duty to consult and, where appropriate, accommodate Indigenous communities has been met and continues to be met.

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# 9. CLAIMS AND PAYMENTS

## *9.1 PAYMENT CONDITIONS*

a) Canada will not pay interest for failing to make a payment under this Agreement.

b) Canada will not pay any claims submitted after March 31, 2026, unless otherwise accepted by Canada.

c) Canada will not pay any claims until the requirements under Section 3.7 (Condition Precedent), Section 7 (Environmental and Impact Assessment)

and Section 8 (Indigenous Consultation), if applicable, are, in Canada's opinion, satisfied to the extent possible at the date the claim is submitted to Canada.

d) Canada will not pay any claims until the requirements under Schedule C (Reporting Requirements) are, in Canada's opinion, satisfied to the extent possible at the time the claim is submitted to Canada.

### *9.2 PROGRESS CLAIMS*

a) The Recipient will submit progress claims to Canada in accordance with Schedule B.3 (Claim Frequency Table) covering the Recipient's Eligible Expenditures in a form acceptable to Canada. Each progress claim must include the following:

   i. a certification by a senior official designated in writing by the Recipient in the form set out in Schedule D.1 (Certificate of Compliance for Progress Claim) stating that the information submitted in support of the claim is accurate;

   ii. a breakdown of Eligible Expenditures of the Project claimed, in accordance with Schedule B.2 (Project Budget) in a form set out by Canada;

   iii. any reporting due in accordance with Schedule C (Reporting Requirements);

   iv. upon request by Canada, any documentation in support of Eligible Expenditures claimed.

b) Canada will make a payment upon review and acceptance of a progress claim, subject to the terms and conditions of the Agreement.

### *9.3 FINAL CLAIM AND FINAL ADJUSTMENTS*

a) The Recipient will submit a final claim to Canada by March 31, 2026 covering the Recipient's Eligible Expenditures in a form acceptable to Canada. The final claim must include the following:

   i. a certification by a senior official designated in writing by the Recipient in the form set out in Schedule D.2 (Certificate of Compliance for Final Claim) stating that the information submitted in support of the claim is accurate;

   ii. a breakdown of Eligible Expenditures of the Project claimed, in accordance with Schedule B.2 (Project Budget) in a form set out by Canada;

   iii. confirmation of the Total Financial Assistance in accordance with Section 3.2 c) (Commitments by the Recipient), in the form set out in Schedule D.2 (Certificate of Compliance for Final Claim);

   iv. any reporting due in accordance with Schedule C (Reporting Requirements);

   v. a completed Declaration of Substantial Completion in accordance with Section 9.5 (Declaration of Substantial Completion);

   vi. upon request by Canada, any of the documents referenced in

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Schedule F (Declaration of Substantial Completion); and

vii. upon request by Canada, any documentation in support of Eligible Expenditures claimed.

b) Upon receipt of the final claim, but before issuing the final payment, the Parties will jointly carry out a final reconciliation of all claims and payments in respect of the Project and make any adjustments required in the circumstances.

### *9.4 RETENTION OF CONTRIBUTION*

Canada will retain five percent (5%) of its contribution, under this Agreement, as a holdback. The amount retained by Canada will be released by Canada upon review and acceptance of the final report described under Schedule C.3 (Final Report) and Canada being satisfied that the Recipient has fulfilled all of its obligations under this Agreement.

### *9.5 DECLARATION OF SUBSTANTIAL COMPLETION*

a) Prior to executing the Declaration of Substantial Completion, the Recipient will request confirmation in writing from Canada as to whether the Declaration of Substantial Completion lists all relevant documents.

b) The Declaration of Substantial Completion must be signed by an authorized official of the Recipient as deemed acceptable by Canada, and it must list all relevant documents as determined by Canada.

## 10. REPORTING

Any Project and performance reporting requirements will be undertaken and completed in accordance with Schedule C (Reporting Requirements).

## 11. INFORMATION MANAGEMENT

The Recipient will use the process designated by Canada to fulfill the obligations of the Recipient under this agreement, including Section 10 (Reporting) and any other obligations of the recipient as requested by Canada.

## 12. AUDIT, EVALUATION AND MONITORING FOR COMPLIANCE

### *12.1 RECIPIENT AUDIT*[3]

Canada may, at its discretion, conduct a Recipient audit related to this Agreement during the term of this Agreement and up to three years after the Agreement End Date, in accordance with the Canadian Auditing Standards and Section 19.3 (Accounting Principles).

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3 A Recipient Audit is defined as an audit contracted by Canada. Its scope is tailored to the needs of the Department, the type of Recipient and the areas where additional assurance is needed.

### *12.2 EVALUATION*

The Recipient agrees to cooperate with Canada in the conduct of any evaluation of the Program during or after the term of this Agreement. The Recipient also agrees to provide Project-related information to Canada during and following the termination of the Agreement in order for Canada to conduct any evaluation of the performance of the Program. All evaluation results will be made available to the public, subject to all applicable laws and policy requirements.

### *12.3 CORRECTIVE ACTION*

The Recipient will submit to Canada in writing as soon as possible, but no later than sixty (60) days following receipt of any audit findings or recommendations, a report on follow-up actions taken to address recommendations and results of any audit findings and recommendations.

### *12.4 RECORD KEEPING*

The Recipient will keep proper and accurate financial accounts and records, including but not limited to its Contracts, invoices, statements, receipts, and vouchers, in respect of the Project, for at least six (6) years after the Agreement End Date.

### *12.6 ACCESS*

The Recipient will provide Canada and its designated representatives with reasonable and timely access, at no cost, to the Project sites, facilities, and any documentation for the purposes of audit, evaluation, inspection and monitoring compliance with this Agreement.

## 13. COMMUNICATIONS

### *13.1 COMMUNICATIONS PROTOCOL*

The Parties will comply with Schedule E (Communications Protocol).

### *13.2 RECOGNITION OF CANADA'S CONTRIBUTION*

The Recipient will acknowledge Canada's contribution in all signage and public communication produced as part of the Project or Agreement, in a manner acceptable to Canada, unless Canada communicates in writing to the Recipient that this acknowledgement is not required.

### *13.3 PUBLIC INFORMATION*

The Recipient acknowledges that the following may be made publicly available by Canada:

a) its name, the amount awarded by Canada, and the general nature of the Project; and

b) any evaluation or audit report and other reviews related to this Agreement.

### *13.4 OFFICIAL LANGUAGES*

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The Government of Canada wishes, among other things and where appropriate, to promote English and French in Canadian society and support the development of official language minority communities. The Recipient will:

a) ensure that information on the Project is developed and is available in both official languages when intended for the information of, or use by the public;

b) communicate in such a manner as to address the needs of both official language communities; and,

c) encourage members of both official languages communities to participate in the Project.

## 14. INTELLECTUAL PROPERTY

a) All intellectual property that arises in the course of the Project will vest in the Recipient.

b) The Recipient will obtain the necessary authorizations, as needed, for the implementation of the Project, from third parties to this Agreement who may own the intellectual property rights or other rights in respect of the Project. Canada will assume no liability in respect of claims from any third party to this Agreement in relation to such rights and to the Agreement.

c) Canada, in compliance with the *Privacy Act* and relevant privacy regulations, may film or photograph the Recipient, its officers, servants, employees, or agents during visits, activities, and events for the purpose of promoting the Program. The Recipient further agrees that Canada, in compliance with the *Privacy Act*, can use or publish any such film or photograph internally or externally, in whole or in part, in any form and by any medium for the purposes of promoting the Program.

## 15. DISPUTE RESOLUTION

a) The Parties will keep each other informed of any issue that could be contentious by exchanging information and will, in good faith and reasonably, attempt to resolve potential disputes.

b) Where the Parties cannot agree on a resolution, the Parties may explore any alternative dispute resolution mechanisms available to them to resolve the issue.

c) Any payments related to the issue in dispute will be suspended, together with the obligations related to such issue, pending resolution.

d) The Parties agree that nothing in this section will affect, alter or modify the rights of Canada to terminate this Agreement.

## 16. DEFAULT

### *16.1 EVENTS OF DEFAULT*

The following events constitute Events of Default under this Agreement:

a) the Recipient has not complied with one or more of the terms and conditions

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of this Agreement;

b) the Recipient has not completed the Project in accordance with the terms and conditions of this Agreement;

c) the Recipient has submitted false or misleading information to Canada or made a false or misleading representation in respect of the Project or in this Agreement, except for an error in good faith, demonstration of which is incumbent on the Recipient, to Canada's satisfaction;

d) the Recipient has neglected or failed to pay Canada any amount due in accordance with this Agreement.

### *16.2 DECLARATION OF DEFAULT*

Canada may declare a default if:

a) In Canada's opinion, one or more of the Events of Default occurs;

b) Canada gave notice to the Recipient of the event which constitutes an Event of Default; and

c) the Recipient has failed, within thirty (30) business days of receipt of the notice from Canada, either to remedy the Event of Default or to notify Canada and demonstrate, to the satisfaction of Canada, that it has taken such steps as are necessary to remedy the Event of Default.

### *16.3 REMEDIES ON DEFAULT*

In the event that Canada declares a default under Section 16.2 (Declaration of Default), Canada may exercise one or more of the following remedies, without limiting any remedy available to it at law:

a) suspend any obligation by Canada to contribute or continue to contribute funding to the Project, including any obligation to pay an amount owing prior to the date of such suspension;

b) terminate any obligation of Canada to contribute or continue to contribute funding to the Project, including any obligation to pay any amount owing prior to the date of such termination;

c) require the Recipient to reimburse Canada all or part of the contribution paid by Canada to the Recipient;

d) terminate the Agreement.

## 17. LIMITATION OF LIABILITY AND INDEMNIFICATION

### *17.1 DEFINITION OF PERSON*

In this section, "Person" includes, without limitation, a person, the Recipient, a Third Party, a corporation, or any other legal entity, and their officers, servants, employees or agents.

### *17.2 LIMITATION OF LIABILITY*

In no event will Canada, its officers, servants, employees or agents be held liable for any damages in contract, tort (including negligence) or otherwise, for:

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a) any injury to any Person, including, but not limited to, death, economic loss or infringement of rights;

b) any damage to or loss or destruction of property of any Person; or

c) any obligation of any Person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Agreement or the Project.

### *17.3 INDEMNIFICATION*

The Recipient will at all times indemnify and save harmless Canada, its officers, servants, employees or agents, from and against all actions, claims, demands, losses, costs, damages, suits or other proceedings, whether in contract, tort (including negligence) or otherwise, by whomsoever brought or prosecuted in any manner based upon or occasioned by:

a) any injury to any Person, including, but not limited to, death, economic loss or any infringement of rights;

b) any damage to or loss or destruction of property of any Person; or

c) any obligation of any Person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Agreement or Project, except to the extent to which such actions, claims, demands, losses, costs, damages, suits or other proceedings are caused by the negligence or breach of the Agreement by an officer, servant, employee or agent of Canada in the performance of his or her duties.

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# 18. ASSETS

a) Unless otherwise agreed to by the Parties, the Recipient will:

   i. where the Recipient owns the Asset, retain title to and ownership of the Asset or part of the Asset for the Asset Disposal Period; or

   ii. for a Non-Owned Asset, ensure that title to and ownership for any Non-Owned Asset is retained by the entity with title to and ownership of that Asset for the Asset Disposal Period.

b) The Recipient will ensure that any Asset will be preserved, maintained, and used for the purposes of the Project, and that no Asset, in whole or in part, will be sold, leased, encumbered or otherwise disposed of, directly or indirectly, during the Asset Disposal Period, unless the Recipient notifies Canada in advance and in writing, and Canada consents to such Asset disposal**.**

c) Upon alternate use or disposal of any Asset, which includes selling, leasing and encumbering, or otherwise disposing of, directly or indirectly, during the Asset Disposal Period, the Recipient will reimburse Canada, at Canada's discretion, all or part of the contribution paid under this Agreement by Canada to the Recipient

# 19. GENERAL

## *19.1 PUBLIC BENEFIT*

The Parties acknowledge that their contributions to the Project are meant to accrue to the public benefit.

## *19.2 SURVIVAL*

The Parties' rights and obligations which, by their nature, extend beyond the termination of this Agreement, will survive any termination of this Agreement.

## *19.3 ACCOUNTING PRINCIPLES*

All accounting terms will have the meanings assigned to them, all calculations will be made and all financial data to be submitted will be prepared, in accordance with the Generally Accepted Accounting Principles (GAAP) in effect in Canada as defined in the Chartered Professional Accountants (CPA) Canada Handbook - Accounting or, where applicable, the CPA Canada Public Sector Accounting Handbook.

## *19.4 DEBTS DUE TO THE FEDERAL CROWN*

Any amount owed to Canada under this Agreement by the Recipient will constitute a debt due to the federal Crown, which the Recipient will reimburse to Canada forthwith on demand.

## *19.5 INTEREST ON DEBTS DUE TO THE FEDERAL CROWN*

Debts due to the federal Crown by the Recipient will accrue interest in accordance with the federal *Interest and Administrative Charges Regulations*.

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### *19.6 SET-OFF BY CANADA*

Any debt due to the federal Crown by the Recipient may be set-off against any amounts payable by Canada to the Recipient under this Agreement.

### *19.7 MEMBERS OF THE HOUSE OF COMMONS AND SENATE*

No member of the House of Commons or the Senate of Canada will be admitted to any share or part of this Agreement, or to any benefit arising from it that is not otherwise available to the public. The Recipient will promptly inform Canada should it become aware of the existence of any such situation.

### *19.8 CONFLICT OF INTEREST*

No current or former public servant or public office holder to whom any post-employment, ethics and conflict of interest legislation, guidelines, codes or policies of Canada applies will derive direct benefit from this Agreement unless the provision or receipt of such benefits is in compliance with such legislation, guidelines, policies or codes. The Recipient will promptly inform Canada should it become aware of the existence of any such situation.

### *19.9 NO AGENCY, PARTNERSHIP, JOINT VENTURE, ETC.*

a) No provision of this Agreement and no action by the Parties will establish or be deemed to establish a partnership, joint venture, principal-agent relationship or employer-employee relationship in any way or for any purpose whatsoever between Canada and the Recipient or between Canada and a Third Party.

b) The Recipient will not represent itself, including in any agreement with a Third Party, as a partner, employee or agent of Canada.

### *19.10 NO AUTHORITY TO REPRESENT*

Nothing in this Agreement is to be construed as authorizing any person, including a Third Party, to contract for or to incur any obligation on behalf of Canada or to act as an agent for Canada. The Recipient will take the necessary action to ensure that any Contract between the Recipient and any Third Party contains a provision to that effect.

### *19.11 ASSIGNMENT*

The Recipient will not transfer or assign its rights or obligations under this Agreement without the prior written consent of Canada. Any attempt by the Recipient to assign any of the rights, duties or obligations of this Agreement without Canada's express written consent is void.

### *19.12 COUNTERPART SIGNATURE*

This Agreement and all documents contemplated by or delivered under or in connection with this Agreement may be executed and delivered in any number of counterparts (including by electronic signature, facsimile or other means of electronic transmission, such as by electronic mail in "PDF" form), with the same effect as if all Parties had signed and delivered the same document, and all counterparts shall together constitute one and the same original document.

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### *19.13 SEVERABILITY*

If for any reason a provision of this Agreement that is not a fundamental term of this Agreement between the Parties is found to be or becomes invalid or unenforceable, in whole or in part, and if both Parties agree, it will be deemed to be severable and will be deleted from this Agreement, but all the other terms and conditions of this Agreement will continue to be valid and enforceable.

### *19.14 AMENDMENTS*

a) This Agreement, including its schedules, can only be amended in writing by the Parties.

b) Notwithstanding Section 19.14(a) (Amendments), updates to the cashflow in Schedule B.2 (Project Budget) made pursuant to section 3.4 (Fiscal Year Budgeting) that do not result in an increase to the maximum amount of Canada's contribution under section 3.1 (Commitments by Canada) may be made administratively through an exchange of written correspondence between the Parties.

### *19.15 WAIVER*

A Party may waive any of its rights under this Agreement only in writing. Any tolerance or indulgence demonstrated by the Party will not constitute a waiver.

### *19.16 NOTICE*

a) Any notice, information or required documentation provided for under this Agreement must be delivered in person or sent by mail, email, messenger or facsimile to the identified representatives of the Parties at the following coordinates, unless otherwise specified by Canada:

Canada:

Active Transportation Fund
Infrastructure Canada
180 Kent Street Ottawa Ontario
ATF-FTA@infc.gc.ca

Recipient:

Director of Planning
99 Foster Drive Sault Ste. Marie Ontario

P lanning@cityssm.on.ca

b) Such notice will be deemed to have been received:

i. in person, when delivered;

ii. if sent by mail, email or facsimile, when receipt is acknowledged by the other Party;

iii. if sent by messenger or registered mail, when the receiving Party has signed the acknowledgment of reception.

c) If a Party changes its representative or the coordinates for that

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representative, it will advise the other Party as soon as possible.

### *19.17 COMPLIANCE WITH LAWS*

The Recipient will comply with all applicable laws and regulations and all requirements of regulatory bodies having jurisdiction over the subject matter of the Project.

### *19.18 GOVERNING LAW*[4]

This Agreement is governed by, and is to be interpreted in accordance with, the applicable federal laws and the laws in force in Ontario. The Parties attorn to the jurisdiction of the Courts of Ontario and all courts competent to hear appeals from the Courts of Ontario.

### *19.19 SUCCESSORS AND ASSIGNS*

This Agreement is binding upon the Parties and their respective successors and assigns.

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4 Any disputes relating to the agreement will be interpreted according to the laws of the province or territory indicated in this section, and adjudicated by the courts in that same province or territory. Only the laws of one province or territory may be indicated in this section. If the Recipient's headquarters and project location are different, use province/territory of headquarters.

## 20. SIGNATURES

This Agreement has been executed on behalf of His Majesty the King in right of Canada by the Minister of Intergovernmental Affairs, Infrastructure and Communities and on behalf of The Corporation of the City of Sault Ste. Marie by Mayor and City Clerk.

| | |
|---|---|
| HIS MAJESTY THE KING IN RIGHT OF CANADA | THE CORPORATION OF THE CITY OF SAULT STE. MARIE |
| Per: Mark Matz, Director General, Public Transit, Infrastructure Canada | Per: Matthew Shoemaker<br>Mayor |
| Date | Date |
| | Per: Rachel Tyczinski<br>City Clerk |
| | Date |

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# SCHEDULE A – ELIGIBLE AND INELIGIBLE EXPENDITURES

## *SCHEDULE A.1: ELIGIBLE EXPENDITURES*

Eligible expenditures are those considered to be direct and necessary for the successful implementation of an eligible project and are incurred by an eligible recipient, excluding those explicitly identified in Schedule A.2: Ineligible Expenditures.

Eligible projects include active transportation capital projects and active transportation planning projects. Capital projects refer to new infrastructure construction, enhancement of existing infrastructure, and fixed design and safety features that encourage increased active transportation. Eligible capital projects include, but are not limited to:

- Building or enhancing infrastructure for active transportation, such as multi-use paths, sidewalks, footbridges, separated bicycle lanes, and connections to other roadways (this could include nature trails and other infrastructure which could support recreation, so long as this infrastructure can be demonstrated to reflect merit criteria);
- Enhancing active transportation infrastructure, including design considerations in which there may be no net gain in kilometers of infrastructure, but quality improvements that support greater usage;
- Building or enhancing design features and facilities which promote active transportation, such as storage facilities, lighting, greenery, shade, and benches;
- Building or enhancing safety features which promote active transportation, such as crosswalks, medians, speed bumps, and wayfinding signage.

Eligible Expenditures must:

- be reasonable and directly related to the Project, as determined by Canada;
- be incurred between the Project Approval Date and the Final Claim Date; and
- consist of the following categories of expenditures:
    - Construction of infrastructure assets, e.g., cycling or walking paths.
    - Expenditures directly associated with joint federal communication activities and with federal project signage;
    - Costs/expenditures incurred for consultation or engagement with Indigenous groups on the project. These costs are retroactively eligible dating back to one year prior to the submission of the application for funding. These costs can include legal fees of the Indigenous groups, as part of overall consultation capacity funding, if they are incurred by an Indigenous group who is not a Recipient or an Ultimate Recipient of the given project, are reasonable, as determined by Canada, support consultation efforts, activities or tools and are not used to fund litigation against the Crown;
    - Expenditures incurred for accommodation of adverse impacts on Aboriginal and Treaty rights;
    - Incremental expenditures directly related to meeting specific program requirements, such as climate change and resiliency assessments, as well as creating community employment benefit plans;

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- The incremental costs of the eligible recipients' employees may be included as an eligible expenditure provided that the use of employees or equipment pertains solely to the implementation of the project, and:
  - There is a lack of private sector capacity to undertake the work; or
  - The work involves proprietary or specialized infrastructure or equipment that requires specific knowledge or skill of the recipient's employees; or
  - A collective agreement requires the recipient to use their own unionized employees for certain project work.
- Costs associated with project monitors or independent certifiers

Project expenditures will only be eligible as of project funding approval, except for expenditures associated with Climate Lens assessments and Indigenous consultation which are eligible before project funding approval, but can only be reimbursed if and when project funding is approved and a contribution agreement has come into force.

## *SCHEDULE A.2: INELIGIBLE EXPENDITURES*

Certain expenditures are not eligible for funding and therefore will not be considered in the calculation of the total eligible expenditures of the Project, including:

- Expenditures incurred before project funding approval and any and all expenditures related to agreements signed prior to project funding approval, except those specified under Section A.1 of this Schedule.
- Expenditures related to purchasing land, buildings and associated real estate and other fees;
- Expenditures related to cost overruns or incurred for cancelled projects;
- Furnishings and non-fixed assets which are not essential for the operation of the asset/project;
- General repairs and maintenance of a project and related structures, unless they are part of a larger capital project;
- Services on works normally provided by an eligible recipient, incurred in the course of implementation of the project, except those specified as eligible expenditures;
- Taxes for which the eligible recipient is eligible for a tax rebate and all other costs eligible for rebates;
- On-going operations, maintenance and/or electricity and fuel costs associated with the operations of capital assets;
- Legal fees, except those explicitly eligible under Section A.1 of this Schedule
- Financing, interest, and taxes, including principal and interest payments to the Canada Infrastructure Bank;
- Leasing land, buildings, equipment and other facilities except for equipment other than equipment directly related to the construction of the project, real estate fees and related costs;
- Provincial sales tax and Goods and Services tax/HST, for which the recipient is

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eligible for a rebate, and any other costs eligible for rebates;

- Purchase or maintenance of diesel buses;
- Expenditures related to any good and services which are received through donation or in-kind contribution;
- Employee costs, with the exception of incremental costs which pertain solely to the implementation of the project under Section A.1 of this Schedule; and
- Maintenance expenditures incurred as part of regular operations.

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# SCHEDULE B – THE PROJECT

## *SCHEDULE B.1: PROJECT DESCRIPTION*

**Project Description:**

*[Below is a condensed version of the project description as provided in the Recipient's application. Please confirm this description is accurate.]*

This project is to construct four multi-use pathways to add to the City of Sault Ste. Marie's overall active transportation network. The total length of all projects proposed is approximately 1.40 kilometers.

- The James Street neighbourhood connection will replace the existing 200 metre long sidewalk along the south side of Albert Street, between James Street and Carmen's Way, with a multi-use path. A signalized pedestrian crossover (PXO) will also be installed at the major intersection to facilitate safe connections for both pedestrians and cyclists.
- The West-End connection will have two segments of sidewalk boulevard converted to off-road, multi-use paths. The peoples road segment is approximately 180 metres long between Churchill Avenue and Second Line and the second line segment is approximately 360 metres long between Peoples Road and Carmen's Way. These proposed paths will complete a cyclist network which would provide a safe and efficient alternative to second line, a major high traffic volume road.
- The Carmen's Way Hub Trail Gap will convert the 185 metre long sidewalk between White Oak Drive and Second Line, into a 3 metre wide multi-use paved path consistent with the rest of the Hub Trail.
- The Mark Street Hub Trail Gab will replace a 470 metre long sidewalk along Mark Street, between Lake Street and Algoma University with a multi-use paved path.

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**Objective(s):**

The objective of the Active Transportation Fund is to increase the total amount, usage, and quality of active transportation infrastructure throughout Canada. In advancing this objective, the Active Transportation Fund would also support the goals of the Strengthened Climate Plan and improve the resilience of communities.

In recognition that almost every journey begins and ends with a form of active transportation, the Fund would prioritize safety and security of Canadians and seek to enhance the impact of other modes of transit by supporting first-and-last kilometre connections to existing and planned infrastructure.

**Activities:**

Project activities will include the construction or acquisition of the following Assets:

| Asset Type | Estimated Length (km) / Count |
|---|---|

| | |
|---|---|
| Multi-use paths | 1km |
| Pavement Markings | X count |
| Signage and trail markers | X count |

**Project Outcomes:**

In order to illustrate how the Project will contribute to the Program's outcomes, the Recipient will collect performance data and report on performance indicators. The information concerning these indicators must be provided within the Annual Report and/or Final Report submitted to Canada.

Canada may update and refine the Program's outcomes and performance indicators in order to support performance measurement and reporting to Parliament and Canadians. Any updates will be discussed with the Recipient and will be made administratively through an exchange of written correspondence between the Parties.

The performance indicators in the Annual Report and/or Final Report may include the following, as applicable:

| ***Project Expected Results*** | |
|---|---|
| | ***Performance Indicators*** |
| ***Immediate Outcomes*** | |
| Increased capacity of active transportation infrastructure | Total kilometres of new active transportation infrastructure built |
| Improved active transportation infrastructure | Total kilometres of active transportation infrastructure enhanced |
| | Total number of safety elements added |
| | Total number of user experience improvements added |
| ***Intermediate Outcomes*** | |
| Increased access to active transportation infrastructure | Community connections created |

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## *SCHEDULE B.2: PROJECT BUDGET*

***Table 1:***

| Project Budget | Amount |
|---|---|
| **Total Project Cost** | $ 1,403,000 |
| **Total Eligible Cost** | $ 1,403,000 |

***Table 2:***

| Total INFC Contribution | Annual Breakdown | | | Total |
|---|---|---|---|---|
| | ***2022-23*** | ***2024-25*** | ***2025-26*** | |
| *INFC Contribution* | $79,200 | $610,800 | $151,800 | $841,800 |

***Table 3: Other Sources of Funding***

| Source | Amount |
|---|---|
| *The Corporation of the City of Sault Ste. Marie* | $561,200 |
| **Total Other Sources of Funding** | $561,200 |

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## *SCHEDULE B.3: CLAIM FREQUENCY TABLE*

-

| Payment Period | Required Documents | Frequency | Payment Date |
|---|---|---|---|
| Progress Claims | Interim Report, including:<br>• Progress Report<br>• Financial Report (claim form, updated cashflow, and Certificate of Compliance for Progress Claim) | At least once per fiscal year, no later than September 15.<br><br>Additional claims may be submitted by the Recipient, no more frequently than every 3 months. | Within 30 calendar days of approval of required documents by Canada |
| Year-end Claim | Year-end Financial Report, including:<br>• Claim form (for costs incurred up to March 31)<br>• Updated Cashflow<br>• Certificate of Compliance for Progress Claim | On or before five (5) business days after March 31. | Within 30 calendar days of approval of required documents by Canada. |
| Annual Report | Annual Report:<br>(Described in Schedule C.2) | No later than sixty (60) days after March 31. | N/A |
| Final Claim | Final Report:<br>(Described in Schedule C.3) | March 31, 2026 | Within 30 calendar days of approval of required documents by Canada |

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# SCHEDULE C – REPORTING REQUIREMENTS

***The Recipient should contact the Active Transportation Fund in accordance with Section 19.16, to ensure the most up-to-date reporting forms are being used, prior to submitting them to Canada.***

Canada will collect information that may be used to analyze the progress of all projects funded by the Program and may inform Program lessons learned and/or be used for communications about the Program.

## *SCHEDULE C.1: INTERIM REPORT*

a) The Recipient will submit Interim Reports to Canada at a timing and frequency determined by Canada, which will be no less frequently than annually but not more frequently than quarterly. The frequency will remain the same, unless the Recipient is otherwise notified by Canada. Notwithstanding the foregoing, for the last Interim Report period of the Fiscal Year, the Recipient will submit an Annual Report instead of an Interim Report.

b) The Interim Report will be attested by a senior designated official, duly authorized by the Recipient and submitted to Canada in an agreed upon format acceptable to Canada.

c) Interim Reports will be comprised of a progress report, a financial report, and two attestations, in formats provided by Canada;

d) The Progress Report must include, at a minimum:

   i. Recipient name, Project title and Project identification number;

   ii. Reporting period dates;

   iii. Construction dates;

   iv. Summary of Project activities and progress achieved to date;

   v. Update on Project risks or issues affecting the progress of the Project, if any, and mitigation measures;

   vi. Planned Project activities for the upcoming period, including any variation from the workplan (if applicable);

   vii. Confirmation of the Project's installed signage, if applicable; and

   viii. Update on Communication Activities to date and future communications plans.

e) The financial report must include at a minimum:

   i. Recipient name, Project title and Project identification #;

   ii. Reporting period dates; and

   iii. Expenditures for the reporting period and updated cash flow forecast for the upcoming fiscal year(s).

f) The Interim Report will be attested by:

   i. a senior designated official, duly authorized by the Recipient; and

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ii. a construction manager or other professional assigned to the project and designated by the Recipient.

## *SCHEDULE C.2: ANNUAL REPORT*

a) The Recipient will submit an annual report ('Annual Report') for the end of each Fiscal Year period covered by this Agreement no later than [sixty (60) days following the end of the Fiscal Year. The Annual Report will be attested by a senior designated official, duly authorized by the Recipient, stating that the report is factually correct and that the Recipient and the Project continue to maintain eligibility under the Program. Notwithstanding the foregoing, for the last Fiscal Year period, the Recipient will submit a Final Report instead of an Annual Report.

b) The Annual Report will be submitted to Canada in an agreed upon format acceptable to Canada and will include at a minimum:

i. Recipient name;

ii. Project title and Project identification number;

iii. Reporting period dates;

iv. Construction dates;

v. Confirmation of the Project's installed signage, if applicable;

vi. Confirmation of Communication requirements met for the reported period year, if applicable;

vii. Summary of the implementation progress of the project, by project phase, including:

- Summary of central project activities (including major construction and any delays, if applicable) for progress achieved to date;
- Planned Project activities for the upcoming Fiscal Year;

viii. Update on results achieved towards the Project outcomes using performance measures identified in Schedule B.1 (Project Description) and by Canada, if applicable.

## *SCHEDULE C.3: FINAL REPORT*

a) The Recipient will submit a Final Report to Canada with the final claim.

b) The final report ('Final Report') will be attested by a senior designated official, duly authorized by the Recipient and submitted to Canada in an agreed upon format acceptable to Canada as substantially identified using the template identified in Schedule D: Certificate of Compliance for Final Claim.

c) The Recipient will submit a Final Report to Canada for approval no later than March 31, 2026.

d) The content of the Final Report will include at a minimum:

i. A general description of the Project's major achievements, including a aggregated information and data identified in Annual Reports for the period of the Project; in Annual Reports;

ii. A completed Schedule F (Declaration of Substantial Completion);

iii. Details of the funds and their management, including:

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i. a description of Project activities and funds expended on Project activities for the period of the Project.

ii. an audit conducted by an independent third party for the period of the Project

iii. results achieved towards the Project outcomes using performance measures identified in Schedule B.1 (Project Description) and by Canada which may inform Program lessons learned and/or be used for communication about the Program; and

iv. a reconciliation of financial reporting.

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# SCHEDULE D – CERTIFICATE(S) OF COMPLIANCE FOR CLAIMS

## *SCHEDULE D.1: CERTIFICATE OF COMPLIANCE FOR PROGRESS CLAIM*

In the matter of the Agreement entered into between His Majesty the King in right of Canada, as represented by the Minister of Intergovernmental Affairs, Infrastructure and Communities, and the Corporation of the City of Sault Ste. Marie (the "Recipient"), represented by _____(Name), concerning the Active Transportation Projects in Sault Ste. Marie, Ontario (2022) Project (the "Agreement").

I, _____(Name), of the City/Town of _____, Province/Territory of _____, declare as follows:

1. That I hold the position of _____ with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.
2. I am duly authorized by the Recipient to give this Certificate under [RECIPIENT INSERTS THE COMPLETE REFERENCE TO THE BY LAW OR INTERNAL POLICY AUTHORITY THAT ALLOWS THEM TO PROVIDE THIS CERTIFICATION] dated [DATE].
3. I have read and understood the Agreement and the progress claim submitted by the Recipient thereunder dated the same date as this Certificate and have knowledge of the business and affairs of the Recipient and have made such examinations or investigations as are necessary to give this Certificate and to ensure that the information contained herein is true and accurate.
4. The expenditures claimed are Eligible Expenditures in accordance with the Agreement.
5. The Recipient, at the date of this Certificate, has performed all covenants under the Agreement that are required to be performed by it on or prior to that date.
6. All representations and warranties of the Recipient contained in the Agreement are true and accurate in all respects at the date of this Certificate as though such representations and warranties had been made at the date of this Certificate.

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Dated, this _____day of _____20___

_____
Signature

## *SCHEDULE D.2: CERTIFICATE OF COMPLIANCE FOR FINAL CLAIM*

In the matter of the Agreement entered into between His Majesty the King in right of Canada, as represented by the Minister of Intergovernmental Affairs, Infrastructure and Communities, and the Corporation of the City of Sault Ste. Marie (the "Recipient"), represented by _____(Name), concerning the Active Transportation Projects in Sault Ste. Marie, Ontario (2022)Project (the "Agreement").

I, _____(Name), of the City/Town of _____, Province/Territory of _____, declare as follows:

1. That I hold the position of _____ with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.
2. I am duly authorized by the Recipient to give this Certificate under [RECIPIENT INSERTS THE COMPLETE REFERENCE TO THE BY LAW OR INTERNAL POLICY AUTHORITY THAT ALLOWS THEM TO PROVIDE THIS CERTIFICATION] dated [DATE].
3. I have read and understood the Agreement and the final claim submitted by the Recipient thereunder dated the same date as this Certificate and have knowledge of the business and affairs of the Recipient and have made such examinations or investigations as are necessary to give this Certificate and to ensure that the information contained herein is true and accurate.
4. The Recipient, at the date of this Certificate, has performed all covenants under the Agreement that are required to be performed by it on or prior to that date.
5. The expenditures claimed are Eligible Expenditures in accordance with the Agreement.
6. All representations and warranties of the Recipient contained in the Agreement are true and accurate in all respects at the date of this Certificate as though such representations and warranties had been made at the date of this Certificate.
7. The Project as defined in the Agreement has been completed.

*[If applicable, add:]*

8. The Project, to the best of my knowledge and belief, conforms to the applicable federal environmental or impact assessment legislation.

*[If applicable, add:]*

9. All applicable mitigation measures, accommodation measures and follow-up measures required to be performed during the Project implementation as a result of Indigenous consultations have been implemented.
10. The Total Financial Assistance received or due for the Project in accordance with Section 3.2 c) (Commitments by the Recipient) is as follows:

    [INCLUDE ALL TOTAL FINANCIAL ASSISTANCE RECEIVED OR DUE]

11. This Certificate of Compliance does not preclude any rights of Canada to verify, audit or inspect as per the terms and conditions of the Agreement.

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12. The Recipient is not entitled to payment of any amount under the Agreement, other than any amount requested by the Recipient in accordance with the Agreement on or prior to the date of this Certificate.

Dated, this _____day of _____20___

_____ Signature

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# SCHEDULE E – COMMUNICATIONS PROTOCOL

## *SCHEDULE E.1: PURPOSE*

This Communications Protocol outlines the roles and responsibilities of each of the Parties to this Agreement with respect to Communications Activities related to the funded Project.

This Communications Protocol will guide all Communications Activity planning, development and implementation with a view to ensuring efficient, structured, continuous and coordinated communications to the Canadian public.

The provisions of this Communications Protocol apply to all Communications Activities related to any Program funding and the Project funded under this Agreement. Such Communications Activities may include, but are not limited to, public or media events, news releases, reports, web and social media products or postings, blogs, project signs, digital signs, publications, success stories and vignettes, photo compilations, videos, advertising campaigns, awareness campaigns, editorials, and multi-media products.

## *SCHEDULE E.2: GUIDING PRINCIPLES*

The Parties recognize the importance of managing the delivery of coherent Communications Activities based on the principle of transparent and open discussion and collaboration.

Communications activities undertaken through this Protocol should ensure that Canadians are informed of infrastructure investments made to help improve their quality of life and that they receive consistent information about the funded Project and its benefits from each Party.

The communication activities undertaken jointly by Canada and the Recipient should recognize the funding of all contributors to the Project.

## *SCHEDULE E.3: GOVERNANCE*

The Parties will designate communications contacts that will work collaboratively to prepare communications activities for the project announcement, milestones, and completion.

## *SCHEDULE E.4: PROGRAM COMMUNICATIONS*

Canada retains the right to meet its obligations to communicate information to Canadians about the Program and the use of funding through its own communications products and activities.

Canada and the Recipient may also include general program messaging and an overview of this Project as an example in their own communications products and activities. The Party undertaking these activities will recognize the funding of the Parties.

Canada and the Recipient agree that they will not unreasonably restrict the other Party or other funding contributors from using, for their own purposes, public communications products related to the Project that were prepared collectively or individually by the Parties, and if web-based, from linking to them.

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## *SCHEDULE E.5: JOINT COMMUNICATIONS*

Canada, the Recipient, or other funding contributors may request to have Joint Communications about the Project.

Joint Communications include, but are not limited to, media events such as news conferences; in-person and virtual funding announcements; official milestone events or ceremonies like ground breakings and openings; and news releases.

The Parties agree to have regular media events about the funding and status of the Project. Key milestones may be marked by public events, news releases and/or other mechanisms.

Joint Communications related to the Project funded under this Agreement should not occur without the prior knowledge and agreement of all Parties as well as the Ultimate Recipient, where applicable.

All Joint Communications material will be approved by Canada prior to release, and will recognize the funding of all Parties.

The requestor of a Joint Communication will provide at least fifteen (15) business days of notice to the other Parties of their intention to undertake such a communication. If the Joint Communication activity is a funding announcement or milestone event, it will take place on and at a mutually agreed upon date, time, and location.

The Party undertaking these activities will provide equal opportunity for the other Parties to participate and choose their own designated representative. Each Party will be represented by an equal number of individuals, in joint communications and events, unless otherwise agreed upon. All Joint Communications will recognize the funding of all contributors.

The Ultimate Recipient of the Project will be responsible for providing communications and logistics support for both virtual or onsite events. Canada will be responsible for development, translation and approvals of joint communications products for funding announcements (ex. news releases, media advisories). Milestone communications (such as ground breakings and ribbon cuttings), will be coordinated by ultimate recipients and all funding partners will be invited and recognized. Communications materials (such as media advisories and news releases) for milestone announcements are developed by the ultimate recipient and will offer Canada and other funding partners the ability to contribute a quote.

All Joint Communications material related to media events must be approved by Canada and recognize the funding of all Parties (Canada, Provinces/Territories, Recipient and others as appropriate).

All Joint Communications material related to funding announcements must reflect Canada's Policy on Official Languages and the Federal Identity Program.

The conduct of all Joint Communications and media events and products will follow the Table of Precedence for Canada.

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## *SCHEDULE E.6 INDIVIDUAL COMMUNICATIONS*

The Recipient will ensure that:

a. Where a website or webpage is created to promote or communicate progress on a funded Project or Projects, it must recognize federal funding through the use of a digital sign or through the use of the Canada wordmark and the following wording, "This project is funded in part by the Government of Canada." The Canada wordmark or digital sign must link to Canada's website, at www.infrastructure.gc.ca. The guidelines for how this recognition is to appear and language requirements are published on Canada's website, at http://www.infrastructure.gc.ca/pub/signage-panneaux/intro-eng.html.

b. The Recipient will be required to send a minimum of one photograph to each of the Parties of the construction in progress, or of the completed project, for use in social media and other digital individual Communications Activities. Sending the photos will constitute permission to use and transfer of copyright. Photographs are to be sent to photo@infc.gc.ca along with the Project's name and location.

## *SCHEDULE E.7: OPERATIONAL COMMUNICATIONS*

The Recipient is solely responsible for operational communications with respect to the Project, including, but not limited to, calls for tender, construction, and public safety notices. Operational communications as described above are not subject to the federal official language policy.

Canada does not need to be informed on operational communications. However, such products should include, where appropriate, the following statement, "This project is funded in part by the Government of Canada."

Canada and the Recipient will share information promptly with the other Party should significant media inquiries be received or if major stakeholder issues relating to the Project arise.

## *SCHEDULE E.8: SIGNAGE*

Canada, the Recipient and other funding contributors may request a Project sign recognizing their funding contribution to a Project.

Where a physical sign is to be installed, unless otherwise agreed upon by Canada, it will be the Ultimate Recipient who will produce and install a joint physical sign that recognizes funding of each Party at each Project site in accordance with current federal signage guidelines.

The joint sign design, content, and installation guidelines for how this recognition is to appear and language requirements are published on Canada's website, at http://www.infrastructure.gc.ca/pub/signage-panneaux/intro-eng.html.

The recognition of funding contributions of each Party and the Ultimate Recipient will be of equal prominence and visibility.

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Digital signage may also be used in addition to or in place of a physical sign in cases where a physical sign would not be appropriate due to project type, scope, location or duration.

