

Planning Committee Agenda

Monday, April 28, 2025 Tom Davies Square

Councillor Cormier, Chair

11:30 a.m. Closed Session Committee Room C-12 / Electronic Participation1:00 p.m. Open Session Council Chamber / Electronic Participation

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1. Call to Order

2. Roll Call

3. Closed Session

Resolution to move to Closed Session to deal with two Proposed or Pending Acquisition or Disposition of Land Matters, the first regarding Long Lake Road, Sudbury, and the second regarding Fergus Avenue, Val Therese, in accordance with Municipal Act, 2001, par 239 (2)(c).

- 4. Recess
- 5. Open Session
- 6. Roll Call
- 7. Declarations of Pecuniary Interest and the General Nature Thereof
- 8. Public Hearings

8.1 3441 Highway 144, Chelmsford

This report provides a recommendation regarding a request to rezone a draft approved plan of subdivision on lands known as 3441 Highway 144 in Chelmsford.

This report is prepared by Stephanie Poirier, Senior Planner.

8.2 0 Keith Avenue & 0 Pinellas Road, Chelmsford

This report provides a recommendation regarding an application for Zoning Bylaw Amendment that seeks to permit a mix of single-detached, semi-detached and street-townhouse dwellings.

This report is presented by Ugo Ufoegbune, Senior Planner.

9. Matters Arising from the Closed Session

At this point in the meeting, the Chair of the Closed Session, will rise and report. The Committee will then consider any resolution(s) emanating from the Closed Session.

10. Consent Agenda

For the purpose of convenience and for expediting meetings, matters of business of repetitive or routine nature are included in the Consent Agenda, and all such matters of business contained in the Consent Agenda are voted on collectively.

A particular matter of business may be singled out from the Consent Agenda for debate or for a separate vote upon the request of any Councillor. In the case of a separate vote, the excluded matter of business is severed from the Consent 5

26

Agenda, and only the remaining matters of business contained in the Consent Agenda are voted on collectively.

Each and every matter of business contained in the Consent Agenda is recorded separately in the minutes of the meeting.

10.1 Routine Management Reports

10.1.1 54 William Avenue, Coniston

83

This report provides a recommendation regarding a request to deem certain lots not to be part of a registered plan of subdivision, 54 William Avenue, Coniston.

10.1.2 White Road, Lively – Declaration of Surplus Land and Addition to Affordable Housing Land Bank

86

This report provides a recommendation in regard to declaring surplus vacant land north of White Road, Lively, and to add the land to the Affordable Housing Land Bank.

10.1.3 Municipal Road 55, Lively – Declaration of Surplus Land Walden Industrial Park

92

This report provides a recommendation in regard to declaring surplus vacant land on the south side of Municipal Road 55, Lively, in the Walden Industrial Park.

11. Presentations

11.1 Complete Street Design Guidelines – Transportation Planning Impacts

97

This presentation provides information regarding the Complete Street Guidelines as well as their impact to the design of the transportation network.

12. Managers' Reports

12.1 Employment Land Community Improvement Plan – Program Review 2025

287

This report provides a recommendation regarding the outcomes of the Employment Land Community Improvement Plan (ELCIP) to date. These proposed adjustments will improve clarity in the application, eligibility, and assessment process while strengthening alignment with Council's strategic priorities in order to refine a successful initiative.

12.2 Scenic View Subdivision Street Name

290

This report provides a recommendation regarding a request to rename Covington Crescent within the Scenic View subdivision to Carrington Drive.

12.3 Valley East Employment Lands Expansion

310

This report provides recommendations to direct staff to undertake Planning Act processes to swap settlement area, amend the Official Plan, and Zoning By-law to allow for the expansion of the Valley East Industrial Park on Cityowned lands, with the intent of offering the land for sale to the respective

abutting property owners.

- 13. Members' Motions
- 14. Addendum
- 15. Civic Petitions
- 16. Question Period
- 17. Adjournment



3441 Highway 144, Chelmsford

Meeting Date: April 28, 2025 Type: Public Hearing Prepared by: Stephanie Poirier Planning Services Recommended by: General Manager of Growth and Infrastructure File Number: 751-5/24/12	Presented To:	Planning Committee
Prepared by: Stephanie Poirier Planning Services Recommended by: General Manager of Growth and Infrastructure	Meeting Date:	April 28, 2025
Planning Services Recommended by: General Manager of Growth and Infrastructure	Type:	Public Hearing
Growth and Infrastructure	Prepared by:	•
File Number: 751-5/24/12	Recommended by:	<u> </u>
	File Number:	751-5/24/12

Report Summary

This report provides a recommendation regarding a request to rezone a draft approved plan of subdivision on lands known as 3441 Highway 144 in Chelmsford.

This report is prepared by Stephanie Poirier, Senior Planner.