Where the Recipient decides to install a permanent plaque or other suitable marker with respect to the Project, it must recognize the federal contribution and be approved by Canada.

The Recipient agrees to inform Canada of federal sign installations, through the project progress report (Schedule C).

Where a physical sign is being installed, signage should be erected at the Project site(s) thirty (30) days, or one month, prior to the start of construction, be visible for the duration of the Project, and remain in place until thirty (30) days after the construction is completed and the infrastructure is fully operational or open for public use.

Signage should be installed in a prominent and visible location that takes into consideration pedestrian and traffic safety and visibility.

### *SCHEDULE E.9: COMMUNICATIONS COSTS*

The eligibility of costs related to communication activities that provide public information on this Agreement will be subject to Schedule A (Eligible and Ineligible Expenditures) and must be agreed to in advance by Canada.

### *SCHEDULE E.10: ADVERTISING CAMPAIGNS*

Recognizing that advertising can be an effective means of communicating with the public, Canada and the Recipient may, at their own cost, organize an advertising or public information campaign related to the Program or the Project. However, such a campaign must respect the provisions of this Agreement and the Government of Canada requirements for advertising. In the event of such a campaign, each Party agrees to inform the other Party of its intention, no less than twenty-one (21) business days prior to the campaign launch.

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# SCHEDULE F – DECLARATION OF SUBSTANTIAL COMPLETION[5]

In the matter of the Agreement entered into between His Majesty the King in right of Canada, as represented by the Minister of Infrastructure and Communities, and the Corporation of the City of Sault Ste. Marie] (the "Recipient"), represented by _____(Name), concerning the Active Transportation Projects in Sault Ste. Marie, Ontario (2022) Project (the "Agreement").

I, _____(Name), of the City/Town of _____,

Province/Territory of _____, declare as follows:

1. I hold the position of _____with the Recipient and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.

2.

a) I have received the following documents for the Active Transportation Projects in Sault Ste. Marie, Ontario (2022) Project:

   i. [LIST NAME OF RELEVANT DOCUMENT, e.g. Certificate of Completion, Certificate of Performance, Occupancy Permit, etc.] [INSERT if applicable "signed by _____ (Name), a _____ (Profession, e.g. professional engineer, professional architect or other applicable professional) for the Project."]

   ii. …

b) Based on the above documents and the representations made to me by the professionals identified in section 2(a) above, I declare to the best of my knowledge and belief that the Project has been substantially completed, in that it can be used for its intended use, as described in Schedule B.1 (Project Description), as defined in the Agreement, on the _____ day of the _____ 20__.

*[Insert #3, if applicable:]*

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[5] Include known documents required under the program in in the space provided. Use a separate line for each document using the same text/approach as in subparagraph i of each section. Additional documents may be added to this schedule over the course of the agreement on concurrence of the Parties. If applicable, as per Section 5 (Agreement Monitoring Committee), the AMC may review and recommend at any point over the duration of the Agreement that notice be provided to change this schedule. As per Section 9 (sub-section 9.3 or 9.5 depending on the circumstance) - Declaration of Substantial Completion - the Recipient is to request confirmation in writing from Canada as to whether the list of documents is complete prior to signing the Declaration and submitting it to Canada with the final claim.

3. I have received the following documents and based on these documents and representations made to me by the professionals identified below, I declare to the best of my knowledge and belief that the Project conforms with the guidelines of the Agreement:

    i. [LIST NAME OF RELEVANT DOCUMENT, e.g. Certificate of Completion, Certificate of Performance, Occupancy Permit, etc.] [INSERT if applicable "signed by _____ (Name), a _____ (Profession, e.g. professional engineer, professional architect or other applicable professional) for the Project."]

    ii. …

*[Insert #4, if applicable:]*

4. I have received the following documents and based on these documents and representations made to me by the professionals identified below, I declare to the best of my knowledge and belief that the Project conforms with, as applicable, the [LIST THE APPLICABLE ENVIRONMENTAL REVIEW OR ASSESSMENT *e.g., the Canadian Environmental Assessment Act, 2012, Impact Assessment Act, or Northern Regime*]*:*

    i. [LIST NAME OF RELEVANT DOCUMENT] signed by _____ (Name), an _____ (Profession, e.g. environmental consultant or other applicable professional).

    ii. …

5. All terms and conditions of the Agreement that are required to be met as of the date of this declaration have been met.

Declared at _____ (City/Town), in _____ (Province/Territory)

this _____ day of _____, 20_____.

_____
Signature

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**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-127**

**AGREEMENT**: A by-law to authorize the execution of the Agreement between the City and Sault Ste. Marie Gymnastics Club for the lease of space at the John Rhodes Community Centre.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated September 9, 2024 between the City and Sault Ste. Marie Gymnastics Club, a copy of which is attached as Schedule “A” hereto. This Agreement is for the lease of space at the John Rhodes Community Centre.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

lv\\citydata\LegalDept\Legal\Staff\COUNCIL\BY-LAWS\2024\2024-127 Gymnastics Club agreement.docx

**THIS AGREEMENT** made this **9th** day of **September**, **2024.**.

**BETWEEN:**

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**
**(hereinafter called the “City”)**

**of the FIRST PART**

**- and -**

**SAULT STE. MARIE GYMNASTIC CLUB**
**(hereinafter called the “Club”)**

**of the SECOND PART**

**WHEREAS** the Club has been operating in the John Rhodes Centre since 1979;

**AND WHEREAS** the previous agreements between the City and the Club was signed under the authority of By-law 96-48; 2000-190 and 2005-18;

**AND WHEREAS** the City undertook an expansion of the John Rhodes Community Centre during the term of the 2000-190 lease with the Club, the result of which was that the area the Club leased increased to 10,724.321 sq.ft. (from 7,123.424 sq.ft. originally);

**AND WHEREAS** the current lease expires on December 31, 2024, the purpose of this agreement is for the Club to renew its agreement with the City;

**NOW THEREFORE** the parties in consideration of the mutual covenants and agreements contained in this agreement and subject to the terms and conditions contained in this agreement agree as follows:

**1. <u>TERM</u>**

The City agrees to lease to the Club for its use 10,724 square feet for the gymnasium facilities including adjoining washroom and change rooms for the term commencing January 1, 2025 to December 31, 2029.

The Club, when not in default of the terms of this agreement, shall have the right to renew this agreement for one (1) optional period of five (5) years. The Parties acknowledge that the concept of rent will be negotiated into the subsequent renewals. If negotiations prove successful, the term of the agreement shall expire on December 31, 2034.

**2. RENTAL PAYMENT**

From January 1, 2025, to March 31, 2029 the Club will pay One Thousand Six Hundred Fifty-Four Dollars and Sixty-Two Cents ($1,654.62) a month plus Five Hundred ($500.00) Dollars for pro-rated utilities. For the remainder of the term, the utilities will increase every January 1st, by the Consumer Price Increase, Ontario ("CPI") on both Rent and Utility costs.

**3. DISCRIMINATION PROHIBITED**

The Club agrees that no person shall be denied membership in the Club on the basis of the person's sex, race, creed, colour, nationality, ancestry, place of origin, sexual orientation, ethnic origin, citizenship, age, marital status, gender identity, gender expression, disability, record of offences, or family status.

**4. INSURANCE**

The Club agrees to take out and keep in force during the term of this agreement, comprehensive general insurance subject to limits of not less than $5,000,000.00, inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof and molestation and abuse coverage. The comprehensive general liability insurance shall include liability coverage for: premises and operations; product or completed operations; written contractual liability; cross liability; contingent employer's liability; personal injury liability arising out of false arrest, detention or imprisonment or malicious prosecution; libel, slander or defamation of character; invasion of privacy; wrongful eviction or wrongful entry; and liability with respect to non-owned licensed motor vehicles. The City shall be added as an Additional Insured to the required liability insurance policy or policies and no such policy shall be cancelled or allowed to lapse without at least thirty (30) days written notice having been given to the City. An Insurance Certificate, on the C.S.I.O. form and satisfactory to the City's Risk Manager, shall be provided to the City prior to the commencement of the Licence Date.

**5. INDEMNIFICATION**

The Club agrees to indemnify the City against all liability, claims, damages, or expenses arising out of any act of negligence by the Club, its servants, agents, invitees, or licensees in or about the Club's area, including liability for injury or damage to the person or

property of the Club's servants, employees, agents, invitees or licencees.

**6. EQUIPMENT AND MATERIALS**

The City assumes no responsibility for loss or damage to equipment or material belonging to the Club, its servants, agents, invitees or licensees in or about the Club's area, including liability for injury or damage to the person or property of the Club's servants, employees, agents, invitees or licensees.

**7. ADDITIONS OR ALTERATIONS TO PROPERTY**

The Club shall not construct or cause to be constructed any addition to the property or make any renovations to the property without first obtaining the prior written approval of the Manager of Community Arenas ("Manager"). In the event that the Manager authorizes any such addition or alteration the costs of such construction shall be paid by the Club.

**8. CONDITION OF PROPERTY**

At the termination of this agreement or any extension hereof the Club agrees that the property shall be in the same condition as when the Club entered the property, reasonable wear and tear excepted.

**9. CLUB ACTIVITIES**

The Club shall be wholly responsible for the activities carried on and things done within the gymnasium facilities during the term of this agreement and shall do its utmost to advise the public that the City is not to be contacted respecting events carried on by the Club.

**10. CONCESSIONS AND REFRESHMENT STANDS**

The City retains the right to operate the concessions and refreshment stands and the Club shall not furnish or sell liquid refreshments, food, or other concessions in any part of the premises except upon prior approval and consent of the Manager of Community Arenas.

**11. UTILITY COSTS**

With respect to utilities, the amounts for electricity, heat and water for the gymnasium facilities occupied by the Club shall be paid by the Club on a pro rata basis as set out in Section 2.

**12. MAINTENANCE**

The Club shall be responsible for maintenance of the gymnasium facilities including adjoining washrooms and change rooms and the Club shall supply the personnel, equipment, and all cleaning supplies necessary for the property maintenance of the gymnasium facilities, including adjoining washrooms and change rooms.

The City shall be responsible for maintaining the building, other than the gymnasium facilities, which includes HVAC, air conditioning, heating, mechanical, plumbing and electrical.

**13. INTERFERENCE**

The Club shall not interfere with the use of the other facilities of the John Rhodes Community Centre by other lessees of the City or by the public, provided that reasonable use by the Club of the gymnasium facilities, pursuant to the terms of this agreement, shall not be deemed to be such interference. The Club agrees to advise the Manager of Community Arenas at least 30 days in advance of any meets or events being held by the Club other than regular Club programming.

**14. FINANCIAL STATEMENTS**

The Club agrees to provide the City with copies of the Club's year-end Financial Statements to be submitted to the City by July 1st of every year.

**15. REGULATIONS AND REQUIREMENTS**

The Club shall not carry on any activities on the premises which, in the opinion of the City, constitutes a nuisance. The Club shall comply with all regulations and requirements of the City as may be in force with regards to the use of the gymnasium facilities.

The Club shall notify any Board appointment changes as they occur and provide current contact information to the Manager of Community Arenas.

**16. TAXES**

The Club agrees that if any taxes are payable as a result of the Club's use of the leased premises, the Club shall pay the taxes.

**17. DEFAULT**

(a) If the Club for any reason fails to make a payment of the capital costs required of it and such default continues for a period of 30 days after the payment was due this lease shall immediately be terminated, and the Club shall pay to the City any reserves that it has created for the payment of the capital costs.

(b) If the Club defaults for any other reason than as set out in subsection (a) and such default continues for a period of 30 days after notice of the default is given by the City to the Club, the City may without further notice enter upon the area leased to the Club and take possession of it and this lease shall be deemed to be terminated.

(c) The City shall be entitled to seize any assets of the Club left in the leased area at the time of default, including equipment owned by the Club.

**18. <u>SUBLEASE</u>**

The Club shall not sublease any of the premises leased under this Agreement without the written approval of the Manager of Community Arenas which approval shall not unreasonably be withheld.

**IN WITNESS WHEREOF** the said parties hereto have hereunto set their hands and seals.

**SIGNED, SEALED AND DELIVERED**
**in the presence of**

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

_____
**MAYOR – MATTHEW SHOEMAKER**

_____
**CITY CLERK – RACHEL TYCZINSKI**

**SAULT STE. MARIE GYMNASTIC CLUB**

_____
**PRESIDENT – SARA KEATING**

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-128**

**ENGINEERING**: A by-law to authorize the execution of the Agreement between the City and AECOM Canada Ltd. for engineering services for the reconstruction of Peoples Road (Churchill Avenue to Third Line).

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated September 9, 2024 between the City and AECOM Canada Ltd., a copy of which is attached as Schedule “A” hereto. This Agreement is for engineering services for the reconstruction of Peoples Road (Churchill Avenue to Third Line).

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

tm

# Association of Consulting Engineering Companies | Ontario (ACEC-Ontario) in partnership with the Municipal Engineers Association (MEA)

# CLIENT/ENGINEER AGREEMENT

# FOR

# *PROFESSIONAL CONSULTING SERVICES*

*2020*
*(VERSION 3.1)*

*Please enter the title of the project/ assignment*

Reconstruction of Peoples Road
from Churchill Avenue to Third Line

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**AGREEMENT**

**FOR**

**PROFESSIONAL CONSULTING SERVICES**

**Dated the** 9th **day of** September **20** 24

**-BETWEEN-**

The Corporation of the City of Sault Ste. Marie

Hereinafter called the 'Client'

**-AND-**

AECOM Canada Ltd.

Hereinafter called the 'Engineer'

WHEREAS the Client intends to (Description of Project)

Provide engineering services for the Reconstruction of Peoples Road from Churchill Avenue to Third Line including design, traffic analysis, contract administration, and field inspection.

Hereinafter called the 'Project' and has requested the Engineer to furnish professional Services in connection therewith.

**NOW THEREFORE WITNESSETH** that in consideration of the covenants contained herein, the Client and the Engineer mutually agree as follows:



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# DEFINITIONS

1. **Client**
   Client shall be the party identified herein, and shall mean a municipality within the Province of Ontario or a related municipal organization representing the interests of Ontario municipalities.

2. **Engineer**
   Engineer shall be the party identified herein, and shall be properly qualified to provide the professional services prescribed in this Agreement.

3. **Municipal Engineers Association (MEA)**
   MEA shall mean the association of public sector Professional Engineers engaged in performing the various functions that comprise the field of municipal engineering in Ontario

4. **Association of Consulting Engineering Companies | Ontario (ACEC-Ontario)** shall mean the industry association created to represent the business interests of member consulting engineering firms, working with all levels of government and other stakeholders to promote fair procurement and business practices to support its member firms as necessary.

5. **Order of Precedence**:
   i. Standard Agreement
   ii. Schedule A: Supplementary Conditions to the Standard Agreement
   iii. Schedule B: Addenda to the Request for Proposals (RFP)
   iv. Schedule C: Request for Proposal (RFP)
   v. Schedule D: Proposal submission document(s) from the Engineer
   vi. Schedule E: Other


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# ARTICLE 1 - GENERAL CONDITIONS

## 1.1 Retainer

The Client hereby retains the services of the Engineer in connection with the Project and the Engineer agrees to provide the services described in Article 2 (Services to be provided) for the Project under the general direction and control of the Client.

## 1.2 Compensation

The Client shall pay the Engineer in accordance with the provisions set forth in Article 3. For purposes of this agreement, the basis of payment shall be as specified in Article 3.2.

## 1.3 Staff and Methods

The Engineer shall perform the services under this agreement with the degree of care, skill and diligence normally provided in the performance of such services as contemplated by the agreement at the time such services are rendered and as required by the Professional Engineers Act (RSO 1990, Chapter P.28) and the regulations therein. The Engineer shall employ only competent staff who will be under the supervision of a senior member of the Engineer's staff. The Engineer shall obtain the prior agreement of the Client before making any changes to the staff list after commencement of the Project.

## 1.4 Drawings and Documents

Subject to Article 3, drawings and documents or copies thereof required for the Project shall be exchanged between the parties on a reciprocal basis. Documents prepared by the Engineer for the Client may be used by the Client, for the Project herein described, including "record" drawings. Subject to Article 1.5, the Client has ownership of the drawings and the client indemnifies the Engineer for unauthorized use of the documents and deliverables.

## 1.5 Intellectual Property

All concepts, products or processes produced by or resulting from the Services rendered by the Engineer in connection with the Project, or which are otherwise developed or first reduced to practice by the Engineer in the performance of his/her Services, and which are patentable, capable of trademark or otherwise, shall be and remain the property of the Engineer.

The Client shall have permanent non-exclusive royalty-free license to use any concept, product or process, which is patentable, capable of trademark or otherwise produced by or resulting from the Services rendered by the Engineer in connection with the Project and for no other purpose or project.

## 1.6 Records and Audit

a) In order to provide data for the calculation of fees on a time basis, the Engineer shall keep a detailed record of the hours worked by staff employed for the Project.
b) The Client may inspect timesheets and record of expenses and disbursements of the Engineer during regular office hours with respect to any item which the Client is required to pay on a time scale or disbursement basis as a result of this Agreement.





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c) The Engineer, when requested by the Client, shall provide copies of receipts with respect to any disbursement for which the Engineer claims payment under this Agreement.
d) For seven (7) years after the expiry date or any date of termination of the Agreement, the Engineer shall maintain all necessary records to substantiate i) all charges and payments under the Agreement and ii) that all deliverables were provided in accordance with the Agreement.

## 1.7 Changes and Alterations and Additional Services

With the consent of the Engineer, the Client may in writing at any time after the execution of the Agreement or the commencement of the Services delete, extend, increase, vary or otherwise alter the Services forming the subject of the Agreement, and if such action by the Client necessitates additional staff or Services, the Engineer shall be paid in accordance with Section 3.2.2.1 for such additional Services and staff employed directly thereon, together with such expenses and disbursements as allowed under Section 3.2.4, or as otherwise agreed in writing between the parties.

## 1.8 Delays

In the event that the start of the project is delayed for sixty (60) days or more for reasons beyond the control of the Engineer, the Engineer shall have the right to renegotiate the agreement before the commencement of the project.

## 1.9 Suspension or Termination

The Client may at any time by notice in writing suspend or terminate the Services or any portion thereof at any stage of the project. Upon receipt of such written notice, the Engineer shall perform no further Services other than those reasonably necessary to close out his/her Services. In such an event, the Engineer shall be entitled to payment in accordance with Section 3.2 for any of the Engineer's staff employed directly thereon together with such expenses and disbursements allowed under Section 3.2.

If the Engineer is an individual and deceases before his/her Services have been completed, this Agreement shall terminate as of the date of his/her death, and the Client shall pay for the Services rendered and disbursements incurred by the Engineer to the date of such termination.

## 1.10 Indemnification

The Engineer shall indemnify and save harmless the Client from and against all claims, actions, losses, expenses, costs or damages of every nature and kind whatsoever which the Client, his employees, officers or agents may suffer, to the extent the Engineer is legally liable resulting from the negligent acts of the Engineer, his employees, officers or agents in the performance of this Agreement.

The Client agrees to hold harmless, indemnify and defend the Engineer from and against any and all claims, actions, losses, expenses, costs or damages of every nature including liability and costs of defense arising out of or in any way connected with the presence, discharge, release or escape of contaminants of any kind, excluding only such liability as may arise out of the negligent acts of the Engineer in the performance of his/her Services to the Client within this project.

## 1.11 Insurance

The Client will accept the insurance coverage amount specified in this clause section (a) or (b), or whichever is applicable to the claim or as specified in the RFP as the aggregate limit of liability of the Engineer for Clients damages.

a) Comprehensive General Liability and Automobile Insurance



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The Insurance Coverage shall be $_5,000,000_ per occurrence and in the aggregate for general liability and $_2,000,000_ for automobile insurance. When requested, the Engineer shall provide the Client with proof of Comprehensive General Liability and Automobile Insurance (Inclusive Limits) for both owned and non-owned vehicles.

b) Professional Liability Insurance
The Insurance Coverage shall be in the amount of $_2,000,000_ per claim and in the aggregate. When requested, the Engineer shall provide to the Client proof of Professional Liability Insurance carried by the Engineer, and in accordance with Professional Engineers Act (RSO 1990, Chapter P.28) and Regulations therein.

c) Additional Coverage
If the Client requests to have the amount of coverage increased from that detailed in the RFP, or requests other special insurance for this Project then the Engineer shall endeavour forthwith to obtain such additional or special insurance at the Client's expense as a disbursement allowed under Section 3.2.

It is understood and agreed that the coverage provided by these policies will not be changed or amended in any way nor cancelled by the Engineer until (30) days after written notice of such change or cancellation has been delivered to and acknowledged by the Client.

## 1.12 Force Majeure

The Client agrees that the Engineer is not responsible for damages arising directly or indirectly from any delays for causes beyond the Engineer's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labour disputes; severe weather disruptions or other natural disasters or acts of God; fires; riots, war or other emergencies; failure of performance by the Client or the Client's contractors or consultants; or discovery of any hazardous substances or differing site conditions.

In addition, if such delays resulting from any such causes increase the cost or time required by the Engineer to perform its services in an orderly and efficient manner, the Engineer shall be entitled to a reasonable adjustment in schedule and compensation.

## 1.13 Contracting for Construction

The Engineer or any person, firm or corporation associated or affiliated with or subsidiary to the Engineer shall not tender for the construction of the Project or have an interest either directly or indirectly in the construction of the Project.

## 1.14 Assignment

Neither party may assign this Agreement or any portion thereof without the prior consent in writing of the other party.

## 1.15 Previous Agreements

This Agreement supersedes all previous agreements, arrangements or understandings between the parties whether written or oral in connection with or incidental to the Project.

## 1.16 Approval by Other Authorities

Unless otherwise provided in this Agreement, where the work of the Engineer is subject to the approval or review of an authority, department of government, or agency other than the Client, such applications for approval or review shall be the responsibility of the Engineer, but shall be submitted through the offices of the Client and unless authorized by the Client in writing, such applications for approval or review shall not


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be obtained by direct contact by the Engineer with such other authority, department of government or agency. Costs for all application fees shall be borne by the Client unless otherwise provided for by the Engineer. The foregoing in no way limits the Engineer's responsibility to identify, understand and coordinate any and all approvals and permits required for the Project unless otherwise specified in the RFP or agreed to by the Client.

### 1.17 Sub-Consultants

The Engineer may engage Sub-Consultants for specialized services provided that prior approval is obtained, in writing, from the Client and may add a mark-up of 5 % of the cost of such Services to cover office administration costs when claiming reimbursement from the Client.

### 1.18 Inspection (Review by the Client)

The Client, or persons authorized by the Client, shall have the right, at all reasonable times, to inspect or otherwise review the Services performed, or being performed, under the Project and the premises where they are being performed.

### 1.19 Publication

The Engineer agrees to obtain the consent in writing of the Client before publishing or issuing any information regarding the Project.

### 1.20 Confidential Data

The Engineer shall not divulge any specific information identified as confidential, communicated to or acquired by him/her, or disclosed by the Client in the course of carrying out the Services provided for herein. These obligations of confidentiality shall not apply to information which is in the public domain, which is provided to the Engineer by a third party without obligation of confidentially, which is independently developed by the Engineer without access to the Client's information, or which is required to be disclosed by law or court order. No such information shall be used by the Engineer on any other project without the approval in writing of the Client.

### 1.21 Dispute Resolution

1) Negotiation

   a) In the event a matter of difference between the Engineer and the Client in relation to the Contract the grieved party shall send a notice in writing of dispute to the other party which contains the particulars of the matter in dispute and the relevant provisions of the Contract Documents. The responding party shall send a reply in writing to the dispute within ten (10) business days after receipt of the notice of dispute setting out particulars of this response and any relevant provisions of the Contract Documents.

   b) The Engineer and the Client shall make all reasonable efforts to resolve their dispute by amicable negotiations and agree to provide, without prejudice, frank, candid and timely disclosure of any and all relevant facts, information, and documents to facilitate these negotiations.



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c) In the event of failure by the Engineer and the Client to reach agreement within ten (10) business days of receipt of the responding party's reply, or if either party concludes that further negotiation is unlikely to result in agreement, the matter shall be referred to mediation as provided in Section 2 herein.

2) Mediation

a) The Engineer and the Client shall jointly select an impartial Mediator who shall be, preferably, properly qualified in the area of work as contemplated by this Contract. In the event that the parties, acting reasonably, cannot agree on a mediator, the candidates selected by the parties shall, acting reasonably, choose a third party to act as the Mediator.
b) The Mediator shall meet with the parties within ten (10) business days after the selection of the Mediator, or as soon thereafter as is practicable, to attempt to mediate and resolve the dispute. The Engineer and the Client shall observe such reasonable procedures for conducting the mediation as the Mediator may reasonably request.
c) If no agreement is reached upon mediation, or if either party concludes that further mediation is unlikely to result in agreement, then either the Engineer or the Client may request the Mediator to recommend (and only recommend) a basis, or bases, for resolution of the dispute. The Mediator shall, after consideration of the parties' positions and written submissions (if so requested), issue a written recommendation in this regard. Any recommended basis for resolution shall have absolutely no binding effect upon either party unless both parties agree to accept it and shall be without prejudice to the parties' positions in any further proceeding.
d) If no agreement is reached either party may refer such matter as is arbitrable to arbitration as provided in Section 3 herein or exercise any legal rights it may have.
e) All meetings and proceedings shall be held in the municipality of the Client or a reasonable alternate at a time and location as determined by the parties.
f) The costs and expenses of the Mediator shall be shared equally by the Engineer and the Client.

3) Arbitration

a) In the event that the parties are unable to settle any dispute between them which is under mediation, either party may refer such matter to arbitration as provided herein:
    i. The Client and the Engineer shall select an arbitrator within ten (10) business days of the submission of a dispute to arbitration under this Section, which arbitrator shall be neutral and independent of the parties. If the parties are unable to agree on an arbitrator, either party shall be at liberty to seek an appointment of an arbitrator upon application under the Arbitration Act, 1991, S.O. 1991, C. 17.
    ii. The arbitration shall be conducted in accordance with the provisions of the *Arbitration Act, 1991*, S.O. 1991, C.17, unless the parties otherwise agree. If the issue in dispute is particularly time sensitive, the parties shall, in good faith, take such reasonable steps as may be required to expedite the arbitration process. In any event, all disputes shall be submitted to the arbitrator within thirty (30) calendar days of the selection of the arbitrator. All arbitration meetings and proceedings shall be held in the municipality of the Client or a reasonable alternate, at a time and location determined by the parties, but in any event no later than thirty (30) calendar days following the submission of the dispute to the arbitrator.
    iii. In addition to the examination of the parties by each other, the arbitration panel may examine, in the ordinary course, the parties or either of them and the witnesses in the matter referred to the arbitration panel, and the parties and witnesses, if examined, shall be examined on oath or affirmation.
    *iv.* The arbitration panel shall, after full consideration of the issues in dispute, the relevant facts and applicable law, render a decision within thirty (30) calendar days after argument of the issue to the arbitrator, which decision shall be final and binding on the parties and not subject to appeal or challenge, except such limited relief provided under Subsection 45(1) (appeal on a question of law, with leave) or Section 46 (setting aside award) of the *Arbitration Act, 1991.*
    v. Each party shall bear is own costs and expenses incurred in the arbitration, and the parties shall share equally in the costs and expenses of the arbitrator.


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*vi.* Any award of the arbitration panel may, at the instance of either of the parties to this Agreement and without notice to the other of them, be made an Order of the Superior Court of Ontario, pursuant to the *Arbitration Act, 1991* and the *Courts of Justice Act,* R.S.O. 1990, c.C-43.

4) Adjudication

a) Nothing in this Agreement shall prevent the right of either the Engineer or the Client to refer to adjudication any dispute which may be adjudicated under the provisions of section 13.5 of the *Construction Act*, R.S.O. 1990, c. C-30.

b) Any such adjudication shall be governed by the provisions of Part II.1 CONSTRUCTION DISPUTE INTERIM ADJUDICATION of the *Construction Act*.

## 1.22 Time

The Engineer shall perform the Services in accordance with the requirements of Article 2 and shall complete any portion or portions of the Services in such order as the Client may require.

The Client shall give due consideration to all designs, drawings, plans, specifications, reports, tenders, proposals and other information submitted by the Engineer, and shall make any decisions which he/she is required to make in connection therewith within a reasonable time so as not to delay the work of the Engineer.

## 1.23 Estimates, Schedules and Staff List

### 1.23.1 Preparation of Estimate of Fees, Schedule of Progress and Staff List

When requested by the Client, and where payment is calculated on a time basis, the Engineer shall provide, for approval by the Client:

a) An estimate of the total fees to be paid for the Services.
b) A Schedule showing an estimate of the portion of the Services to be completed in each month and an estimate of the portion of the fee which will be payable for each such month.
c) A Staff list showing the number, classifications and hourly rate ranges for staff, Principals and Executives, for which the Engineer will seek payment on a time basis. The Engineer shall relate such information to the particular type of work that such staff is to perform, while employed on the Project. Such list shall designate the member of the Engineer's staff who is to be the liaison person between the Engineer and the Client.

### 1.23.2 Subsequent Changes in the Estimate of Fees, Schedule of Progress and Staff List

The Engineer will require prior written approval from the Client for any of the following changes:

a) Any increase in the estimated fees beyond those approved under Subsection 1.23.1(a).
b) Any change in the schedule at progress which results in a longer period than provided in Subsection 1.23.1 (b).
c) Any change in the number, classification and hourly rate ranges of the staff provided under Subsection 1.23.1 (c).

### 1.23.3 Monthly Reporting of Progress

When requested by the Client, the Engineer shall provide the Client with a written report showing the portion of the Services completed in the preceding month.



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## 1.24 Additional Conditions

Any requirements regarding insurance, WSIB, permits, approvals, AODA, etc. to be listed here. If there are no additional conditions, then this section is to be left blank. Documentation supporting additional conditions detailed here shall be contained in Article 5.

N/A



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## ARTICLE 2 – SERVICES TO BE PROVIDED

2.1 Services to be provided by Engineer as detailed in the RFP and as provided for in the Engineer's Proposal.

Refer to the attached City of Sault Ste. Marie Request for Proposal, and AECOM's Proposal and Time and Task Breakdown dated August 13, 2024.

2.2 Services to be provided by Client as detailed in the RFP and as provided for in the Engineer's Proposal.

Refer to the attached City of Sault Ste. Marie Request for Proposal, and AECOM's Proposal and Time and Task Breakdown dated August 13, 2024.



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# ARTICLE 3 - FEES AND DISBURSEMENTS

## 3.1 Definitions

For the purpose of this Agreement, the following definitions shall apply:

**a) Cost of the Work:**

i. The "Cost of the Work" shall mean the total construction cost of the Project including all materials, equipment, sales taxes, labour and contractor's overhead and profit, necessary to complete the work for which the Engineer prepares designs, drawings or specifications, for which he/she is responsible. Where sales taxes are not included in the cost of the work, the fee shall be adjusted upwards by the factor equivalent to the sales taxes. The adjusted fee may be computed to the nearest one-tenth of one percent (1/10%).

ii. Wherever the Client furnishes labour or other service which is incorporated in the work, the current price of labour or other service when the work was executed shall be used to compute the Cost of the Work.

iii. Whenever used materials or equipment is furnished by or on behalf of the Client, the fair market value of such materials or equipment, as though it was purchased new, shall be used to compute the Cost of the Work.

iv. In computing the Cost of the Work, no deductions shall be made on account of any penalties or damages claimed by the Client from any contractor or on account of any other sum withheld from any contractor.

v. The Cost of the Work shall not include any fees and disbursements due to the Engineer, the Client's engineering and office expenses, or cost of land.

**b) Site:**

Site includes the actual work site and other locations where the checking of materials, equipment and workmanship is carried out.

## 3.2 Basis of Payment for this agreement

Fees Calculated on Time

***Note: If you have multiple bases of payment please select "Applies" in the appropriate sections below. If one basis of payment applies, be sure it is the only option selected.***

### 3.2.1 Fees Calculated on a Percentage of Cost Basis

The Client shall pay the Engineer fees to be calculated as a percentage of the Cost of the Work for normal projects as follows:

**CALCULATION OF FEE**

| TYPE OF SERVICE | PERCENTAGE |
|---|---|
| | |
| | |
| | |
| | |



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### 3.2.2 Fees Calculated on a Time Basis

a) Fees

The Client shall pay the Engineer a fee, calculated on a time basis, for that part of the Services described in Article 2. Fees on a time basis for all staff shall be hourly rates based on job classifications as detailed in the Engineer's proposal.

For a project of over one (1) year duration, or for projects which become extended beyond one (1) year in duration, the Engineer may from time to time seek approval from the Client to adjust hourly rates and such approval shall not be unreasonably withheld.

b) Time Expended

All time expended on the assignment, whether in the Engineer's office, at the Client's premises, or elsewhere, and including travel time, shall be chargeable.

### 3.2.3 Upset Cost Limit

(a) The Engineer shall be paid a fee, calculated on a time basis, for the Services.

(b) Included in the fee, the Engineer shall be reimbursed at cost plus an administrative charge of 5 % for all reasonable expenses properly incurred by them in connection with the Services, including but not limited to: vehicle use charges, traveling and living expenses, long distance telephone charges, report production costs, photography, special delivery charges, supplies and equipment, field equipment costs, laboratory costs. Computer and office charges are considered part of overhead and shall not be invoiced as disbursements.

(c) Notwithstanding Subsections (a) and (b) of this Section, the total fees and disbursements paid by the Client to the Engineer for the Services shall not exceed the total upset amount of $1,221,645.00 plus, applicable taxes made up as follows:

~~(i) $_____ plus, applicable taxes for Core Services as described in Schedule A; and,~~

~~(ii) $_____ plus, applicable taxes as a Contingency Allowance for Additional Services that may be required but are not included in Schedule A.~~

(d) Notwithstanding Subsections (a) and (b) of this Section, the Client, at its sole discretion, may limit the fees and disbursements paid by the Client to the percentage equivalent to the project complete in the opinion of the Client.

(e) The Engineer must request and receive the written approval of the Client before any Additional Services are carried out that are not included in Schedule A. The Engineer shall not be entitled to any payment from the Contingency Allowance unless the Engineer has satisfied this condition. When approving Additional Services that are not included in Schedule A, the Client, at its sole discretion, may, in writing, set a limit on the monies from the Contingency Allowance that may be permitted for the requested Additional Services.

### 3.2.4 Reimbursable Expenses – Apply to 3.2.1. through 3.2.3. and shall be included in 3.2.5.

In addition to the fee, the Engineer shall be reimbursed at cost plus an administrative charge of 5 %, for all expenses and disbursements properly incurred by the Engineer in connection with the project.

### 3.2.5 Lump Sum Basis

a) Fees for the scope of work covered under this Agreement will be on a Lump Sum Price Basis, inclusive or labour, disbursements and reimbursable expenses.

b) Monthly progress invoices will be based on the percentage of project completed or



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milestone achieved as detailed in the RFP.

c) If the project is abandoned or delayed for any reason beyond the Engineer's control, the Client shall pay a fee for services rendered to that date, plus the termination expenses reasonably incurred by the Engineer in winding down the project.

## 3.3 Payment

### 3.3.1 Fees Calculated on a Time Basis Applies

The Engineer shall submit an invoice to the Client for all Services completed in the immediately preceding month.

### 3.3.2 Fees Calculated on a Percentage of Cost Basis Does Not Apply

a) Monthly Payment

The Engineer shall submit an invoice to the Client for that part of the design of the Project completed in the immediately preceding month calculated upon the basis of the Engineer's estimate of the cost of that part of the Project, and, if the Client agrees with such estimate and that such part has been completed, the Engineer will be paid the amount of the fee so invoiced.

b) On Award of Contract

Following the award of the contract for the construction of the Project, the Engineer shall recalculate his/her fee on the basis of the tender quantities and prices on which the contract for the construction of the Project was awarded, plus the estimated cost of materials and other services supplied by the Client and upon such recalculation, the amount paid to the Engineer shall be adjusted to equal the full amount of the recalculated fee including the repayment by the Engineer of any overpayment made to the Engineer.

c) Delay of Award of Contract

In the event the contract for construction of the Project is not awarded within _____ months of the acceptance of the Design by the Client the final fee for design shall be determined as in paragraph (a) above, and paragraph (b) shall not apply.

Further services for the Project beyond the _____ months will be undertaken on a time basis.

d) On Completion of the Work

Following Completion of the Work, the Engineer shall recalculate his/her fee on the basis of the actual Cost of the Work and upon such recalculation the amount paid to the Engineer shall be adjusted to equal the full amount of the recalculated fee including the repayment by the Engineer of any overpayment to the Engineer.



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### 3.3.3 Lump Sum Does Not Apply

Based on a milestone basis as per the Engineer's proposal.

### 3.3.4 Invoices Generally

a) Requirements for a proper invoice

All invoices submitted by the Engineer to the Client under this Agreement shall contain the following information:

(1) The Engineer's name and address;
(2) The date of the invoice and the period during which invoiced Services were supplied;
(3) Information identifying the Agreement under which Services were supplied;
(4) A description of the services supplied;
(5) The amount payable for the services supplied , and a statement that payment is due upon receipt;
(6) The name, title, telephone number and mailing address of the person to whom payment is to be sent; and
(7) The following additional information (if any):

b) Disputed invoices

If the Client intends to dispute any invoice delivered by the Engineer, in whole or in part, the Client shall within 14 calendar days of receiving the invoice, deliver to the Engineer a notice of non-payment in Form 1.1 as prescribed by the *Construction Act*.

Any undisputed portion of any invoice shall remain payable upon receipt in accordance with the terms of payment set out in section 3.3.5.

### 3.3.5 Terms of Payment

The Client will compensate the Engineer in accordance with the fees and charges for services as set out in the proposal or as otherwise mutually agreed.

All fees, irrespective of their basis, shall be exclusive of HST, and HST will be added to each invoice.

All fees and charges will be payable in Canadian funds unless noted otherwise.

Invoices will be due and payable, as presented and without hold-backs, by the Client upon receipt, and in any event no later than 28 days after receiving the proper invoice.

Interest on overdue accounts will be charged at the rate of 12 % per annum.


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## ARTICLE 4 – FORM OF AGREEMENT

**ENGINEER:** AECOM Canada Ltd.

The signatory shall have the authority to bind the Engineer for the purposes of this agreement.

**This_____Day of_____, 20____**

| | | | |
|---|---|---|---|
| Signature | | Signature | |
| Name | Rick Talvitie | Name | |
| Title | Associate Vice President | Title | |

**CLIENT:** The Corporation of the City of Sault Ste. Marie

The signatory shall have the authority to bind the municipality or its agency for the purposes of this agreement.

**This_____Day of_____, 20 ____**

| | | | |
|---|---|---|---|
| Signature | | Signature | |
| Name | Mayor Matthew Shoemaker | Name | Rachel Tyczinski |
| Title | Mayor | Title | City Clerk |



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## ARTICLE 5 – SCHEDULES

*Copies of Request for Proposal and Proposal Submission documents ifrequired.*

This article includes all schedules, (i.e. Request for Proposal, Proposal Submission, Certificates of Insurance, etc.) as well as any additional information required to form the Agreement, such as supplemental general conditions, etc.

The following schedules form part of:

| | Attached |
|---|---|
| Schedule A: Supplementary Conditions – attached OR not used | ☑ |
| Schedule B: Addenda – attached OR not used | ☐ |
| Schedule C: Scope of Services – RFP attached OR not used | ☑ |
| Schedule D: Proposal from engineer – attached OR not used | ☑ |
| Schedule E: Other | ☐ |

NOTE: Attach all appropriate schedule documents as indicated (✓).





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## City Insurance and Indemnity Provision to MEA-CEO Agreement

## Supplementary Conditions

Notwithstanding the Order of Precedence as set out in the MEA-CEO AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification**" and "**1.11 Insurance**" in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and

(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provide that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Engineer, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Architect.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**
Commercial General Liability ("CGL") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement. Sudden and Accidental pollution coverage with limits of not less than two million dollars ($2,000,000) per occurrence (can also be provided under a separate Environmental Impairment or Pollution policy).

**Automobile Liability Insurance**
Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on

behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Article 3 – Fees and Disbursements, Clause 3.2 – Basis of Payment**

Clause 3.2.3 (b) is deleted in its entirety and replaced with the following:

"Included in the fee, the Engineer shall be reimbursed at cost for all reasonable expenses properly incurred by them in connection with the Services, including but not limited to: vehicle use charges, traveling and living expenses.

"In addition, a communication/information Technology (IT) charge equal to 5% of invoiced labour costs will be charged to cover telephone charges, long distance telephone charges, facsimile transmission charges, printing and reproductions, progress photography, special delivery and expense charges, postage and IT costs. The IT assessment shall include all information technology resources required for purposes of providing the services contemplated under this agreement, including: computer equipment/systems, computer software, computer supplies, networking (local and wide area), and labour associated with computer management, administration and support. Computer systems include all types of computers, such as: general purpose microcomputers, PC-CADD microcomputers, graphic design workstations, and notebooks. The cost for reproducing specifications and drawing sets shall not be included in this rate."

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

# REQUEST FOR PROPOSAL

## 2024PWE-ENG-05-P

**Professional Engineering Services**
**RECONSTRUCTION OF PEOPLES ROAD**
**Churchill Avenue to Third Line**

CLOSING DATE AND TIME REQUIREMENTS:

**Electronic Submissions Only**, will be received by the Bidding System

**no later than 4:00 p.m. local time on Tuesday, August 13, 2024**.

**July 23, 2024**

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# SECTION 1

## 1. INFORMATION TO PROPONENTS

### *1.1 Introduction*

The Corporation of the City of Sault Ste. Marie (the City) is requesting proposals from Vendors of Record (VOR) within the Linear Municipal Infrastructure Category to provide engineering services associated with proposed reconstruction of:

- Peoples Road – Churchill Avenue to Third Line

Engineering services required for these projects include the design, traffic analysis, contract administration and field inspection associated with reconstruction of the road, watermain, storm sewers and sanitary sewers

### *1.2 Methodology for Submitting Proposals*

**Registering to Bid**

All Proponents shall have a Bidding System Vendor account and be registered as a Plan Taker for this Proposal opportunity, which will enable the Proponent to download the Bid Call Document, to receive Addenda email notifications and download all documents without the watermark “preview” on them.

To ensure receipt of the latest information and updates via email regarding this bid, or if a Proponent has obtained this Proposal Document from a third party, the onus is on the Proponent to create a Bidding System Vendor account and be registered as a Plan Taker for the Proposal opportunity.

**Electronic Submission**

ELECTRONIC PROPOSAL SUBMISSIONS ONLY, shall be received by the Bidding System. Hardcopy submissions not permitted.

Proponents are cautioned that the timing of their Proposal Submission is based on when the Proposal is RECEIVED by the Bidding System, not when a Proposal is submitted, as Proposal transmission can be delayed due to file transfer size, transmission speed, etc.

For the above reasons, it is recommended that sufficient time is allotted to complete the Proposal Submission and to resolve any issues that may arise. The closing time and date shall be determined by the Bidding System’s web clock.

Proponents should contact bids&tenders support listed below, at least twenty-four (24) hours prior to the closing time and date, if they encounter any problems. The Bidding System will send a confirmation email to the Proponent advising that their proposal was submitted successfully. If you do not receive a confirmation email, contact bids&tenders support.

Late Proposals are not permitted by the Bidding System.

To ensure receipt of the latest information and updates via email regarding this RFP, or if a Proponent has obtained this RFP Document from a third party, the onus is on the Proponent to create a Bidding System Vendor account and register as a Plan Taker for the proposal opportunity.

Proponents may edit or withdraw their Proposal Submission prior to the closing time and date. However, the Proponent is solely responsible to ensure the re-submitted proposal is received by the Bidding System no later than the stated closing time and date.

The Corporation reserves the right to reject any or all Proposals and the lowest or any Proposal will not necessarily be accepted.

### *1.3 Errors, Omissions, Clarifications*

It will be the Proponent's responsibility to clarify any questions before submitting a Proposal.

**Submitting questions and receiving addendums**

Questions related to this RFP are to be submitted to the Purchasing representative through the Bidding System only by clicking on the "Submit a Question" button for this specific proposal opportunity.

An addendum issued through the bidding system is the only means of changing, amending or correcting this RFP. In the process of responding to this RFP, the Proponent should not utilize any information obtained outside this protocol.

Proponents shall acknowledge receipt of any addenda through the Bidding System by checking a box for each addenda and any applicable attachment.

It is the responsibility of the Proponent to review all Addenda that are issued. Proponents should check online at Sault Ste. Marie Bid Opportunities Website prior to submitting their Proposal and up until Proposal closing time and date in the event additional addenda are issued.

In the event that a Proponent submits their proposal prior to the issuance of an addenda, the Bidding System will **withdraw** the submission and change the submission status to

"**Incomplete**". The Proponent is solely responsible to:

- make any required adjustments to their Bid;
- acknowledge the addendum/addenda; and
- ensure the re-submitted Proposal is received by the Bidding System no later than the stated Proposal closing time and date.

### *1.4 Withdrawal/Decline of Proposal*

Proponents may edit or withdraw their Proposal Submission prior to the closing time and date. However, the Proponent is solely responsible to ensure the re-submitted proposal is received by the Bidding System no later than the stated closing time and date.

### *1.5 Informal Proposals*

Proposals are to conform to the terms and conditions set out herein. Proposals which are incomplete, conditional, or obscure, or which contain additions not called for, erasures, alterations, errors, or irregularities of any kind, may be rejected as informal.

### *1.6 Proposal Evaluation*

The successful proponent will be selected based on evaluation of the proposal utilizing a rating system which considers the requirements mentioned below. A committee composed of City staff will be used in the selection process. The proponent shall outline:

1) Consulting team's demonstrated expertise in municipal road construction including watermain, storm, sanitary sewer and traffic analysis. Include relevant past experience on similar projects and professional representative experience including references and key personnel (30%);

2) Detailed proposed work plan and methodology to be undertaken, including any other information or content relevant to the completion of project (35%);

3) A detailed schedule recognizing critical deliverables, progress meetings and timelines (15%); and

4) A fee schedule indicating the name, role and rate of pay for each individual assigned to the project (showing HST as extra). The cost of the engineering assignment shall include work up to and including the final construction. No further payment will be made above this figure unless authorized in advance by the City. (20%).

The above list of criteria represents areas which are to be specifically addressed in the proposal. The evaluation process will not necessarily be limited to these areas. Other

criteria not specifically listed above may also receive consideration. The order in which the criteria are listed does not indicate the weighting of the evaluation.

The City reserves the right, in its sole and absolute discretion to select a preferred Proponent with which to negotiate a final contract, terminate the proposal call or reject any and all Proposals. Negotiations will not constitute a legally binding offer to enter into a contract on the part of the City or the proponent.

The City will endeavor to complete the evaluation process within a reasonable time frame. The City reserves the right to contact Proponents to seek clarification of the proposals, as submitted, to assist in the evaluation process. Interviews may be required. **Please see Paragraph 1.10 concerning incurred costs associated with attendance at such interviews.**

**IMPORTANT:** The decision of the City of Sault Ste. Marie with respect to this Request for Proposals is considered final. In submitting a Proposal, Proponents agree that there is no recourse to the City of Sault Ste. Marie for its decision.

### *1.7 Site Inspection and Requirements of Work*

Proponents are required to submit their proposals upon the conditions that they shall satisfy themselves by personal examination of the location of the proposed works, and by such other means, as they may prefer, as to the actual conditions and requirements of the work.

The successful Proponent is required to comply with the requirements of the City's Contractor Pre-Qualification Program prior to the start of any onsite work on this Contract and shall be kept current for the duration of the Contract. These requirements include but are not limited to WSIB Coverage, Liability Insurance Coverage, Accessibility Training, and Safe Work Practices. Details regarding compliance with this requirement can be found by visiting Sault Ste. Marie Health and Safety page. Responsibility for compliance with this requirement for its Subcontractors is the responsibility of the successful Contractor. Failure to comply with the requirements of this Program will result in loss of the contract.

### *1.8 Proposal Left Open*

The Proponent shall keep their Proposal open for acceptance for ninety (90) days after the closing date.

### *1.9 Schedule*

(A) Release of RFP: July 23, 2024
(B) Question Close: July 31, 2024

(C) Submission of Proposal: August 13, 2024, by 4:00 p.m. local time (Eastern)
(D) Recommendation of Award: September 9, 2024
(E) Signing of Agreement: September, 2024
(F) Commencement of Services: September, 2024

The City reserves the right to alter the scheduling of items “D” to “F”. Proponents are asked to designate one contact person to whom any additional information deemed to be relevant to the proposal may be communicated. Complete Contact Coordinates including email address shall be included in the Proposal.

### *1.10 Incurred Costs*

The City will not be liable for, nor reimburse any Proponent for costs incurred in the preparation of Proposals or any other costs such as preparation for, and attendance at interviews that may be required as part of the evaluation process.

Whenever possible, at the sole determination of the City, additional information and/or clarifications will be obtained by telephone or other electronic means.

### *1.11 Alterations to Documents*

No electronic reproduction or alteration of the original document will be permitted under any circumstance. The Proponent shall not change the wording of the proposal after submission; and no words or comments shall be added to the general conditions or detailed specifications unless requested by the City for the purpose of clarification.

### *1.12 Confidentiality & Post-Award Comment*

No Proponent shall have the right to review or receive any information with respect to a proposal, documentation, or information submitted by any other Proponent. The content of the proposal, and all documentation, and information shall be held in confidence by the City subject only to the provision of freedom of information and privacy legislation, including without limitation, the *Municipal Freedom of Information and Protection of Privacy Act*.

Post-Award Comment by the City regarding this Request for Proposal may be limited to written notification to all Proponents of the successful Proponent’s name and address only. **In submitting a Proposal, Proponents acknowledge and agree to this provision.**

### *1.13 Municipal Freedom of Information & Protection of Privacy Act*

The Corporation of the City of Sault Ste. Marie is governed by the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*. All documents submitted to the City in response to this Request for Proposal become the property of the City and as such will be

subject to the disclosure provisions of the *Act*. The *Act* gives persons a right of access to information held by the municipality. The right of access is subject to exemptions contained in the *Act*.

### *1.14 Indemnification and Insurance*

The successful Proponent will indemnify and save harmless the City against and from all actions, causes of action, interest, claims, demands, costs, damages, expenses or loss which the City may bear, suffer, incur, become liable for, or be put to by reason of any damage to property or injury or death to persons by reason of, arising out of or in consequence of breach, violation of non-performance by the successful Proponent of any provision of the agreement, or by reason of or arising out of the use of the premises or in connection with the work covered by this contract, or by reason of or arising out of any act, neglect or default by the successful Proponent or any of its agents or employees or any other person or persons, in, on, or about the premises.

The rights to indemnity contained in this section shall survive any termination of the agreement, anything in this agreement to the contrary notwithstanding.

In addition to the Insurance required for compliance with the requirements of the City's Contractor Pre-Qualification Program, the successful Proponent shall also maintain Professional Liability Insurance as may be required and appropriate for the Project.

### *1.15 Agreement for Services*

The City Purchase Order issued, the Proposal submitted by the successful Proponent and the RFP as issued and amended shall constitute the Agreement for this Project.

The successful Proponent will be required to enter into an agreement for professional services such as MEA for engineering services, with the City's Insurance and Indemnity special provisions (Schedule A); with a fee limit established at the outset of the agreement. Additional fees for unforeseen work which may be required must be approved in writing by the City prior to expenditure. An alternate agreement may be approved for use provided it meets city requirements

# Schedule A –Special Provisions

## City Insurance and Indemnity Provisions to MEA-CEO Agreement Supplementary Conditions

Insurance and Indemnity provisions and considerations for use with the "Association of Consulting Engineering Companies/Ontario (ACEC-Ontario) in Partnership with the Municipal Engineers Association (MEA)" - "Standard Form of Contract for Professional Consulting Services 2020 (Version 3.1)"

**Option A** *(The following language to be used with contracts not involving any excavating, digging, drilling, core sample removal etc.):*

Notwithstanding the Order of Precedence as set out in the MEA/CEO CLIENT/ENGINEER AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification"** and "**1.11 Insurance"** in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and
(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provided that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Architect, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Engineer.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability ("**CGL**") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement.

**Automobile Liability Insurance**

Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Option B** *(The following language to be used if the work involves any excavating, digging, drilling, core sample removal etc., and the Engineer is performing that work themselves (rather than a separate contract for those tasks):*

Notwithstanding the Order of Precedence as set out in the MEA-CEO AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification"** and "**1.11 Insurance"** in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and
(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provide that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Engineer, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Architect.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability ("**CGL**") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement. Sudden and Accidental pollution coverage with limits of not less than two million dollars ($2,000,000) per occurrence (can also be provided under a separate Environmental Impairment or Pollution policy).

**Automobile Liability Insurance**

Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Additional Insurance considerations**:

If the work involves any technology or IT aspects, Cyber coverage may be warranted – please forward these to Legal for review.

If any subconsultant is to be engaged (once approved by the City as per section 1.17) they will be required to place the same insurance coverages as outlined in section 1.11

# SECTION 2

## 2. TERMS OF REFERENCE

### *2.1 Introduction*

The City of Sault Ste. Marie is requesting proposals for engineering services associated with proposed reconstruction of Peoples Road from Churchill Avenue to Third Line

- Estimated construction value: $20,000,000*

*Includes estimate for Engineering, excluding estimate for water.

Engineering services required for these projects include the design, traffic analysis, contract administration and field inspection of a municipal road including the associated storm sewers, sanitary sewers and watermain. Full geotechnical including sampling/testing for excess soils regulations are required.

Therefore, the successful Proponent(s) will collect and analyze information to develop recommendations, design, prepare tender documents and administer contracts for the construction of the proposed works. The detailed total station survey will be completed by a City survey crew for Peoples Road.

### *2.2 Background*

In 2020, the City initiated a Class Environmental Assessment (EA) to study overland and basement flooding. The study area encompasses an approximate boundary defined by Peoples Road and Farwell Terrace to the west, Old Goulais Bay Road and Fort Creek to the east, Fourth Line to the north and Second Line to the south.

The Peoples Road sanitary sewer upgrade to increase the sewer capacity on Peoples Road was one of the recommendations from the EA. As this improvement is an A+ initiative which is exempt from further EA requirements, this EA study was finalized and can be implemented under the current Municipal Class EA process.

### *2.3 Project Scope*

The successful Proponent will use engineering principles to re-design a municipal road that meets current City standards.

In addition to the municipal infrastructure reconstruction, the design of Peoples Road should

follow the Complete Streets concept that balance the needs of all road users. As such, the successful proponent will conduct a traffic analysis to review a possible road diet and a review of the intersection of Peoples Road at Second Line, and Peoples Road at Third Line. Cycling infrastructure should be considered for the length of the project and include an extension to the Second Line intersection.

The City has applied for the Housing Enabling Water System Fund (HEWSF) to support this project. Should the application be successful, the Peoples Road construction will be delivered in two phases, one tendered in 2025 and the other in 2026. tendered over two construction years, 2025 and 2026. **The projects have been approved for design only, the 2025/2026 Budget is not yet approved.** All construction budgets are subject to Council approval of the capital construction plan.

Should the funding application be unsuccessful, the City anticipates delivering the construction over three phases. Proponents should submit their proposals assuming that the funding application is successful.

The successful Proponent will be able to start immediately following agreement approval in September 2024.

### *2.4 Municipal Class Environmental Assessment Requirements*

This project is assumed to be exempt from the Municipal Class EA process. The successful consultant must satisfy themselves with this.

### *2.5 Project Requirements*

Communications - Meetings, Workshops and Public Information Centres

The minimum is expected (per project):

- Three Design Meetings with City staff
- One Public Information Session
- Contract/ tender preparation in 2025
- Contract administration in 2025
- Resident site inspection in 2025
- Contract/ tender preparation in 2026
- Contract administration in 2026
- Resident site inspection in 2026

### *2.6 Existing Documentation*

It will be up to the Proponent(s) to request existing as-constructed drawings and records from the City Engineering Division.

### *2.7 Project Deliverables*

The project deliverables shall include:

- Preliminary Design Reports
- Production and distribution of public notices
- Preparation of design and construction drawings
- Approval and permit application package
- Preparation of all contract documents
- Contract Administration
- As-built drawings

### *2.8 Fee Schedule*

Proponents shall provide a fee schedule for the Project(s) broken down into steps reflecting the required scope of services listed in the requirements above. Time allotments, including staff names and disbursements must be identified for each step. Fees associated with subconsultants must be listed in a similar fashion.

For contract administration, the proponents should assume two contract admin phases of 28 weeks each.

# SECTON 3

## 3. SUBMISSION REQUIREMENTS

### *3.1 Experience & References*

Demonstrate your Consulting team's expertise in municipal road construction including watermain, storm and sanitary sewer of similar size, within the last five (5) years preferred.

- Include relevant past experience on similar projects and professional representative experience.
- Include listing of Key Personnel with brief Curriculum Vitae (CV) and Roles to be utilized for the Project.

Complete these section(s) within the Bidding System:

- Step 3: References
  - Previous Relevant Projects
  - Project Team Experience and Qualifications
- Step 4: Documents
  - CVs, as Document Upload

### *3.2 Methodology*

Proponent to demonstrate their understanding of the scope and purpose of the project, providing a detailed proposed work plan and methodology.

Value Add - Outline any additional services which may be beneficial to delivery and completion of the Project.

Complete these section(s) within the Bidding System:

- Step 2: Specifications (Methodology)
  - Project Understanding, Methodology, Approach and Work Plan

### *3.3 Project Timelines*

Provide project timeline/schedule recognizing critical deliverables, progress meetings and timelines; indicating how they intend to meet the timelines established by the City.

Complete these section(s) within the Bidding System:

- Step 2: Specifications (Timelines)

- Project Schedule outline

- Step 4: Documents
  - Schedule Chart, as Document Upload

## *3.4 Fee Schedule*

Proponents shall provide a fee schedule for the project, if applicable broken down into steps reflecting the required scope of services outlined within. Time allotments including staff names and disbursements must be identified for each step. Fees associated with subconsultants must be listed in a similar fashion. Agents will not be reimbursed for travel expenses.

**It is preferred that the fee schedule be "All Inclusive" with HST shown as extra.** A minimal number of exclusions should be shown – must be itemized and costed with the Proposal.

Invoicing shall be limited to services actually performed in accordance with the fee schedule proposed.

Complete these section(s) within the Bidding System:

- Step 1: Schedule of Prices
  - Fee Estimate
- Step 4: Documents
  - Task-Cost Matrix, as Document Upload

# SECTION 4

## 4. APPENDICES

**Not Applicable**

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# 2024PWE-ENG-05-P - Engineering Services -Reconstruction of Peoples Road

Opening Date: July 23, 2024 4:45 PM

Closing Date: August 13, 2024 4:00 PM

### Vendor Details

| | |
|---|---|
| Company Name: | AECOM Canada Ltd. |
| Does your company conduct business under any other name? If yes, please state: | AECOM |
| Address: | 523 Wellington Street East<br>Sault Ste. Marie, Ontario P6A 2M4 |
| Contact: | Nancy Maahs |
| Email: | nancy.maahs@aecom.com |
| Phone: | 705-942-2612 |
| HST#: | 850170416RT0002 |

### Submission Details

| | |
|---|---|
| Created On: | Thursday August 08, 2024 15:21:53 |
| Submitted On: | Tuesday August 13, 2024 13:36:50 |
| Submitted By: | Nancy Maahs |
| Email: | nancy.maahs@aecom.com |
| Transaction #: | 8f7db560-67fe-4978-8a21-3b68f56881e8 |
| Submitter's IP Address: | 208.127.144.69 |

## Schedule of Prices

The Bidder hereby Bids and offers to enter into the Contract referred to and to supply and do all or any part of the Work which is set out or called for in this Bid, at the unit prices, and/or lump sums, hereinafter stated. HST is additional. Pricing in Canadian Funds.

* Denotes a "MANDATORY" field

Do not enter $0.00 dollars unless you are providing the line item at zero dollars to the Owner (unless otherwise specified).

If the line item and/or table is "NON-MANDATORY" and you are not bidding on it, leave the table and/or line item blank. Do not enter a $0.00 dollar value.

### FEE ESTIMATE - ENGINEERING SERVICES

Provide pricing in Canadian Dollars (excluding HST). HST is extra to tendered pricing and shall not be included in the Unit Price tendered

Proponent shall provide a fee estimate for the total cost of the services.

An attached Task-Cost Matrix providing breakdown of fees shall be provided in the Document Upload section of the Bidding System, and shall equal the fee estimate provided.

| Description | Lump Sum Price * |
|---|---|
| Bid Price for the Work as specified in the Bid Call Documents | $1,221,645.0000 |
| Subtotal: | $ 1,221,645.00 |

### Summary Table

| Bid Form | Amount |
|---|---|
| FEE ESTIMATE - ENGINEERING SERVICES | $ 1,221,645.00 |
| Subtotal Contract Amount: | $ 1,221,645.00 |

### PROJECT UNDERSTANDING, APPROACH AND WORK PLAN

The proponent will provide detailed information demonstrating their project understanding and proposed work methodology to achieve the project deliverables.

| Description | Response * |
|---|---|
| Proponent to demonstrate their understanding of the scope and purpose of the project, project requirements, and deliverables. | The City of Sault Ste. Marie, through its consultant AECOM, completed a Class Environmental Assessment (Class EA) to study overland and basement flooding issues in the Peoples Road area. Within the study area, there have been occurrences of overland and basement flooding during significant precipitation events. The study, completed by AECOM on behalf of the City included recommendations to be addressed by individual property owners together with capital improvements to be considered by the City. This project is intended to address a key recommendation to enhance the capacity of the Peoples Road sanitary sewer. In conjunction with the sanitary sewer replacement the City plans to complete traffic analyses and a full road reconstruction including replacement of storm sewers, watermains and roadside appurtenances. Apart from the geotechnical and excess soil investigations and reporting, AECOM plans to undertake all work in house including the traffic analyses. Through the preliminary design phase, we will consider cycling infrastructure for the full length including the implementation of a potential road diet.<br><br>There are a few project specific challenges and risks that will have to be carefully reviewed and assessed to ensure a successful outcome. These project challenges/risks are summarized under the additional services and value add section of this proposal. |
| Identify major work criteria of the services, with clear explanations of steps required to achieve the deliverables, outlining any known challenges and risks associated with the project. | 1. Project Management<br><br>Project Management: This task will include the implementation of all AECOM project management processes and procedures, including administrative setup in the AECOM Project Management platform, and development of Safety, Health and Environment (SH&E), Quality and Communication plans. |

Each week our Project Manager will review costs posted to the project during the previous week to identify issues early and implement mitigation measures to maintain budget and schedule. Monthly project management activities include monitoring of the budget and schedule using the earned value method, and the review of monthly invoices.

Project Meetings: In accordance with the RFP, we will attend and chair one project initiation meeting and at least two additional meetings through the design phases. We will also attend additional meetings at the City's discretion. We have been successful in using Microsoft Teams with various City meetings over the past several years which allows our team to share their computer screens with participants. We are prepared to conduct the meetings remotely through Microsoft Teams or, if desired, in person.
AECOM will prepare agendas a minimum of two business days before meetings and circulate minutes within five business days after.
Project Management Summary:
Deliverables - Project Management Plan including SH&E, Quality, and Communications, Meeting Agendas/Minutes, Monthly Project Status Reports outlining project progress.
Key AECOM Staff - Darrell Maahs, Rick Talvitie

2. Collect and Review Background Information and Data

At the onset of the project, we will obtain all available background information and data relating to the project including relevant reports, digital base plans, benchmarks, existing plan/profile drawings, other geotechnical reports, aerial photos, adjacent drainage designs including drainage area plans (storm and sanitary), electrical distribution drawings, grid maps and base plans showing existing utility plant and details of any proposed utility plant improvements in conjunction with project.

The data will be catalogued and reviewed by all key members of the project team to ensure a keen understanding of existing conditions and guiding principles. Given our involvement in the Class EA phase we currently have an extensive inventory of background information and data related to this project and will be able to hit the ground running with the preliminary design phase. In particular we have a keen understanding of a number of important background reports and studies that relate to the Peoples Road sanitary sewer sizing, and we have in hand an all pipes model to assist in the assessment of wastewater flows.

Data Collection Summary:
Deliverables - Data and Information Catalog
Key AECOM Staff – Darrell Maahs, Jerry Tulloch, Kerry Young

3. Comprehensive Field Review

One of the most important elements in developing practical and efficient designs is to complete a detailed field review at the onset of the project. We will supplement the field reviews we completed throughout the Class EA phase, with a detailed field review to be conducted by the Project Manager, Darrell Maahs, Senior Designer, Jerry Tulloch and Designer/Inspector Kerry Young.

The review will include the identification of potential drainage challenges, potential utility conflicts, landscaping challenges, etc.

The initial detailed field review forms the basis for finalizing the geotechnical work program and developing the preliminary and detail designs throughout the corridor. We will also prepare a detailed video and photographic inventory to accurately record existing conditions including existing buildings, building entrances, utility infrastructure, landscaping features and other roadside features.

We will also review with City staff the recommended field investigation and CCTV inspection of the "elephant trunk" infrastructure to assist in confirming the merits of potentially bringing it back online.

Field Review Summary:
Deliverables - Summary of key findings, Photographs/videos
Key AECOM Staff - Darrell Maahs, Rick Talvitie, Jerry Tulloch, Kerry Young

4. Planning Requirements

The City of Sault Ste. Marie, through its consultant AECOM, completed a Class Environmental Assessment (Class EA) to study overland and basement flooding issues in the Peoples Road area. This project was one of several capital improvements proposed through that study.

One element that was not contemplated through the Flooding Class EA is the potential change in the lane configuration from four through lanes (2 in each direction) to three lanes (one though lane in each direction with a centre turn lane) together with curbside bike lanes. During the proposal phase we conducted a review of the MEA Class EA reference document and believe this change may fall under the following: "reconstruction where the

reconstructed road or other linear paved facilities (eg. HOV lanes) will be for the same purpose, use, capacity and at the same location". Although we will consider alternative designs it will be prudent to consider designs that fit within the current road cross-section. In reviewing the overall pavement width on Peoples Road it is very similar to the width of Queen Street east of Pine Street where AECOM previously studied and implemented a road diet. Furthermore, it is our understanding that the City has undertaken and completed road diets at other locations within the City without completing any formal Class EA requirements and it is anticipated that the same approach will apply here. Regardless there will be merit in conducting an open house to present the overall preferred preliminary design to the public to ensure an awareness and to provide an opportunity to discuss the plans with the project team.

AECOM had considerable interaction with the public in this area during the Flooding Class EA and there was significant participation during the open house as we engaged in numerous conversations with property owners. We will participate in an open house to present the preliminary design for public input and to provide an awareness of what is to be expected during the construction phase. This approach tends to improve the level of understanding and patience of property owners/tenants in the vicinity of the construction activity.

Project Planning Summary:
Deliverables – Project Notices, Public Open House Displays
Key AECOM Staff – Darrell Maahs, Rick Talvitie

5. Geotechnical/Excess Soil Investigation and Reporting

In order to assess the subsurface conditions including soil types, groundwater conditions and to provide suitable recommendations to address construction techniques, frost susceptibility, utility and service trench designs, excavations, dewatering, subdrainage, pipe bedding and backfill, subgrade, subbase, base and pavement designs, we are proposing to undertake a comprehensive geotechnical investigation. The geotechnical program will also be augmented to include the characterization of the existing soils as per Ontario Regulation 406/19 "On-Site and Excess Soil Management". The scope will meet the minimum sampling and analyses requirements and due diligence requirements for characterizing excess soil quality. This information will be incorporated into the overall tender package to assist Contractors in developing and executing a project specific soil management strategy that meets the regulatory requirements. The geotechnical investigation and excess soil quality assessment and reporting will be completed by our subconsultant EXP. At the conclusion of this task we will deliver comprehensive geotechnical and excess soil characterization reports that will form the basis for the design and construction contract.

Geotechnical/Excess Soil Summary:
Deliverables – Geotechnical and Excess Soil reporting and recommendations
Key AECOM Staff - Darrell Maahs, Rick Talvitie and EXP

6. Preliminary Design

A preliminary design must be developed and approved before initiating the detail design activities. In this case the horizontal and vertical alignments are generally fixed but may benefit from modest changes. In the preliminary design phase of the project, we will develop design options for various cross-sectional design elements and alignments and produce a final overall preliminary road and servicing design. In each case where options are developed, we will prepare drawings or details illustrating each option, compute preliminary costs, and develop an evaluation matrix to select a preferred design. The options will be presented to City staff for discussion with our recommendations and rationalizations. Following consultation with the City, a final selection will be made and incorporated into the overall preliminary design.

There are few key elements to the preliminary design phase, one of which is the road cross-section and in particular the lane configuration. AECOM was involved in a comprehensive study to convert Queen Street from four lanes to three lanes with bike lanes and will leverage that work when considering a potential change for this corridor. Although this corridor was not specifically identified as a candidate for a road diet in the most recent Transportation Master Plan it does appear to lend itself to a potential conversion based on current traffic volumes and the overall width. Interestingly the overall width of Peoples Road is very similar to the width of Queen Street east of Pine Street where we completed a conversion. In that case there was a need for some compromises in relation to the widths of the various cross-sectional elements but in the end a suitable design with reasonable compromises was developed for the project and again we will leverage that work for this project.

Another critical element of the preliminary design will be the sanitary sewer sizing. The principal focus of this project is to upgrade the existing Peoples Road sanitary sewer given the significant level of development that has occurred and is planned for areas upstream of this sewer. AECOM is very familiar with many of the existing and planned developments through the Flooding Class EA study together with the previously completed Third Line

Reconstruction project from Fort Creek to Peoples Road. Close coordination will be required with the City's Planning Division to define future developable lands north of Third Line and it will also be important to carefully consider the capacity of the downstream sewers. We are well positioned for this analysis based on the modeling work completed to date and the flow monitoring currently ongoing.

The City has also requested that consideration be given to the Third Line and Second Line intersection configurations which will likely require some modifications particularly if the four to three lane configuration is to be implemented. AECOM will leverage their Transportation engineers as necessary to undertake traffic analyses in relation to a potential road diet and to complete intersection analyses and provide recommendations as appropriate.

At the conclusion of the preliminary design phase, the road and roadside geometrics will be finalized including horizontal and vertical alignments, intersection configurations, road cross-sections and roadside features. In addition, the following elements will also be defined; proposed storm and sanitary sewer sizing and locations, watermain sizing and locations, and illumination requirements (if needed but excluded from our fee estimate).

We also believe it is important to clearly define the decisions made and the designs adopted prior to proceeding with detail design. We will summarize the final road design and servicing elements for future reference. The summary will be presented to City staff at the conclusion of the preliminary design phase. It has been our experience with past projects that this summary proves to be a very useful tool in future years if questions are raised relating to the design decisions made.

Preliminary Design Summary:
Deliverables - Design Summary including drawings, and cost estimate
Key AECOM Staff - Darrell Maahs, Rick Talvitie, Jerry Tulloch, Kerry Young

7. Detail Design

Once the Preliminary Design has been approved by the City, we will initiate the detail design.

In the detail design phase, we will generate detail design cross-sections throughout the limits of the construction. The sections will be generated using design software and will ultimately be used to compute excavation, subbase and base quantities. These quantities will be sufficiently accurate to allow these items to be administered as plan quantity items which will reduce the staffing requirements during construction. In addition, the design sections will also be used to generate construction templates.

We will also develop all necessary design details including trench design to mitigate frost action, pipe bedding and backfill requirements, replacement landscaping as necessary, paving details etc. Detail design drawings will be developed for all components of the work including roadway elements, roadside elements, illumination (if necessary but we have not included allowances for roadway lighting design in our fee), signage, pavement markings, traffic and pedestrian management, staging aspects, servicing elements including watermains, sanitary collection and storm water management features. Our designs will also include careful consideration of AODA requirements at intersections. All necessary design calculations will be completed and submissions will be made for all necessary technical approvals including sewage works and stormwater management. Technical approvals will include Design Briefs, Pipe Data Form and application for alteration to the collection and conveyance systems. We will also prepare a similar submission for the water distribution upgrades.

It has been assumed that the project construction will be procured in two separate phases (2025 and 2026). We will produce two complete tender packages including tender drawings, technical specifications, and tender documents. The tender packages will be reviewed thoroughly in-house (ie; technical review meeting) prior to submission to the City and approval agencies. We will produce detailed pre-construction cost estimates in advance of each tender close.

Ultimately, we will prepare a tender advertisement, and complete the necessary deliverables for posting by the City on the Bids and Tenders portal. During the tender period we will address any questions raised during the tender period and issue addenda as appropriate. Once tenders are received, we will evaluate and report on the tenders received.

Detail Design Summary:
Deliverables - Detailed quantity/cost estimates, Approvals submissions, Tender Packages, including Issued for Tender drawings and Tender reports.
Key AECOM Staff - Darrell Maahs, Rick Talvitie, Jerry Tulloch, Kerry Young

8. Construction Administration and Supervision

Through our extensive experience in Northern Ontario with Municipalities and the Ministry of Transportation, we have a thorough understanding of our responsibilities and of our client's

expectations. We will be acting as an agent to the Owner and will be entrusted to ensure appropriate materials are incorporated into the work and the quality of workmanship meets or exceeds the contract specifications. We have significant experience in the administration and inspection of municipal road, connecting link and provincial highway projects including many completed for the City.

In the following subsections we have briefly described the proposed work activities that will be undertaken by our staff. These services will be undertaken in two separate phases with the tendering and contract administration and inspection of two separate construction contracts assumed to be in 2025 and 2026.

Pre-Construction Phase
Prior to initiating construction, we will ensure that the contract is properly executed, and mandatory submissions are received from the Contractor including insurance certificates, Notice of Project, a clearance certificate from the Workers Safety Insurance Board, material lists, shop drawings, staging plan, erosion and sediment control plan, site access plan, traffic management plan, and construction schedule. We will also conduct a construction pre-start meeting to clearly define lines of communication, the project schedule, administrative procedures, key issues, site access, traffic routing, construction staging, and the expectations of all parties involved. The meeting with the Contractor will also include participation by the City, PUC, and any relevant Utility or Provincial Agencies.

Construction Phase
During the construction period, we will provide full-time resident inspection services to monitor the progress of the work and ensure the Contractor is carrying out its obligations in accordance with the contract drawings, specifications and special provisions. These activities will include alignment and grade checks, excess soil management, coordinating compaction checks and material sampling, compliance assessment of construction procedures, environmental controls, safe work practices and operational constraints. The daily work activities will be documented in a construction diary and summarized in a weekly report. Our resident inspection staff will also be responsible for measuring quantities for progress and final payments and liaising with property owners and resolving public concerns and/or complaints.

We are fully familiar with the MTO's Construction Administration and Inspection Task Manual through our past and ongoing MTO Contract Administration assignments. We will use the manual as a guideline to ensure an appropriate level of inspection and documentation is provided.

Quality assurance testing of materials will be undertaken in accordance with the contract specifications by an independent testing laboratory. Testing costs for the above will be incorporated into the Construction Contract.

Kerry Young will be our resident inspector and has demonstrated through many past similar projects, that the City's interests will be well managed.

Darrell Maahs will be responsible for the day-to-day management of staff and issues during the construction phase. This will include liaising with Municipal, PUC and Utility representatives, chairing the construction pre-start meeting and all progress meetings, issuing meeting reports, providing direction to our resident inspection staff, interpreting the contract documents, assessing claims and negotiating extra work, preparing progress and final payment certificates, conducting periodic reviews of the work including final inspections. Darrell will coordinate the completion of as-built drawings and will coordinate any remedial work required throughout the warranty period.

Post Construction Phase
At the conclusion of the construction period, we will prepare final payment certificates and provide to the municipality an as-constructed record of the work in hardcopy and digital formats. We will also monitor the work site throughout the maintenance period and coordinate any remedial work. At the conclusion of the maintenance period, we will conduct a final inspection and identify any outstanding deficiencies. Once the deficiencies are rectified, we will prepare and issue a contract release and final payment certificate.

Construction Administration and Supervision Summary:
Deliverables - Construction Meeting Agendas/Minutes, Contractor submissions and AECOM reviews, Field records, Weekly reports, As-constructed records
Key AECOM Staff – Darrell Maahs, Kerry Young

AECOM Assumptions and Limitations
AECOM will perform all professional services in accordance with the standard of care customarily observed by professional consulting firms performing similar services at the same time and location. The standard of care will include adherence to all applicable published standards of the profession and laws, regulations, by-laws, building codes and governmental rules.
Please note that, notwithstanding its construction contract administration services, AECOM shall have no responsibility for construction means; methods; techniques; sequences and

| | |
|---|---|
| | procedures, all of which remain the sole responsibility of the contractor performing the work. |
| Outline any additional services, value add which may be beneficial to delivery and completion of the project. | AECOM has completed preliminary sizing for the replacement sanitary sewer, but this will have to be vetted further and updated with careful consideration of the upstream developable lands. In addition, AECOM has developed an all-pipes sanitary sewer system model that is currently being calibrated through a network of flow monitors installed throughout the system. Presently the existing Peoples Road sanitary sewers are restricting flows and once upgraded will convey increased flows to downstream sewers. The current model will be used to assess and confirm what if any impacts will be transferred to downstream sewers.<br><br>The Flooding Class EA also suggested that it may be prudent to bring the previously constructed “elephant trunk” offline pipe storage back online. This alternative is contingent upon further input from the City regarding the rational for taking it offline and confirmation of any challenges in bringing it back online including its current condition. The reactivation of this element can be confirmed at the time of the preliminary/detail design. We suggest that the City complete a CCTV inspection of the components and review files to better understand the reason if was taken offline.<br><br>The stormwater management system throughout the project area is somewhat unique as it consists of roadside ditches, storm water conveyance infrastructure and a series if ravines that empty into storm sewers. The combination of ravines and storm sewers present some challenges, and we plan to discuss the design criteria with the City at the onset of the project to ensure an effective and thoughtful design is developed.<br><br>The City has also requested consideration of bicycle infrastructure for the full project length including consideration of a road diet. Although this corridor was not specifically identified as a candidate for a road diet in the most recent Transportation Master Plan it does appear to lend itself to a potential conversion based on current traffic volumes and the overall width. As noted previously, the overall width of Peoples Road is very similar to the width of Queen Street east of Pine Street where AECOM studied, in detail, and implemented a road diet. Our analyses will also consider any potential modifications required to the Third Line and Second Line intersections. |

## PROJECT SCHEDULE

Provide outline of project schedule for completing the objectives and deliverables in accordance with the timelines.

An attached Schedule Chart mapping tasks; phases; timelines etc. shall be provided in the the Document Upload section of the Bidding System.

| Description | Response * |
|---|---|
| Provide outline of your proposed project schedule., recognizing deliverables, progress meetings and timelines. | Our proposed project schedule has been developed to meet the requirements stipulated in the Terms of Reference. Specifically, the schedule assumes a September 2024 award and includes two separate construction seasons in 2025 and 2026 with 28 weeks of contract administration in each year. AECOM has previously completed conceptual level design in conjunction with the previously completed Class EA and plans to complete the preliminary design by January 2025. We will have two separate tender ready packages completed by end of March 2025 and early March 2026. Our overall project schedule is included in the document upload section. |

All references stated shall be for the same or similar scope as the one described in this Bid.

For newly formed business entity including, corporations, partnerships and sole proprietors or a Contractor teaming arrangement you shall state below in the Client Column that you were not the “Contractor” for the named project and should state whose past experience on the named project is relevant to that reference.

**PREVIOUS RELEVANT PROJECTS**

Proponent to provide a detailed outline of three (3) recent projects its firm has delivered which are considered relevant and comparable to this project request in size and complexity.

| Description | Past Project #1 * | Past Project #2 * | Past Project #3 * |
|---|---|---|---|
| Project Owner | City of Sault Ste. Marie | City of Sault Ste. Marie | City of Sault Ste. Marie |
| Project Title | Reconstruction of Biggings Avenue from Queen Street to Wellington Street | Reconstruction of Third Line from SAH to Black Road | Third Line Extension (from Great Northern Road to Peoples Road) |
| Contract Value | $4.5M | $6.4M | $16M |
| Start and Completion dates | May, 2023 to June, 2024 | May, 2021 to July, 2022 | 2003 to 2011 |
| Was the project completed on time? If not provide explanation | There were delays with completion of the construction phase by the Contractor which resulted in liquidated damages being applied against them. The liquidated damages were used to offset the additional contract administration fees. | There were delays with completion of the construction phase by the Contractor due to extended delivery times for precast structures, unexpected conditions encountered for concrete retaining wall and delays caused by Enbridge Gas. | Yes |
| Briefly outline Scope of Work (i.e. how it was delivered, results, satisfaction of client, and other relevant details of the project ) | Design, contract administration, and field inspection for the reconstruction of Biggings Ave. including road, roadside environment, watermain, storm sewers and sanitary sewers. | Reconstruction of Third Line from Sault Area Hospital entrance to Black Road, including planning, preliminary and detail design, tendering, contract administration and construction inspection. This project included consideration of road geometrics and restricted sight distance at vertical curves. | Completed a Schedule C Class Environmental Assessment to identify the preferred means to improve traffic flow and address capacity constraints between Great Northern Road and Peoples Road. A preferred preliminary design was identified through the Class EA process and the final report was issued in the summer of 2004. A Part II order request was rejected by the MECP. The project was later modified by an addendum in 2006/07 to include a 1 km section east of Great Northern Road. The project proceeded to preliminary design, detail design and contract administration including full-depth road reconstruction, road widening, culverts, storm sewers, sanitary sewers and forcemains, watermains, temporary water servicing, sidewalks, multi-use trail, utility relocations, property acquisitions and negotiations, traffic staging and traffic signal upgrades. The project extended across four construction contracts during the 2009, 2010, and 2011 construction seasons. Of note in relation to the current project the Third Line extension project included the reconstruction of Third Line from Fort Creek westerly to Peoples Road. Through that project AECOM became familiar with the developments in this area and enhanced our background knowledge in relation to this project. The same Team that completed that assignment is proposed for this project. |

## PROJECT TEAM EXPERIENCE AND QUALIFICATIONS

Proponent will provide its project team composition. Identify the named individuals who will be assigned to this project, their specific role and responsibilities on the team. Include any agents, employees, and subconsultants who will be involved in providing the deliverables

Project team's resumes (CVs) showing experience and qualifications are to be uploaded in the Document Upload section of the Bidding System

- Project team members will not be changed out without written request by the Consultant, and must be approved in writing in advance by the City

| Name * | Role * | # Years * | Responsibility * |
|---|---|---|---|
| Rick Talvitie | Project Director/Project Engineer | 37 | Provide leadership and direction to the project team; Design Criteria development; Overseeing the development of the preliminary designs; Brainstorming any design options; Conduct quality assurance reviews for all deliverables. Allocating staff resources to the project; Overseeing the project budget. |
| Darrell Maahs | Project Manager | 43 | Overall project management; Schedule and budget control, Design criteria development; Collect and review background information data; Comprehensive field review; Overseeing subconsultant's geotechnical investigation and reporting; Overseeing the development of the preliminary package; Brainstorming design options; Coordinating the tender package preparation and completing reviews of deliverables. |
| Jerry Tulloch | Senior Road and Servicing Design Technician | 38 | Survey data processing; Compilation of digital terrain model using design software; Base plan preparation; Develop and assess design roadway options; Sizing of all sewers including modeling and analyses to confirm sizing; Develop preliminary design of all project elements; Prepare tender drawings and complete quantity checks. |
| Kerry Young | Senior Design Technician and Resident Inspector | 25 | Preliminary and Detail watermain design; Produce plan/profile drawings and design details; Tender quantity takeoffs; Resident site inspection; Quality assurance during construction; Quantity measurements for progress payments; Monitor safety and traffic management; Addressing Contractor claims/issues; Interpret contract documents; Resolve property owner issues; and As-constructed drawings |
| Ian McMillan, Geotechnical Subconsultant EXP Services Inc | Geotechnical Project Manager/Senior Geotechnical Engineer | 18 | Oversee all geotechnical aspects of the project, monitor the QA/QC programs, and assume overall responsibility for the successful completion of the geotechnical works on time and on budget. |
| Yves Beauparlant Geotechnical Subconsultant EXP Services Inc | Environmental Lead / QP / Senior Engineer | 23 | Yves will act as environmental lead on the project. He is a Qualified Person (QP), meeting the requirements of O. Reg. 406/19 and will be responsible for the Excess Soils investigation. |

**Documents**

It is your responsibility to make sure the uploaded file(s) is/are not defective or corrupted and are able to be opened and viewed by the Owner. If the attached file(s) cannot be opened or viewed, your Bid Call Document may be rejected.