Resolution

THAT the City of Greater Sudbury approves the application by Vytis Lands (Kagawong) Ltd. & Ronald Chevrier to amend Zoning By-law 2010-100Z by changing the zoning classification from "FD", Future Development to "R2-2", Low Density Residential Two and "R3", Medium Density Residential on lands described as Part of PINs 73348-0734 & 73348-0005, Parts 1, 2 & 3, Plan 53R-20417 in Lot 2, Concession 2, Township of Balfour, as outlined in the report entitled "3441 Highway 144, Chelmsford" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025, subject to the following conditions:

- 1. That the owner provides the Development Approvals Section with a registered survey plan outlining the lands to be rezoned to enable the preparation of an amending zoning by-law; and
- 2. That the draft approved plan of subdivision (File: 780-5/12-005) be rezoned as follows:
 - i) Lots 1 to 6, 18 to 21, 92, 93, 164 to 168 and 192 to 194 and Block C be zoned as "R3", Medium Density Residential;
 - ii) Lots 7 to 17, 22 to 91, 94 to 163 and 169 to 191 and Blocks B and D be zoned as "R2-2", Low Density Residential Two; and,
 - iii) Block A be zoned as "P", Park.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The proposal is consistent with the goals and objectives of the Strategic Plan by expanding and diversifying the supply of new housing in a fully serviced settlement area, where the provision of municipal services is deemed to be efficient and cost-effective. The application is consistent with the goal to create compact, complete communities under the Community Energy & Emissions Plan.

Financial Implications

If approved, staff estimates approximately \$1.8 million in taxation revenue in the supplemental tax year only, based on the assumption of 348 semi-detached dwelling units and 73 townhouse units, at an estimated assessed value of \$300,000 and \$275,000 respectively per dwelling unit, at the 2024 property tax rates.

This additional taxation revenue will only occur in the supplemental tax year. Any taxation revenue generated from new development is part of the supplemental taxation in its first year. Therefore, the City does not receive additional taxation revenue in future years from new development, as the tax levy amount to be collected as determined from the budget process, is spread out over all properties within the City.

The amount of development charges will be based on final review of the property by the Building Services department, at time of building permit issuance.

Report Overview:

An application for rezoning has been submitted to permit the construction of 174 lots for semi-detached dwellings (348 units) and 20 lots for street townhouse dwellings (73 units) on lands subject to a draft plan of subdivision (file 780-5-12-005) approved in 2013 and most recently amended in 2022.

Staff recommends approval of the application as described in the Resolution section on the basis that it is consistent with the Provincial Planning Statement, conforms to the Growth Plan for Northern Ontario, the Official Plan for the City of Greater Sudbury, has regard for matters of provincial interest and represents good planning.

Staff Report

Proposal:

The purpose and effect of the application is to rezone the subject lands from the "FD", Future Development to "R2-2", Low Density Residential Two and "R3", Medium Density Residential to permit the construction of 174 lots for semi-detached dwellings (348 units) and 20 lots for street townhouse dwellings (73 units) on lands subject to a draft plan of subdivision (file 780-5-12-005) approved in 2013 and most recently amended in 2022.

The lands are subject to two previous Zoning By-law Amendment Applications, files 751-5-12-17 and 751-5-22-001 which have both lapsed. No changes have been proposed since the previous rezoning application.

The subject lands are designated 'Living Area 1' within the City's Official Plan, are zoned "FD" Future Development" within By-law 2010-100Z being the Zoning By-law for the City of Greater Sudbury, and are regulated by the Nickel District Conservation Authority (NDCA).

Surrounding uses are low density residential, commercial, open space recreational, and future development in nature.

The following materials have been submitted as part of the application and are attached for reference:

- 1. Planning Justification Memorandum
- Draft Plan of Subdivision
- 3. Floodplain Correspondence
- 4. Photos of Units

A location map has been attached for reference.

Policy & Regulatory Framework:

The property is subject to the following policy and regulatory framework:

- 2024 Provincial Planning Statement:
- 2011 Growth Plan for Northern Ontario;
- Official Plan for the City of Greater Sudbury, 2006; and,
- Zoning By-law 2010-100Z.

Provincial Planning Statements and geographically specific Provincial Plans, along with municipal Official Plans, provide a policy framework for planning and development in the Province. This framework is implemented through a range of land use controls such as zoning by-laws, plans of subdivision and site plans.

Provincial Planning Statement:

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters are consistent with the Provincial Planning Statement (PPS).

The PPS acknowledges the Province's goal of getting at least 1.5 million homes built by 2031 and identifies that Ontario will increase the supply and mix of housing options. "Ontario will increase the supply and mix of housing options, addressing the full range of housing affordability needs. Every community will build homes that respond to changing market needs and local demand. Providing a sufficient supply with the necessary mix of housing options will support a diverse and growing population and workforce, now and for many years to come."

Several sections of the PPS are relevant to the application and intended residential use of the lands.

Policy 2.1.6 identifies that planning authorities should support complete communities by accommodating an appropriate range and mix of land uses to meet long term needs, which improves accessibility for people of all ages and abilities, and improves social equity and overall quality of life for people of all ages, abilities, and incomes.