- Resume (CV) (optional)
- Schedule Plan - Peoples Road - Proposed Schedule.pdf - Tuesday August 13, 2024 13:09:29
- Task-Cost Matrix - Peoples Road - Proposed Task-Cost Matrix.pdf - Tuesday August 13, 2024 13:09:55

## Addenda, Terms and Conditions

I/We the undersigned, hereby submit the attached Proposal to satisfy the requirements laid out by the Corporation of the City of Sault Ste. Marie.

I/We have reviewed and understand the Information to Proponents (Section 1) of the RFP and agree to the terms and conditions contained therein in submitting this Proposal.

I/We agree that this Proposal is made without any connection, knowledge, comparison of figures or arrangements with any other person or persons submitting a Proposal for the same purpose and is in all respects fair and without collusion or fraud.

It is further understood and agreed that the lowest or any Proposal will not necessarily be accepted and that the City reserves the right in its absolute discretion to reject any or all Proposals, or accept the Proposal deemed most acceptable to the City. The City further reserves the right to negotiate with the successful Proponent to finalize the terms and conditions of the Proposal.

☑ I/WE agree to be bound by the terms and conditions and have authority to bind the Corporation and submit this Bid on behalf of the Bidder. - Rick Talvitie, Associate Vice President, AECOM Canada Ltd.
The bidder shall declare any potential or actual conflict of interest that could arise from Bidding on this Bid. Do you have a conflict of interest? ○ **Yes** ◉ **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document

Please check the box in the column "**I have reviewed this addendum"** below to acknowledge each of the addenda.

| File Name | I have reviewed the below addendum and attachments (if applicable) | Pages |
|---|---|---|
| **There have not been any addenda issued for this bid.** | | |

**City of Sault Ste Marie**
**Reconstruction of Peoples Road (Churchill Boulevard to Third Line)**
**Design and Construction Services**

AECOM

**TIME TASK BREAKDOWN**

Date: August 12, 2024

| Task Description | Task Cost (incl. Expenses) | Task Hours | Project Engineer | Project Manager | Traffic Engineer | Senior Design Tech | Design/CADD Tech | Junior Design Engineer | Sr. Construction Inspector | Jr. Construction Inspector | Support Staff | Expenses | Engineering Fees (Incl. 5% Comm Fee &Disbursements) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Team Member | | R. Talvitie | D. Maahs | | J. Tulloch | K. Young | Jake Tulloch | K. Young | Jake Tulloch | | | |
| **Part A - Preliminary Design** (Note 2, 3, 4, 5) | | | | | | | | | | | | | |
| 1 Project Management - QA/QC - SH&E | | | | | | | | | | | | | |
| 2 Conduct Start-Up Meeting with City to review/confirm scope of work | | | | | | | | | | | | | |
| 3 Collect additional background information from City, PUC & Utilities | | | | | | | | | | | | | |
| 4 Meet with PUC and confirm scope of waterworks upgrades | | | | | | | | | | | | | |
| 5 Review City survey and identify any additional survey requirements | | | | | | | | | | | | | |
| 6 Compile baseplans | | | | | | | | | | | | | |
| 7 Conduct comprehensive field review | | | | | | | | | | | | | |
| 8 Develop digital terrain model, contours and cross-sections | | | | | | | | | | | | | |
| 9 Compile design criteria incl. roadwork, sewers, waterworks etc. | | | | | | | | | | | | | |
| 10 Geotechnical and Excess Soil Investigations and Reports | | | | | | | | | | | | | |
| 11 Undertake traffic analysis (review of road diet, cycling lanes, intersections) | | | | | | | | | | | | | |
| 12 Preliminary design of road section (incl. lane widths, boulevard, sidewalk etc.) | | | | | | | | | | | | | |
| 13 Preliminary design of roadwork (horizontal & vertical alignment, intersections etc.) | | | | | | | | | | | | | |
| 14 Preliminary design of storm sewers (sizing, layout, details etc.) | | | | | | | | | | | | | |
| 15 Preliminary design of sanitary sewers (modeling, sizing, layout, details etc.) | | | | | | | | | | | | | |
| 16 Review and assess downstream SAN sewer capacity (incl. modeling) | | | | | | | | | | | | | |
| 17 Review with City the condition and suitability of reinstating elephant trunk sewer | | | | | | | | | | | | | |
| 18 Preliminary design of watermains and appurtenances (layout, details etc.) | | | | | | | | | | | | | |
| 19 Meet with Watco (ACR) to review railway crossing requirements | | | | | | | | | | | | | |
| 20 Identify any additional property acquisition requirements | | | | | | | | | | | | | |
| 21 Identify any utility impacts and review with agencies | | | | | | | | | | | | | |
| 22 Compile preliminary design drawings | | | | | | | | | | | | | |
| 23 Meet with City & PUC to review & finalize preliminary design | | | | | | | | | | | | | |
| 24 Finalize preliminary design with City & PUC comments | | | | | | | | | | | | | |
| 25 Compile preliminary construction quantities and cost estimate | | | | | | | | | | | | | |
| **Sub-Total - Part A - Preliminary Design** | | | | | | | | | | | | | $302,840 |
| **Part B - Detailed Design and Tendering** (Note 5, 6) | | | | | | | | | | | | | |
| 1 Project Management - QA/QC - SH&E | | | | | | | | | | | | | |
| 2 Prepare for and Conduct Public Open House | | | | | | | | | | | | | |
| 3 Complete detailed design of roadwork (incl. curbs, sdwk, blvd etc.) | | | | | | | | | | | | | |
| 4 Complete detailed design of sanitary sewers & appurtenances | | | | | | | | | | | | | |
| 5 Complete detailed design of storm sewers & appurtenances | | | | | | | | | | | | | |
| 6 Complete detailed design for waterworks & appurtenances | | | | | | | | | | | | | |
| 7 Complete design of railway crossing (roadway surface and u/g services) | | | | | | | | | | | | | |
| 8 Develop construction staging/traffic management plan and related drawings | | | | | | | | | | | | | |
| 9 Finalize utility relocations and other upgrades with Utilities | | | | | | | | | | | | | |
| 10 Compile detailed design drawings (General, Removals, Traffic & Civil) | | | | | | | | | | | | | |
| 11 Compile technical specifications | | | | | | | | | | | | | |
| 12 Compile tender quantities | | | | | | | | | | | | | |
| 13 Develop construction cost estimates | | | | | | | | | | | | | |
| 14 Compile tender documents | | | | | | | | | | | | | |
| 15 Finalize draft tender documents and drawings and submit to City & PUC for review | | | | | | | | | | | | | |
| 16 Meet with City & PUC to review draft tender documents and drawings (2) | | | | | | | | | | | | | |
| 17 Confirm limits of contracts for 2025 & 2026 | | | | | | | | | | | | | |
| 18 Compile & submit MOECP Forms, Pipe Data & design brief for SAN & STM sewers to City | | | | | | | | | | | | | |
| 19 Compile & submit Form 1 & watermain with design brief package to the PUC | | | | | | | | | | | | | |
| 20 Finalize tender packages (2025 & 2026) | | | | | | | | | | | | | |
| 21 Issue tender documents for posting on bids&tender (2025 & 2026 tenders) | | | | | | | | | | | | | |
| 22 Respond to inquiries during tender period and issue Addenda as required | | | | | | | | | | | | | |
| 23 Attend tender openings, review tenders and prepare & submit tender report to City | | | | | | | | | | | | | |
| 24 Award contracts | | | | | | | | | | | | | |
| **Sub-Total - Part B - Detailed Design and Tendering** | | | | | | | | | | | | | $312,160 |
| **Part C - Construction** (Note 7) | | | | | | | | | | | | | |
| 1 Project Management - QA/QC - SH&E | | | | | | | | | | | | | |
| 2 Coordinate and conduct pre-construction meeting with City, Contractor and Utilities | | | | | | | | | | | | | |
| 3 Prepare for and Conduct Construction public open houses | | | | | | | | | | | | | |
| 4 Liaison with City & Businesses/Residences to address any on-site construction issues | | | | | | | | | | | | | |
| 5 Review of submissions (staging & traffic control plans, shop drawings etc.) | | | | | | | | | | | | | |
| 6 Administer construction contract | | | | | | | | | | | | | |
| 7 Provide full-time resident inspection (56 weeks for 2 contracts) | | | | | | | | | | | | | |
| 8 Coordinate and conduct regular site meetings | | | | | | | | | | | | | |
| 9 Carry out final inspection with City and Contractor | | | | | | | | | | | | | |
| 10 Prepare and submit as-constructed drawings | | | | | | | | | | | | | |
| 11 Monitor work throughout warranty period and conduct final inspection | | | | | | | | | | | | | |
| **Sub-Total - Part C - Construction** | | | | | | | | | | | | | $606,645 |
| **SUB-TOTAL FEES** | | | | | | | | | | | | | |
| Communication/Information Technology Fee (5%) | | | | | | | | | | | | | |
| **TOTAL FEES (Incl. Expenses & Excl. HST) - >** | $1,221,645 | | | | | | | | | | | | $1,221,645 |

NOTES:
1) Fees including adjustment for inflation costs for 2025 & 2026.
2) Assumes no further requirements under the Municipal Class EA.
3) Excludes review of street lighting levels and electrical design for upgrades.
4) Assumes CCTV inpsection of elephant components by City.
5) SAN design includes modeling of proposed sewers to confirm sizing and downstream sewers to verify capacities based on flow data capture during flow monitoring.
6) Tasks for preparation and issuance of tenders assumes 2 separate contracts will be issued in 2025 and 2026.
7) Construction fees based on 2 separate contracts in 2025 and 2026 with a total construction duration of 56 weeks (28 weeks each) at an average of 55 hrs/week for inspection time.
8) Includes three public information centres (final preliminary design and two prior to construction)

**City of Sault Ste Marie**
**Reconstruction of Peoples Road (Churchill Boulevard to Third Line)**
**Design and Construction Services**

AECOM

**PROPOSED SCHEDULE**

Date: August 12, 2024

| | TASKS | TIMING (Months) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2024 | | | | 2025 | | | | | | | | | | | | 2026 | | | | | | | | | | | | |
| | | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| **Part A - Preliminary Design** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Project Management - QA/QC - SH&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Conduct Start-Up Meeting with City to review/confirm scope of work | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Collect additional background information from City, PUC & Utilities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Meet with PUC and confirm scope of waterworks upgrades | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Review City survey and identify any additional survey requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Compile baseplans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Conduct comprehensive field review | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Develop digital terrain model, contours and cross-sections | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Compile design criteria incl. roadwork, sewers, waterworks etc. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Geotechnical and Excess Soil Investigations and Reports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Undertake traffic analysis (review of road diet, cycling lanes, intersections) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Preliminary design of road section (incl. lane widths, boulevard, sidewalk etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Preliminary design of roadwork (horizontal & vertical alignment, intersections etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Preliminary design of storm sewers (sizing, layout, details etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Preliminary design of sanitary sewers (modeling, sizing, layout, details etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Review and assess downstream SAN sewer capacity (incl. modeling) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Review with City the condition and suitability of reinstating elephant trunk sewer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Preliminary design of watermains and appurtenances (layout, details etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | Meet with Watco (ACR) to review railway crossing requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Identify any additional property acquisition requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Identify any utility impacts and review with agencies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Compile preliminary design drawings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Meet with City & PUC to review & finalize preliminary design | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Finalize preliminary design with City & PUC comments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | Compile preliminary construction quantities and cost estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Part B - Detailed Design and Tendering** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Project Management - QA/QC - SH&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Prepare for and Conduct Public Open House | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Complete detailed design of roadwork (incl. curbs, sdwk, blvd etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Complete detailed design of sanitary sewers & appurtenances | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Complete detailed design of storm sewers & appurtenances | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Complete detailed design for waterworks & appurtenances | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Complete design of railway crossing (roadway surface and u/g services) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Develop construction staging/traffic management plan and related drawings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Finalize utility relocations and other upgrades with Utilities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Compile detailed design drawings (General, Removals, Traffic & Civil) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Compile technical specifications | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Compile tender quantities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Develop construction cost estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Compile tender documents | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Finalize draft tender documents and drawings and submit to City & PUC for review | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Meet with City & PUC to review draft tender documents and drawings (2) | | | | | | | X | | | | | | | | | | | X | | | | | | | | | | | |
| 17 | Confirm limits of contracts for 2025 & 2026 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Compile & submit MOECP Forms, Pipe Data & design brief for SAN & STM sewers to City | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | Compile & submit Form 1 & watermain with design brief package to the PUC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Finalize tender packages (2025 & 2026) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Issue tender documents for posting on bids&tender (2025 & 2026 tenders) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Respond to inquiries during tender period and issue Addenda as required | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Attend tender openings, review tenders and prepare & submit tender report to City | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Award contracts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Part C - Construction** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Project Management - QA/QC - SH&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Coordinate and conduct pre-construction meeting with City, Contractor and Utilities | | | | | | | | | X | | | | | | | | | | | | X | | | | | | | | |
| 3 | Prepare for and Conduct Construction public open houses | | | | | | | | | X | | | | | | | | | | | | X | | | | | | | | |
| 4 | Liaison with City & Businesses/Residences to address any on-site construction issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Review of submissions (staging & traffic control plans, shop drawings etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Administer construction contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Provide full-time resident inspection (56 weeks for 2 contracts) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Coordinate and conduct regular site meetings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Carry out final inspection with City and Contractor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Prepare and submit as-constructed drawings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Feb/Mar 2027 |
| 11 | Monitor work throughout warranty period and conduct final inspection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | continues to Nov, 2027 |

**Legend**

City Meetings - X  Timeline -

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-129**

**ENGINEERING**: A by-law to authorize the execution of the Agreement between the City and TULLOCH Engineering Inc. for the reconstruction of East Street (Bay Street to Wellington Street).

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated August 28, 2024 between the City and TULLOCH Engineering Inc., copy of which is attached as Schedule “A” hereto. This Agreement is for the reconstruction of East Street (Bay Street to Wellington Street).

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

lv\\citydata\LegalDept\Legal\Staff\COUNCIL\BY-LAWS\2024\2024-129 Agreement Reconstruction of East Street.docx

# Association of Consulting Engineering Companies | Ontario (ACEC-Ontario) in partnership with the Municipal Engineers Association (MEA)

# CLIENT/ENGINEER AGREEMENT

# FOR

# *PROFESSIONAL CONSULTING SERVICES*

*2020*
*(VERSION 3.1)*

The Corporation of the City of Sault Ste. Marie – East Street Reconstruction

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**AGREEMENT**

**FOR**

**PROFESSIONAL CONSULTING SERVICES**

**Dated the 28 day of August 20 24**

**-BETWEEN-**

The Corporation of the City of Sault Ste. Marie

Hereinafter called the 'Client'

**-AND-**

TULLOCH Engineering Inc.

Hereinafter called the 'Engineer'

WHEREAS the Client intends to (Description of Project)

Obtain Professional Engineering Services associated with the design of the reconstruction of East Street (Bay Street to Wellington Street) in Sault Ste. Marie, Ontario.

Hereinafter called the 'Project' and has requested the Engineer to furnish professional Services in connection therewith.

**NOW THEREFORE WITNESSETH** that in consideration of the covenants contained herein, the Client and the Engineer mutually agree as follows:



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# DEFINITIONS

1. **Client**
   Client shall be the party identified herein, and shall mean a municipality within the Province of Ontario or a related municipal organization representing the interests of Ontario municipalities.

2. **Engineer**
   Engineer shall be the party identified herein, and shall be properly qualified to provide the professional services prescribed in this Agreement.

3. **Municipal Engineers Association (MEA)**
   MEA shall mean the association of public sector Professional Engineers engaged in performing the various functions that comprise the field of municipal engineering in Ontario

4. **Association of Consulting Engineering Companies | Ontario (ACEC-Ontario)** shall mean the industry association created to represent the business interests of member consulting engineering firms, working with all levels of government and other stakeholders to promote fair procurement and business practices to support its member firms as necessary.

5. **Order of Precedence**:
   i. Standard Agreement
   ii. Schedule A: Supplementary Conditions to the Standard Agreement
   iii. Schedule B: Addenda to the Request for Proposals (RFP)
   iv. Schedule C: Request for Proposal (RFP)
   v. Schedule D: Proposal submission document(s) from the Engineer
   vi. Schedule E: Other



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# ARTICLE 1 - GENERAL CONDITIONS

## 1.1 Retainer

The Client hereby retains the services of the Engineer in connection with the Project and the Engineer agrees to provide the services described in Article 2 (Services to be provided) for the Project under the general direction and control of the Client.

## 1.2 Compensation

The Client shall pay the Engineer in accordance with the provisions set forth in Article 3. For purposes of this agreement, the basis of payment shall be as specified in Article 3.2.

## 1.3 Staff and Methods

The Engineer shall perform the services under this agreement with the degree of care, skill and diligence normally provided in the performance of such services as contemplated by the agreement at the time such services are rendered and as required by the Professional Engineers Act (RSO 1990, Chapter P.28) and the regulations therein. The Engineer shall employ only competent staff who will be under the supervision of a senior member of the Engineer's staff. The Engineer shall obtain the prior agreement of the Client before making any changes to the staff list after commencement of the Project.

## 1.4 Drawings and Documents

Subject to Article 3, drawings and documents or copies thereof required for the Project shall be exchanged between the parties on a reciprocal basis. Documents prepared by the Engineer for the Client may be used by the Client, for the Project herein described, including "record" drawings. Subject to Article 1.5, the Client has ownership of the drawings and the client indemnifies the Engineer for unauthorized use of the documents and deliverables.

## 1.5 Intellectual Property

All concepts, products or processes produced by or resulting from the Services rendered by the Engineer in connection with the Project, or which are otherwise developed or first reduced to practice by the Engineer in the performance of his/her Services, and which are patentable, capable of trademark or otherwise, shall be and remain the property of the Engineer.

The Client shall have permanent non-exclusive royalty-free license to use any concept, product or process, which is patentable, capable of trademark or otherwise produced by or resulting from the Services rendered by the Engineer in connection with the Project and for no other purpose or project.

## 1.6 Records and Audit

a) In order to provide data for the calculation of fees on a time basis, the Engineer shall keep a detailed record of the hours worked by staff employed for the Project.
b) The Client may inspect timesheets and record of expenses and disbursements of the Engineer during regular office hours with respect to any item which the Client is required to pay on a time scale or disbursement basis as a result of this Agreement.



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c) The Engineer, when requested by the Client, shall provide copies of receipts with respect to any disbursement for which the Engineer claims payment under this Agreement.
d) For seven (7) years after the expiry date or any date of termination of the Agreement, the Engineer shall maintain all necessary records to substantiate i) all charges and payments under the Agreement and ii) that all deliverables were provided in accordance with the Agreement.

## 1.7 Changes and Alterations and Additional Services

With the consent of the Engineer, the Client may in writing at any time after the execution of the Agreement or the commencement of the Services delete, extend, increase, vary or otherwise alter the Services forming the subject of the Agreement, and if such action by the Client necessitates additional staff or Services, the Engineer shall be paid in accordance with Section 3.2.2.1 for such additional Services and staff employed directly thereon, together with such expenses and disbursements as allowed under Section 3.2.4, or as otherwise agreed in writing between the parties.

## 1.8 Delays

In the event that the start of the project is delayed for sixty (60) days or more for reasons beyond the control of the Engineer, the Engineer shall have the right to renegotiate the agreement before the commencement of the project.

## 1.9 Suspension or Termination

The Client may at any time by notice in writing suspend or terminate the Services or any portion thereof at any stage of the project. Upon receipt of such written notice, the Engineer shall perform no further Services other than those reasonably necessary to close out his/her Services. In such an event, the Engineer shall be entitled to payment in accordance with Section 3.2 for any of the Engineer's staff employed directly thereon together with such expenses and disbursements allowed under Section 3.2.

If the Engineer is an individual and deceases before his/her Services have been completed, this Agreement shall terminate as of the date of his/her death, and the Client shall pay for the Services rendered and disbursements incurred by the Engineer to the date of such termination.

## 1.10 Indemnification

The Engineer shall indemnify and save harmless the Client from and against all claims, actions, losses, expenses, costs or damages of every nature and kind whatsoever which the Client, his employees, officers or agents may suffer, to the extent the Engineer is legally liable resulting from the negligent acts of the Engineer, his employees, officers or agents in the performance of this Agreement.

The Client agrees to hold harmless, indemnify and defend the Engineer from and against any and all claims, actions, losses, expenses, costs or damages of every nature including liability and costs of defense arising out of or in any way connected with the presence, discharge, release or escape of contaminants of any kind, excluding only such liability as may arise out of the negligent acts of the Engineer in the performance of his/her Services to the Client within this project.

## 1.11 Insurance

The Client will accept the insurance coverage amount specified in this clause section (a) or (b), or whichever is applicable to the claim or as specified in the RFP as the aggregate limit of liability of the Engineer for Clients damages.

a) Comprehensive General Liability and Automobile Insurance



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The Insurance Coverage shall be $ **5,000,000.00** per occurrence and in the aggregate for general liability and $ **2,000,000.00** for automobile insurance. When requested, the Engineer shall provide the Client with proof of Comprehensive General Liability and Automobile Insurance (Inclusive Limits) for both owned and non-owned vehicles.

b) Professional Liability Insurance
The Insurance Coverage shall be in the amount of $ **2,000,000.00** per claim and in the aggregate. When requested, the Engineer shall provide to the Client proof of Professional Liability Insurance carried by the Engineer, and in accordance with Professional Engineers Act (RSO 1990, Chapter P.28) and Regulations therein.

c) Additional Coverage
If the Client requests to have the amount of coverage increased from that detailed in the RFP, or requests other special insurance for this Project then the Engineer shall endeavour forthwith to obtain such additional or special insurance at the Client's expense as a disbursement allowed under Section 3.2.

It is understood and agreed that the coverage provided by these policies will not be changed or amended in any way nor cancelled by the Engineer until (30) days after written notice of such change or cancellation has been delivered to and acknowledged by the Client.

## 1.12 Force Majeure

The Client agrees that the Engineer is not responsible for damages arising directly or indirectly from any delays for causes beyond the Engineer's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labour disputes; severe weather disruptions or other natural disasters or acts of God; fires; riots, war or other emergencies; failure of performance by the Client or the Client's contractors or consultants; or discovery of any hazardous substances or differing site conditions.

In addition, if such delays resulting from any such causes increase the cost or time required by the Engineer to perform its services in an orderly and efficient manner, the Engineer shall be entitled to a reasonable adjustment in schedule and compensation.

## 1.13 Contracting for Construction

The Engineer or any person, firm or corporation associated or affiliated with or subsidiary to the Engineer shall not tender for the construction of the Project or have an interest either directly or indirectly in the construction of the Project.

## 1.14 Assignment

Neither party may assign this Agreement or any portion thereof without the prior consent in writing of the other party.

## 1.15 Previous Agreements

This Agreement supersedes all previous agreements, arrangements or understandings between the parties whether written or oral in connection with or incidental to the Project.

## 1.16 Approval by Other Authorities

Unless otherwise provided in this Agreement, where the work of the Engineer is subject to the approval or review of an authority, department of government, or agency other than the Client, such applications for approval or review shall be the responsibility of the Engineer, but shall be submitted through the offices of the Client and unless authorized by the Client in writing, such applications for approval or review shall not



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be obtained by direct contact by the Engineer with such other authority, department of government or agency. Costs for all application fees shall be borne by the Client unless otherwise provided for by the Engineer. The foregoing in no way limits the Engineer's responsibility to identify, understand and coordinate any and all approvals and permits required for the Project unless otherwise specified in the RFP or agreed to by the Client.

### 1.17 Sub-Consultants

The Engineer may engage Sub-Consultants for specialized services provided that prior approval is obtained, in writing, from the Client and may add a mark-up of 5 % of the cost of such Services to cover office administration costs when claiming reimbursement from the Client.

### 1.18 Inspection (Review by the Client)

The Client, or persons authorized by the Client, shall have the right, at all reasonable times, to inspect or otherwise review the Services performed, or being performed, under the Project and the premises where they are being performed.

### 1.19 Publication

The Engineer agrees to obtain the consent in writing of the Client before publishing or issuing any information regarding the Project.

### 1.20 Confidential Data

The Engineer shall not divulge any specific information identified as confidential, communicated to or acquired by him/her, or disclosed by the Client in the course of carrying out the Services provided for herein. These obligations of confidentiality shall not apply to information which is in the public domain, which is provided to the Engineer by a third party without obligation of confidentially, which is independently developed by the Engineer without access to the Client's information, or which is required to be disclosed by law or court order. No such information shall be used by the Engineer on any other project without the approval in writing of the Client.

### 1.21 Dispute Resolution

1) Negotiation

a) In the event a matter of difference between the Engineer and the Client in relation to the Contract the grieved party shall send a notice in writing of dispute to the other party which contains the particulars of the matter in dispute and the relevant provisions of the Contract Documents. The responding party shall send a reply in writing to the dispute within ten (10) business days after receipt of the notice of dispute setting out particulars of this response and any relevant provisions of the Contract Documents.

b) The Engineer and the Client shall make all reasonable efforts to resolve their dispute by amicable negotiations and agree to provide, without prejudice, frank, candid and timely disclosure of any and all relevant facts, information, and documents to facilitate these negotiations.



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c) In the event of failure by the Engineer and the Client to reach agreement within ten (10) business days of receipt of the responding party's reply, or if either party concludes that further negotiation is unlikely to result in agreement, the matter shall be referred to mediation as provided in Section 2 herein.

2) Mediation

a) The Engineer and the Client shall jointly select an impartial Mediator who shall be, preferably, properly qualified in the area of work as contemplated by this Contract. In the event that the parties, acting reasonably, cannot agree on a mediator, the candidates selected by the parties shall, acting reasonably, choose a third party to act as the Mediator.
b) The Mediator shall meet with the parties within ten (10) business days after the selection of the Mediator, or as soon thereafter as is practicable, to attempt to mediate and resolve the dispute. The Engineer and the Client shall observe such reasonable procedures for conducting the mediation as the Mediator may reasonably request.
c) If no agreement is reached upon mediation, or if either party concludes that further mediation is unlikely to result in agreement, then either the Engineer or the Client may request the Mediator to recommend (and only recommend) a basis, or bases, for resolution of the dispute. The Mediator shall, after consideration of the parties' positions and written submissions (if so requested), issue a written recommendation in this regard. Any recommended basis for resolution shall have absolutely no binding effect upon either party unless both parties agree to accept it and shall be without prejudice to the parties' positions in any further proceeding.
d) If no agreement is reached either party may refer such matter as is arbitrable to arbitration as provided in Section 3 herein or exercise any legal rights it may have.
e) All meetings and proceedings shall be held in the municipality of the Client or a reasonable alternate at a time and location as determined by the parties.
f) The costs and expenses of the Mediator shall be shared equally by the Engineer and the Client.

3) Arbitration

a) In the event that the parties are unable to settle any dispute between them which is under mediation, either party may refer such matter to arbitration as provided herein:
    i. The Client and the Engineer shall select an arbitrator within ten (10) business days of the submission of a dispute to arbitration under this Section, which arbitrator shall be neutral and independent of the parties. If the parties are unable to agree on an arbitrator, either party shall be at liberty to seek an appointment of an arbitrator upon application under the Arbitration Act, 1991, S.O. 1991, C. 17.
    ii. The arbitration shall be conducted in accordance with the provisions of the *Arbitration Act, 1991*, S.O. 1991, C.17, unless the parties otherwise agree. If the issue in dispute is particularly time sensitive, the parties shall, in good faith, take such reasonable steps as may be required to expedite the arbitration process. In any event, all disputes shall be submitted to the arbitrator within thirty (30) calendar days of the selection of the arbitrator. All arbitration meetings and proceedings shall be held in the municipality of the Client or a reasonable alternate, at a time and location determined by the parties, but in any event no later than thirty (30) calendar days following the submission of the dispute to the arbitrator.
    iii. In addition to the examination of the parties by each other, the arbitration panel may examine, in the ordinary course, the parties or either of them and the witnesses in the matter referred to the arbitration panel, and the parties and witnesses, if examined, shall be examined on oath or affirmation.
    iv. The arbitration panel shall, after full consideration of the issues in dispute, the relevant facts and applicable law, render a decision within thirty (30) calendar days after argument of the issue to the arbitrator, which decision shall be final and binding on the parties and not subject to appeal or challenge, except such limited relief provided under Subsection 45(1) (appeal on a question of law, with leave) or Section 46 (setting aside award) of the *Arbitration Act, 1991.*
    v. Each party shall bear is own costs and expenses incurred in the arbitration, and the parties shall share equally in the costs and expenses of the arbitrator.



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vi. Any award of the arbitration panel may, at the instance of either of the parties to this Agreement and without notice to the other of them, be made an Order of the Superior Court of Ontario, pursuant to the *Arbitration Act, 1991* and the *Courts of Justice Act*, R.S.O. 1990, c.C-43.

4) Adjudication

a) Nothing in this Agreement shall prevent the right of either the Engineer or the Client to refer to adjudication any dispute which may be adjudicated under the provisions of section 13.5 of the *Construction Act*, R.S.O. 1990, c. C-30.

b) Any such adjudication shall be governed by the provisions of Part II.1 CONSTRUCTION DISPUTE INTERIM ADJUDICATION of the *Construction Act*.

## 1.22 Time

The Engineer shall perform the Services in accordance with the requirements of Article 2 and shall complete any portion or portions of the Services in such order as the Client may require.

The Client shall give due consideration to all designs, drawings, plans, specifications, reports, tenders, proposals and other information submitted by the Engineer, and shall make any decisions which he/she is required to make in connection therewith within a reasonable time so as not to delay the work of the Engineer.

## 1.23 Estimates, Schedules and Staff List

### 1.23.1 Preparation of Estimate of Fees, Schedule of Progress and Staff List

When requested by the Client, and where payment is calculated on a time basis, the Engineer shall provide, for approval by the Client:

a) An estimate of the total fees to be paid for the Services.
b) A Schedule showing an estimate of the portion of the Services to be completed in each month and an estimate of the portion of the fee which will be payable for each such month.
c) A Staff list showing the number, classifications and hourly rate ranges for staff, Principals and Executives, for which the Engineer will seek payment on a time basis. The Engineer shall relate such information to the particular type of work that such staff is to perform, while employed on the Project. Such list shall designate the member of the Engineer's staff who is to be the liaison person between the Engineer and the Client.

### 1.23.2 Subsequent Changes in the Estimate of Fees, Schedule of Progress and Staff List

The Engineer will require prior written approval from the Client for any of the following changes:

a) Any increase in the estimated fees beyond those approved under Subsection 1.23.1(a).
b) Any change in the schedule at progress which results in a longer period than provided in Subsection 1.23.1 (b).
c) Any change in the number, classification and hourly rate ranges of the staff provided under Subsection 1.23.1 (c).

### 1.23.3 Monthly Reporting of Progress

When requested by the Client, the Engineer shall provide the Client with a written report showing the portion of the Services completed in the preceding month.



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## 1.24 Additional Conditions

Any requirements regarding insurance, WSIB, permits, approvals, AODA, etc. to be listed here. If there are no additional conditions, then this section is to be left blank. Documentation supporting additional conditions detailed here shall be contained in Article 5.



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## ARTICLE 2 – SERVICES TO BE PROVIDED

2.1 Services to be provided by Engineer as detailed in the RFP and as provided for in the Engineer's Proposal.

2.2 Services to be provided by Client as detailed in the RFP and as provided for in the Engineer's Proposal.



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# ARTICLE 3 - FEES AND DISBURSEMENTS

## 3.1 Definitions

For the purpose of this Agreement, the following definitions shall apply:

**a) Cost of the Work:**

i. The "Cost of the Work" shall mean the total construction cost of the Project including all materials, equipment, sales taxes, labour and contractor's overhead and profit, necessary to complete the work for which the Engineer prepares designs, drawings or specifications, for which he/she is responsible. Where sales taxes are not included in the cost of the work, the fee shall be adjusted upwards by the factor equivalent to the sales taxes. The adjusted fee may be computed to the nearest one-tenth of one percent (1/10%).

ii. Wherever the Client furnishes labour or other service which is incorporated in the work, the current price of labour or other service when the work was executed shall be used to compute the Cost of the Work.

iii. Whenever used materials or equipment is furnished by or on behalf of the Client, the fair market value of such materials or equipment, as though it was purchased new, shall be used to compute the Cost of the Work.

iv. In computing the Cost of the Work, no deductions shall be made on account of any penalties or damages claimed by the Client from any contractor or on account of any other sum withheld from any contractor.

v. The Cost of the Work shall not include any fees and disbursements due to the Engineer the Client's engineering and office expenses, or cost of land.

**b) Site:**

Site includes the actual work site and other locations where the checking of materials, equipment and workmanship is carried out.

## 3.2 Basis of Payment for this agreement

**Fees Calculated on Time with Upset Limit**

***Note: If you have multiple bases of payment please select "Applies" in the appropriate sections below. If one basis of payment applies, be sure it is the only option selected.***

### 3.2.1 Fees Calculated on a Percentage of Cost Basis

The Client shall pay the Engineer fees to be calculated as a percentage of the Cost of the Work for normal projects as follows:

**CALCULATION OF FEE**

| TYPE OF SERVICE | PERCENTAGE |
|---|---|
| | |
| | |
| | |
| | |
| | |



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### 3.2.2 Fees Calculated on a Time Basis

a) Fees

The Client shall pay the Engineer a fee, calculated on a time basis, for that part of the Services described in Article 2. Fees on a time basis for all staff shall be hourly rates based on job classifications as detailed in the Engineer's proposal.

For a project of over one (1) year duration, or for projects which become extended beyond one (1) year in duration, the Engineer may from time to time seek approval from the Client to adjust hourly rates and such approval shall not be unreasonably withheld.

b) Time Expended

All time expended on the assignment, whether in the Engineer's office, at the Client's premises, or elsewhere, and including travel time, shall bechargeable.

### 3.2.3 Upset Cost Limit

(a) The Engineer shall be paid a fee, calculated on a time basis, for the Services.

(b) Included in the fee, the Engineer shall be reimbursed at cost plus an administrative charge of **5** % for all reasonable expenses properly incurred by them in connection with the Services, including but not limited to: vehicle use charges, traveling and living expenses, long distance telephone charges, report production costs, photography, special delivery charges, supplies and equipment, field equipment costs, laboratory costs. Computer and office charges are considered part of overhead and shall not be invoiced as disbursements.

(c) Notwithstanding Subsections (a) and (b) of this Section, the total fees and disbursements paid by the Client to the Engineer for the Services shall not exceed the total upset amount of $ **536,583.50** plus, applicable taxes made up as follows:

(i) $536,583.50 plus, applicable taxes for Core Services as described in Schedule A; and,

(ii) $ **0.00** plus, applicable taxes as a Contingency Allowance for Additional Services that may be required but are not included in Schedule A.

(d) Notwithstanding Subsections (a) and (b) of this Section, the Client, at its sole discretion, may limit the fees and disbursements paid by the Client to the percentage equivalent to the project complete in the opinion of the Client.

(e) The Engineer must request and receive the written approval of the Client before any Additional Services are carried out that are not included in Schedule A. The Engineer shall not be entitled to any payment from the Contingency Allowance unless the Engineer has satisfied this condition. When approving Additional Services that are not included in Schedule A, the Client, at its sole discretion, may, in writing, set a limit on the monies from the Contingency Allowance that may be permitted for the requested Additional Services.

### 3.2.4 Reimbursable Expenses – Apply to 3.2.1. through 3.2.3. and shall be included in 3.2.5.

In addition to the fee, the Engineer shall be reimbursed at cost plus an administrative charge of **5** %, for all expenses and disbursements properly incurred by the Engineer in connection with the project.

### 3.2.5 Lump Sum Basis

a) Fees for the scope of work covered under this Agreement will be on a Lump Sum Price Basis, inclusive or labour, disbursements and reimbursable expenses.

b) Monthly progress invoices will be based on the percentage of project completed or



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milestone achieved as detailed in the RFP.

c) If the project is abandoned or delayed for any reason beyond the Engineer's control, the Client shall pay a fee for services rendered to that date, plus the termination expenses reasonably incurred by the Engineer in winding down the project.

## 3.3 Payment

### 3.3.1 Fees Calculated on a Time Basis — Applies

The Engineer shall submit an invoice to the Client for all Services completed in the immediately preceding month.

### 3.3.2 Fees Calculated on a Percentage of Cost Basis — Does Not Apply

a) Monthly Payment

The Engineer shall submit an invoice to the Client for that part of the design of the Project completed in the immediately preceding month calculated upon the basis of the Engineer's estimate of the cost of that part of the Project, and, if the Client agrees with such estimate and that such part has been completed, the Engineer will be paid the amount of the fee so invoiced.

b) On Award of Contract

Following the award of the contract for the construction of the Project, the Engineer shall recalculate his/her fee on the basis of the tender quantities and prices on which the contract for the construction of the Project was awarded, plus the estimated cost of materials and other services supplied by the Client and upon such recalculation, the amount paid to the Engineer shall be adjusted to equal the full amount of the recalculated fee including the repayment by the Engineer of any overpayment made to the Engineer.

c) Delay of Award of Contract

In the event the contract for construction of the Project is not awarded within _____ months of the acceptance of the Design by the Client the final fee for design shall be determined as in paragraph (a) above, and paragraph (b) shall not apply.

Further services for the Project beyond the_____months will be undertaken on a time basis.

d) On Completion of the Work

Following Completion of the Work, the Engineer shall recalculate his/her fee on the basis of the actual Cost of the Work and upon such recalculation the amount paid to the Engineer shall be adjusted to equal the full amount of the recalculated fee including the repayment by the Engineer of any overpayment to the Engineer.



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### 3.3.3 Lump Sum Does Not Apply

Based on a milestone basis as per the Engineer's proposal.

### 3.3.4 Invoices Generally

a) Requirements for a proper invoice

All invoices submitted by the Engineer to the Client under this Agreement shall contain the following information:

(1) The Engineer's name and address;
(2) The date of the invoice and the period during which invoiced Services were supplied;
(3) Information identifying the Agreement under which Services were supplied;
(4) A description of the services supplied;
(5) The amount payable for the services supplied , and a statement that payment is due upon receipt;
(6) The name, title, telephone number and mailing address of the person to whom payment is to be sent; and
(7) The following additional information (if any):

b) Disputed invoices

If the Client intends to dispute any invoice delivered by the Engineer, in whole or in part, the Client shall within 14 calendar days of receiving the invoice, deliver to the Engineer a notice of non-payment in Form 1.1 as prescribed by the *Construction Act*.

Any undisputed portion of any invoice shall remain payable upon receipt in accordance with the terms of payment set out in section 3.3.5.

### 3.3.5 Terms of Payment

The Client will compensate the Engineer in accordance with the fees and charges for services as set out in the proposal or as otherwise mutually agreed.

All fees, irrespective of their basis, shall be exclusive of HST, and HST will be added to each invoice.

All fees and charges will be payable in Canadian funds unless noted otherwise.

Invoices will be due and payable, as presented and without hold-backs, by the Client upon receipt, and in any event no later than 28 days after receiving the proper invoice.

Interest on overdue accounts will be charged at the rate of 12% per annum.



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## ARTICLE 4 – FORM OF AGREEMENT

**ENGINEER: TULLOCH Engineering Inc.**

The signatory shall have the authority to bind the Engineer for the purposes of this agreement.

**This_____Day of_____, 20____**

| | | | |
|---|---|---|---|
| Signature | | Signature | |
| Name | Larry Jackson, P.Eng. | Name | John McDonald, P.Eng. |
| Title | General Manager of Engineering | Title | Project Manager |

**CLIENT: The Corporation of the City of Sault Ste. Marie**

The signatory shall have the authority to bind the municipality or its agency for the purposes of this agreement.