Policy 2.2 speaks to housing and requires planning authorities to provide an appropriate range and mix of housing options to meet social, health, and economic needs of current and future residents by permitting densities for new housing and residential intensification which efficiently use land, resources, infrastructure, public service facilities, and transit.

Policy 2.3 speaks to settlement areas and requires that settlement areas be the focus of growth and development. Land use patterns within settlement areas should be based on densities and a mix of land uses which efficiently use land and resources, optimize existing and planned infrastructure and public service facilities, and are transit supportive. Intensification and redevelopment to achieve complete communities shall be supported.

Policy 2.9 speaks to energy conservation, air quality, and climate change and requires planning authorities to reduce greenhouse gas emissions by supporting compact and complete communities that are transit supportive, conserve and use energy efficiently, protect the environment, and improve air quality.

Policy 3.6 speaks to sewage, water, and stormwater and includes a servicing hierarchy where municipal sewage and water services are the preferred form of servicing within settlement areas to support protection of the environment and minimize potential risk to human health and safety.

Growth Plan for Northern Ontario:

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters conform with the Growth Plan for Northern Ontario. The Growth Plan encourages Municipalities to plan communities that achieve accommodation of the diverse needs of all residents, now and in the future, optimize use of existing infrastructure, and result in a high quality of place.

Official Plan for the City of Greater Sudbury:

The subject property is designated as 'Living Area 1' in the City of Greater Sudbury Official Plan. Additionally, a small northwesterly portion adjacent to the Whitson River tributary is designated as Parks and Open Space, which aligns with the flood plain boundary indicated on the draft plan.

Section 3.1 contains the objectives of the 'Living Area 1' designation. The objectives applicable to this application are as follows:

- a. meet Greater Sudbury's housing needs, including the special needs of the elderly, handicapped, low-income individuals and families, and students, by encouraging the provision of an adequate supply of affordable, ownership, rental, and special needs housing in Living Areas;
- b. encourage the development of a mix of residential uses;
- c. achieve stability in the City's housing market by ensuring that a sufficient supply of designated and serviceable residential land is available to meet existing and future needs;
- d. focus residential development in areas that have sufficient infrastructure and public service capacity

Section 3.2 contains general policies for Living Areas, and states that low and medium density housing is permitted in all Living Area 1 designations where full municipal services are available. Low density development permits single detached dwellings, semi-detached dwellings, duplexes and townhouses to a maximum net density of 36 units per hectare.

New residential development must be compatible with the existing physical character of established neighbourhoods, with consideration given to the size and configuration of lots, predominant built form, building setbacks, building heights and other provisions applied to nearby properties under the Zoning Bylaw.

Areas designated 'Living Area I' in Communities are seen as the primary focus of residential development. Section 3.2.1 contains policies for the 'Living Area I' designation. The following are applicable:

- 5. In considering applications to rezone land in Living Area I, Council will ensure amongst other matters that:
 - a. the site is suitable in terms of size and shape to accommodate the proposed density and building form;
 - b. the proposed development is compatible with the surrounding neighbourhood in terms of scale, massing, height, siting, setbacks, and the location of parking and amenity areas;
 - c. adequate on-site parking, lighting, landscaping and amenity areas are provided; and,
 - d. the impact of traffic on local streets is minimal.

Section 2.3 of the Official Plan speaks to reinforcement of the urban structure and states that growth must continue to be directed to capitalize on existing investments, make the most efficient use of existing infrastructure and public service facilities, protect our rural and agricultural assets and preserve our natural features and areas. Reinforcing the urban structure also creates a more energy efficient land use pattern and supports climate change mitigation.

Section 2.3.2 directs that settlement area land use patterns will be based on densities and land uses that make the most efficient use of land, resources, infrastructure and public service facilities, minimize negative impacts on air quality and climate change, promote energy efficiency and support public transit, active transportation and the efficient movement of goods.

Section 2.3.3 encourages all forms of intensification and establishes a 20% residential intensification target. Intensification applications are to be evaluated with respect to the following criteria:

- a. the suitability of the site in terms of the size and shape of the lot, soil conditions, topography and drainage;
- b. compatibility with the existing and planned character of the area;
- c. the provision of on-site landscaping, fencing, planting and other measures to lessen any impact the proposed development may have on the character of the area:
- d. the availability of existing and planned infrastructure and public service facilities;
- e. the provision of adequate ingress/egress, off-street parking and loading facilities, and safe and convenient vehicular circulation;
- f. the impact of traffic generated by the proposed development on the road network and surrounding land uses:
- g. the availability of existing or planned, or potential to enhance, public transit and active transportation infrastructure:
- h. the level of sun-shadowing and wind impact on the surrounding public realm;
- i. impacts of the proposed development on surrounding natural features and areas and cultural heritage resources:
- j. the relationship between the proposed development and any natural or man-made hazards; and,
- k. the provision of any facilities, services and matters if the application is made pursuant to Section 37 of the Planning Act.