**This_____Day of_____, 20 ____**

| | | | |
|---|---|---|---|
| Signature | | Signature | |
| Name | Matthew Shoemaker | Name | Rachel Tyczinski |
| Title | Mayor | Title | City Clerk |



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## ARTICLE 5 – SCHEDULES

*Copies of Request for Proposal and Proposal Submission documents if required.*

This article includes all schedules, (i.e. Request for Proposal, Proposal Submission, Certificates of Insurance, etc.) as well as any additional information required to form the Agreement, such as supplemental general conditions, etc.

The following schedules form part of:

| | Attached |
|---|---|
| Schedule A: Supplementary Conditions – attached OR not used | X |
| Schedule B: Addenda – attached OR not used | |
| Schedule C: Scope of Services – RFP attached OR not used | X |
| Schedule D: Proposal from engineer – attached OR not used | X |
| Schedule E: Other | |

NOTE: Attach all appropriate schedule documents as indicated (X).



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# Schedule A – Supplementary Conditions

Insurance and Indemnity provisions and considerations for use with the "Association of Consulting Engineering Companies/Ontario (ACEC-Ontario) in Partnership with the Municipal Engineers Association (MEA)" – "Client/Engineer Agreement for Professional Consulting Services 2020 (Version 3.1)"

**Option A** *(The following language to be used with contracts not involving any excavating, digging, drilling, core sample removal etc.):*

Notwithstanding the Order of Precedence as set out in the M.E.A./C.E.O. CLIENT/ENGINEER AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections **"1.10 Indemnification"** and **"1.11 Insurance"** in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and

(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provided that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Engineer, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Engineer.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability (**"CGL"**) insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of

~~Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement.~~

~~**Automobile Liability Insurance**~~

~~Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.~~

~~**Professional Liability Insurance**~~

~~Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.~~

~~The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.~~

~~Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.~~

~~All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.~~

**Option B** *(The following language to be used if the work involves any excavating, digging, drilling, core sample removal etc., and the Engineer is performing that work themselves (rather than a separate contract for those tasks):*

Notwithstanding the Order of Precedence as set out in the M.E.A./C.E.O. CLIENT/ENGINEER AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification**" and "**1.11 Insurance**" in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and

(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provided that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Engineer, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Engineer.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability ("**CGL**") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement. Sudden and Accidental pollution coverage with limits of not less than two million dollars ($2,000,000) per occurrence (can also be provided under a separate Environmental Impairment or Pollution policy).

**Automobile Liability Insurance**

Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Additional Insurance considerations**:

If the work involves any technology or IT aspects, Cyber coverage may be warranted – please forward these to Legal for review.

If any subconsultant is to be engaged (once approved by the City as per section 1.17) they will be required to place the same insurance coverages as outlined in section 1.11

# THE CORPORATION OF THE CITY OF SAULT STE. MARIE

## REQUEST FOR PROPOSAL

## 2024PWE-ENG-06-P

**Professional Engineering Services**
**RECONSTRUCTION OF EAST STREET**
**Bay Street to Wellington Street**

---

CLOSING DATE AND TIME REQUIREMENTS:

**Electronic Submissions Only**, will be received by the Bidding System

**no later than 4:00 p.m. local time on Wednesday, August 21, 2024.**

**July 31, 2024**

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# SECTION 1

## 1. INFORMATION TO PROPONENTS

### *1.1 Introduction*

The Corporation of the City of Sault Ste. Marie (the City) is requesting proposals from Vendors of Record (VOR) within the Linear Municipal Infrastructure Category to provide engineering services associated with proposed reconstruction of:

- East Street – Bay Street to Wellington Street

Engineering services required for this project include the design, contract administration and field inspection associated with reconstruction of the road, watermain, storm sewers and sanitary sewers.

### *1.2 Methodology for Submitting Proposals*

**Registering to Bid**

All Proponents shall have a Bidding System Vendor account and be registered as a Plan Taker for this Proposal opportunity, which will enable the Proponent to download the Bid Call Document, to receive Addenda email notifications and download all documents without the watermark "preview" on them.

To ensure receipt of the latest information and updates via email regarding this bid, or if a Proponent has obtained this Proposal Document from a third party, the onus is on the Proponent to create a Bidding System Vendor account and be registered as a Plan Taker for the Proposal opportunity.

**Electronic Submission**

ELECTRONIC PROPOSAL SUBMISSIONS ONLY, shall be received by the Bidding System. Hardcopy submissions not permitted.

Proponents are cautioned that the timing of their Proposal Submission is based on when the Proposal is RECEIVED by the Bidding System, not when a Proposal is submitted, as Proposal transmission can be delayed due to file transfer size, transmission speed, etc.

For the above reasons, it is recommended that sufficient time is allotted to complete the Proposal Submission and to resolve any issues that may arise. The closing time and date shall be determined by the Bidding System's web clock.

Proponents should contact bids&tenders support listed below, at least twenty-four (24) hours prior to the closing time and date, if they encounter any problems. The Bidding System will send a confirmation email to the Proponent advising that their proposal was submitted successfully. If you do not receive a confirmation email, contact bids&tenders support.

Late Proposals are not permitted by the Bidding System.

To ensure receipt of the latest information and updates via email regarding this RFP, or if a Proponent has obtained this RFP Document from a third party, the onus is on the Proponent to create a Bidding System Vendor account and register as a Plan Taker for the proposal opportunity.

Proponents may edit or withdraw their Proposal Submission prior to the closing time and date. However, the Proponent is solely responsible to ensure the re-submitted proposal is received by the Bidding System no later than the stated closing time and date.

The Corporation reserves the right to reject any or all Proposals and the lowest or any Proposal will not necessarily be accepted.

### *1.3 Errors, Omissions, Clarifications*

It will be the Proponent's responsibility to clarify any questions before submitting a Proposal.

**Submitting questions and receiving addendums**

Questions related to this RFP are to be submitted to the Purchasing representative through the Bidding System only by clicking on the "Submit a Question" button for this specific proposal opportunity.

An addendum issued through the bidding system is the only means of changing, amending or correcting this RFP. In the process of responding to this RFP, the Proponent should not utilize any information obtained outside this protocol.

Proponents shall acknowledge receipt of any addenda through the Bidding System by checking a box for each addenda and any applicable attachment.

It is the responsibility of the Proponent to review all Addenda that are issued. Proponents should check online at Sault Ste. Marie Bid Opportunities Website prior to submitting their Proposal and up until Proposal closing time and date in the event additional addenda are issued.

In the event that a Proponent submits their proposal prior to the issuance of an addenda, the Bidding System will **withdraw** the submission and change the submission status to

"**Incomplete**". The Proponent is solely responsible to:

- make any required adjustments to their Bid;
- acknowledge the addendum/addenda; and
- ensure the re-submitted Proposal is received by the Bidding System no later than the stated Proposal closing time and date.

### *1.4 Withdrawal/Decline of Proposal*

Proponents may edit or withdraw their Proposal Submission prior to the closing time and date. However, the Proponent is solely responsible to ensure the re-submitted proposal is received by the Bidding System no later than the stated closing time and date.

### *1.5 Informal Proposals*

Proposals are to conform to the terms and conditions set out herein. Proposals which are incomplete, conditional, or obscure, or which contain additions not called for, erasures, alterations, errors, or irregularities of any kind, may be rejected as informal.

### *1.6 Proposal Evaluation*

All proponents have been prequalified in the City's VOR list. The successful proponent will be selected based on evaluation of the proposal utilizing a rating system which considers the requirements mentioned below. A committee composed of City staff will be used in the selection process. The proponent shall outline:

1) Consulting team's demonstrated expertise in municipal road construction including watermain, storm, sanitary sewer and traffic analysis. Include relevant past experience on similar projects and professional representative experience including references and key personnel (30%);

2) Detailed proposed work plan and methodology to be undertaken, including any other information or content relevant to the completion of project (35%);

3) A detailed schedule recognizing critical deliverables, progress meetings and timelines (15%); and

4) A fee schedule indicating the name, role and rate of pay for each individual assigned to the project (showing HST as extra). The cost of the engineering assignment shall include work up to and including the final construction. No further payment will be made above this figure unless authorized in advance by the City. (20%).

The above list of criteria represents areas which are to be specifically addressed in the

proposal. The evaluation process will not necessarily be limited to these areas. Other criteria not specifically listed above may also receive consideration. The order in which the criteria are listed does not indicate the weighting of the evaluation.

The City reserves the right, in its sole and absolute discretion to select a preferred Proponent with which to negotiate a final contract, terminate the proposal call or reject any and all Proposals. Negotiations will not constitute a legally binding offer to enter into a contract on the part of the City or the proponent.

The City will endeavor to complete the evaluation process within a reasonable time frame. The City reserves the right to contact Proponents to seek clarification of the proposals, as submitted, to assist in the evaluation process. Interviews may be required. **Please see Paragraph 1.10 concerning incurred costs associated with attendance at such interviews.**

**IMPORTANT:** The decision of the City of Sault Ste. Marie with respect to this Request for Proposals is considered final. In submitting a Proposal, Proponents agree that there is no recourse to the City of Sault Ste. Marie for its decision.

### *1.7 Site Inspection and Requirements of Work*

Proponents are required to submit their proposals upon the conditions that they shall satisfy themselves by personal examination of the location of the proposed works, and by such other means, as they may prefer, as to the actual conditions and requirements of the work.

The successful Proponent is required to comply with the requirements of the City's Contractor Pre-Qualification Program prior to the start of any onsite work on this Contract and shall be kept current for the duration of the Contract. These requirements include but are not limited to WSIB Coverage, Liability Insurance Coverage, Accessibility Training, and Safe Work Practices. Details regarding compliance with this requirement can be found by visiting Sault Ste. Marie Health and Safety page. Responsibility for compliance with this requirement for its Subcontractors is the responsibility of the successful Contractor. Failure to comply with the requirements of this Program will result in loss of the contract.

### *1.8 Proposal Left Open*

The Proponent shall keep their Proposal open for acceptance for ninety (90) days after the closing date.

### *1.9 Schedule*

(A) Release of RFP: July 31, 2024

(B) Question Close: August 9, 2024
(C) Submission of Proposal: August 21, 2024, by 4:00 p.m. local time (Eastern)
(D) Recommendation of Award: September, 2024
(E) Signing of Agreement: September, 2024
(F) Commencement of Services: September, 2024

The City reserves the right to alter the scheduling of items "D" to "F". Proponents are asked to designate one contact person to whom any additional information deemed to be relevant to the proposal may be communicated. Complete Contact Coordinates including email address shall be included in the Proposal.

### *1.10 Incurred Costs*

The City will not be liable for, nor reimburse any Proponent for costs incurred in the preparation of Proposals or any other costs such as preparation for, and attendance at interviews that may be required as part of the evaluation process.

Whenever possible, at the sole determination of the City, additional information and/or clarifications will be obtained by telephone or other electronic means.

### *1.11 Alterations to Documents*

No electronic reproduction or alteration of the original document will be permitted under any circumstance. The Proponent shall not change the wording of the proposal after submission; and no words or comments shall be added to the general conditions or detailed specifications unless requested by the City for the purpose of clarification.

### *1.12 Confidentiality & Post-Award Comment*

No Proponent shall have the right to review or receive any information with respect to a proposal, documentation, or information submitted by any other Proponent. The content of the proposal, and all documentation, and information shall be held in confidence by the City subject only to the provision of freedom of information and privacy legislation, including without limitation, the *Municipal Freedom of Information and Protection of Privacy Act*.

Post-Award Comment by the City regarding this Request for Proposal may be limited to written notification to all Proponents of the successful Proponent's name and address only. **In submitting a Proposal, Proponents acknowledge and agree to this provision.**

### *1.13 Municipal Freedom of Information & Protection of Privacy Act*

The Corporation of the City of Sault Ste. Marie is governed by the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*. All documents submitted to the City in

response to this Request for Proposal become the property of the City and as such will be subject to the disclosure provisions of the *Act*. The *Act* gives persons a right of access to information held by the municipality. The right of access is subject to exemptions contained in the *Act*.

### *1.14 Indemnification and Insurance*

The successful Proponent will indemnify and save harmless the City against and from all actions, causes of action, interest, claims, demands, costs, damages, expenses or loss which the City may bear, suffer, incur, become liable for, or be put to by reason of any damage to property or injury or death to persons by reason of, arising out of or in consequence of breach, violation of non-performance by the successful Proponent of any provision of the agreement, or by reason of or arising out of the use of the premises or in connection with the work covered by this contract, or by reason of or arising out of any act, neglect or default by the successful Proponent or any of its agents or employees or any other person or persons, in, on, or about the premises.

The rights to indemnity contained in this section shall survive any termination of the agreement, anything in this agreement to the contrary notwithstanding.

In addition to the Insurance required for compliance with the requirements of the City's Contractor Pre-Qualification Program, the successful Proponent shall also maintain Professional Liability Insurance as may be required and appropriate for the Project.

### *1.15 Agreement for Services*

The City Purchase Order issued, the Proposal submitted by the successful Proponent and the RFP as issued and amended shall constitute the Agreement for this Project.

The successful Proponent will be required to enter into an agreement for professional services such as MEA for engineering services, with the City's Insurance and Indemnity special provisions (Schedule A); with a fee limit established at the outset of the agreement. Additional fees for unforeseen work which may be required must be approved in writing by the City prior to expenditure. An alternate agreement may be approved for use provided it meets city requirements.

# Schedule A –Special Provisions

## City Insurance and Indemnity Provisions to MEA-CEO Agreement Supplementary Conditions

Insurance and Indemnity provisions and considerations for use with the "Association of Consulting Engineering Companies/Ontario (ACEC-Ontario) in Partnership with the Municipal Engineers Association (MEA)" - "Standard Form of Contract for Professional Consulting Services 2020 (Version 3.1)"

**Option A** *(The following language to be used with contracts not involving any excavating, digging, drilling, core sample removal etc.):*

Notwithstanding the Order of Precedence as set out in the MEA/CEO CLIENT/ENGINEER AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification**" and "**1.11 Insurance**" in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and
(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provided that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Architect, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Engineer.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability ("**CGL**") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement.

**Automobile Liability Insurance**

Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Option B** *(The following language to be used if the work involves any excavating, digging, drilling, core sample removal etc., and the Engineer is performing that work themselves (rather than a separate contract for those tasks):*

Notwithstanding the Order of Precedence as set out in the MEA-CEO AGREEMENT, the Indemnification and Insurance sections below take precedence over anything to the contrary contained in the aforesaid Agreement.

Remove sections "**1.10 Indemnification**" and "**1.11 Insurance**" in their entirety and replace with the following:

**1.10 Indemnification**

The Engineer shall indemnify and hold harmless the City, its officers, Council members, partners, agents and employees from and against:

(a) all actions, claims, demands, losses, costs, damages, suits or proceedings whatsoever which may be brought against or made upon the City; and
(b) all losses, liabilities, judgements, claims, suits, demands or expenses which the City may sustain, suffer or be put to,

provide that same results from or arises out of the Engineer's failure to exercise reasonable care, skill or diligence or the Engineer's omissions in the performance or rendering of any work or service required hereunder to be performed or rendered by the Engineer, its agents, officials and employees. This indemnification shall include any legal costs incurred by the City on a substantial indemnity basis, including those incurred to defend any criminal prosecutions against the City resulting from the actions of the Architect.

**1.11 Insurance**

Without restricting the generality of the requirement to indemnify the City, the Engineer shall obtain, maintain, pay for and provide evidence of insurance coverage, taken out with insurance companies licensed to transact business in the Province of Ontario and acceptable to the City's Risk Manager. Listed below are the minimum insurance requirements deemed necessary for the Contract by the City's Insurance and Risk Manager.

**Commercial General Liability Insurance**

Commercial General Liability ("**CGL**") insurance must include the City as an Additional Insured, with limits of not less than five million dollars ($5,000,000.00) inclusive per occurrence for bodily and personal injury, death and damage to property including loss of use. The CGL insurance will include Cross Liability and Severability of Interest Clauses, Products and Completed Operations coverage (twelve (12) months) and Standard Non-Owned Automobile liability endorsement. Sudden and Accidental pollution coverage with limits of not less than two million dollars ($2,000,000) per occurrence (can also be provided under a separate Environmental Impairment or Pollution policy).

**Automobile Liability Insurance**

Automobile Liability Insurance in respect of licensed vehicles must have limits of not less than two million dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property. Coverage shall be in the form of a standard owner's form automobile policy providing third party liability and accident benefits insurance and covering licensed vehicles owned and/or leased or operated by or on behalf of the Engineer.

**Professional Liability Insurance**

Professional Liability Insurance coverage must have limits of not less than two million dollars ($2,000,000.00) inclusive per claim, covering services or activities that are professional in nature and excluded under the CGL policy.

The City will accept in place of the above-mentioned insurance coverage, a combination of primary liability limits and umbrella insurance or excess liability limits which meet the CGL and/or Automobile Liability coverage limits noted above.

Such coverage must in all respects be satisfactory to the City's Insurance and Risk Manager and shall be maintained continuously by the Engineer from either the commencement of the Services or the signing of the Contract, whichever is earliest. The policies must be endorsed to provide the City with not less than thirty (30) days' written notice in advance of cancellation, or any change or amendment restricting coverage.

All of the above insurance must be evidenced, by the Engineer only upon Contract award, on the C.S.I.O. standard Certificate of Insurance form or if on another form, one that is satisfactory to the City.

**Additional Insurance considerations**:

If the work involves any technology or IT aspects, Cyber coverage may be warranted – please forward these to Legal for review.

If any subconsultant is to be engaged (once approved by the City as per section 1.17) they will be required to place the same insurance coverages as outlined in section 1.11

# SECTION 2

## 2. TERMS OF REFERENCE

### *2.1 Introduction*

The City of Sault Ste. Marie is requesting proposals for engineering services associated with proposed reconstruction of East Street from Bay Street to Wellington Street

- Estimated construction value: $5,000,000*

*Includes estimate for Engineering, excluding estimate for water.

Engineering services required for these projects include the design, traffic analysis, contract administration and field inspection of a municipal road including the associated storm sewers, sanitary sewers and watermain. Full geotechnical including sampling/testing for excess soils regulations are required.

Therefore, the successful Proponent will collect and analyze information to develop recommendations, design, prepare tender documents and administer contracts for the construction of the proposed works. The detailed total station survey will be completed by a City survey crew for East Street.

### *2.2 Background*

East Street is an important north south road in the City's Downtown core. There are multiple sanitary and storm sewers located within the road allowance that have a variety of installations dates, 1912, 1942, 1970s, and 1980s.There is a sanitary overflow connection to the storm system within the Queen Street intersection.

In 2021, the City obtained a Lane marking review of East Street from Albert Street to Wellington Street from CIMA+. Recommendations from this memo have yet to be implemented.

### *2.3 Project Scope*

The successful Proponent(s) will use engineering principles to re-design a municipal road that meets current City standards. A review and analysis of all pipes should be undertaken to assess their need for replacement.

In addition to the municipal infrastructure reconstruction, the design of East Street should

follow the Complete Streets concept that balances the needs of all road users. Review and implementation of the recommendations from the lane marking review should be included, as well as a review of the traffic signals at the East and Wellington intersection.

A simplified streetscape design should match the existing design on recent downtown projects. Public Works Parks Department will provide recommendations for planting.

The project will be tendered in February 2025 with construction completed by November 2025 pending Council approval of the capital construction plan. The successful Proponent will be able to start immediately following agreement approval in September 2025.

**The projects have been approved for design only, the 2025/2026 Budget is not yet approved.** All construction budgets are subject to Council approval of the capital construction plan.

### *2.4 Municipal Class Environmental Assessment Requirements*

This project is assumed to be exempt from the Municipal Class EA process. The successful consultant must satisfy themselves with this.

### *2.5 Project Requirements*

Communications - Meetings, Workshops and Public Information Centres

The minimum is expected (per project):

- Three Design Meetings with City staff
- One Public Information Session
- Contract/ tender preparation in 2025
- Contract administration in 2025
- Resident site inspection in 2025

### *2.6 Existing Documentation*

It will be up to the Proponent(s) to request existing as-constructed drawings and records from the City Engineering Division.

### *2.7 Project Deliverables*

The project deliverables shall include:

- Preliminary Design Reports

- Production and distribution of public notices
- Preparation of design and construction drawings
- Approval and permit application package
- Preparation of all contract documents
- Contract Administration
- As-built drawings

## *2.8 Fee Schedule*

Proponents shall provide a fee schedule for the Project(s) broken down into steps reflecting the required scope of services listed in the requirements above. Time allotments, including staff names and disbursements must be identified for each step. Fees associated with subconsultants must be listed in a similar fashion.

For contract administration, the proponents should assume a contract administration phase of 24 weeks.

# SECTON 3

## 3. SUBMISSION REQUIREMENTS

### *3.1 Experience & References*

Demonstrate your Consulting team's expertise in municipal road construction including watermain, storm and sanitary sewer of similar size, within the last five (5) years preferred.

- Include relevant past experience on similar projects and professional representative experience.
- Include listing of Key Personnel with brief Curriculum Vitae (CV) and Roles to be utilized for the Project.

Complete these section(s) within the Bidding System:

- ☐ Step 3: References
  - Previous Relevant Projects
  - Project Team Experience and Qualifications
- ☐ Step 4: Documents
  - CVs, as Document Upload

### *3.2 Methodology*

Proponent to demonstrate their understanding of the scope and purpose of the project, providing a detailed proposed work plan and methodology.

Value Add - Outline any additional services which may be beneficial to delivery and completion of the Project.

Complete these section(s) within the Bidding System:

- ☐ Step 2: Specifications (Methodology)
  - ☐ Project Understanding, Methodology, Approach and Work Plan

### *3.3 Project Timelines*

Provide project timeline/schedule recognizing critical deliverables, progress meetings and timelines; indicating how they intend to meet the timelines established by the City.

Complete these section(s) within the Bidding System:

- ☐ Step 2: Specifications (Timelines)

- Project Schedule outline

☐ Step 4: Documents
- Schedule Chart, as Document Upload

### *3.4 Fee Schedule*

Proponents shall provide a fee schedule for the project, if applicable broken down into steps reflecting the required scope of services outlined within. Time allotments including staff names and disbursements must be identified for each step. Fees associated with subconsultants must be listed in a similar fashion. Agents will not be reimbursed for travel expenses.

**It is preferred that the fee schedule be "All Inclusive" with HST shown as extra.** A minimal number of exclusions should be shown – must be itemized and costed with the Proposal.

Invoicing shall be limited to services actually performed in accordance with the fee schedule proposed.

Complete these section(s) within the Bidding System:

☐ Step 1: Schedule of Prices
- Fee Estimate

☐ Step 4: Documents
- Task-Cost Matrix, as Document Upload

## SECTION 4

### 4. APPENDICES

Not Applicable

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# 2024PWE-ENG-06-P - Engineering Services - Reconstruction of East Street

Opening Date: July 31, 2024 11:30 AM

Closing Date: August 21, 2024 4:00 PM

## Schedule of Prices

The Bidder hereby Bids and offers to enter into the Contract referred to and to supply and do all or any part of the Work which is set out or called for in this Bid, at the unit prices, and/or lump sums, hereinafter stated. HST is additional. Pricing in Canadian Funds.

* Denotes a "MANDATORY" field

Do not enter $0.00 dollars unless you are providing the line item at zero dollars to the Owner (unless otherwise specified).

If the line item and/or table is "NON-MANDATORY" and you are not bidding on it, leave the table and/or line item blank. Do not enter a $0.00 dollar value.

## FEE ESTIMATE - ENGINEERING SERVICES

Provide pricing in Canadian Dollars (excluding HST). HST is extra to tendered pricing and shall not be included in the Unit Price tendered

Proponent shall provide a fee estimate for the total cost of the services.

An attached Task-Cost Matrix providing breakdown of fees shall be provided in the Document Upload section of the Bidding System, and shall equal the fee estimate provided.

| Description | Lump Sum Price * |
|---|---|
| Bid Price for the Work as specified in the Bid Call Documents | |
| Subtotal: | |

## Summary Table

| Bid Form | Amount |
|---|---|
| FEE ESTIMATE - ENGINEERING SERVICES | |
| Subtotal Contract Amount: | |

## PROJECT UNDERSTANDING, APPROACH AND WORK PLAN

The proponent will provide detailed information demonstrating their project understanding and proposed work methodology to achieve the project deliverables.

| Description | Response * |
|---|---|
| Proponent to demonstrate their understanding of the scope and purpose of the project, project requirements, and deliverables. | |
| Identify major work criteria of the services, with clear explanations of steps required to achieve the deliverables, outlining any known challenges and risks associated with the project. | |
| Outline any additional services, value add which may be beneficial to delivery and completion of the project. | |

## PROJECT SCHEDULE

Provide outline of project schedule for completing the objectives and deliverables in accordance with the timelines.

An attached Schedule Chart mapping tasks; phases; timelines etc. shall be provided in the the Document Upload section of the Bidding System.

| Description | Response * |
|---|---|
| Provide outline of your proposed project schedule., recognizing deliverables, progress meetings and timelines. | |

All references stated shall be for the same or similar scope as the one described in this Bid.

For newly formed business entity including, corporations, partnerships and sole proprietors or a Contractor teaming arrangement you shall state below in the Client Column that you were not the "Contractor" for the named project and should state whose past experience on the named project is relevant to that reference.

## PREVIOUS RELEVANT PROJECTS

Proponent to provide a detailed outline of three (3) recent projects its firm has delivered which are considered relevant and comparable to this project request in size and complexity.

| Description | Past Project #1 * | Past Project #2 * | Past Project #3 * |
|---|---|---|---|
| Project Owner | | | |
| Project Title | | | |
| Contract Value | | | |
| Start and Completion dates | | | |
| Was the project completed on time? If not provide explanation | | | |
| Briefly outline Scope of Work (i.e. how it was delivered, results, satisfaction of client, and other relevant details of the project ) | | | |

## PROJECT TEAM EXPERIENCE AND QUALIFICATIONS

Proponent will provide its project team composition. Identify the named individuals who will be assigned to this project, their specific role and responsibilities on the team. Include any agents, employees, and subconsultants who will be involved in providing the deliverables

Project team's resumes (CVs) showing experience and qualifications are to be uploaded in the Document Upload section of the Bidding System

- Project team members will not be changed out without written request by the Consultant, and must be approved in writing in advance by the City

| Name * | Role * | # Years * | Responsibility * |
|---|---|---|---|
| | | | |

**Documents**

It is your responsibility to make sure the uploaded file(s) is/are not defective or corrupted and are able to be opened and viewed by the Owner. If the attached file(s) cannot be opened or viewed, your Bid Call Document may be rejected.

- Resume (CV) (optional)
- Schedule Plan * (mandatory)
- Task-Cost Matrix * (mandatory)

## Addenda, Terms and Conditions

I/We the undersigned, hereby submit the attached Proposal to satisfy the requirements laid out by the Corporation of the City of Sault Ste. Marie.

I/We have reviewed and understand the Information to Proponents (Section 1) of the RFP and agree to the terms and conditions contained therein in submitting this Proposal.

I/We agree that this Proposal is made without any connection, knowledge, comparison of figures or arrangements with any other person or persons submitting a Proposal for the same purpose and is in all respects fair and without collusion or fraud.

It is further understood and agreed that the lowest or any Proposal will not necessarily be accepted and that the City reserves the right in its absolute discretion to reject any or all Proposals, or accept the Proposal deemed most acceptable to the City. The City further reserves the right to negotiate with the successful Proponent to finalize the terms and conditions of the Proposal.

☐ I/WE agree to be bound by the terms and conditions and have authority to bind the Corporation and submit this Bid on behalf of the Bidder.
The bidder shall declare any potential or actual conflict of interest that could arise from Bidding on this Bid. Do you have a conflict of interest? ○ **Yes** ○ **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document

Please check the box in the column "**I have reviewed this addendum**" below to acknowledge each of the addenda.

| File Name | I have reviewed the below addendum and attachments (if applicable) | Pages |
|---|---|---|
| **There have not been any addenda issued for this bid.** | | |

# 2024PWE-ENG-06-P - Engineering Services - Reconstruction of East Street

Opening Date: July 31, 2024 11:30 AM

Closing Date: August 21, 2024 4:00 PM

### Vendor Details

| | |
|---|---|
| Company Name: | Tulloch Engineering Inc. |
| Address: | 71 Black Rd - Unit 8<br>Sault Ste. Marie, Ontario P6B 0A3 |
| Contact: | Christopher Valela |
| Email: | christopher.valela@tulloch.ca |
| Phone: | 613-818-8042 |
| HST#: | |

### Submission Details

| | |
|---|---|
| Created On: | Wednesday August 21, 2024 14:35:44 |
| Submitted On: | Wednesday August 21, 2024 15:20:37 |
| Submitted By: | Christopher Valela |
| Email: | christopher.valela@tulloch.ca |
| Transaction #: | 5c717ed2-9cfc-4770-92d2-5009ebef0a3d |
| Submitter's IP Address: | 184.70.47.130 |

## Schedule of Prices

The Bidder hereby Bids and offers to enter into the Contract referred to and to supply and do all or any part of the Work which is set out or called for in this Bid, at the unit prices, and/or lump sums, hereinafter stated. HST is additional. Pricing in Canadian Funds.

* Denotes a "MANDATORY" field

Do not enter $0.00 dollars unless you are providing the line item at zero dollars to the Owner (unless otherwise specified).

If the line item and/or table is "NON-MANDATORY" and you are not bidding on it, leave the table and/or line item blank. Do not enter a $0.00 dollar value.

## FEE ESTIMATE - ENGINEERING SERVICES

Provide pricing in Canadian Dollars (excluding HST). HST is extra to tendered pricing and shall not be included in the Unit Price tendered

Proponent shall provide a fee estimate for the total cost of the services.

An attached Task-Cost Matrix providing breakdown of fees shall be provided in the Document Upload section of the Bidding System, and shall equal the fee estimate provided.

| Description | Lump Sum Price * |
|---|---|
| Bid Price for the Work as specified in the Bid Call Documents | $536,583.5000 |
| Subtotal: | $ 536,583.50 |

## Summary Table

| Bid Form | Amount |
|---|---|
| FEE ESTIMATE - ENGINEERING SERVICES | $ 536,583.50 |
| Subtotal Contract Amount: | $ 536,583.50 |

## PROJECT UNDERSTANDING, APPROACH AND WORK PLAN

The proponent will provide detailed information demonstrating their project understanding and proposed work methodology to achieve the project deliverables.

| Description | Response * |
|---|---|

| | |
|---|---|
| Proponent to demonstrate their understanding of the scope and purpose of the project, project requirements, and deliverables. | East Street, located in the downtown core of Sault Ste. Marie, connects Bay Street to Wellington Street East and is an important north-south downtown corridor. The underground infrastructure located within the right-of-way consists of multiple sanitary and storm sewers dating back to as early as 1912.There is also a sanitary overflow which connects to the storm system within the Queen Street intersection.<br><br>The engineering services required for this project encompass a comprehensive geotechnical investigation which will guide a design exercise focused on improving aging and deficient infrastructure. The project aims to prioritize road safety enhancements while minimizing the impact on citizens and businesses during construction.<br><br>In addition to the reconstruction of the municipal infrastructure, the geometric design of East Street will take into account all road users, with a focus on those utilizing active transportation, and will follow the Complete Streets concept. The surface infrastructure design will match that of recent downtown projects and will follow a simplified streetscape design. In 2021, the City completed a lane marking review of East Street from Albert Street to Wellington Street. Recommendations from the lane marking review will be included as deemed appropriate and the traffic signals at the East Street and Wellington Street East intersection will be assessed to determine if they are warranted.<br><br>While the detailed survey will be executed by the City, the required deliverables include a full geotechnical investigation report (with sampling and excess soils analysis), a preliminary design report, detailed design drawings and specifications package, tender documents, and a traffic analysis report for the intersection of East Street and Wellington Street East. Once tendered, our team of inspectors, contract administrators, and materials quality assurance specialists will work together to provide a quality deliverable to the City. |
| Identify major work criteria of the services, with clear explanations of steps required to achieve the deliverables, outlining any known challenges and risks associated with the project. | KEY CONSIDERATIONS<br>Improving East Street requires attention to several factors. Based on our knowledge of the assignment and review of existing documentation, it is our opinion that effectively dealing with the following key considerations will be critical to the success of the project:<br><br>• Access during construction: When developing a road improvement design within the downtown core such as East Street, it is critical to provide safe access with little interruptions for nearby residents, patrons of the downtown businesses, and visitors of the Public Library and Clergue Park. Clergue Park is home to numerous community events and activities that take place each year, including Rotaryfest. Accessibility for emergency vehicles and evacuation routes is paramount throughout the duration of construction, therefore a thorough traffic management plan must be developed to ensure a safe and timely project delivery.<br>• Communication: To minimize public disruption and ensure a smooth project delivery, it will be important to provide effective communication before, during, and after construction with nearby residents, businesses, Ward Councilors, community members, tourists and stakeholders. The intention is to inform, minimize conflict and disruption, and ensure a safe and efficient work environment through various means of consultation.<br>• Surface improvements: The redesign of East Street must take into consideration the needs of all road users such as vehicles, cyclists and pedestrians. Given the variation in the type of road users of East Street, an accessible and inclusive design is critical which shall include, for example, AODA compliant features and active transportation considerations.<br>• Geotechnical challenges: It is anticipated that bedrock will be encountered during the excavation of East Street. Therefore, the underground infrastructure will be designed in such a way as to avoid additional rock excavation as much as possible. Furthermore, a gas station was previously located at the southeast corner of the Queen Street and East Street intersection. Additional effort will be allocated towards excess soil sampling to determine if soil contamination is present within the East Street right-of-way.<br><br>WORK PROGRAM<br>Based on the request for proposal and key project considerations identified therein, we have developed a work program to satisfy the objectives of the assignment. The individual project tasks are briefly described below.<br><br>1 PROJECT INITIATION AND PRELIMINARY DESIGN<br>During the initial phase of the engineering assignment, TULLOCH will delve into the details of the project. We will assemble and review available background information for reference. We will attend a project initiation meeting with the City to introduce the key personnel involved, to review the proposed scope of work and schedule to ensure that it meets their objectives and to establish a concise design criterion.<br><br>1.1 Project Initiation and Agreement for Services<br>Upon recommendation of award, TULLOCH staff will prepare an agreement for services using the standard Municipal Engineers Association Client/Consultant standard contract as a template. The agreement will be submitted to City staff for review and subsequent approval by Council.<br><br>1.2 Assemble and Review Background Information<br>TULLOCH will immediately commence with obtaining project background information on award of services. Typical information includes existing roadway drawings, property fabric |

information, past studies and reports in the area.

1.3 Project Initiation Meeting and Field Review
Senior TULLOCH staff will meet with the City to establish and verify the objectives and expectations of the project. A field review will be conducted to familiarize the team with the project.

1.4 Topographic Survey
In accordance with the terms of the RFP, the topographic survey is to be provided by the City of Sault Ste. Marie. TULLOCH will proof the provided information and, if required, obtain additional topographical information to fill in any data gaps identified during the preliminary design phase. TULLOCH shall account for up to eight (8) hours of additional data collection.

1.5 Traffic Analysis
TULLOCH will coordinate with Public Works to perform a traffic count measurement in the vicinity of East Street. Using this information, we will analyze the traffic volume and provide recommendations to the city regarding the future vehicular and active transportation (if any) roadway design.

1.6 Establish Design Criteria
At the conclusion of field work operations, TULLOCH will begin the design process by establishing the design criteria. This phase is the time in which the raw data, the project objectives and our experience start to merge. We take into account the owner's requirements and desires, the budget, site, restrictions and covenants, local codes and standards, impacted residents and other criteria that will affect the project.

1.7 Development of Base Drawings
From the background and field information obtained, we will prepare design drawings showing removal plans, staging plans, plans and profiles of new construction geometrics, site orientation, standard and non-standard details, right of way cross sections and intersection layouts. These drawings will then be presented to the City, for their approval. The actual drawings included will depend on the particular project circumstances.

1.8 Geotechnical Investigation
TULLOCH has extensive knowledge and existing geotechnical data throughout the City of Sault Ste. Marie. TULLOCH will conduct a geotechnical subsurface exploration program for the subject road being constructed, to clearly identify the subsurface strata and characteristics. TULLOCH anticipates encountering bedrock at a relatively shallow depth and is therefore allocating 8 hours of rock probing. The purpose of such exercise is to determine the location of bedrock across the site which will help guide the underground infrastructure design.

Upon completion of the geotechnical subsurface investigation, TULLOCH will prepare a geotechnical engineering report in accordance with the latest edition of the Canadian Foundation of Engineering Manual. Geotechnical design and construction recommendations will be provided following the completion of borehole drilling. The final engineering report will be signed and sealed by a licensed Professional Engineer registered in the Province of Ontario. This will be utilized by both the design team in the detailed design phase and included within the final tender documents as constructability information for contractors.

1.9 Excess Soils Screening and Report
In accordance with O.Reg. 406/19, TULLOCH will perform the necessary soil sampling and testing. The results of the testing, as well as the excess soils past uses and soil characterization will be documented and presented in a report.

Previously, a gas station was located at the southeast corner of the Queen Street and East Street intersection. TULLOCH acknowledges the potential for contaminated soil in the vicinity of the former gas station and will perform soil sampling accordingly.

1.10 Preliminary Design of Sewers, Watermain, Road and Surface Works
TULLOCH will complete the preliminary design of sewage works, water works, roadway and other surface works in accordance with City, PUC, MECP and MTO requirements, as applicable. An exclusion from TULLOCH's scope of work is the streetlighting, as that will be designed by the PUC. Throughout this stage, we will identify and analyze alternatives, consult with the City, PUC, property owners and other affected stakeholders to develop an efficient and constructible design.

1.11 Preliminary Design Report
At the conclusion of the preliminary design phase, we will prepare a Preliminary Design Report documenting the project design criteria, preliminary utility sizing and other key considerations being incorporated into the design of the project.

2 DETAILED DESIGN, SPECIFICATIONS AND TENDERING
Detailed design is the phase where the design is refined and plans, specifications and estimates are created. This phase is where the full cost of the project is identified. It has

been proven that detailed design and engineering is the key phase in which a project's costs are defined and set. By adhering to the following work plan, TULLOCH will mitigate project risks and provide a robust, cost-effective design.

2.1 Detailed Design of Waterworks and Sewer Systems

The design of waterworks and sewer systems will be completed with sound engineering practice in accordance with City, PUC, Ontario Ministry of the Environment, Conservation, and Parks guidelines. The design will ensure the hydraulic requirements are fully met and be cognizant of any constraints such as the presence of bedrock which is probable in this location.

2.2 Detailed Design of Roads, Grading and Surface Features

The detailed design of the roads and surface works will include full consideration of the existing built environment, and the requirements for access and parking, accessibility, drainage, utilities and a host of other issues. Balancing these, often conflicting, priorities is an essential part of the design that requires engineering judgement and collaboration with many different stakeholders. TULLOCH has an experienced team to achieve this effectively.

Prior to tendering, TULLOCH in consultation with the City of Sault Ste. Marie, will determine appropriate staging for the project to reduce the impact on local residents, traffic, and its intersections. Appropriate operational constraint clauses will be drafted during the detailed design phase for inclusion into the tender documents.

2.3 Preparation of Detailed Design Drawings

TULLOCH will prepare contract drawings that meet the client's requirements and in accordance with City and PUC standards. Drawings will clearly differentiate between original conditions and new construction, with all prominent features clearly labeled and design features identified by appropriate legends. The detailed design will include all such elements as may be required for the construction which may include the following:

- site plans;
- geometric design;
- pavement design;
- sanitary and storm sewer design;
- watermain design;
- typical cross-sections;
- design cross-sections;
- grading;
- structural design;
- landscaping requirements;
- utilities;
- traffic staging and detour

2.4 Public Consultation

Given the location and impact East Street has on the community, TULLOCH proposes to host up to two (2) Public Information and Comment (PIC) sessions. At the PIC(s), the proposed design will be presented to the public and comments will be solicited for consideration and potential incorporation in the design. Scheduling of the PIC(s), which will be planned in conjunction with the City, is critical as the intention is to inform the public but also receive valuable feedback at key stages of the design process. Thus, hosting two PICs at different stages of the design process could foster greater involvement and public input. We acknowledge that community participation will be essential to the success of the project and will be encouraged throughout the project.

In addition to the PIC(s), we will provide community members with our Office phone numbers and e-mails if they wish to present their views directly to us. We have found that some community members may not wish to provide their comments in a meeting setting but may be more willing to discuss personally and/or in private.

TULLOCH will also engage the public and stakeholders through social media/media avenues to disseminate information and encourage public involvement.

2.5 Contract Documents/Specification Preparation

Contract specifications will be prepared to provide instructions to contractors. Special provisions will be used to address specific construction practices, materials and methods of measurement for payment. In preparing the specifications, TULLOCH will utilize Ontario Provincial Standard Specifications as much as possible.

2.6 Approval Applications and Follow-up

TULLOCH will apply for and obtain all necessary approvals required for the project potentially including but not limited to Environmental Compliance Approvals (ECA's) from the Ontario Ministry of the Environment, Conservation and Parks. TULLOCH will also complete the "Form 1" submission under the PUC's Drinking Water Works Permit.