Section 17 identifies a key housing goal is to maintain a balanced mix of ownership and rental housing, and to encourage a greater mix of housing types and tenure, including encouraging the production of smaller (one and two bedroom) units to accommodate the growing number of smaller households. The Official Plan is intended to provide direction as to how housing needs and issues can be addressed in concert with the CGS Housing and Homelessness Plan.

Due to the flood plain associated with Tributary III of the Whitson River, policies applied to flooding and erosion hazards under Section 10.2 shall be considered:

- 1. Because flooding and erosion hazards may cause loss of life and may result in damage to property, development on lands adjacent to the shoreline of a watercourse or waterbody affected by flooding or erosion hazards are generally restricted and may be approved by Conservation Sudbury or MNRF. In addition, development on adjacent lands is also generally restricted and may be approved by Conservation Sudbury or MNRF.
- 2. Notwithstanding the above, development and site alteration is not permitted within a floodway regardless of whether the area of inundation contains high points of land not subject to flooding. Development and site alteration is not permitted in areas that would be rendered inaccessible to people and vehicles during times of a hazard, unless it has been demonstrated that the site has safe access appropriate to the nature of development and hazard.
- 3. For purposes of clarity, institutional uses such as hospitals, long-term care facilities, retirement homes, pre-schools, elementary schools and secondary schools; essential emergency services and industrial uses involving the disposal, manufacture, treatment or storage of hazardous substances are not permitted on lands subject to flooding or erosion hazards.

- 4. Uses that by their nature must locate within the Flood Plain including flood and/or erosion control works or minor additions or passive non-structural uses which do not affect flood flows are permitted.
- 5. Any alterations to the terrain within the Flood Plain which may have an effect on drainage and the erection of any structures must first receive the approval of Conservation Sudbury or MNRF.

Zoning By-law 2010-100Z:

The subject lands are zoned 'FD' Future Development within the City's Zoning By-law.

The development standards for a semi-detached dwelling in the requested zone being the 'R2-2' Low Density Residential Two Zone are as follows:

- Minimum lot area of 275 m² per dwelling unit
- Minimum lot frontage of 9 m (10.5 m for corner lots)
- Minimum lot depth of 30 m
- Minimum front yard setback 6 m
- Minimum rear yard setback 7.5 m
- Minimum interior side yard setback 1.2 m + 0.6 m per storey above the first storey
- Maximum lot coverage 40%
- Maximum height 11 m

The development standards for street townhome dwellings in the requested zone being the 'R3' Medium Density Residential Zone are as follows:

- Minimum lot area of 150 m² per dwelling unit
- Minimum lot frontage of 6 m (8 m for corner lots)
- Minimum lot depth of 30 m
- Minimum front yard setback 6 m
- Minimum rear yard setback 7.5 m
- Minimum interior side yard setback 1.2 m + 0.6 m per storey above first storey
- Maximum lot coverage 40%
- Minimum landscaped open space 30%
- Maximum height 11 m

Parking provisions for semi-detached and street townhome dwellings require 1 space per unit.

Landscaping provisions require a 3 m wide planting strip, or 1.5 m tall opaque fence with 1.8 m planting strip along the medium density 'R3' Zone lot lines which abut lower residential 'R2-2' Zone.

Public Consultation:

The statutory notice of the application was provided by newspaper on February 8, 2025 along with a courtesy mail-out to surrounding property owners and tenants within 122 m of the property on February 4, 2025. The statutory notice of the public hearing was provided by newspaper on April 5, 2025, and courtesy mail-out within 122 m of the property on April 3, 2025.

At the time of writing this report, no written or oral submissions from the public have been received by the Planning Services Division.

Department/Agency Review:

The application including relevant accompanying materials has been circulated to all appropriate agencies and departments. Responses received from agencies and departments have been used to assist in evaluating the application and to inform and identify appropriate development standards in an amending zoning by-law should the application be approved. Comments received from departments generally had no objections to the rezoning application. Advisory comments were provided from Building Services and Conservation Sudbury in regard to additional zoning review at time of building permit stage and the

continuation of addressing floodplain and erosion hazards through the draft plan of subdivision process. Additionally, Development Engineering has advised that a first submission of construction drawings were reviewed in 2024 for the plan of subdivision.

Detailed comments can be found in Appendix 1 to this report.

Planning Analysis:

The Provincial Planning Statement, Growth Plan for Northern Ontario, and City of Sudbury Official Plan all encourage appropriate growth and residential intensification to occur within settlement areas on full municipal services. The proposed development is located within the settlement boundaries of Chelmsford in an area intended to accommodate future residential use. The proposal represents the logical extension of municipal services within a designated growth area.

The PPS and Official Plan promote residential intensification and encourage a wide range of housing forms in order to accommodate current and future housing needs. The proposed rezoning will result in residential intensification and is intended to contribute to diversifying the housing supply by permitting semi-detached and townhome dwellings. The Official Plan identifies that a key housing goal is to maintain a balanced mix of ownership and rental housing, and to encourage a greater mix of housing types and tenure. The proposal represents an opportunity to provide additional housing options within Chelmsford. The applicant has provided photos of one-storey townhome dwellings attached for reference.