2.7 Pre-Tender Cost Estimate

In addition to regular cost estimate updates throughout the project, a pre-tender cost estimate will be prepared by TULLOCH for the information of the City and will be based on

| | |
|---|---|
| | the final items and quantities within the contract documents. TULLOCH will work with the City to ensure the project stays within budget.<br><br>2.8 Assistance with Tendering<br>In addition to the preparation of construction specifications and contract documents, TULLOCH will administer the tendering process on behalf of the City of Sault Ste. Marie in accordance with the City's procurement by-law. Enquiries during the tender period will be addressed by TULLOCH by addendum.<br><br>2.9 Review of Tenders and Tender Report to Council<br>TULLOCH will be present during the closing of the bid process and evaluate the bids for completeness, accuracy, experience and cost. A tender review report including recommendations will be provided to the City and TULLOCH staff will make themselves available to City Council to address any questions and concerns that may arise.<br><br>3 CONSTRUCTION SERVICES<br>TULLOCH is a recognized leader in providing contract administration and is committed to completing projects successfully, expeditiously and on budget.<br><br>3.1 Prepare and Review Project Documentation<br>Prior to construction commencement, TULLOCH staff will review the required submissions from the contractor as specified in the contract documents including but not limited to: bonding, insurance, WSIB clearance certificates, shop drawings, etc.<br><br>3.2 Project Management, Construction Contract Administration and Quality Assurance Inspections<br>TULLOCH's highly experienced staff will provide full time construction contract administration and quality assurance. TULLOCH's expertise around contract management provides an assurance that the contract will be administered in a fair and transparent manner in accordance with the contract documents and governing law.<br><br>Throughout the duration of the project construction, TULLOCH staff will provide the public with updates on the project progress and any interruptions around the site.<br><br>3.3 As-Constructed Drawings and Service Records<br>On completion of construction activities, we will provide the City with a set of as-constructed plans and service lateral records. TULLOCH staff recognizes that accurate recording of as-built data is vital for future maintenance and information purposes.<br><br>3.4 Warranty Period Services<br>After Substantial Completion of the project, TULLOCH staff will regularly review the constructed conditions and coordinate any 'make good' work required of the contractor. Final payment certificates will be issued in addition to ensuring the contractors project close-out submittals are completed in accordance with the contract documents. |
| Outline any additional services, value add which may be beneficial to delivery and completion of the project. | Material Testing (Provisional)<br>TULLOCH's in-house material testing laboratory is equipped to provide quality assurance testing for all soil, aggregate, asphalt, and concrete needs throughout the duration of the project. We are proposing that the City carries a material testing allowance within this contract to account for material testing that may be required during construction. This varies from other consultant/contractor contracts as typically the contractor would carry fees for this service within the applicable unit prices. However, in our case, this could pose a perceived conflict of interest, therefore we propose to perform this work in a quality assurance role directly for the owner, the City. |

## PROJECT SCHEDULE

Provide outline of project schedule for completing the objectives and deliverables in accordance with the timelines.

An attached Schedule Chart mapping tasks; phases; timelines etc. shall be provided in the the Document Upload section of the Bidding System.

| Description | Response * |
|---|---|
| Provide outline of your proposed project schedule., recognizing deliverables, progress meetings and timelines. | TULLOCH is committed to the delivery of the project on time and on budget. We have prepared the attached schedule in accordance with our work plan. The proposed schedule milestones within the RFP are reasonable and we confirm we have sufficient resources to complete the requested work. |

All references stated shall be for the same or similar scope as the one described in this Bid.

For newly formed business entity including, corporations, partnerships and sole proprietors or a Contractor teaming arrangement you shall state below in the Client Column that you were not the "Contractor" for the named project and should state whose past experience

on the named project is relevant to that reference.

## PREVIOUS RELEVANT PROJECTS

Proponent to provide a detailed outline of three (3) recent projects its firm has delivered which are considered relevant and comparable to this project request in size and complexity.

| Description | Past Project #1 | Past Project #2 | Past Project #3 |
|---|---|---|---|
| Project Owner | Municipality of Wawa | City of Sault Ste. Marie | City of Sault Ste. Marie |
| Project Title | Wawa School Zone Surface Reconstruction | MacDonald Avenue Drainage Improvements | Wemyss Street Reconstruction |
| Contract Value | $3,439,273.93 | $1,787,349.11 | $5,670,967.79 |
| Start and Completion dates | May 2021 – Aug 2022 | May – Oct 2022 | May – November 2023 |
| Was the project completed on time? If not provide explanation | Substantial completion was granted on time | Substantial completion was granted on time | Substantial completion was granted on time |
| Briefly outline Scope of Work (i.e. how it was delivered, results, satisfaction of client, and other relevant details of the project ) | The Wawa School Zone Project involved the resurfacing of and improvements to the area surrounding the Ecole Saint Joseph, St. Joseph French Immersion Catholic School, and the Michipicoten High School. The limits of construction included the following roads: Churchill, Spruce, Grace, Parkhill, Darwin, Arnott, Ross, Boyer, and Magpie. The reconstruction consisted of detailed design and construction drawings for the specified roads, reviewing changes for school loading zones and bicycle lanes, and choosing optimal materials for resurfacing and drainage. The project followed traffic study recommendations, managed signage requirements, and ensured environmental assessments and permits were obtained. | Flooding was a regular occurrence in the MacDonald Avenue area east of Pim Street. In an effort to mitigate the flooding and associated effects, the storm sewer on MacDonald Avenue from Campbell Avenue to the ravine east of Alworth Place was replaced and the flow was redirected into a forested ravine on the south side of MacDonald Avenue. The ravine, situated between MacDonald Avenue and Garrison Way, was transformed into a quasi-natural stormwater management dry pond nestled between an established neighbourhood and a high-rise apartment building. A small berm and control structure were constructed near Garrison Way to control the outflow with the rest of the ravine remaining largely untouched. The stormwater management pond now drains into the Pine Street storm sewer system in a controlled fashion to help mitigate flooding. | Wemyss Street serves as a significant connection for municipal services, however, the infrastructure within the municipal right-of-way had reached or was approaching the end of its useful life. The reconstruction of Wemyss Street consisted of the complete replacement of the storm sewer system, sanitary sewer system, water distribution system, roadway subbase, asphalt road surface, and concrete curbs, gutters, and sidewalks. The limits of construction spanned from Trelawne Avenue to Pim Street measuring approximately 600m in length. The redesign of Wemyss Street allowed for infrastructure deficiencies to be addressed and pedestrian safety to be improved. |

## PROJECT TEAM EXPERIENCE AND QUALIFICATIONS

Proponent will provide its project team composition. Identify the named individuals who will be assigned to this project, their specific role and responsibilities on the team. Include any agents, employees, and subconsultants who will be involved in providing the deliverables

Project team's resumes (CVs) showing experience and qualifications are to be uploaded in the Document Upload section of the Bidding System

- Project team members will not be changed out without written request by the Consultant, and must be approved in writing in advance by the City

| Name * | Role * | # Years * | Responsibility * |
|---|---|---|---|
| John McDonald, P.Eng. | Project Director | 20 | John will be the Project Director on the assignment. John is a professional engineer with more than 20 years of experience in all aspects of municipal infrastructure design including roadway geometric design, intersection design, municipal servicing, land development, stormwater management, and culvert and bridge repairs and replacements. John also has extensive experience in the completion of engineering surveys, Class Environmental Assessments, construction materials inspection, construction project management and municipal asset management. He is also very familiar with all City and PUC standards and procedures and has significant experience managing municipal infrastructure construction projects. |
| Christopher Valela, PhD, P.Eng. | Project Manager | 8 | Christopher will be responsible for the design of the civil infrastructure and will serve as the project manager where he will be responsible for the day-to-day management of the project. Christopher is a professional engineer and holds a Ph.D. in Civil Engineering specializing in Water Resources where he utilized both numerical (Computational Fluid Dynamic modelling) and experimental methods to study bridge pier scour. He has 3 years of consulting experience (in addition to 5 years of academic research experience) in civil engineering including culvert and bridge repairs and replacements, shoreline protection, water course realignment, water distribution system design, wastewater system design, stormwater assessments and designs, municipal servicing and road design. He is well-versed in applicable standards and procedures and has significant experience managing various types of infrastructure construction projects including Municipal Class EA processes, engineering surveys, agency approvals, design, tendering and contract administration. |
| Erik Giles, P.Eng. | Geotechnical Engineer | 12 | Erik is a Geotechnical Engineer with a wide range of design and field experience in road reconstruction projects. Erik has designed and worked on numerous geotechnical field investigations across Canada. He has supervised over one thousand (1000) boreholes on remote and congested public sites such as Highway 401 in Ontario. He has also been involved with large-scale renewable energy projects both as a Design Engineer, as well as an overseer of the fieldwork including construction support, client coordination, and project management. Erik has been responsible for managing various complicated field-based programs including multi-phase geotechnical site investigations and quality assurance during construction. His design and consulting experience include clients and projects across Canada. Mr. Giles will lead the Geotechnical Investigations for this project. |
| Niraj Neupane, B.C.E Civil. | Engineering Intern | 4 | Niraj has over 4 years of experience within the civil engineering domain having participated in design processes, development of drawings, field surveys, and field supervision. Demonstrating a comprehensive skillset, he has successfully concluded numerous structural, water, and stormwater assessments. In his forthcoming role, Niraj will aid the design engineers throughout the project. |

**Documents**

It is your responsibility to make sure the uploaded file(s) is/are not defective or corrupted and are able to be opened and viewed by the Owner. If the attached file(s) cannot be opened or viewed, your Bid Call Document may be rejected.

- Resume (CV) - Merged Resumes.pdf - Wednesday August 21, 2024 14:58:20
- Schedule Plan - East Street Reconstruction Work Program & Schedule.pdf - Wednesday August 21, 2024 14:58:44
- Task-Cost Matrix - P23350 -164 - TTM - JM Review.pdf - Wednesday August 21, 2024 14:58:59

## Addenda, Terms and Conditions

I/We the undersigned, hereby submit the attached Proposal to satisfy the requirements laid out by the Corporation of the City of Sault Ste. Marie.

I/We have reviewed and understand the Information to Proponents (Section 1) of the RFP and agree to the terms and conditions contained therein in submitting this Proposal.

I/We agree that this Proposal is made without any connection, knowledge, comparison of figures or arrangements with any other person or persons submitting a Proposal for the same purpose and is in all respects fair and without collusion or fraud.

It is further understood and agreed that the lowest or any Proposal will not necessarily be accepted and that the City reserves the right in its absolute discretion to reject any or all Proposals, or accept the Proposal deemed most acceptable to the City. The City further reserves the right to negotiate with the successful Proponent to finalize the terms and conditions of the Proposal.

☑ I/WE agree to be bound by the terms and conditions and have authority to bind the Corporation and submit this Bid on behalf of the Bidder. - Larry Jackson, General Manager, Tulloch Engineering Inc.
The bidder shall declare any potential or actual conflict of interest that could arise from Bidding on this Bid. Do you have a conflict of interest? ○ **Yes** ○ **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document

Please check the box in the column "**I have reviewed this addendum**" below to acknowledge each of the addenda.

| File Name | I have reviewed the below addendum and attachments (if applicable) | Pages |
|---|---|---|
| **2024PWE-ENG-06-P Addendum #2**<br>Mon August 19 2024 10:34 AM | ☑ | 1 |
| **East Street Lane Marking Review**<br>Wed August 14 2024 11:05 AM | ☑ | 11 |
| **Wellington 87-F1**<br>Wed August 14 2024 11:05 AM | ☑ | 1 |
| **Queen St. East 67-E2**<br>Wed August 14 2024 11:05 AM | ☑ | 1 |
| **Lane 69_A1**<br>Wed August 14 2024 11:04 AM | ☑ | 1 |
| **Albert St E 298-H**<br>Wed August 14 2024 11:04 AM | ☑ | 1 |
| **East Street 158-B**<br>Wed August 14 2024 11:04 AM | ☑ | 1 |
| **East Street 158-A1**<br>Wed August 14 2024 11:03 AM | ☑ | 1 |
| **East Street 158-A**<br>Wed August 14 2024 11:03 AM | ☑ | 1 |
| **2024PWE-ENG-06-P Addendum #1**<br>Wed August 14 2024 11:02 AM | ☑ | 1 |

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-130**

**AGREEMENT**: A by-law to authorize the execution of the Agreement between the City and Trans Canada Trail for Bellevue Kayak Dock accessibility updates.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated September 9, 2024 between the City and Trans Canada Trail, a copy of which is attached as Schedule “A” hereto. This Agreement is for Bellevue Kayak Dock accessibility updates.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

lv\\citydata\LegalDept\Legal\Staff\COUNCIL\BY-LAWS\2024\2024-130 Trans Canada Trail Bellevue Kayak dock.docx

**Trans Canada Trail**
**Contribution Agreement**
**Project Code: 107050**

# Contribution Agreement

**Name of Organization:** The Corporation of the City of Sault Ste. Marie (the "Recipient")
**Organization Representative:** Diane Morrell
**Project Name:** Accessible Kayak Dock - SSM (the "Project")
**Province:** Ontario
**Project Code:** 107050
**TCT Representative:** Trisha Kaplan

## SUMMARY

1. This project is being funded, in part, by Trans Canada Trail ("TCT"), under the Trail Funding Program - Accessibility and Inclusion in Trails stream, (TFP).
2. TCT will fund 34.92% of actual eligible expenditures for the Project, up to the maximum contribution amount set out below.
3. The maximum contribution amount from TCT to the Recipient, to be put towards the completion of this Project, is $6,983.00**.**
4. The term of this contribution agreement ("this Agreement") commences from the date of signature by TCT to 2024/12/23, unless extended by TCT, in writing to the Recipient.
5. The **Scope of the Project** (including the purpose of the contribution, a brief summary of the Project, the eligible costs, Project schedule, Project budget, and expected results) is set out in **Appendix A**.
6. The **Scope of the Project** will not change without advance written approval from TCT.
7. The **Appendices** to this Agreement form part of this Agreement.

## DEFINITIONS

**TCT -** Is the organization managing The Trans Canada Trail network.

**The Trans Canada Trail Network** - consists of more than 28,000 kilometres of multi-use trails, linking Canada and Canadians.

**Trail Operator** - Is the individual, entity, trail organization or government organization that is leading the planning, design, construction, maintenance, trail experience and general operation of a Trail Section.

**Trail Section -** is a defined type of infrastructure that is designed and used to enable one or more trail-based recreation activities. To be recognized as a trail, the infrastructure must meet the following criteria:

- Be approved by the public and/or private land manager
- Be mapped
- Marked with proper signage, and
- Be actively managed and maintained by a trail operator, or combination of operators, that has accepted the responsibility for the management and maintenance of the trail and associated infrastructure.
- For this Agreement, Trail Section refers to those operated by the Trail Operator.

**Trail Code -** TCT number of reference to identify the trail section.

## THE RECIPIENT AND THE TRAIL OPERATOR ACKNOWLEDGE AND CONFIRM:

**(1)** That before signing this Agreement, they concluded an agreement to clearly identify their roles and responsibilities in regard to this Project and the operation of the trail.

**(2)** That, by submitting this project, they have read, understood and agreed to the latest guidelines related to the TFP program (including stream guidelines) which are incorporated by reference into this Agreement.

**(3)** That, the Project is located on the Trans Canada Trail network, on a local trail system defined as a **Greenway** and **Road,** with permitted activities on this section established by TCT's trail definitions and types at the time of the Project being submitted to TCT.

**(4)** That:

- A maintenance plan has been/will be implemented
- Safety rules and trail etiquette are clearly set out in trail signage to users, and are enforced by local law enforcement or trail wardens.
- Trail conditions are suitable for cyclists, paddlers or walkers/hikers to enjoy the best possible experience on the Trail.

**(5)** That, the Trail is only being used for lawfully permitted activities, and as otherwise permitted by the major category and primary type under which the Trail section was built and registered with TCT - defined above in point (2). Prior to any change in the major category and primary type of a registered Trail section, the Recipient must first notify TCT and receive written advance approval for the proposed change. In the event of non-compliance with this provision, TCT may, at any time, require reimbursement by the Recipient for any contribution that has been provided by TCT. Within 14 days of any such reimbursement request sent to the Recipient by TCT, the Recipient will reimburse TCT the full amount of the request, up to the total amount indicated in the signed contribution agreement.

**(6)** That, as Recipient, they have the full authority and permission from all the land owners, trail operators and trail managers to sign this Agreement, and conduct and manage the Project.

## THE RECIPIENT AND THE TRAIL OPERATOR AGREE TO:

**(1)** Complete each stage of the Project, as well as the entire Project, on time, as set out in **Appendix A.**

**(2)** Comply with the requirements set out in **Appendix B.**

**(3)** Comply with TCT's acknowledgement guidelines.

**(4)** Comply with TCT's signage guidelines with regards to wayfinders and other signage, for the area covered by the project. Contact project@tctrail.ca if a wayfinding project is being planned.

**(5)** Post the following phrase on trailheads and signs of significance (rules of trail, etc.):

Recreational Trail | Sentier Récréatif
Use at Own Risk | À utiliser à vos propres risques

**(6)** Comply with the reporting schedule set out in this Agreement.

**(7)** Comply with all applicable federal, provincial/territorial and local legislation, bylaws, codes, regulations, and current best practices in relation to the Project and the area covered by the Project, including but not limited to these in relation to construction, health and safety, accessibility and environmental practices.

**(8)** Obtain all approvals and permits required for the Project and local trail system.

**(9)** Take full responsibility for the ownership, maintenance and repair of the Trail, infrastructure and signage, for the area covered by the Project, subject to this Agreement.

**(10)** Take full responsibility when defining a Trail section as being accessible or universally accessible. Where a trail is defined as accessible or universally accessible, ensure an accessible or universally accessible standard is maintained, with appropriate signage, whenever the trail and all related infrastructure is open to users.

**(11)** Comply with and respect TCT's guidelines and policies. The Recipient should contact its TCT representative to obtain the latest version of TCT's guidelines and policies.

**(12)** Consent to the publication by TCT of any and all information related to the Project, including but not limited to, the amount and details of TCT's financial contribution, the name of the Recipient organization, the Project description and any other related information.

## REPORTING AND PAYMENT CONDITIONS

**(1)** The Recipient must use TCT's online template to deliver all written progress reports for the Project to TCT in accordance with this Agreement, including Appendix A. Progress reports must include the following information:

- Confirmation that each aspect of the Scope of the Project has not changed (an explanation, as well as advance approval from TCT, is required for any changes);
- The previous month's expenses and total cost to date;
- Any other information or documentation required by this Agreement;
- Supporting documentation for any expenses incurred for the Project, as required by TCT, in its sole discretion.

**(2)** The Recipient must use TCT's online template to deliver a final report for the Project to TCT within 30 days of the substantial completion of the Project. The final report must include the following information:

- Pictures (before and after the Project);
- Proof of insurance, with TCT identified as one of the insured entities;
- Signage report, including final GIS locations and trail alignment;
- Description of how TCT's contribution has been or will be recognized;
- The previous month's expenses and total costs to date;
- Matching funds sources;
- In the case of a study, the final design, report or any other documentation produced during the study;
- Any other information or documentation required by this Agreement
- Maintenance plan;
- Supporting documentation, as required by TCT, in its sole discretion.

**(3)** If TCT does not receive progress reports, or a final report, in accordance with this Agreement, it may withhold payments until the reports are received and determined by TCT to be in accordance with this Agreement. Aside from all other available remedies, TCT may terminate this Agreement if any such report, otherwise in accordance with this Agreement, is not received by TCT within sixty (60) days of the date on which the report was due.

**(4)** In addition to the scheduled reports, TCT, in its sole discretion, may require the Recipient to submit additional reports, verbally or in writing, on such timing as required by TCT.

**(5)** During the term of this Agreement, the Recipient must demonstrate that it is overseeing the Project in accordance with this Agreement, including but not limited to, the Scope of the Project, and that it has the ability to complete the Project in accordance with this Agreement. The Recipient may be subject to work inspections and validation of financial data by TCT, in its sole discretion, which must be kept up to date throughout the Project.

**(6)** The Recipient must maintain all records associated with the Project, and retain them for at least six (6) years after the expiry of this Agreement. If requested by TCT, the Recipient will provide any

requested records, including pay stubs, to TCT for inspection, verification or copying, and must allow access to work sites for inspection. Staff, volunteers or subcontractors involved in the Project must be made available to TCT for interview purposes as required by TCT in its sole discretion.

**(7)** The Recipient may be asked to participate in an evaluation or audit of the Project or contribution under this Agreement. In such case, the Recipient will make available any records required for such evaluations or audits.

## PAYMENTS

**(1)** Each payment will be made within 90 days of the signing of the contribution agreement and/or approval of a project report by Trans Canada Trail. Payments will be made according to the schedule in Appendix A.

**(2)** The total contribution will be based on the actual approved Project expenditures up to the maximum contribution amount set out in this Agreement. The total contribution amount may be lower than originally specified, as set out in this Agreement, including if the eligible expenses incurred by the Recipient are less than those detailed in the Scope of the Project.

**(3)** Spending on the Project by the Recipient must be within the agreed upon budget allocation included in the Scope of the Project (Appendix A). The Recipient must report any budget reallocation within the budget categories in the next progress report, as well as in the final report.

**(4)** Any unspent funds must be returned to TCT, unless TCT has provided the Recipient with prior written approval for such funds to be spent on other items or activities that are consistent with the Project's purpose, in TCT's sole discretion.

**(5)** All payments under this Agreement are conditional upon TCT receiving sufficient funding from its funding sources. The Recipient understands and agrees that if TCT determines, in its sole discretion, that it does not have sufficient funding for the amounts payable to the Recipient under this Agreement, TCT may reduce the payments or terminate this Agreement, without any further obligation or liability by TCT. In such case, the Recipient will have no recourse or rights against TCT.

## DEFAULTS

**(1)** Each of the following actions constitutes a default under this Agreement:

- Any named default in this Agreement;
- False statements to TCT by the Recipient;
- Failure of the Recipient to meet any term condition, requirement or obligation contained in this Agreement;
- TCT determines, in its sole discretion, that the Recipient will be unable to complete the Project in an acceptable manner or otherwise in accordance with this Agreement.

**(2)** TCT will deliver notice to the Recipient and the Trail Operator, in writing, of any such defaults (the "Default Notice"). The Recipient will be required to comply with the conditions set out in the Default Notice. Upon receipt of the Default Notice, the Recipient will have 30 days to remedy the default. If

the Recipient does not remedy the default, or otherwise comply with the Default Notice to TCT's satisfaction, in its sole discretion, TCT may:

- Suspend or terminate this Agreement, including any payments required under this Agreement;
- Suspend or terminate any other agreements between the Recipient and/or the Trail Operator and TCT, including any payments required under those agreements;
- Refuse to support any future projects of the Recipient;
- Recover some or all of TCT's contribution for the Project;
- Remove Trans Canada Trail designation from any area associated with the Recipient and/or the Trail Operator;
- Take any other action or remedy permitted under this Agreement or at law.

**(3)** The failure by TCT to take any action in response to a default under this Agreement does not constitute a waiver of TCT's right to take future action with respect to said default.

## CLAIMS, TRANSFER, TERMINATION AND RECOURSE

**(1)** The Recipient and/or the Trail Operator will not make any claim against TCT for any delay or deficiency in the completion of the Project, nor for any inaccuracies in information provided to the Recipient and/or the Trail Operator under this Agreement or otherwise.

**(2)** The Recipient and/or the Trail Operator shall release, indemnify and hold harmless TCT and its directors, officers, employees, agents, assigns and representatives from and against any and all costs, claims, demands, expenses, actions, and causes of action (the "Claims"), howsoever caused, which arise out of, relate to, or result from the Project, including but not limited to, TCT's contribution under this Agreement, including but not limited to any Claims for damage to property or injury to persons (including death). TCT also holds this indemnity in trust for parties who are not signatories to this Agreement.

**(3)** TCT is not liable for any borrowings, leases or other obligations that the Recipient and/or the Trail Operator may have incurred with respect to any obligations or expenses towards which contribution under this Agreement is made.

**(4)** In addition to any other available remedies, this Agreement may be terminated immediately by TCT if the Recipient and/or Trail Operator ceases operations, liquidates its business, is placed in receivership, becomes insolvent or declares bankruptcy.

**(5)** In the event of a dispute arising from or in connection with this Agreement, the parties agree to engage in good faith discussions for 30 days, or such further period as may be agreed by the parties in writing, in an attempt to resolve the dispute. If the dispute is not resolved within the aforesaid period, either party may refer the matter to an arbitration.

**(6)** This Agreement is not transferable by the Recipient and/or the Trail Operator.

**(7)** This Agreement shall be governed solely by the laws of Ontario.

## AUTHORIZED SIGNATURES

The undersigned hereby certify the following:

- I am duly authorized to bind our organization;
- The information included in this Agreement, including in the appendices, is accurate.

| | |
|---|---|
| _____ | _____ |
| Name of Recipient Signing Authority | Name of TCT Signing Authority |
| _____ | _____ |
| Signature (Recipient) | Signature (TCT) |
| _____ | _____ |
| Date Signed | Date Signed |

### If different than the Recipient:

_____
Name of Trail Operator Signing Authority

_____
Signature (Operator)

_____
Date Signed

## APPENDIX A — SCOPE OF PROJECT

| Information | |
|---|---|
| **Project Name** | Accessible Kayak Dock - SSM |
| **Total Cost (budget)** | $19,996.07 |
| **TCT max Contribution** | $6,983.00 |
| **% of total cost (contribution)** | 34.92% |
| **Schedule** | |
| **Start date** | 2024/06/01 |
| **Completion date** | 2025/11/24 |
| **Expiration date** | 2024/12/23 |

### Project Deliverables

| Deliverable | Due Date |
|---|---|
| Contribution Agreement | 2024/06/28 |
| Acknowledgement Signs | 2024/08/03 |
| Progress Report 1 | 2024/08/15 |
| Final Report | 2025/12/05 |

### Payment schedule

| Deliverable | % of the contribution |
|---|---|
| **Contribution Agreement** | 25% of 100% |
| **Progress report (50% completion stage)** | 50% of 100% |
| **Final Report** | 25% of 100% |

### Description

Project is focused on dock accessibility, mainly remediation to the existing dock to become truly accessible. Actions will include the addition of safety features like handrails on ramping and 'step' removal, paving of accessible parking spots and paving of the path of travel to the dock from the accessible parking.

## APPENDIX B — Promotion and Recognition

Appendix B is provided to ensure that TCT (national) and the Recipient (local) benefit as much as possible from the unique and valuable relationship we share.

TCT recognizes that the Recipient commonly engages in a variety of fundraising activities, in addition to receiving financial support from TCT.

The Recipient recognizes that TCT also fundraises for local Trail projects in their provincial/territorial jurisdiction, in addition to providing fundraising advice and limited support to recipients requiring assistance.

### Guiding Principles

Collaboration: TCT and the Recipient recognize their shared responsibility to collaborate on achieving their goals and priorities, and are committed to a multi-sector approach.

Stewardship: The Recipient recognizes that donors have entrusted TCT to invest their support in order to ensure the greatest impact. The Recipient will work with TCT to meet their commitment to donors.

This appendix is a commitment by the Recipient to TCT. The contribution provided through this agreement has been supplied, in part, through donations to Trans Canada Trail and TCT is committed to recognizing these donors for their support.

### Trans Canada Trail agrees to:

**(1)** Give a contribution to the Recipient for the completion of the Project, as set out in this Agreement.

**(2)** At its sole discretion, promote trail sections, funded programs and initiatives within the Province/Territory through a variety of channels, including but not limited to: TCT's website, social media channels, as well as campaign and promotional materials.

**(3)** When feasible, consult and provide guidance with respect to fundraising upon request in order to, among other things, reduce donor confusion.

**(4)** Ensure regular and timely communications with the Recipient on any matter that may affect their relationship with TCT or the terms of this Agreement.

### The Recipient and Trail Operator agree to:

**(1)** Follow the acknowledgement requirement – See TCT's acknowledgement guidelines.

**(2)** Prepare or collaborate, as required, on the development of an event to acknowledge the Project (i.e. announcement of contribution, trail opening, etc.) and provide a speaking opportunity for a TCT representative.

**(3)** Portray Trans Canada Trail positively in all verbal and written communication to the public.

**(4)** Protect TCT's brand identity by following brand and logo usage guidelines.

**(5)** Display signage that is provided, recognizing Trans Canada Trail as a funder. This signage should be placed in a high-traffic area or at the construction site.

**(6)** Collaborate with TCT throughout the term of this Agreement to support marketing and content materials such as blogs, newsletters and other engagement programs that help to demonstrate our work together in the Province/Territory.

**(7)** Refrain from fundraising from national corporations who may have already given to TCT. TCT will, in turn, refrain from fundraising from local and provincial branches of similar national corporations. If there are questions about who these national corporate donors are, and/or if advice is required to coordinate a stronger approach to ensure success of your organization.

**(8)** Participate in donor recognition initiatives, such as thanking donors, when appropriate, thereby making a tangible connection between donations to TCT and improvements to the Trans Canada Trail.

**(9)** Provide, for TCT's review, any publication, printed recognition, or signage featuring the TCT logo, prior to publication, which will not occur without TCT's advance approval.

**(10)** Notify TCT in advance of any public events related to the Project, and provide an opportunity for TCT representation and recognition at the event. Demonstrating tangible recognition of local donors who have contributed to the success of the Project, including notifying TCT, will reflect positively on the Recipient and will be considered in future funding requests submitted to TCT.

TCT also requires recipients to follow Trans Canada Trail on social media and share its content when possible, for the duration of the agreement.

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-131**

**ENGINEERING**: A by-law to authorize the execution of the Agreement between the City and AECOM Canada Ltd. to comply with regulatory requirements in respect to Ontario Regulation 588/17 under Infrastructure for Jobs and Prosperity Act.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated August 27, 2024 between the City and AECOM Canada Ltd., a copy of which is attached as Schedule “A” hereto. This Agreement is to comply with regulatory requirements in respect to Ontario Regulation 588/17 under Infrastructure for Jobs and Prosperity Act.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

tm

AECOM

# Fee Addendum Authorization

☒ **Client Contract Change** ☐ **Sub Contract Change**

| | | | |
|---|---|---|---|
| **Project Name:** | Asset Management Plan Consulting Engineering Services | **Change No.:** | 2 |
| **AECOM Project No.:** | 60667706 | **Date:** | 27-Aug-24 |
| **Client/Sub Name:** | City of Sault Ste. Marie | **Contract Reference No.:** | City SSM By-Law No. 2024-131 |
| **Subject:** | Core and Non-Core Asset Management Plans Phase III Update | | |

Pursuant to the Agreement, the following change to the Scope of Work for the above project is advised:

**Description of Change:**
Fee Addendum to provide professional services to update 10 Asset Management Plans (AMPs) for the City's corporate-wide asset classes, including both core (Wastewater, Stormwater, Roads & Bridges) and non-core (Protective Services, Solid Waste, Parks & Cemetery, Facilities, Fleet, Roadway Appurtenances, and Active Transportation) assets. This update aims to support the City in meeting the July 1, 2025 deadline set our by O.Reg. 588/17. Refer to the attached Proposal dated August 23, 2024.

**Fee:** The agreed contract value will be: ☐ unaltered, ☒ increased, ☐ decreased by Time & Materials - **$229,000.00** (AMT)

**Time:** The agreed time for completion is ☐ unaltered, ☒ increased, ☐ decreased by 368 (calendar days)

| Contract Value Summary | | Time Changes Summary | |
|---|---|---|---|
| **Original Contract Value** | $210,000.00 | **Original Contract Completion Date** | 30-Jun-22 |
| **Net value of changes previously authorized** | $214,700.00 | **Net Change Previously Authorized (calendar days)** | 0 |
| **This change** | $229,000.00 | **This Change (calendar days)** | 0 |
| **New Contract Value** | $653,700.00 | **New Contract Completion Date** | 1-Jul-25 |

## Fee Addendum Approval

| | | |
|---|---|---|
| Christiaan Lombard | | 27-Aug-24 |
| **AECOM Project Manager** | **Signature** | **Date** |
| Rick Talvitie, Associate Vice President | | 27-Aug-24 |
| **AECOM Authorized Signatory** | **Signature** | **Date** |
| Mayor - Matthew Shoemaker | | |
| **City of Sault Ste. Marie** | **Signature** | **Date** |
| City Clerk - Rachel Tyzinski | | |
| **City of Sault Ste. Marie** | **Signature** | **Date** |
| | | |
| **City of Sault Ste. Marie** | **Signature** | **Date** |

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-132**

**PROPERTY ACQUISITION**: A by-law to authorize the acquisition of property located at civic 628 Second Line West (Windsor Park Residence Ltd.).

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **PROPERTY ACQUISITION**

The Corporation shall acquire by purchase the absolute right in fee simple to the lands more particularly described in Schedule "A" attached hereto.

2. **EXECUTION OF DOCUMENTS**

The City Solicitor is hereby authorized by By-law 2018-55 for and in the name of the Corporation to execute and affix the seal of the Corporation to all documents required to complete the said acquisition.

3. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

4. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

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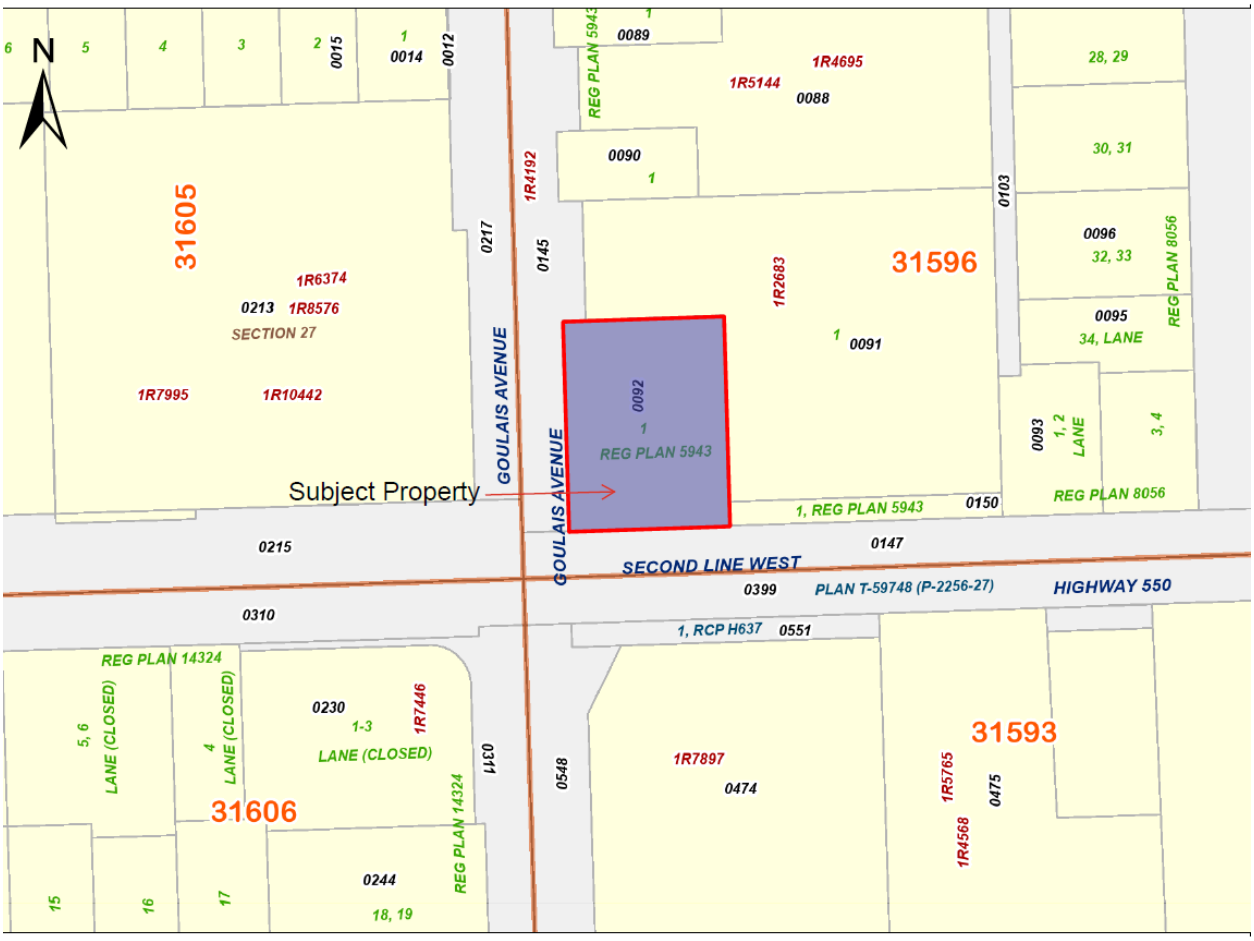
SCHEDULE “A”

| | |
|---|---|
| PURCHASER: | The Corporation of the City of Sault Ste. Marie |
| VENDOR: | Windsor Park Residence Ltd. (or as otherwise directed) |
| ADDRESS: | 628 Second Line West |
| LEGAL DESCRIPTION: | PIN 31596-0092(LT) PT LT 1 PL 5943 KORAH AS IN T23331, T54425, T39067 EXCEPT T54424; S/T T82455; SAULT STE. MARIE |
| CONSIDERATION: | Seven Hundred Thousand ($700,000.00) Dollars (subject to usual adjustments) |



**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-133**

**PLANNING**: A by-law to approve the proposed Sault Ste. Marie Housing Community Improvement Plan, designate the Plan Administrator and delegate approval authority of the financial incentives.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to Sections 28(2), (4), (7) AND (7.1) of the *Planning Act*, R.S.O. 1990, c.P.13 **ENACTS** as follows:

1. **SAULT STE. MARIE HOUSING COMMUNITY IMPROVEMENT PLAN**

City Council hereby adopts and agrees to implement the proposed Sault Ste. Marie Housing Community Improvement Plan for the purpose set out in section 1 hereinabove. The Plan is attached as Schedule "A" hereto.

2. **SCHEDULE "A"**

Schedule "A" hereto forms a part of this by-law.

3. **DESIGNATION OF PLAN ADMINISTRATOR**

City Council hereby designates the Director of Planning or their designate as the Plan Administrator.

4. **DELEGATION TO THE PLAN ADMINISTRATOR**

City Council hereby delegates approval authority of the financial incentives to the Plan Administrator or their designate.

5. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

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**APPENDIX A**

Schedule "A"

SAULT STE MARIE

City of Sault Ste. Marie

# Housing Community Improvement Plan (Draft)

**August 2024**

## Land Acknowledgement

### Robinson-Huron Treaty Territory

The City of Sault Ste. Marie acknowledges this area as part of the Robinson-Huron Treaty territory and is the traditional territory of the Anishinaabe and known as Bawating. Bawating is the home of Garden River First Nation, Batchewana First Nation, the Historic Sault Ste. Marie Metis Council and today is home to many Urban Indigenous people from across Turtle Island.

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# 1. Introduction

## 1.1 Purpose of this Plan

This Community Improvement Plan ("CIP" or "Plan") is a community revitalization tool that responds to the housing needs of the City of Sault Ste. Marie ("City"). It directly implements Action 3 of Sault Ste. Marie's Housing Action Plan 2023-2028, to "provide financial incentives for housing". In doing so, the Plan establishes a range of financial incentive programs intended to facilitate broad investment in the City's housing stock to meet current and future housing demand.

Like many municipalities across Canada and in Ontario, the supply of adequate and affordable housing has emerged as a critical challenge. As of 2023, the City estimates that approximately 3,115 new housing units will be required by 2036 to meet projected housing demand. The Province of Ontario ("Province") has also identified a housing target for the City of 1,500 new units by the year 2031.

The City therefore plans to meet or exceed the Provincial housing target by 2031, as well as satisfy the housing demand that is projected by the year 2036. This Plan is intended to have a key role in achieving these housing targets.

Importantly, the City will require housing that responds to changing demographics, economics, and market conditions. Therefore, housing within the City will need to provide opportunities for people with housing needs and aspirations.

## 1.2 Objectives of this Plan

The objectives of this Plan are in response to the identified housing needs and opportunities within the City, while similarly advancing the priorities of the Housing Action Plan. Therefore, the objectives of this Plan are to:

1. Support implementation of the Housing Action Plan, specifically Action 3, which states "Provide Financial Incentives to Housing".
2. Implement the housing policies of the City's Official Plan.
3. Increase the overall inventory of housing stock.
4. Develop an appropriate mix of housing with regards to type and tenure.
5. Prioritize the development of affordable housing.
6. Focus housing development within the Strategic Development Areas of the City that have the greatest identified need or are within a safe-walkable distance to an array of services and amenities.
7. Respond to the diverse housing needs of current and future residents.

Proposed community improvement works that benefit from the financial incentive programs of this Plan must be consistent with these objectives. These objectives are also a critical component to the monitoring and evaluation framework of this Plan, and therefore should be evaluated regularly to inform future updates.

## 1.3 Community Improvement Project Area (CIPA)

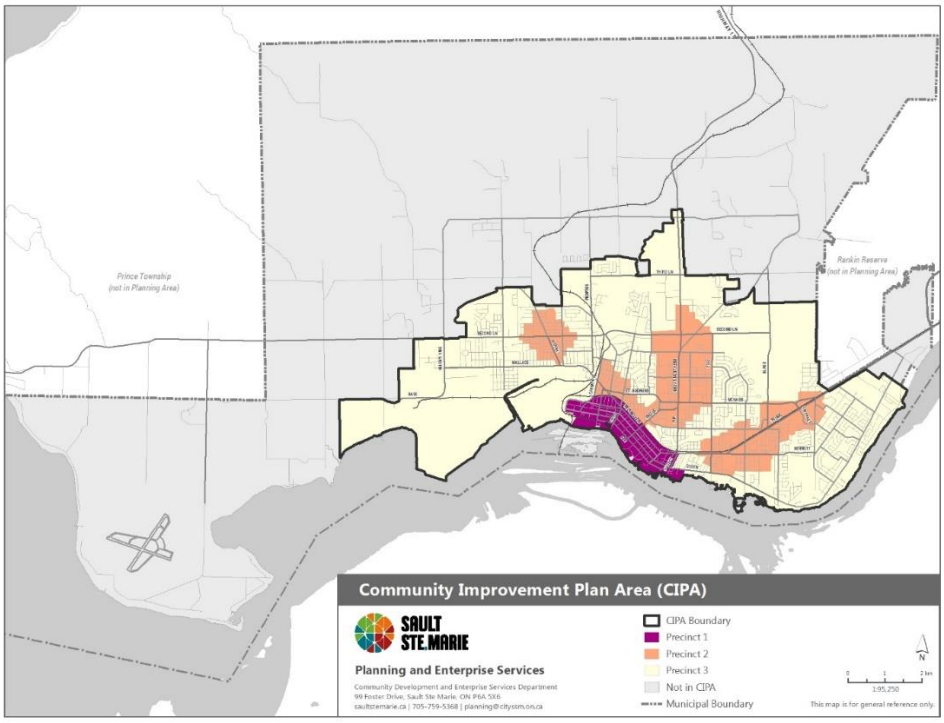
Properties eligible to apply for the financial incentive programs established by this Plan are shown on the CIPA. The CIPA is established as a separate by-law from this Plan and may be amended from time to time at Council's discretion. It is therefore important for eligible applicants to consult with the Plan Administrator to determine if a property or building is within the CIPA before applying.

The CIPA delineates distinct "Precincts", wherein this Plan contemplates some of the financial incentive programs differently in response to the housing priorities throughout the City. The Precincts are generally described as follows:

1. **Precinct 1:** This Precinct corresponds to the Strategic Development Areas – First Neighbourhoods as identified in the Official Plan. Precinct 1 includes some of the City's first established residential neighbourhoods, as well as the Downtown and is an area that demonstrates a heightened and unique need for adequate and affordable housing.
2. **Precinct 2:** This Precinct corresponds to the Strategic Development Areas – Other as identified in the Official Plan. Precinct 2 includes areas of the City that are within a safe-walkable distance to a variety of services and amenities. Over time, areas within Precinct 2 will experience residential growth and a resulting demand for new housing opportunities.
3. **Precinct 3:** This Precinct includes areas that are within the Urban Settlement Area of the City, but outside of Precincts 1 and 2.

The boundaries of the Precincts are delineated by the CIPA and may be subject to modification through a by-law as enacted by Council. The CIPA is shown in Figure 1.

*Figure 1: Community Improvement Project Area (CIPA)*




## 1.4 Legislative Authority

This Plan has been prepared and enacted in accordance with Section 28 of the *Planning Act*. Pursuant to Section 28, the City may issue financial incentives to eligible applicants within a designated CIPA, and where a CIP has been prepared.

This Plan is also permitted under Section 106 of the Municipal Act, 2001, which generally prohibits municipalities from directly or indirectly assisting manufacturing, business or other industrial or commercial enterprises. An exception to Section 106 is made under Section 106(3) for municipalities exercising powers under Section 28 (6) or (7) of the Planning Act, being to adopt a CIPA and CIP.

## 1.5 Structure of this Plan

This Plan is organized into four sections:

1. **Section 1** introduces the CIP, including relevant background information, purpose, and legislative authority.
2. **Section 2** identifies the programs of this Plan which includes the description, purpose, and interpretation for each program.
3. **Section 3** establishes the general eligibility criteria for programs.
4. **Section 4** provides detailed implementation policies that inform how this Plan is monitored and evaluated.

# 2. Financial Incentive Programs

## 2.1 Purpose

This Plan establishes several financial incentive programs to advance the housing objectives of the Plan. The programs are intended to respond to a range of housing needs and opportunities within the community.

## 2.2 Financial Incentive Programs

Under this Plan, a total of three programs are established:

1. Per-Door Grant Program;
2. Tax Increment Equivalent Grant (TIEG) Program; and
3. Sault Foundations - Feasibility Study Grant Program.

Specific details of the financial incentive programs are established under sections 2.4 through 2.6 of this Plan.

## 2.3 Interpretation of the Programs

The financial incentive programs are presented in sections to assist with interpretation and administration, as follows:

1. **Purpose:** Identifies the purpose of the financial incentive program and how it benefits applicants and the community.
2. **General Program Availability:** Specifies the types of housing and tenure that are eligible for the program based on the CIPA.
3. **Eligible Costs:** Provides details for which types of community improvement works are considered eligible in the calculation of a financial incentive program value.
4. **Financial Incentive Program Value:** This section identifies program-specific financial incentive values and maximum grant values.
5. **Payment of Financial Incentive Program:** Describes how and when a financial incentive is to be paid or deemed complete.
6. **Specific Eligibility Criteria:** Provides program-specific details of applicable criteria that applicants must satisfy in order to be eligible to apply for a Program. These eligibility criteria must be read in conjunction with Section 3 General eligibility of this Plan.

## 2.4 Per-Door Grant Program

### 2.4.1 Purpose

The Per-Door Grant Program provides a one-time grant to small-scale developments that propose up to four new dwelling units. The Program is intended to support a greater mix, size, and tenure of housing within the City, while also contributing to an increase in the overall availability of affordable housing options, particularly missing middle housing options. Successful applicants will be required to enter into an agreement with the City to maintain the housing as affordable, in accordance with the specific eligibility criteria of this Program.

### 2.4.2 General Program Availability

The availability of the Per-Door Grant Program depends on whether the housing is developed as affordable or market rate, and depending on tenure, as follows:

1. **Affordable:** Where affordable dwelling units are proposed, the Program is available in all three Precincts.
2. **Market Rate:** Where market rate dwelling units are proposed, the Program is only available in Precinct 1.
3. **Tenure:** Both freehold housing and rental housing are eligible for this Program, however freehold housing is limited to not-for-profit ownership in Precincts 2 and 3.

Additionally, only lands designated Residential, Commercial, or Institutional by the Official Plan shall be eligible for this Program.

### 2.4.3 Eligible Costs

The following costs shall be deemed eligible for the purpose of calculating the total value of the grant:

1. Any development that results a net increase in the total number of dwelling units shall be eligible for this Program.
2. Where a development consists of a mixed-use format, only the residential component of the development shall be eligible.

### 2.4.4 Financial Incentive Program Value

The structure of the Per-Door Grant Program, including the per-unit grant value, is as shown in Table 1:

*Table 1: Per-Door Grant Program Structure*

| Housing Category | Precinct | Tenure Types | Maximum Grant Value (per unit) |
|---|---|---|---|
| Affordable | 1 | Purpose-Built Rental,<br>Freehold (private and not-for-profit) | Bachelor: $30,000<br>1 Bedroom: $35,000<br>2 Bedroom: $40,000<br>3+ Bedroom: $45,000 |
| | 2 or 3 | Purpose-Built Rental,<br>Freehold (not-for-profit) | Bachelor: $30,000<br>1 Bedroom: $35,000<br>2 Bedroom: $40,000<br>3+ Bedroom: $45,000 |
| Market Rate | 1 | Purpose-Built Rental,<br>Freehold (private and not-for-profit) | $20,000 |

The maximum amount of incentive provided under this program to any approved eligible property will not exceed $180,000 (which corresponds to a four-unit development with all 3-bedroom units that meet the definition of affordable).

### 2.4.5 Payment of Financial Incentive Program

The grant shall be paid upon completion of works related to the eligible costs and when an occupancy permit is issued, or otherwise to the satisfaction of the City, and in accordance with the requirements of this Plan.

### 2.4.6 Specific Eligibility Criteria

Eligible applicants must satisfy the requirements of Section 3 General Eligibility Criteria, as well as the following program specific eligibility criteria:

1. Where affordable housing is proposed, the City will require successful applicants to enter into an agreement with the City to maintain the housing as affordable for a period of 20 years.
2. The City requires eligible applicants to provide a cost estimate or quote in advance of the services being rendered by a qualified professional. The cost estimate or quote shall include a detailed breakdown of tasks and associated costs. At its discretion, the City may require additional cost estimates or quotes to be provided, and in this case, the payment of this portion of the grant shall be the lesser of the cost estimates provided.
3. Applications will be assessed and prioritized using a Per-Door Grant scorecard.

## 2.5 Tax Increment Equivalent Grant (TIEG) Program

### 2.5.1 Purpose

The Tax Increment Equivalent Grant (TIEG) will provide an annual grant to reimburse a portion of the municipal property tax increase resulting from residential development on a property over a fixed number of years. The Program is intended to encourage significant investment in new housing within the City. Only applications that propose a total of five new dwelling units or greater are eligible for this Program.

### 2.5.2 General Program Availability

The TIEG is available for affordable dwelling units in all three precincts. However, the Program is structured differently depending on tenure, as follows:

1. **Purpose-Built Rental:** Financial incentives for dwelling units defined as rental by this Plan are eligible in all Precincts.
2. **Freehold:** Financial incentives for units defined as freehold by this Plan are eligible in Precinct 1 only (for example, a condominium with 5 or more units).

Additionally, only lands designated Residential, Commercial, or Institutional by the Official Plan shall be eligible for this Program.

### 2.5.3 Eligible Costs

The following costs shall be deemed eligible for the purpose of calculating the total value of the grant:

1. Any development that results in a net increase in 5 or more dwelling units shall be eligible for this Program.
2. Where a development consists of a mixed-use format, only the residential component of the development shall be eligible.

### 2.5.4 Financial Incentive Program Value

The maximum value of the TIEG is calculated as the difference between pre-project municipal tax assessment and the post-project municipal tax assessment.

As shown in Tables 2 to 4, the total length of the TIEG (in years) will be determined by the percentage of new affordable units within the development and the Precinct where the development is located.

A TIEG will typically contain a fixed number of years at 100% of the municipal portion of the tax increment, decreasing to 75% in the third last year, 50% in the second last year, and 25% in the final year. The grant ceases thereafter.

*Table 2: Percentage of Property Tax (Municipal Portion) Rebated for Developments in Precinct 1*

| Affordable Units (%) ▶ | None | 1-9% | 10-19% | 20-29% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-89% | 90-100% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Year 1** | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 2** | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 3** | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 4** | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 5** | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 6** | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 7** | 0% | 0% | 25% | 50% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 8** | 0% | 0% | 0% | 25% | 75% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 9** | 0% | 0% | 0% | 0% | 50% | 75% | 100% | 100% | 100% | 100% | 100% |
| **Year 10** | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% |
| **Year 11** | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 100% | 100% | 100% | 100% |
| **Year 12** | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 75% | 100% | 100% | 100% |
| **Year 13** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50% | 100% | 100% | 100% |
| **Year 14** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 75% | 100% | 100% |
| **Year 15** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50% | 100% | 100% |
| **Year 16** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 75% | 100% |
| **Year 17** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50% | 75% |
| **Year 18** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% |
| **Year 19** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% |
| **Year 20** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Length (Years)** | 5 | 6 | 7 | 8 | 10 | 11 | 12 | 14 | 16 | 18 | 19 |

*Table 3: Percentage of Property Tax (Municipal Portion) Rebated for Developments in Precinct 2*

| Affordable Units (%) ▶ | None | 1-9% | 10-19% | 20-29% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-89% | 90-100% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Year 1** | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 2** | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 3** | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 4** | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 5** | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 6** | 0% | 0% | 25% | 50% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 7** | 0% | 0% | 0% | 25% | 75% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 8** | 0% | 0% | 0% | 0% | 50% | 75% | 100% | 100% | 100% | 100% | 100% |
| **Year 9** | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% |
| **Year 10** | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 100% | 100% | 100% | 100% |
| **Year 11** | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 75% | 100% | 100% | 100% |
| **Year 12** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50% | 75% | 100% | 100% |
| **Year 13** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 100% | 100% |
| **Year 14** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 75% | 100% |
| **Year 15** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50% | 75% |
| **Year 16** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% |
| **Year 17** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% |
| **Year 18** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 19** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 20** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Length (Years)** | 4 | 5 | 6 | 7 | 9 | 10 | 11 | 13 | 14 | 16 | 17 |

*Table 4: Percentage of Property Tax (Municipal Portion) Rebated for Developments in Precinct 3*

| Affordable Units (%) ▶ | None | 1-9% | 10-19% | 20-29% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-89% | 90-100% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Year 1** | 75% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 2** | 50% | 75% | 75% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 3** | 25% | 50% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 4** | 0% | 25% | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% | 100% |
| **Year 5** | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% | 100% |
| **Year 6** | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% | 100% | 100% |
| **Year 7** | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% | 100% |
| **Year 8** | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% | 100% |
| **Year 9** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 75% | 100% |
| **Year 10** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% | 75% |
| **Year 11** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 50% |
| **Year 12** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% |
| **Year 13** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 14** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 15** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 16** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 17** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 18** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 19** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Year 20** | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| **Length (Years)** | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

### 2.5.5 Payment of Financial Incentive Program

1. The TIEG will only be issued subsequent to completion of approved eligible works, final inspections are complete, and an occupancy permit has been issued.
2. The grant will be paid annually by the City to the eligible applicant subsequent to payment of all property taxes.

### 2.5.6 Specific Eligibility Criteria

Eligible applicants must satisfy the requirements of Section 3 General Eligibility Criteria, as well as the following program specific eligibility criteria:

1. The TIEG program shall be eligible to be combined with the Feasibility Study Grant Program of this Plan but not the Per-Door Grant program.
2. The City may evaluate the merit of an application based on considerations for achieving specific actions as part of the Housing Action Plan.
3. The applicant must demonstrate that a substantial increase in municipal property taxes will occur due to development or redevelopment.
4. The applicant shall provide to the City a post-improvement assessment. The post-improvement assessment will be used by the City to determine the difference between the

amount of municipal taxes prior to the development or redevelopment and the amount of municipal taxes to be paid after the development is complete.

5. A grant issued under this Program will be issued in accordance with a grant schedule and provided to the registered owner of the property on an annual basis.
6. An annual grant shall not be issued until all property taxes owing for each year are fully paid. If a property tax installment is missed or payment is late, the City reserves the right, without notice and at its own discretion, to withhold or terminate all future grant payments.
7. An annual grant shall not be recalculated based on tax increases resulting from general re-assessments, or changes in tax legislation.
8. If the property is sold or there is otherwise a change in ownership, the City reserves the right to withhold or terminate future grants.
9. The City shall not issue an annual grant that is of greater value than the municipal tax collected in a given year on the increased assessed value of the property.
10. At its discretion, the City may suspend or discontinue this Program. However, existing agreements between the City and landowners will be recognized, whereby grants will continue to be issued subject to the agreement.

## 2.6 Sault Foundations - Feasibility Study Grant Program

### 2.6.1 Purpose

The Sault Foundations Program offers a grant to fund studies that assess the feasibility of building "missing middle" housing on a property that is owned by a Not-for-Profit agency. The feasibility study would facilitate development at the concept stage to identify steps and resources needed to make the development a reality.

### 2.6.2 General Program Availability

The Sault Foundations Program is available in all three precincts where proposed development includes an increase in residential units.

### 2.6.3 Eligible Costs

A feasibility study consisting of any combination of the following shall be deemed eligible under this Program:

1. financial analysis and feasibility assessment, or associated business development related studies and plans; and
2. technical reports or studies, such as a building conditions report, where an existing building is proposed to be repurposed or significantly modified or renovated.

### 2.6.4 Financial Incentive Program Value

The maximum grant value of the Program is $30,000.

### 2.6.5 Payment of Financial Incentive Program

1. A grant may be issued to an eligible applicant in advance of the eligible costs being undertaken, at the City's sole discretion.
2. An application must be formally approved by the City before undertaking or initiating the eligible costs. The City may request that the applicant provide at least one quote from a prospective consultants who will conduct the study. Consultants must be qualified professionals.
3. The City may require that the study be completed within a specific timeframe. Further, the City may require full repayment of the total grant value should the study not be completed within the established timeframe.
4. The specific timeframe for which the study is completed will be determined through an agreement entered into between the City and an applicant. At its sole discretion, the City may extend this timeframe upon request of the applicant, provided advance notice is given, and justification for the extension is provided.

### 2.6.6 Specific Eligibility Criteria

Eligible applicants must satisfy the requirements of Section 3 General Eligibility Criteria, as well as the following program specific eligibility criteria:

1. Applicants must be a registered Not-for-Profit organization in good standing. The nature of the Not-for-Profit's interest in developing housing aligns with advancing the housing goals and objectives of the City and this Plan.
2. Applications that propose affordable housing units may be prioritized for funding under this Plan, at the discretion of the City.
3. If the project is deemed feasible, applicants may be eligible for other financial incentive programs in this Plan. For clarity, applicants shall not be eligible to apply for any other financial incentive program if combined with this Program, until such time that it can be demonstrated to the City that the proposed development is feasible.

# 3. General Eligibility Criteria

### 3.1.1 Housing Objectives

All eligible works must be deemed by the City to be consistent with the objectives of this Plan, and the Housing Action Plan.

### 3.1.2 Eligible Applicants

1. Eligible applicants are deemed to be the registered landowner, an agent of the landowner, or a tenant of a property. The following exception to this requirement shall apply:
    a. For the purpose of the Sault Foundations Program, an eligible applicant shall be deemed to be a Not-for-Profit agency and must own the subject property.
2. Where an application is made by someone other than the registered landowner, the applicant is required to provide written authorization from the landowner prior to the submission of an application or before undertaking of any community improvement works.
3. Only properties within the designated CIPA shall be deemed eligible properties, and further, applications must meet all eligibility criteria of this Plan to be deemed eligible.

### 3.1.3 No Retroactive Incentives

1. Works that have already been commenced or completed prior to entering into an agreement with the City are not eligible for any financial incentive program established by this Plan. At its sole discretion, the City may make an exception to this policy by awarding an incentive retroactively, provided the merit for doing so can be satisfactorily demonstrated to the City by the applicant.

### 3.1.4 Timing of Approved Works

1. The City shall stipulate a maximum period of time in which approved works associated with a financial incentive program under this Plan must be initiated by the applicant.
2. The City may further stipulate a maximum period of time in which the approved works funded by a financial incentive program under this Plan is required to be fully completed and/or occupied.
3. At its discretion, the City may elect to extend the maximum period of time in which approved works must be initiated and/or completed.
4. If the approved works are not initiated and/or completed within the stipulated timeframe, the City may reduce or otherwise revoke the agreement and/or grant.

### 3.1.5 Combining Financial Incentives

1. The Sault Foundations Program is permitted to be combined with other grants in this Plan, provided all eligibility criteria of this Plan are satisfied. The Tax Increment Equivalent Grant and the Per Door Grant Program shall not be permitted to be combined.
2. Where financial incentive programs are combined, in no case shall the total value of all financial incentives exceed the total value of all eligible costs and in no case shall eligible costs be counted more than once across one or more grants or applications.

### 3.1.6 Site Inspection

1. The City reserves the right to visit a property or building prior to issuing a decision on an application.
2. The City also reserves the right to visit a property or building once the approved works are completed, but prior to making payment of the grant, to ensure all works have been completed in accordance with the approved application.

### 3.1.7 Compliance

1. Eligible applications are required to comply with all applicable by-laws, standards, procedures, and guidelines of the City in order to be deemed eligible.
2. Eligible applications are also required to conform to the Official Plan and be in accordance with applicable land use regulations, including the Zoning By-law. The exception to this is where an amendment to the Zoning By-law is identified as an eligible cost by this Plan.
3. The City may determine that eligible applications are conditional subject to receiving necessary approvals, including but not limited to, permits from Provincial and Federal authorities.
4. Any conditions associated with required approvals or permits may be included in an agreement between the applicant and the landowner.

### 3.1.8 Completed Works

1. Any community improvement works that are undertaken and funded in whole or in part by this Plan must be consistent with the approved application agreement between the applicant and the City.
2. Where community improvement works are not undertaken in accordance with the approved application agreement, the City may delay, reduce, or cancel the approved agreement, and may require repayment for costs otherwise incurred by the City.

### 3.1.9 No Arrears or Defaults of City Requirements

An applicant is not eligible for a financial incentive program if they are in default of any City requirement at the time of an application or when payment of the grant is made. This includes arrears with regard to tax payments or any accounts receivable with the City. This eligibility criterion is to be included as a condition on the agreement between the City and the applicant.

### 3.1.10 Change in Ownership

Any agreement entered into under this Plan between the City and a landowner(s) shall be considered binding and registered on title and shall continue to be upheld where the property has been sold or has otherwise changed ownership.

### 3.1.11 Additional Information

At its discretion, the City may request additional information that it deems necessary to render a decision on an application, or to satisfy any of the eligibility criteria of this Plan. This may include additional information that demonstrates the applicant's creditworthiness and business track record.

### 3.1.12 Total Value of Financial Incentives

The total amount of all grants shall not exceed the total eligible costs of community improvement works that benefit from this Plan's financial incentive programs.

### 3.1.13 Maximum Grant Value

1. The total value of an individual grant shall not be greater than 100% of the calculated eligible costs for that grant.
2. Where two financial incentive programs are combined, in no case shall the value of an incentive be awarded for the same eligible costs between those combined programs.

### 3.1.14 Minimum Grant Value

The minimum value of a grant shall not be less than $1,000. For clarity, where the total value of a grant is calculated to be less than $1,000, the application may not be accepted by the City.

### 3.1.15 Minimum Affordability Period

1. Affordable dwelling units must be maintained in accordance with the definition of affordable under this Plan (see Section 4.6.1) for a minimum of 20 years, as indicated on an agreement between the City and landowner. The definition of affordable may be subject to change over this period of time as stated below.
    a. For *affordable rental units*, the initial rental rate of any incentivized unit will be set at or below the affordable rental rate contained in the most recent Affordable

Residential Units bulletin. The rental rate will be permitted to be raised annually based on the annual percentage rate amount approved by the Provincial Government for the duration of the affordability period.

b. For *affordable ownership housing*, any freehold unit that has been incentivized must be sold at or below the affordable purchase price in the most current Affordable Residential Units bulletin if sold at any time during the affordability period.

2. An agreement prepared by the City, between the City and landowner shall be required regarding the minimum affordability period, with the agreement being registered on title. It will be a condition of this agreement that landowners will be responsible for costs associated with registering the agreement on title.
3. An agreement regarding the minimum affordability period shall include terms and conditions should the housing no longer meet the definition of affordable, and this may include full or partial repayment of any grants that have been paid.
4. An annual statement shall be provided to the City demonstrating that any housing subject to an agreement regarding affordability is being maintained and offered as affordable per the definition of this Plan. The City may require additional documentation or evidence to corroborate the statement.
5. Where the conditions of an agreement are not upheld by the landowner, the City may exercise its authority to terminate the agreement and further, require that the entire amount of the incentives, including any associated costs and interest, be fully repaid to the City.

### 3.1.16 No Implications on Approval

Under no circumstance does a decision by the City to award a financial incentive under this Plan imply the merit of an application made under the *Planning Act* or a permit pursuant to the Ontario Building Code, or otherwise obligate the City to approve same in any manner.

### 3.1.17 Permanent Improvements Only

Eligible costs must involve permanent improvements only. For greater clarity, any costs associated with lifecycle replacement, housewares, or appliances, shall not be deemed an eligible cost.

### 3.1.18 Disclosure of Funding

1. Applicants are required to fully disclose all funding sources at time of application, or when otherwise requested by the City.
2. If in the City's opinion an applicant has received additional funding for the same community improvement works, at its sole discretion, the City may reduce the value of a grant, or otherwise deny an application.

3. Without limiting the generality of the foregoing, additional funding may include grants made available through other Community Improvement Plans, commercial loans, seed funding, or other similar financial assistance.

### 3.1.19 Relationship to Other Community Improvement Plans

1. The financial incentive programs of this Plan may be combined with other CIPs administered by the City.
1. Where financial incentive programs are combined between this Plan and another CIP, in no case shall funding be made available for the same eligible cost.
2. At its sole discretion, the City may determine that an application is non-eligible to receive funding through a financial incentive program of this Plan and another CIP.

### 3.1.20 Heritage Properties and Buildings

Community improvement works to a property or building designated under the *Ontario Heritage Act* or listed by the City may be required to submit additional information to the City in support of an application.

### 3.1.21 Short-term Rentals

1. A dwelling unit developed with a grant issued under this Plan shall not be used for a Short-term Rental, as defined by By-law 2022-178. For additional clarity, financial incentive programs established by this Plan shall not be used for the development or redevelopment of a dwelling unit that is used, or may be used, for a Short-term Rental.
2. The City shall require this as a condition in any agreement entered into with eligible applicants.
3. Failure to uphold this requirement may result in termination of the agreement by the City. The City may also exercise its powers to recuperate a portion, or the total value of any grant(s) issued under this Plan from the landowner.

### 3.1.22 Funding Discretion

1. At its discretion, Council may determine that certain financial incentive programs of this Plan be discontinued or the value of the grants to be modified.
2. The City is not bound to accept any application. The City reserves the right to consider any, none or all of the applications, to accept applications in whole or in part, and to elect not to proceed with this process at any given time.
3. Eligibility to programs does not guarantee funding of projects.
4. Grants and incentives are subject to budget.

# 4. Implementation

## 4.1 General

1. This Plan is intended to be implemented over a 3-year horizon, with regular review and/or update as informed by the plan monitoring and evaluation framework of this Plan.
2. If through consultation with the Plan Administrator it is deemed by Council that this Plan has achieved its objectives, a by-law to dissolve this CIP and Community Improvement Project Area may be passed at any time, in which case a new CIP and Community Improvement Project Area may be enacted by a new by-law.
3. Interpretation and administration of this Plan is at the sole discretion of the Plan Administrator, or their delegate, or Council, as the case may be.
4. This Plan must be read, interpreted, and administered in its entirety.

## 4.2 Community Improvement Project Area

1. Only properties within the designated Community Improvement Project Area shall be deemed to be eligible for the financial incentive programs of this Plan.
2. Where a portion of a lot is within the designated Community Improvement Project Area, it shall be interpreted that the entirety of the lot is within the Community Improvement Project Area.
3. The Community Improvement Project Area is established separately from this Plan as a by-law of Council. Any modification to the Community Improvement Project Area shall therefore be subject to a new by-law of Council.
4. A total of three precincts are identified within the Community Improvement Project Area. Modifying the boundary of a precinct(s) shall only be permitted through an amending by-law of Council. Further, any change to the availability of a financial incentive program within a precinct shall require and amendment to this Plan.

## 4.3 Plan Administration

1. Upon enactment of this Plan, Council shall designate a member of City staff to be the Plan Administrator.
2. The Plan Administrator, at their discretion, may identify an alternate Plan Administrator, should the principal plan administrator become unavailable.
3. Council shall be the approval authority of applications to financial incentive programs established by this Plan, however they can delegate approval authority to the Plan Administrator.

4. The Plan Administrator shall be responsible for ensuring the monitoring and evaluation framework of this Plan is fully implemented over the Plan horizon.
5. Applications shall be submitted and processed in accordance with the policies of this Plan. The Plan Administrator shall be responsible for ensuring that the review and decision process is undertaken in a timely manner.

## 4.4 Financial Incentive Program Funding

1. Council shall establish an annual budget for this Plan, including for each of the financial incentive programs.
2. Council reserves the right to fund all or none of the financial incentive programs under this Plan in any given budgetary year.
3. Based on monitoring and evaluation of this Plan, Council may decide that certain financial incentive values need to be modified to ensure that the programs function as intended, and to be responsive to the evolving housing needs of the City.
4. An amendment to this Plan shall not be required where Council modifies the value of a financial incentive program under this Plan.

## 4.5 Plan Monitoring and Evaluation

### 4.5.1 General

1. It is recognized that this Plan is a tool to facilitate housing development within the City and will therefore need to respond to evolving market forces, economic conditions, and financial resources to remain relevant. Therefore, Plan monitoring and evaluation is critical to the long-term success of this Plan and the financial incentive programs.
2. The Plan Administrator will dedicate the City's available resources to ensure that this Plan is regularly monitored and evaluated in accordance with the policies of this section.
3. The overall objectives of the monitoring and evaluation framework of this Plan are to:
    a. Ensure the financial incentive programs are advancing the objectives of this Plan and achieving their individual intended outcomes.
    b. Adjust aspects of the financial incentive programs, including their maximum values, as may be identified, or needed to ensure they are best positioned to respond to the evolving housing needs and opportunities of the City.

### 4.5.2 Baseline Conditions

1. Upon enactment of this Plan, the Plan Administrator will collect baseline information regarding key housing data and indicators within the Community Improvement Project Area.

2. It is recommended that key housing data and indicators used to prepare the Housing Needs Assessment be initially used for this purpose.

### 4.5.3 On-going Monitoring

1. On-going monitoring of this Plan and the baseline conditions are critical to informing future updates to this Plan or specific financial incentive programs.
2. At a minimum, the following indicators will be monitored by the Plan Administrator:
    a. The number of new affordable and market rate housing units that have been developed;
    b. The tenure of new housing units that have been developed;
    c. The location of new housing units;
    d. Indicators pertaining to housing unit vacancies or where there is heightened demand;
    e. Demographic and economic indicators related to the definition of “affordable” or may otherwise have bearing on the value of the financial incentive programs;
    f. Indicators related to developer and purchaser costs of housing units that have been developed under this Plan;
    g. The approved/denied value of the grant and the total value of construction (the total public investment versus private investment);
    h. The projected and actual increase in property assessments and property taxes, as may be applicable; and
    i. Indirect indicators including economic indicators, qualitative indicators and other indicators which speak more generally to the success of the City, and which may or may not be directly attributed to the influence and success of this Plan.

### 4.5.4 Reporting

1. The Plan Administrator shall prepare an annual report detailing the indicators that are being monitored. The annual report should be made publicly available and presented to Council.
2. The annual report shall include an assessment of each individual financial incentive program, to ensure that sufficient analysis is included to inform potential updates to specific aspects of each program.
3. The annual report shall also make recommendations on potential adjustments to this Plan based on its findings. This may include, for example:
    a. Adjustments to the annual funding of this Plan;
    b. Revisions to the CIPA boundary;
    c. Adjustments to the financial incentive programs, including discontinuation of certain programs in response to funding constraints or low performance, or where otherwise necessary.

d. Modifications to the eligible costs, or eligibility criteria;
e. Necessary modifications to the plan administration, including the monitoring and evaluation framework.

4. The annual report may also include an analysis or review of potential sources of funding for this Plan, and required actions or initiatives that must be undertaken by the City to pursue that funding or otherwise be considered eligible.

## 4.6 Definitions

1. "Affordable", "Affordability" or "Affordable Housing" means:
   a. In the case of ownership housing, a unit would be considered affordable when the purchase price is at or below the lesser of:
      i. Income-based purchase price: A purchase price that would result in annual accommodation costs equal to 30% of a household's gross annual income for a household at the 60th percentile of the income distribution for all households in the City of Sault Ste. Marie as set out in the Affordable Residential Units bulletin, as identified by the Minister of Municipal Affairs and Housing; and
      ii. Market-based purchase price: 90% of the average purchase price of a unit of the same unit type in the City of Sault Ste. Marie as set out in the Affordable Residential Units bulletin.
   b. In the case of rental housing, a unit would be considered affordable when the rent is at or below the lesser of:
      i. Income-based rent: Rent that is equal to 30% of gross annual household income for a household at the 60th percentile of the income distribution for renter households in the City of Sault Ste. Marie as set out in the Affordable Residential Units bulletin, as identified by the Minister of Municipal Affairs and Housing; and
      ii. Market-based rent: Average market rent of a unit of the same unit type in the City of Sault Ste. Marie as set out in the Affordable Residential Units bulletin.
2. "Affordable Residential Units bulletin" means the bulletin entitled the "Affordable Residential Units for the Purposes of the Development Charges Act, 1997 Bulletin that is published by the Minister of Municipal Affairs and Housing on a website of the Government of Ontario and is amended from time to time.
3. "Applicant" means the registered landowner, an authorized agent of a registered landowner, or tenants of lands or buildings with written authorization from the registered landowner.
4. "Dwelling Unit" shall have the same meaning as defined in the City's Zoning By-law.

5. “Eligible Applicant” means an applicant (as defined above) who meets all general and specific eligibility requirements of this Plan and prepares and applies for a financial incentive program established by this CIP.
6. “Eligible Costs” shall have the same meaning as used in subsection 28 (7.1) of the *Planning Act*: “costs related to environmental site assessment, environmental remediation, development, redevelopment, construction and reconstruction of lands and buildings for rehabilitation purposes or for the provision of energy efficient uses, buildings, structures, works, improvements or facilities.”
7. “Mixed-use” means any combination of two or more category of uses in a single development as permitted by the City’s Zoning By-law.
8. “Not-for-Profit” means organizations that are, agencies, associations, clubs, or societies that are not charities and are organized and operated exclusively for social welfare or civic improvement, or any other community benefit purpose except profit.
9. “Purpose-Built Rental” means housing built specifically for long-term rental accommodation.

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-134**

**PLANNING**: A by-law to approve the proposed Sault Ste. Marie Housing Community Improvement Project Area.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to Sections 28(2), (4), (7) AND (7.1) of the *Planning Act*, R.S.O. 1990, c.P.13 **ENACTS** as follows:

1. **SAULT STE. MARIE HOUSING COMMUNITY IMPROVEMENT PROJECT AREA**

   City Council hereby designates as a proposed Housing Community Improvement Project Area the area outlined in the map attached as Schedule "A". This designation will allow City Council to consider grants, government loans, tax assistance or other incentives to encourage development or re-development in this area.

2. **SCHEDULE "A"**

   Schedule "A" hereto forms a part of this by-law.

3. **EFFECTIVE DATE**

   This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

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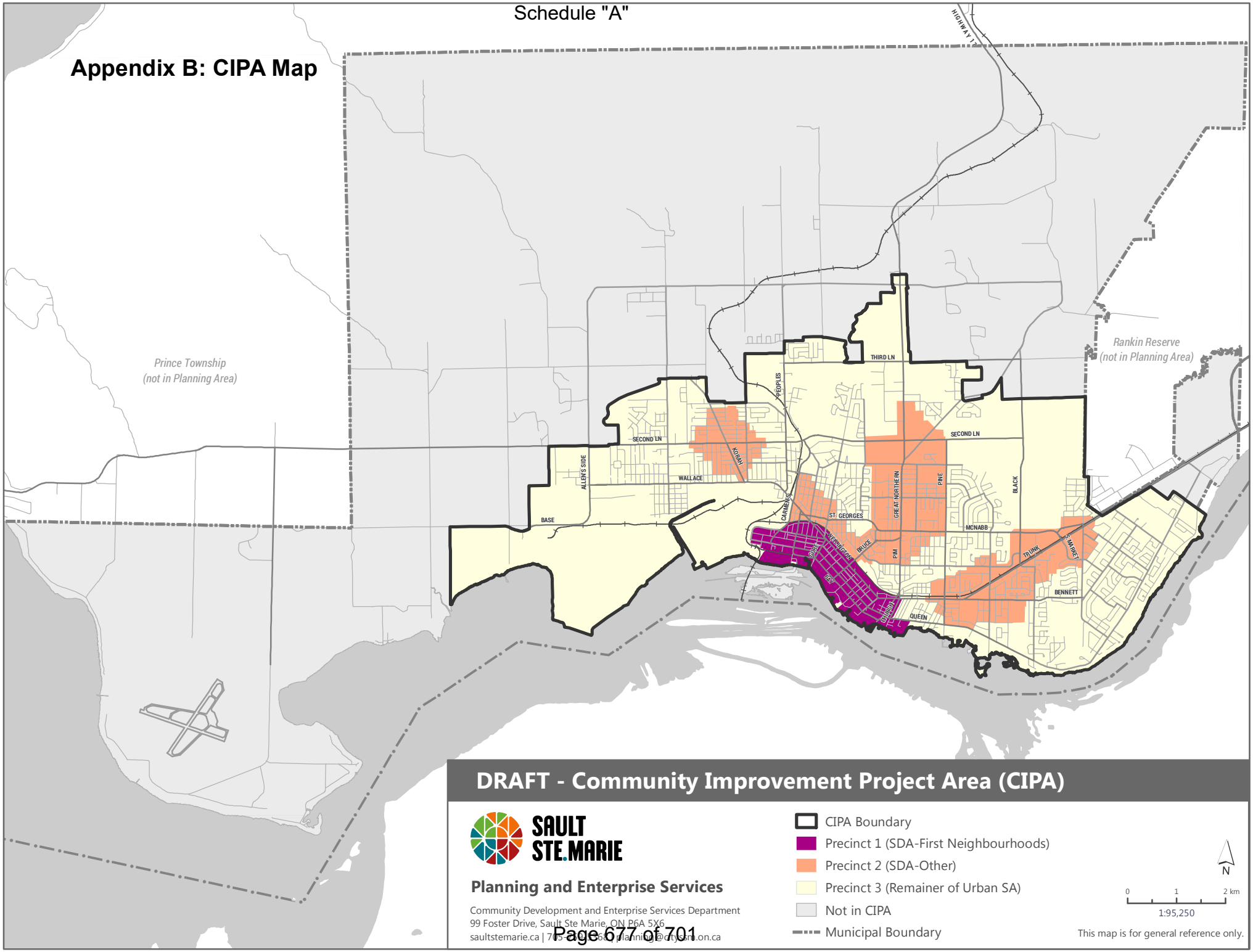
Schedule "A"

# Appendix B: CIPA Map



**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW 2024-119**

**AGREEMENT**: A by-law to authorize the execution of the Lease Agreement between the City and Dr. Lou and Mae Lukenda Charitable Foundation for the YMCA building at 235 McNabb Street, Sault Ste. Marie, Ontario.

**THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, **ENACTS** as follows:

1. **EXECUTION OF DOCUMENT**

The Mayor and City Clerk are hereby authorized for and in the name of the Corporation to execute and affix the seal of the Corporation to the Agreement dated August 2, 2024, between the City and Dr. Lou and Mae Lukenda Charitable Foundation, a copy of which is attached as Schedule “A” hereto. This Lease Agreement is for the YMCA building at 235 McNabb Street, Sault Ste. Marie, Ontario.

2. **SCHEDULE "A"**

Schedule "A" forms part of this by-law.

3. **BY-LAW 2024-114 REPEALED**

By-law 2024-114 is hereby repealed.

4. **EFFECTIVE DATE**

This by-law takes effect on the day of its final passing.

**PASSED** in open Council this 9th day of September, 2024.

**MAYOR – MATTHEW SHOEMAKER**

**CITY CLERK – RACHEL TYCZINSKI**

tm

**THIS LEASE** made the 2nd day of August, 2024.

BETWEEN:

**DR. LOU AND MAE LUKENDA CHARITABLE FOUNDATION**

(“Landlord”)

AND

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

(“Tenant”)

## ARTICLE 1 — BASIC TERMS AND DEFINITIONS

### 1.1 Basic Terms

(a) Landlord:

1000943321 ONTARIO INC.

Address:

747 Queen Street East, Suite 202, Sault Ste. Marie

Contact for Notice:

Dave Saunders, Email: davidsaunders@lukendaholdings.ca

(b) Tenant:

THE CORPORATION OF THE CITY OF SAULT STE. MARIE

Address:

99 Foster Drive, Sault Ste. Marie, Ontario, P6A 5X6

Contact for Notice:

Brent Lamming, Email: b.lamming@cityssm.on.ca

(c) Building:

235 McNabb Street, Sault Ste. Marie, Ontario

(d) Area of Building to be Rented:

Entire Lands, Premises, and Ancillary Parking at the Building, located at 235 McNabb Street, Sault Ste. Marie, Ontario and legally described as: PIN 31535-0132(LT); BEING PT LT 35-36 PL H496 ST. MARY'S; PT HERBERT ST PL H496 ST. MARY'S CLOSED BY T89496, PT 1-3 1R4781; LT 37-42, 53-60 PL

H496 ST. MARY'S; S/T T188316, T28713, T91957, T91958, T91959, T91960, T91961; SAULT STE. MARIE

collectively referred to herein as the “Premises”.

(e) Term:

(i) **Term**. The Lease shall have a Commencement Date being the same date the Landlord acquires the Premises from the Young Men’s Christian Association of Sault Ste. Marie (“YMCA”) pursuant to an Agreement of Purchase and Sale dated May 6, 2024 and shall continue for a period of ten (10) years, ending on the 10th anniversary of the Commencement Date.

In the event that the aforementioned sale of the Premises is not completed, this Lease shall have no force or effect and shall automatically terminate with no further obligations between the parties hereto.

(ii) **Optional Extended Term**. The Term may be Extended (“Extended Term”) if the Tenant provides written notice to the Landlord at least six (6) months prior to the expiry of the Term that it desires to renew the Term, and thereafter the parties shall enter into negotiations of the terms and conditions that will form an Extension Agreement. If negotiations are successful, an Extension Agreement will be prepared. If negotiations are not successful, the Lease will end at the end of the original Term.

(iii) **Optional Amended Term**. The parties hereto acknowledge and agree that the YMCA will be reviewing the future facility requirements of the YMCA and conducting a significant capital campaign to support a new build facility for the YMCA (“New Build”). In the event that the Tenant desires at any time during the Term, given discussions with the YMCA, to amend the Term of this Lease given the New Build, the Tenant shall provide the Landlord with notice of same as soon as practicable and not less than six (6) months prior to the commencement of any planning for the New Build. Upon receipt of such notice, the parties shall enter into negotiations. If negotiations are successful, the Lease may be amended accordingly. If negotiations are not successful, the Lease will remain in the current form and Term.