Staff have reviewed the draft approved plan of subdivision against the proposed zoning standards in terms of minimum lot area, lot frontage, and lot depth for the proposed 'R2-2' and 'R3' Zones. The proposed zoning appears to be consistent with the lot fabric of the draft plan. The applicant has not requested any site specific standards at this point in time and no changes to the draft plan or proposed zoning have occurred since the previous amendment and draft plan extension in 2022.

The subject lands contain flood and erosion hazards adjacent to Tributary III of the Whitson River. The extent of natural hazards is limited to the northerly area of the subject lands as identified on the draft plan. Conservation Sudbury has no objections to the rezoning, however, has identified that additional information on watercourses, erosion hazards, wetlands and municipal drains is required. The applicant has provided a copy of correspondence in regard to this matter as part of the first draft plan submission, which is attached for reference. Staff are satisfied that the hazards will continue to be addressed through the draft plan process.

The draft plan is attached to the report for reference.

Overall staff is satisfied that the proposed zoning is appropriate for the existing draft plan approval to facilitate the construction of 174 lots for semi-detached dwellings (348 units) and 20 lots for street townhouse dwellings (73 units) for a total of 421 dwelling units.

Conclusion:

Staff recommends approval of the application as described in the Resolution section on the basis that it is consistent with the Provincial Planning Statement, conforms to the Growth Plan for Northern Ontario, the Official Plan for the City of Greater Sudbury, has regard for matters of provincial interest and represents good planning.

Appendix 1:

Departmental & Agency Comments

a) Building Services

No objections with the proposed zoning amendment subject to the following advisory comments:

 Specific zone standards and requirements applicable to the lots will be reviewed at time of subdivision and may be subject to the Minor Variance approvals.

b) Conservation Sudbury

The property is adjacent to a portion of the Whitson River Tributary III and has an associated flood and erosion hazard regulated by Conservation Sudbury. Sketch submitted with the rezoning application indicates the approximate flood hazard for this specific Tributary but does not show all the other hazards, including other watercourses, erosion hazards, wetlands or municipal drains.

Conservation Sudbury does not object to the rezoning application for the subject properties. However, concept sketch may not be able to be realized as distributed pending the mapping of the hazards.

The mapping requirement as it relates to the identification of hazards are detailed in correspondence from Conservation Sudbury dated November 21, 2024 (as part of the 1st circulation construction drawings for Huneault Subdivision Phase 1).

c) Development Engineering

Development Engineering has reviewed the above noted application. A first submission of Construction drawings for the subdivision were reviewed in 2024. Servicing of the lots would need to match the proposed lot fabric and meet the requirements of City By-law and standards.

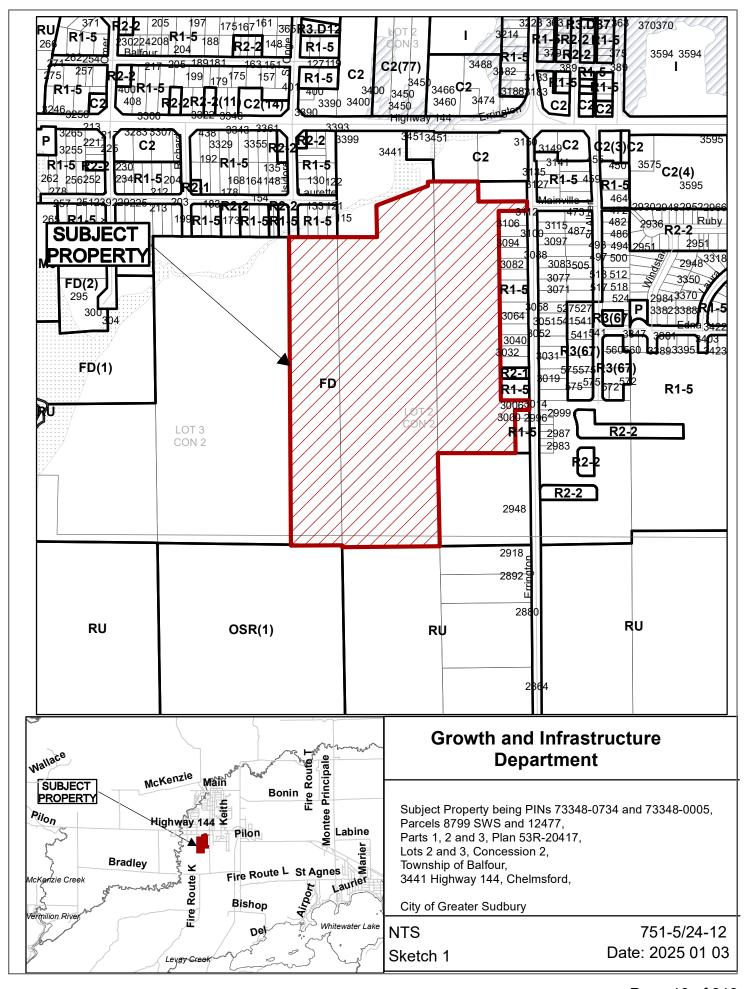
We have no objection to changing the zoning classification of the subject property from "FD", Future Development to "R2-2", Low Density Residential Two and "R3", Medium Density Residential.

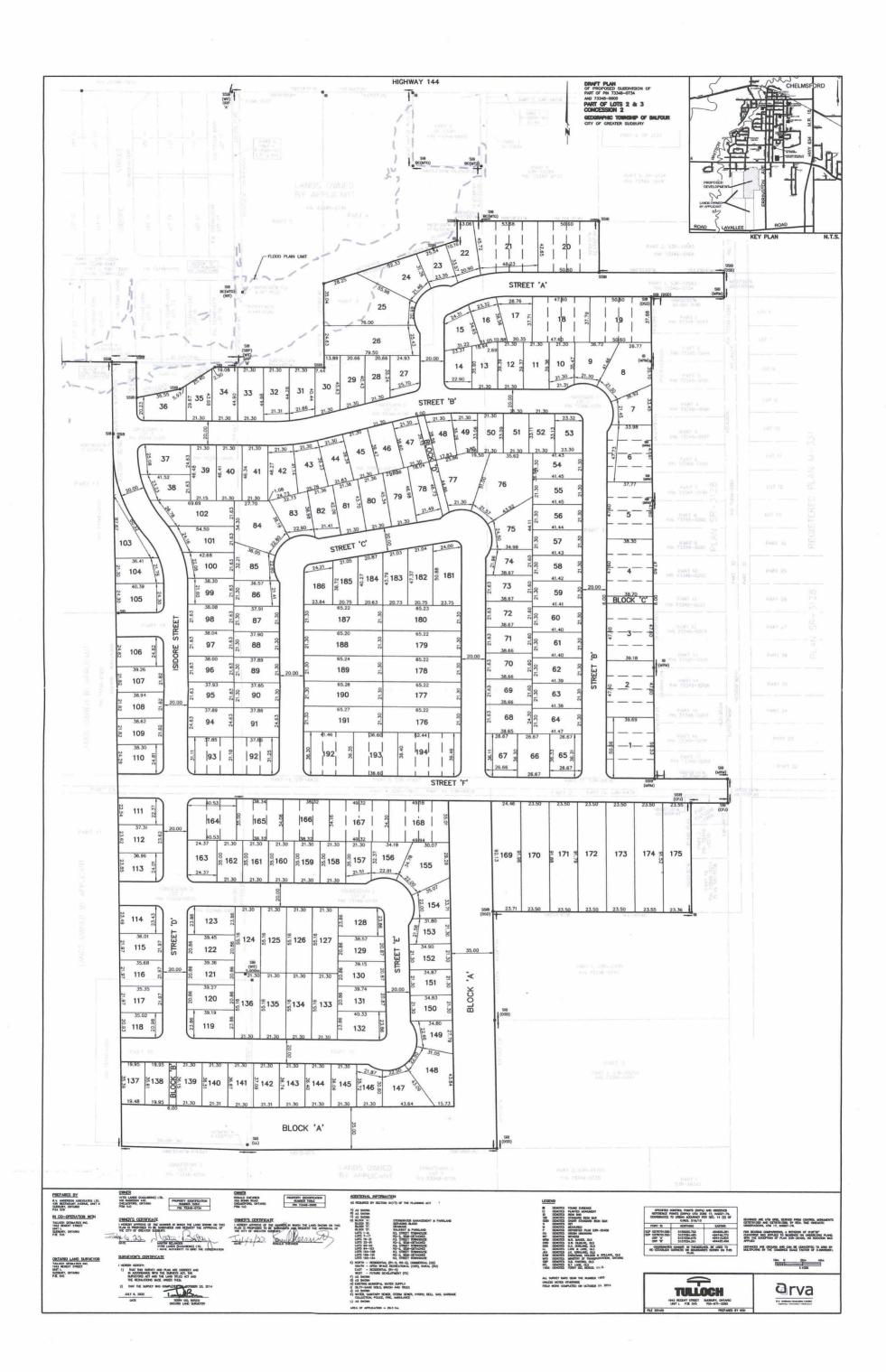
d) Hydro One

No concerns.

e) Infrastructure and Capital Planning.

No concerns from roads, transportation & innovation support, active transportation, roads operations, or drainage.