(f) Basic Rent:

Rent is ONE HUNDRED THOUSAND ($100,000.00 CDN) Dollars per year plus HST, payable by the Tenant to the Landlord in equal monthly payments of EIGHT THOUSAND, THREE HUNDRED AND THIRTY THREE ($8,333.33) DOLLARS AND THIRTY THREE CENTS plus HST, with the first payment being on the actual Commencement Date to cover the cost for the first month in the Term, and thereafter the 1st day of every other month in the Term, for a total maximum payment of $1,000,000.00 plus HST during the entire Term of

the Lease. It is also agreed that the Basic Rent shall not increase at any time during the Term. No deposit is required to be paid upon the signing of this Lease and the Landlord acknowledges having received consideration in the sum of One ($1.00) to formalize this Lease.

(g) Operating Costs:

(i) The parties acknowledge that in addition to Basic Rent, the Tenant shall be responsible for all Operating Costs as defined in section 1.2(n) and to ensure the timely payment of same

(ii) The parties further acknowledge that the Tenant shall be subleasing the Premises to the YMCA in accordance with Article 8 herein. If the Tenant fails to pay such Operating Costs, the Tenant shall immediately give notice to the Landlord and the Tenant acknowledges that they shall take measures to remedy same. At no time shall the Landlord be responsible for such Operating Costs.

(h) Permitted Use:

The Tenant shall be permitted to use the Premises for the operation of a "YMCA" or any other use at the discretion of the Tenant with the prior written consent of the Landlord.

(i) Schedules forming part of this Lease:

None

**1.2 Definitions**

In this Lease, unless there is something in the subject matter or context inconsistent therewith the following terms have the following respective meanings:

(a) *Intentionally Deleted*

(b) *Intentionally Deleted*

(c) "Basic Rent" means the basic rent payable by the Tenant pursuant to Section 3.2 and as defined in Section 1.1(f).

(d) "Building" means the building located at the address set out in Section 1.1(c).

(e) "Commencement Date" means the date set out in Section 1.1(e), as such may be varied pursuant to the terms of this Lease.

(f) *Intentionally Deleted*

(g) "Event of Default" has the meaning set out in Section 11.1.

(h) *Intentionally Deleted*

(i) "Lease" means this lease and all the terms, covenants and conditions set out herein (including all schedules), as amended from time to time in accordance with the terms hereof.

(j) "Lease Year" means, initially, the period commencing on the Commencement

Date and ending twelve months thereafter. The last Lease Year of the Term shall end on the expiry date of the Term.

(k) "Mortgage" means any mortgage or charge of any one or more of, or any part of, the Lands, the Building, and/or the Landlord's interest in this Lease, from time to time, whether made or assumed by the Landlord.

(l) "Mortgagee" means the holder of any Mortgage from time to time.

(m) "Normal Business Hours" shall be as established by the Tenant acting reasonably.

(n) "Operating Costs" means, for any period:

(i) all charges for utilities and services to the Lands and Building, including, without limiting the generality of the foregoing, water, gas, heat, communications, electrical power or energy, steam and hot water, and all charges for fittings, machinery, apparatus, meters, or other things leased in respect thereof, and for all work or services performed by any corporation or commission in connection with such utilities and services.

(ii) all costs incurred in respect of the Lands and Building, including but not limited to, for garbage removal, snow removal, the Tenant's insurance, supervisory and maintenance services, operating any elevators and similar elevating devices, the cost of heating, cooling and ventilating, the cost of window cleaning, the costs of machinery, supplies, tools, equipment and materials used in connection with any of the foregoing (including rentals thereof) and all costs incurred with the maintenance, repair, replacement, management, and operation of the Lands and Building.

(iii) Provided that Operating Costs shall exclude:

(1) the cost to the Landlord of debt service in connection with any mortgage financing of the Lands and Building.

(2) all income tax or similar taxes, corporation taxes, profit taxes, excess profit taxes, capital gains taxes, place of business taxes, gift taxes, estate taxes, succession duties, inheritance taxes, franchise taxes, gross receipt taxes, revenue taxes, payroll taxes, stamp taxes, business transfer taxes and other taxes personal to the Landlord.

(3) any loss or damage to all or any part of the Lands and Building or any personal injury for which the Landlord is insured under the terms of this Lease.

(o) "Premises" means Area of Building to be Rented as defined in 1.1(d), and all rights and easements appurtenant thereto.

(p) "Realty Taxes" means all property taxes, rates, duties and assessments (including local improvement rates), import charges or levies, whether general

or special, that are levied, charged or assessed from time to time by any lawful authority, whether federal, provincial, municipal, school or otherwise, and any taxes payable by the Landlord which are imposed in lieu of, or in addition to, any such real property taxes, whether of the foregoing character or not, and whether or not in existence at the commencement of the Term, and any such property taxes levied or assessed against the Landlord on account of its ownership of the Building or its interest therein, but specifically excluding any taxes assessed on the income of the Landlord.

(q) "Rent" means all Basic Rent and Operating Costs in accordance with Section 3.3.

(r) "Tenants" means any tenant, subtenants or such other parties occupying any part of the Premises with the Landlord's prior written consent, and any successors or assigns thereof.

(s) "Term" means the period specified in Section 1.1(e).

## ARTICLE 2 — DEMISE AND TERM

### 2.1 Demise

In consideration of the rents, covenants, and agreements hereinafter reserved and contained on the part of the Tenant to be paid, observed, and performed, the Landlord demises and leases to the Tenant, and the Tenant rents from the Landlord, the Premises. The Tenant acknowledges that it accepts the Premises as is.

### 2.2 Term

The Term shall commence on the Commencement Date, run for the period set out in Section 1.1(e), and end on the date set out in Section 1.1(e), unless terminated earlier pursuant to this Lease.

### 2.3 Intentionally Deleted

### 2.4 Over-holding

If, at the expiration of the initial Term or any subsequent renewal or extension, the Tenant shall continue to occupy the Premises without further written agreement, there shall be no tacit renewal of this Lease, and the tenancy of the Tenant thereafter shall be from month to month only and may be terminated by either party on one (1) month's advance written notice. All terms and conditions of this Lease shall, so far as applicable, apply to such monthly tenancy.

## ARTICLE 3 — RENT

### 3.1 Covenant to Pay – Triple Net Lease

This is a carefree net, net, net lease. The Tenant covenants to pay Rent as provided in this Lease plus HST throughout the Term. It is the intention of the parties that the Rent (included Basic and Operating Costs as set out in Section 3.3

herein provided) to be paid shall be net to the Landlord and clear of all taxes, costs and charges arising from or relating to the Premises, which shall be borne by the Tenant, and the Tenant covenants with the Landlord accordingly.

**3.2 Basic Rent and Payment Method**

The Tenant covenants and agrees to pay, from and after the Commencement Date, to the Landlord by way of Electronic Funds Transfer, the instructions and particulars of which shall be provided by the Landlord, in lawful money of Canada and plus HST (or other applicable tax at such time) without any prior demand, in equal monthly instalments in advance on the first day of each and every month during the Term. If the Term commences on any day other than the first day of the month or ends on any day other than the last day of the month, rent for the fractions of a month at the commencement and at the end of the Term shall be calculated on a *pro rata* basis and payable on the first day of the partial month.

**3.3 Operating Costs**

(a) The parties acknowledge that there will be ongoing Operating Costs. The Tenant shall be subleasing the Premises to the YMCA in accordance with Article 8 herein. The Tenant shall be responsible for all Operating Costs and shall hold any such accounts (ie. for utilities, communication, internet, etc.) as the Tenant may direct in its Sublease with the Subtenant.

(b) In the event that the Tenant fails to pay such Operating Costs, the Tenant shall immediately give notice to the Landlord.

(c) At no time shall the Landlord be responsible for such Operating Costs.

(d) To the extent that any such Operating Costs are paid by the Landlord for any reason, such amounts paid shall be added to the Rent and shall be immediately due and payable subject to the provisions of section 3.9.

**3.4 Determination and Payment of Realty Taxes**

Any realty taxes that may be assessed as being payable, if any, shall be the responsibility of the Tenant and shall be paid immediately when due. As long as the Landlord is the owner of the Premises and notwithstanding whether the Corporation of the City of Sault Ste. Marie, the Tenant shall cooperate in efforts to waive said realty taxes or rebate said realty taxes if they cannot be waived . The Tenant confirms that City Council has passed a resolution whereby the Tenant “commits to determine a path forward to enable the Premises comprising the lands and building to continue to be exempt from municipal taxation if such exemption is lost as a result of this transaction”.

**3.5 *Intentionally Deleted***

**3.6 Rent Past Due**

If the Tenant fails to pay any Rent when the same is due and payable, such unpaid amount shall bear interest at the rate per annum equal to the prime rate of interest charge by the Landlord’s chartered bank plus one percent (1%) for each month from the time such Rent becomes due until paid by the Tenant.

## ARTICLE 4 — CONTROL AND OPERATION OF BUILDING

### 4.1 Building Operation and Repair

(a) The Tenant shall keep, maintain, and repair the heating equipment, air conditioning systems and the structural elements of the Building being the foundations, bearing walls, exterior finishes, roof and roof membrane in a state of good repair and maintenance The parties agree that the Tenant shall be responsible for only those capital costs that are required to keep the building open and operational during the Term, and that no capital funds should be allocated for improvements that are not necessary, wherein "necessary" means required from a health and safety perspective as determined by the City's Chief Administrative Officer in consultation with the City's Chief Building Official, Risk Manager and Fire Chief, recognizing that the parties intend on working towards a New Build.

(b) To that end, the parties acknowledge and agree that the Tenant is responsible for the capital works referenced in 4.1(a) above, and that the following framework is in place to address such capital works during the Term, beyond the boiler replacement and roof repair projects that are dealt with in Section 4.3 below:

a. The Subtenant has commenced a fundraising campaign to raise funds for a capital reserve. This fund shall be relied upon in the first instance for any capital projects that are determined to be necessary by the Tenant as set out herein from a health and safety perspective;

b. In the event that sufficient funds are not available in Section 4.1(b)a. to address the capital need, the Subtenant shall in the second instance use best efforts to find and exhaust other funding opportunities or matching funding opportunities to minimize the capital costs to the Tenant and pursue same;

c. In the event that there is no or partial success with funding results from efforts made in Section 4.1(b)b. resulting in a necessary capital expense to be made, the City shall review and determine whether or not to proceed with such requests. To that end, the parties hereto acknowledge and agree that the approval by the City shall be the approval from City Council. If City Council decides not to proceed with a capital request and there is an operational impact, then the Subtenant shall be responsible for addressing same.

The parties acknowledge that the intent of this section is to limit expenditures to only those that are necessary from a health and safety perspective so that efforts can be spend on a New Build. The Tenant shall not be considered in "default" under this Lease if Council does not approve a Capital request given the above framework.

### 4.2 HVAC Systems

The Tenant shall, subject to the provisions of this Lease, provide sufficient heating and air-conditioning to maintain a reasonable temperature in the Premises at all times during

Normal Business Hours except during the failure of supply of any utility or other similar facility required to operate the heating and air-conditioning systems, and except during the making of repairs, which repairs the Tenant covenants to make with reasonable diligence, and also to Section 4.1(b) herein.

### 4.3 Boiler and Roof

The Tenant shall ensure that within thirty (30) days from the Commencement Date, , the process has commenced to replace the boiler and the required roof repairs of the Building. If it is determined that the boiler and/or portion of the roof can be upgraded or repaired rather than replaced, the Tenant shall proceed with the upgrades or repairs as necessary.

### 4.4 *Intentionally Deleted.*

### 4.5 Exclusive Lease and Sublease

(a) The Landlord shall not assign or otherwise lease the Premises or any portion of the Premises to any other persons at any time during the Term.

(b) The parties acknowledge that the Tenant shall enter into a sublease of the Premises with the YMCA. The Tenant acknowledges and agrees that the Landlord's consent to the sublease and terms of the Sublease Agreement is required before any Sublease Agreement can be finalized and before any amendment to a Sublease Agreement can be made. In the event that the aforementioned Sublease Agreement is not finalized, this Lease shall have no force or effect and shall automatically terminate with no further obligations between the parties hereto.

(c) The Tenant may not otherwise sublease, assign or transfer this Lease without the prior written consent of the Landlord.

### 4.6 Janitorial Services and Snow removal

(a) The Tenant shall provide, at its own expense, such janitorial services and snow removal services to the Premises as part of the Operating Costs.

(b) At no time shall the Landlord be responsible for janitorial services or snow removal.

### 4.7 Parking

The Landlord leases as part of this Lease all parking at the Premises to the Tenant.

## ARTICLE 5 — USE OF PREMISES

### 5.1 Use of Premises

The Tenant acknowledges that the Premises will be used for the purpose set out in Section 1.1(h) or for such other purpose as does not conflict with any exclusivity rights or restrictive covenants then in effect with respect to the building and complies with all zoning and other government requirements.

### 5.2 Observance of Law

The Tenant shall, at its own expense, comply with all laws, by-laws, ordinances, regulations, and directives of any public authority having jurisdiction affecting the Premises or the use or occupation thereof, including, without limitation, police, fire and health regulations and any requirements of the fire insurance underwriters.

### 5.3 Waste and Nuisance

The Tenant shall not do or suffer any waste, damage, disfiguration, or injury to the Premises or permit or suffer any overloading of the floors and shall not use or permit to be used any part of the Premises for any illegal or unlawful purpose or any dangerous, noxious, or offensive trade or business, and shall not cause or permit any nuisance in, at or on the Premises.

## ARTICLE 6 — MAINTENANCE, REPAIRS, AND ALTERATIONS OF PREMISES

### 6.1 Maintenance and Repair of Premises

The Tenant's obligations to maintain and repair the Premises is as set out in Article 4.

### 6.2 Inspection and Entry

The Landlord, its servants and agents shall be entitled to enter on the Premises at any time without notice for the purpose of making emergency repairs consistent with the terms set out in Article 4 herein, and during Normal Business Hours on reasonable prior notice for the purpose of inspecting and making repairs, alterations or improvements to the Premises or to the building, or for the purpose of having access to the underfloor ducts or to the access panels to mechanical shafts (which the Tenant agrees not to obstruct), and the Tenant shall not be entitled to compensation for any inconvenience, nuisance or discomfort occasioned thereby. The Landlord, its contractors or agents may at any time and from time to time on reasonable prior notice (and without notice in the event of an emergency) enter on the Premises to remove any article or remedy any condition which, in the opinion of the Landlord, would be likely to lead to the cancellation of any policy of insurance. The Landlord, its servants and agents shall take reasonable precautions and attempt to schedule the work so as not to unreasonably interfere with the operation of the Tenant's business and so as to minimize interference with the Tenant's use and enjoyment of the Premises.

### 6.3 Repair where Tenant at Fault

(a) If the building, including the Premises, the elevators, boilers, engines, controls, pipes and other apparatus (or any of them) used for the purpose of heating, ventilation or air-conditioning or operating the elevators, or if the pipes, electric lighting or other equipment of the building are put in a state of disrepair or become damaged or destroyed through the negligence, carelessness or misuse of the Tenant, its servants, agents, or employees, the expense of the necessary repairs, replacements or alterations shall be borne by the Tenant solely, again to the extent same are consistent with Article 4 herein.

### 6.4 Permitted Alterations

(a) The Tenant shall be permitted to make or erect in or to the Premises any installations, alterations, additions, or partitions and shall provide the Landlord with particulars of same prior to the commencement of any such work. The consent of the Landlord is not required. Such work shall be performed by qualified contractors engaged by the Tenant The Tenant shall promptly pay to the Tenant's contractors when due, the cost of all such work, materials, labor, and services involved therein, and of all changes in the building, its equipment or services necessitated thereby.

### 6.5 Signs

(a) The Tenant may not, without the Landlord's written consent, display and/or install any sign, picture, advertisement, or other notice on any part of the exterior windows of the of the Premises or any other location on the building from which the Premises are visible from the outside. If approved by Landlord in writing, such signage will be entirely at the Tenant's expense.

(b) The Landlord is content with the signage currently at the Premises and no consent is required for the existing signage.

### 6.6 Construction Liens

The Tenant shall indemnify and save the Landlord harmless from any liability, claim, damages, or expenses due to or arising from any claim for a construction, builders or other lien made against the Premises or the building in relation to any work done by, for, or on behalf of the Tenant. The Tenant shall cause all registrations of any such claims or Certificates of Action related thereto to be discharged or vacated within ten (10) days following receipt of notice from the Landlord, failing which the Landlord, in addition to any other rights or remedies it may have hereunder, may, but shall not be obligated to, cause such claims or Certificates to be discharged or vacated by payment into court or otherwise, and the Tenant shall pay the Landlord's costs and expenses thereof.

### 6.7 Removal of Improvements and Fixtures

(a) Subject to Section 6.7(b), all leasehold improvements shall immediately, on their placement, become the Landlord's property without compensation to the Tenant. Except as otherwise agreed by the Landlord in writing, no leasehold improvements or trade fixtures shall be removed from the Premises by the Tenant either during or at the expiry or earlier termination of the Term except that:

I. The Tenant may, during the Term, in the usual course of its business, remove its trade fixtures, provided that the Tenant is not in default under this Lease, and at the end of the Term, the Tenant shall remove its trade fixtures; and

II. The Tenant shall, at its sole cost, remove such leasehold improvements as the Landlord shall require it to remove, such removal to be completed on or before the end of the Term.

(b) Notwithstanding the terms and conditions set out in Section 6.7(a), the Tenant shall have ownership and control over any boiler equipment purchased by the Tenant however, such equipment will not be removed by the Tenant without first coming to a mutual agreement with the Landlord.

(c) The Tenant shall, at its own expense, repair any damage caused to the building by the leasehold improvements or trade fixtures or their removal. If the Tenant does not remove its trade fixtures prior to the expiry or earlier termination of the Term, such trade fixtures shall, at the option of the Landlord, become the property of the Landlord and may be removed from the Premises and sold or disposed of by the Landlord in such manner as it deems advisable. For greater certainty, the Tenant's trade fixtures shall not include any of the following: (a) heating, ventilating or air-conditioning systems, facilities and equipment serving the Premises; (b) floor coverings; (c) light fixtures; (d) suspended ceiling and ceiling tiles; (e) wall and window coverings; and (f) partitions within the Premises. Notwithstanding anything in this Lease, the Landlord shall be under no obligation to repair or maintain the Tenant's installations.

### 6.8 Surrender of Premises

At the expiration or earlier termination of this Lease, the Tenant shall peaceably surrender and give up unto the Landlord vacant possession of the Premises in the same condition and state of repair as the Tenant is required to maintain the Premises throughout the Term and in accordance with its obligations in Section 6.7.

### 6.9 Option to Purchase – End of Term/Early Termination

At the expiration or earlier termination of this Lease the Landlord hereby grants the Tenant the first option to purchase the Premises forthwith, with a completion date satisfactory to the Tenant and on terms satisfactory to the Tenant, for the total sum of Two Million ($2,000,000.00) free and clear from any liens and/or encumbrances. For clarity, the completion date of any such purchase pursuant to this option shall be no later than thirty (30) days after the expiration or earlier termination of this Lease. To exercise this option, the Tenant shall provide the Landlord with at least two (2) months' notice of desire to exercise this Option and the parties thereafter shall proceed to complete matters necessary to facilitate the closing of the transaction.

To that end, the parties acknowledge that the Tenant's Option to Purchase as set out herein exists notwithstanding any terms to the contrary in the Agreement of Purchase and Sale between the Landlord and the YMCA granting the YMCA an option to purchase, specifically the following:

> **First Option to Develop New Premises** – Seller grants the buyer first option to develop a new building for the Seller prior to Seller developing, acquiring or moving to a new building or location. **NO ACTION by Seller.** This Covenant remains indefinitely after closing.

To give effect to the Tenant's Option to Purchase herein, the Landlord shall ensure it secures an Undertaking and Acknowledgement from the YMCA on closing of the

transaction involving the Lands and Premises that the YMCA's Option to Develop New Premises as set out in the Agreement of Purchase and Sale is not valid and is unenforceable in the event that the Tenant/City exercises its First Option to Purchase the Premises as set out herein. The Landlord shall provide a copy of the said Undertaking and Acknowledgement on closing.

## ARTICLE 7 — INSURANCE AND INDEMNITY

### 7.1 Indemnity by Tenant

The Tenant shall indemnify and save harmless the Landlord against any and all claims, actions, causes of action, damages, demands for damages, losses and other liabilities and expenses (including, without limitation, those in connection with bodily injury (including death), personal injury, illness or discomfort or damage to property and legal fees on a solicitor and client (substantial indemnity) basis) due to or arising from or out of any occurrence in, on or at the Premises or the occupancy or use by the Tenant of the Premises or any other part of the Lands and Building or occasioned wholly or in part by any act or omission of the Tenant or its officers, employees, agents, contractors, invitees, licensees or by any person permitted by the Tenant to be on the Premises or the Lands and Building.

### 7.2 Release of Landlord

The Landlord shall not be liable for:

(a) any injury or damage to any persons or property resulting from fire, explosion, falling plaster, steam, gas, electricity, water, rain or snow, or leaks from any part of the building or from the pipes, appliances, plumbing works, roof, street or subsurface, or from any other place or by dampness, or caused by or arising from any interruption or failure in the supply of any utility or service to the Premises.

(b) any death, injury, or damage to or loss of property occurring in or about the Premises.

(c) any death, injury, or damage with respect to occurrences insured against or required to be insured against by the Tenant.

(d) any interruption of or non-supply of heating, ventilation, air-conditioning or other utilities and services; or

(e) any indirect or consequential damages that may be suffered by the Tenant, even if caused by the negligence of the Landlord or its agents or others for whom it is at law responsible.

### 7.3 Tenant's Insurance

The Tenant shall, at its sole cost and expense, take out and maintain in full force and effect, always throughout the Term, the following insurance:

(a) "All Risks" insurance on property of every description and kind owned by the Tenant, or for which the Tenant is legally liable, or which is installed by or on behalf

of the Tenant within the Premises or on the Lands or Building, including, without limitation, stock-in-trade, furniture, equipment, partitions, trade fixtures and leasehold improvements, in an amount not less than the full replacement cost thereof from time to time.

(b) general liability and property damage insurance, including personal liability, contractual liability, tenants' legal liability, non-owned automobile liability and with respect to the Premises, which coverage shall include the business operations conducted by the Tenant and shall provide for cross-liability and severability of interest as between the Landlord and the Tenant. Such policies shall be written on a comprehensive basis with coverage for any one occurrence or claim of not less than five million dollars ($5,000,000) or such higher limits as the Landlord may reasonably require from time to time.

(c) Tenant agrees to provide proof of such insurance annually or upon request.

### 7.4 Landlord's Insurance

The Landlord shall provide and maintain insurance at its sole cost, in respect of the building against loss, damage or destruction caused by fire and extended perils, and such liability insurance and rental insurance as the Landlord determines to maintain. The amount of insurance to be obtained shall be determined by the Landlord acting reasonably. The Tenant shall not do, omit or permit anything that may contravene or be prohibited by any of the Landlord's insurance policies in force from time to time or which would prevent the Landlord from procuring such policies with companies acceptable to the Landlord. If the Tenant's occupancy or use of the Premises or any acts or omissions of the Tenant in the Premises or any other portion of the building causes or results in any increase in premiums for any of the Landlord's insurance policies, then, without limiting any other rights or remedies of the Landlord, the Tenant shall pay any such increase as Operating Costs. The Landlord shall provide a Certificate of Insurance to the Tenant prior to the commencement of the Term confirming such coverages are in place and also upon request by the Tenant during the Term.

### 7.5 Mutual Release

Each of the Landlord and the Tenant releases the other and waives all claims against the other and those for whom the other is in law responsible with respect to occurrences insured against or required to be insured against by the releasing party, whether any such claims arise as a result of the negligence or otherwise of the other or those for whom it is in law responsible, subject to the following:

(a) such release and waiver shall be effective only to the extent of proceeds of insurance received by the releasing party or proceeds which would have been received if the releasing party had obtained all insurance required to be obtained by it under this Lease (whichever is greater) and, for this purpose, deductible amounts under the Tenant's insurance (but not the Landlord's) shall be deemed to be proceeds of insurance received; and

(b) to the extent that both parties have insurance or are required to have insurance for any occurrence, the Tenant's insurance shall be primary.

## ARTICLE 8 — ASSIGNMENT AND SUBLETTING

### 8.1 Assignment, Subletting

(1) The Landlord consents to the Tenant subletting of the Premises to the YMCA and the Sublease Agreement between the Tenant and the YMCA dated August 2, 2024.

(2) The Tenant may assign or transfer this Lease in whole or in part to any subsidiary, affiliate or successor to the assets or business of the Tenant with the approval of the Landlord. The Tenant shall not assign or transfer this Lease in whole or in part to any other party without first obtaining the written consent of the Landlord, which consent shall not be unreasonably withheld.

(3) The Landlord shall not lease any portion of the Premises to any other party. This Lease is exclusive to the Tenant and any sublease the Tenant may enter into with the approval of the Landlord.

## ARTICLE 9 — QUIET ENJOYMENT

### 9.1 Quiet Enjoyment

The Tenant, on paying the Rent hereby reserved, and performing and observing the covenants and provisos herein contained on its part to be performed and observed, shall peaceably enjoy the Premises for the Term.

## ARTICLE 10 — DAMAGE AND DESTRUCTION

### 10.1. Destruction of or Damage to Building.

During the Term, if and when the building is destroyed or damaged by fire, lightning, or other perils, including malicious damage, or by a natural catastrophe or by any other casualty, the following provisions shall apply:

(a) if the damage or destruction is such that the Building is rendered wholly unfit for occupancy or it is impossible or unsafe to use and occupy it, and if, in either event, the damage, in the sole opinion of the Landlord, notice of which is to be given to the Tenant in writing within thirty (30) days of the happening of such damage or destruction, cannot be repaired with reasonable diligence within one hundred and eighty (180) days after the happening of such damage or destruction, or if thirty percent (30%) or more of the Rentable Area of the Building is damaged or destroyed, the Landlord may terminate this Lease by giving notice in writing to the Tenant. Should the Landlord terminate this Lease as hereinbefore provided, the Term demised shall cease and be at an end as of the date of such termination (or at the date of such destruction or damage if the Premises could not be used as a result), and the rents and all other payments for which the Tenant is liable under the terms of this Lease shall be apportioned and paid in full to such date;

(b) in the event that the Landlord does not so terminate this Lease under Section 10.1(a), or in the event of lesser damage, the Landlord shall, at its expense, repair the Building to base building standards, and the Rent shall abate from the date of the happening of such damage or destruction until the date which is the earlier of: (i) thirty (30) days after the Landlord has completed such repairs; and (ii) the date

on which the Tenant reopens the Premises or any part thereof to conduct business. The Tenant covenants to make any repairs required to the leasehold improvements and its fixtures with all reasonable speed and to reopen the Premises for business forthwith on completion thereof. If the damage is such that the Premises is capable of being partially used for the purposes for which it is demised, then Rent (other than any items measured by consumption or separate assessment) shall abate in the proportion that the Rentable Area of the part of the Premises which is rendered unfit for occupancy bears to the Rentable Area of the Premises;

(c) in performing any reconstruction or repair, the Landlord may effect changes in the building and its equipment and systems and minor changes in the location or area of the Premises.

(d) notwithstanding anything else herein contained, in the event of damage or destruction occurring by reason of any cause in respect of which proceeds of insurance are substantially insufficient to pay for the costs of rebuilding the Building or the Premises or are not payable to or received by the Landlord, or in the event that any mortgagee or other party entitled thereto shall not consent to the payment to the Landlord of the proceeds of any insurance policy for such purpose, or in the event the Landlord is unable to obtain all governmental approvals required to so rebuild, the Landlord may terminate this Lease on notice to the Tenant.

### 10.2 Certificate Conclusive

In the event of a dispute as to the fitness for occupancy or as to the suitability of the Building and the Premises for the Tenant's business, the decision of an independent qualified professional engineer or architect retained by the Landlord, at the Landlord's expense, shall be final and binding on both parties.

## ARTICLE 11 — DEFAULT

### 11.1 Default and Right to Re-enter

Any of the following constitutes an Event of Default under this Lease:

(a) any Rent is not paid by the Tenant to the Landlord when due and such failure continues for fifteen (15) days after notice is given by the Landlord of such non-payment.

(b) the Landlord or the Tenant has breached any of their respective obligations in this Lease and, if such breach is capable of being remedied and is not otherwise listed in this Section 11.1, on receipt of notice in writing from the Landlord or the Tenant as applicable:

i. the party receiving the notice fails to remedy such breach within fifteen (15) days (or such shorter period as may be provided in this Lease); or

ii. if such breach cannot reasonably be remedied within fifteen (15) days (or such shorter period), the party receiving the notice fails to commence to remedy such breach within such fifteen (15) day (or such shorter) period or thereafter fails to proceed diligently to remedy such breach;

iii. the Landlord or the Tenant becomes bankrupt or insolvent or takes the benefit of any statute for bankrupt or insolvent debtors or makes any proposal, an assignment or arrangement with their respective creditors, or any steps are taken, or proceedings commenced by any person for the dissolution, winding-up or other termination of the Landlord's or the Tenant's existence or the liquidation of their respective assets;

(c) a trustee, receiver, receiver/manager, or a person acting in a similar capacity is appointed with respect to the business or assets of the Landlord or the Tenant.

(d) the Landlord or the Tenant makes a sale in bulk of all or a substantial portion of their respective assets, other than in conjunction with an assignment or sublease.

(e) this Lease or any of the Landlord's or the Tenant's assets are taken under a writ of execution, and such writ is not stayed or vacated within fifteen (15) days after such taking.

(f) the Tenant makes an assignment or sublease, other than in compliance with the provisions of this Lease.

(g) the Tenant abandons or attempts to abandon the Premises, or the Premises become vacant or substantially unoccupied for a period of ten (10) consecutive days or more without the consent of the Landlord.

(h) the Tenant moves or commences, attempts, or threatens to move its trade fixtures, chattels, and equipment out of the Premises; or

(i) any insurance policy covering any part of the building is, or is threatened to be, cancelled, or adversely changed (including a substantial premium increase) as a result of any action or omission by the Tenant.

**11.2 Default, Remedies and Termination**

(1) Should an Event of Default occur on the part of the Tenant, then, without prejudice to any other rights which it has pursuant to this Lease or at law, the Landlord shall have the following rights and remedies, which are cumulative and not alternative:

(a) to immediately terminate this Lease by notice to the Tenant or to re-enter the Premises and repossess them and, in either case, the Landlord may remove all persons and property from the Premises and store such property at the expense and risk of the Tenant or sell or dispose of such property in such manner as the Landlord sees fit without notice to the Tenant;

(b) to enter the Premises as agent of the Tenant and to relet the Premises for whatever length and on such terms as the Landlord, in its discretion, may determine, and to receive the rent therefor and, as agent of the Tenant, to take possession of any property of the Tenant on the Premises, to store such property at the expense and risk of the Tenant or to sell or otherwise dispose of such property in such manner as the Landlord sees fit without notice to the Tenant, and to make alterations to the Premises to facilitate

their re-letting. The Landlord shall apply the proceeds of any such sale or re-letting first, to the payment of any expenses incurred by the Landlord with respect to any such re-letting or sale, second, to the payment of any indebtedness of the Tenant to the Landlord other than Rent, and third, to the payment of Rent in arrears, with the residue to be held by the Landlord and applied to payment of future Rent as it becomes due and payable; provided that the Tenant shall remain liable to the Landlord for any deficiency.

(c) to remedy or attempt to remedy any default of the Tenant under this Lease for the account of the Tenant and to enter on the Premises for such purposes. No notice of the Landlord's intention to remedy or attempt to remedy such default need be given to the Tenant unless expressly required by this Lease. The Landlord shall not be liable to the Tenant for any loss, injury or damages caused by acts of the Landlord in remedying or attempting to remedy such default, and the Tenant shall pay to the Landlord all expenses incurred by the Landlord in connection therewith.

(d) to recover from the Tenant all damages, costs and expenses incurred by the Landlord as a result of any default by the Tenant including, if the Landlord terminates this Lease, any deficiency between those amounts which would have been payable by the Tenant for the portion of the Term following such termination and the net amounts actually received by the Landlord during such period of time with respect to the Premises; and

(e) to recover from the Tenant the full amount of the current month's Rent together with the next three (3) months' instalments of Rent, all of which shall accrue on a day-to-day basis and shall immediately become due and payable as accelerated rent.

(2) Should an Event of Default occur on the part of the Landlord, then, without prejudice to any other rights which it has pursuant to this Lease or at law, the Tenant shall have the following rights and remedies, which are cumulative and not alternative:

(a) to immediately terminate this Lease by notice to the Landlord.

(b) to remedy or attempt to remedy any default of the Landlord and recover all associated costs (including, without limitation, legal fees) from the Landlord or to offset such costs against Rent coming due under this Lease.

(c) to commence an action against the Landlord to interpret or enforce the terms and conditions of this Lease, for damages, specific performance, and/or injunctive relief. The Landlord's failure for any reason, to comply with specific performance and/or injunctive relief ordered by a court shall constitute a breach under this Lease; and

(d) to enforce any judgment obtained by the Tenant against the Landlord by offsetting the outstanding amount of such judgment against Rent coming due under this Lease.

(3) Should an Event of Default occur on the part of the Subtenant (YMCA) as such term is defined in:

(a) Section 11.1 of the Sublease Agreement between the Tenant and the YMCA dated August 2, 2024;

(b) Section 5 of the MOU between the Tenant and the YMCA dated July 15, 2024; and/or

(c) Section 10.0 of the Grant Agreement between the Tenant and the YMCA dated July 15, 2024,

the Tenant shall provide the Landlord with notice of such default and then, without prejudice to any other rights which it has pursuant to this lease or at law, and notwithstanding any terms to the contrary in the Agreement of Purchase and Sale between the Landlord and the YMCA granting the YMCA an option to purchase, specifically the following:

> **First Option to Develop New Premises** – Seller grants the buyer first option to develop a new building for the Seller prior to Seller developing, acquiring or moving to a new building or location. **NO ACTION by Seller.** This Covenant remains indefinitely after closing.

the Landlord hereby grants the Tenant the first option to purchase the Premises forthwith, with a completion date satisfactory to the Tenant and on terms satisfactory to the Tenant, for the total sum of Two Million ($2,000,000.00) free and clear from any liens and/or encumbrances. To exercise such option, the Tenant shall provide the Landlord with notice of desire to exercise this Option and the parties thereafter shall proceed to complete matters necessary to facilitate the closing of the transaction. The Landlord shall ensure it secures an Undertaking and Acknowledgement from the YMCA on closing of the transaction involving the Lands and Premises that the YMCA's Option to Develop New Premises as set out in the Agreement of Purchase and Sale is not valid and is unenforceable in the event of default as defined in the three agreements referenced above to ensure that the Tenant/City's ability to realize on the First Option to Purchase the Premises is possible. The Landlord shall provide a copy of the said Undertaking and Acknowledgement on closing.

### 11.3 Distress

Notwithstanding any provision of this Lease or any provision of applicable legislation, none of the goods and chattels of the Tenant on the Premises at any time during the Term shall be exempt from levy by distress for Rent in arrears, and the Tenant waives any such exemption.

### 11.4 Remedies Cumulative

Notwithstanding any other provision of this Lease, the Landlord or the Tenant may from time to time resort to any or all the rights and remedies available to either of them in the event of any default hereunder by the Landlord or Tenant as applicable, either by any provision of this Lease or by statute or common law, all which rights and remedies are

intended to be cumulative and not alternative. The express provisions hereunder as to certain rights and remedies are not to be interpreted as excluding any other or additional rights and remedies available to the Landlord or the Tenant by statute or common law.

## ARTICLE 12 — GENERAL

### 12.1 Entry

(1) The Landlord shall be entitled at any time during the last six (6) months of the Term:

(a) to place on the exterior walls of the Premises, at a height not lower than the upper limit of the windows of the Premises, the Landlord's usual notice(s) that the Premises are "For Rent"; and

(b) on reasonable prior notice, to enter on the Premises during Normal Business Hours for the purpose of exhibiting same to prospective tenants.

(2) The Landlord may enter at any time during the Term on reasonable notice for exhibiting the Premises to prospective Mortgagees and/or purchasers, or for the purpose of inspecting the Premises.

### 12.2 Force Majeure

Notwithstanding any other provision contained in this Lease, in the event that either the Landlord or the Tenant should be delayed, hindered or prevented from the performance of any act required hereunder by reason of any unavoidable delay, including strikes, lockouts, unavailability of materials, inclement weather, acts of God or any other cause beyond its reasonable care and control, but not including insolvency or lack of funds, performance of such act shall be postponed for a period of time equivalent to the time lost by reason of such delay. The provisions of this Section 12.2 shall not, under any circumstances, operate to excuse the Tenant from prompt payment of Rent and other charges payable under this Lease.

### 12.3 Effect of Waiver or Forbearance

No waiver by any party of any breach by any other party of any of its covenants, agreements or obligations in this Lease shall be or be deemed to be waiver of any subsequent breach thereof or the breach of any other covenants, agreements or obligations, nor shall any forbearance by any party to seek a remedy for any breach by any other party be a waiver by the party so forbearing of its rights and remedies with respect to such breach or any subsequent breach. The subsequent acceptance of Rent by the Landlord shall not be deemed a waiver of any preceding breach by the Tenant of any term, covenant or condition regardless of the Landlord's knowledge of such preceding breach at the time of the acceptance of such Rent.

### 12.4 Notices

Any notice required or contemplated by any provision of this Lease shall be given in writing and addressed, in the case of the Landlord, to it at the address noted in Section 1.1(a), in the case of the Tenant, to it at the address noted in Section 1.1(b), and delivered by email. The time of receipt of such notice by email shall be conclusively deemed to the

time of sending by email. Either party may, by notice to the other from time to time, designate another email address and contact for the purposes of providing Notice under this Agreement.

### 12.5 Registration

Neither the Tenant nor anyone on the Tenant's behalf or claiming under the Tenant shall register this Lease in whole. The Tenant may register a notice, short form or caveat in respect of this Lease. Any such notice, short form or caveat shall contain the minimum requirements for registration.

### 12.6 Interpretation

(1) Words importing the singular number only shall include the plural and *vice versa*, words importing the masculine gender shall include the feminine and neuter genders, and words importing persons shall include firms and corporations and *vice versa*.

(2) The division of this Lease into Articles and Sections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Lease.

(3) If any Article or Section or part or parts of an Article or Section in this Lease is illegal or unenforceable, it or they shall be considered separate and severable from the Lease and the remaining provisions of this Lease shall remain in full force and effect and shall be binding on the Landlord and the Tenant as though such Article or Section had never been included in this Lease.

### 12.7 Entire Agreement

There are no covenants, representations, warranties, agreements or other conditions expressed or implied, collateral or otherwise, forming part of or in any way affecting or relating to this Lease, save as expressly set out or incorporated by reference herein. This Lease constitutes the entire agreement duly executed by the parties, and no amendment, variation or change to this Lease shall be binding unless the same shall be in writing and signed by the parties.

### 12.8 Time of the Essence

Time shall be of the essence of this Lease and every part thereof.

### 12.9 Successors and Assigns

All rights, advantages, privileges, immunities, powers and things hereby secured to the Landlord and to the Tenant shall be secured to and exercisable by their successors and permitted assigns, as the case may be, and all covenants, liabilities and obligations entered into or imposed hereunder upon the Landlord and the Tenant shall be equally binding upon their successors and permitted assigns, as the case may be.

[Signatures on Following Page]

IN WITNESS WHEREOF the parties have duly executed this Lease as of
The day and year first written above.

LANDLORD

Per: _____

Name: _____

Title: _____

I/We have the authority to bind the
Corporation

TENANT

_____
MAYOR – MATTHEW SHOEMAKER

_____
CITY CLERK – RACHEL TYCZINSKI

**THE CORPORATION OF THE CITY OF SAULT STE. MARIE**

**BY-LAW NO 2024-121**

**LANE CLOSING & CONVEYANCE:** A by-law to stop up, close and authorize the conveyance of a lane in the Steel Plant Subdivision, Plan 1598.

**WHEREAS** the lane more particularly hereinafter described was established as a public lane and assumed for public use by By-law 2024-120;

**NOW THEREFORE THE COUNCIL** of The Corporation of the City of Sault Ste. Marie, pursuant to *the Municipal Act, 2001*, S.O. 2001, **ENACTS** as follows:

1. **LANE CLOSED, DECLARED SURPLUS AND CONVEYANCE AUTHORIZED**

   The lane more particularly described as PIN 31609-0253(LT) PT LANE PL 1598 KORAH CLOSED BY T220708 PT 2 1R4911; S/T T221041; T226464E; SAULT STE. MARIE, Steel Plant Subdivision, Plan 1598, having been assumed by the Corporation for public use, is hereby stopped up, closed, declared surplus to the requirements of the Municipality and the conveyance of same is authorized.

2. **EXECUTION OF DOCUMENTS**

   The City Solicitor is hereby authorized by By-law 2018-55 for and in the name of the Corporation to execute and to affix the seal of the Corporation to all documents required to give effect to this by-law.

3. **EASEMENTS TO BE RETAINED**

   The lane is subject to the retention of easements if required.

4. **EFFECTIVE DATE**

   This by-law takes effect on the day of its final passing.

**READ** the **FIRST** and **SECOND** time in open Council this 9th day of September, 2024.

_____

**MAYOR – MATTHEW SHOEMAKER**

_____

**CITY CLERK – RACHEL TYCZINSKI**

THIS DRAWING DOES NOT FORM PART OF THE BY-LAW. IT IS FOR INFORMATION PURPOSES ONLY.