Planners | Surveyors | Biologists | Engineers

December 13, 2024 P201451

Development Approvals – Planning Services Tom Davies Square – City of Greater Sudbury 200 Brady Street Sudbury, ON P3A 5P3 RECEIVED

DEC 19 2024

PLANNING SERVICES

Re:

Application for Rezoning Part of PIN 73348-0734 and Part of PIN 73348-0005 in Lots 2 and 3, Concession 2, Township of Balfour, City of Greater Sudbury, Vytis Lands (Kagawong) Ltd. and Ronald Chevrier

Dear Planning Services,

TULLOCH has been retained by the current owner of those lands known municipally as PINs 73348-0734 & 73348-0005 in Sudbury to facilitate a Zoning By-Law Amendment to rezone the subject lands from "FD", Future Development to "R2-2", Low Density Residential Two and "R3", Medium Density Residential to permit the development of a mixed residential subdivision with single, duplex, semi-detached, and street townhouse dwellings.

The properties were previously rezoned in 2022 (File 751-5/22-001) from "FD", Future Development to "R2-2", Low Density Residential Two and "R3", Medium Density Residential to permit the above noted mixed residential subdivision. The conditional rezoning approval has since lapsed.

This application is a resubmission of the former (751-5/22-001) rezoning application.

Please find attached the following documents and supporting information in support of a complete application:

- Zoning By-law Amendment Application Form
- Subdivision Concept/ Draft Plan(2022)
- Legal Property Descriptions (GeoWarehouse) x2
- Floodplain Mapping and Erosion Hazard Conservation Sudbury Correspondence
- Photos of typical one-storey and two-storey elevations for townhouse units;
- SPART Meeting Minutes.



We understand that this application requires an application fee. For payment of this fee, please contact us by calling 705-522-6303. We trust that this submission package will enable the City of Greater Sudbury to issue a Notice of Complete Application with respect to the subject proposal. Should there be any questions with respect to the above, please do not hesitate to contact the undersigned directly.

In addition to the above, below is an overview of how the applications are considered to be consistent with the Provincial Planning Statement (PPS), conform and do not conflict with the Growth Plan for Northern Ontario (GPNO) and conform with the City of Greater Sudbury Official Plan.

Provincial Planning Statement (PPS), 2024

Section 2.1 of the PPS outlines policies related to planning for people and homes, and states, in part:

- **2.1.6** Planning authorities should support the achievement of complete communities by:
 - a) accommodating an appropriate range and mix of land uses, housing options, transportation options with multimodal access, employment, public service facilities and other institutional uses (including schools and associated child care facilities, long-term care facilities, places of worship and cemeteries), recreation, parks and open space, and other uses to meet long-term needs;

Section 2.2 of the PPS outlines housing policies, and states, in part:

- **2.2.1** Planning authorities shall provide for an appropriate range and mix of housing options and densities to meet projected needs of current and future residents of the regional market area by:
 - b) permitting and facilitating:
 - 1. all housing options required to meet the social, health, economic and well-being requirements of current and future residents, including additional needs housing and needs arising from demographic changes and employment opportunities; and 2. all types of residential intensification, including the development and redevelopment of underutilized commercial and institutional sites (e.g., shopping malls and plazas) for residential use, development and introduction of new housing options within previously developed areas, and redevelopment, which results in a net increase in residential units in accordance with policy 2.3.1.3;





c) promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation; and

The application supports **Section 2.21(b)** by permitting and facilitating residential intensification through the addition of multi-unit housing to the community to meet the needs of current and future residents and by accommodating a mix of residential housing options through the addition of a range and mix of housing types to support the achievement of a more complete community

Section 2.3.1 of the PPS states that Settlement Areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted. Given that the subject lands are located within Greater Sudbury's Settlement Area, the following policies are applicable:

- 2.3.1.1 Settlement areas shall be the focus of growth and development. Within settlement areas, growth should be focused in, where applicable, strategic growth areas, including major transit station areas.
- **2.3.1.2** Land use patterns within settlement areas should be based on densities and a mix of land uses which:
 - a) efficiently use land and resources;
 - b) optimize existing and planned infrastructure and public service facilities;
 - c) support active transportation;
 - d) are transit-supportive, as appropriate; and

Consistent with **Section 2.3.1**, the application proposes new development taking place in a strategic growth area which is adjacent to the existing built-up area. The concept represents an efficient use of the lands and an optimal extension of services to accommodate future residential development. The application also represents a development that is supportive of active transportation and GOVA transit routes along Highway 144, which is less than 500 metres from the subject lands.

Section 5.2 provides direction respecting natural hazards, specifically:

- **5.2.2** 2. Development shall generally be directed to areas outside of:
 - b) hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards;
- **5.2.3** Development and site alteration shall not be permitted within:



per Section 2.1.6.



d) a floodway regardless of whether the area of inundation contains high points of land not subject to flooding.

The application is consistent with **Section 5.2** given that the floodplain associated with the tributary along the northerly edge of the draft plan is located outside of the proposed lots for development with the exception of a minor encroachment on the rear of Lot 24 and more significantly on the rear of Lot 25 which have been sized such that the development of a dwelling and accessory structures can easily occur on these lots outside of the floodplain.

Growth Plan for Northern Ontario

Section 3.4.3 of the GPNO promotes a diverse mix of land uses within northern communities. The GPNO states that:

Municipalities are encouraged to support and promote healthy living by providing for communities with a diverse mix of land uses, a range and mix of employment and housing types, high-quality public open spaces, and easy access to local stores and services.

Per **Section 3.4.3** the subject application will promote a further range of housing types in the community by allowing the introduction of semi-detached and street townhouse units in an area predominated by single detached dwellings.

Along with other major urban centres in Northern Ontario, Greater Sudbury is identified as an Economic and Service Hub. **Section 4.3.2** of the GPNO states that these identified municipalities should be designed to accommodate a significant portion of future population and employment growth in Northern Ontario.

City of Greater Sudbury Official Plan

The subject lands are designated 'Living Area 1' per *Schedule 1C* of the *City of Greater Sudbury Official Plan*. The lands are also located within the 'Settlement Area' and are outside of the 'Built Boundary' on Schedule 3 of the *Official Plan*.

Section 2.3.2 speaks to the City's settlement area and states, in part:

2.3.2.1 Future growth and development will be focused in the Settlement Area through intensification, redevelopment and, if necessary, development in designated growth areas.





- 2.3.2.2 Settlement Area land use patterns will be based on densities and land uses that make the most efficient use of land, resources, infrastructure and public service facilities, minimize negative impacts on air quality and climate change, promote energy efficiency and support public transit, active transportation and the efficient movement of goods.
- 2.3.2.3 Intensification and development within the Built Boundary is encouraged in accordance with the policies of this Plan. Development outside of the Built Boundary may be considered in accordance with the policies of this Plan.

Per **Sections 2.3.2.1** and **2.3.2.3** the site is located within the Settlement Area and is located outside of the built boundary identified in the Official Plan.

With respect to **Section 2.3.2.2**, it is noted that the development will contribute to the efficient use of land, infrastructure and public service facilities, and will support the public transit system and active transportation and in so doing will minimize impacts on air quality and climate change.

Section 3.2 speaks to the City's Living Area designations and states, in part:

- 3.2.1 Low density housing is permitted in all Living Area designations.

 Consistent with the prevailing built form, only single detached dwellings are allowed in Living Area II.
- **3.2.2** Medium density housing is permitted in all Living Area I designations where full municipal services are available.
- 3.2.3 New residential development must be compatible with the existing physical character of established neighbourhoods, with consideration given to the size and configuration of lots, predominant built form, building setbacks, building heights and other provisions applied to nearby properties under the Zoning By-law.
- 3.2.1.1 Low density development permits single detached dwellings, semidetached dwellings, duplexes and townhouses to a maximum net density of 36 units per hectare. In order to maintain existing neighbourhood character, the Zoning Bylaw may establish lower densities in certain areas of the City.
- 3.2.1.5 In considering applications to rezone land in Living Area I, Council will ensure amongst other matters that:
 - **a**. the site is suitable in terms of size and shape to accommodate the proposed density and building form;





- **b.** the proposed development is compatible with the surrounding neighbourhood in terms of scale, massing, height, siting, setbacks, and the location of parking and amenity areas;
- **c.** adequate on-site parking, lighting, landscaping and amenity areas are provided; and,
- d. the impact of traffic on local streets is minimal.

With respect to in **Section 3.2** the proposed development at a gross density of 14.3 units per ha falls within the low density range in which the *Official Plan* permits a density up to 36 units per ha. Townhouses are also a unit type permitted in low density development of which 73 units are proposed.

The proposed semi-detached and street townhouse units are compatible with the adjacent development to the west and east which is comprised of primarily single detached dwellings along with other low density housing forms.

The lots in the draft plan have been sized and located to accommodate the proposed semidetached and townhouse development forms. Typical layouts for the street townhouse units showing setbacks building location, setbacks and driveway locations have been prepared and are included in the application submission to the City.

Summary

The proposed zoning by-law amendment will facilitate development on the subject lands that integrates a mix of semi-detached and street townhouse units. The subject development represents good planning, is in the public interest, providing an expanded range of dwelling types to meet future needs and demands of the community.

Given the analysis provide herein, it is the author's opinion that the proposed rezoning of the subject lands from "Future Development' to 'R2-2 Low Density Residential Two' and R3 Medium Density Residential' to permit the proposed development is consistent with the 2024 PPS, conforms with the Growth Plan for Northern Ontario and the City of Greater Sudbury Official Plan, and represents good planning.

Respectfully submitted,

Vanessa Smith, M.Pl., RPP

Project Manager | Senior Planner

Kevin Jarus, M.Pl., RPP

Planning Manager | Senior Associate





Brandon Cormier

From:

Kevin Jarus

Sent:

December 12, 2024 1:34 PM

To:

Vanessa Smith; Brandon Cormier

Subject:

FW: Huneault Subdivision Floodplain Evaluation

Huneault resub.



Kevin Jarus, M.Pl., RPP Planning Manager **Sr. Associate**

Sudbury Office

Phone: 705-671-2295 ext 606

Mobile: 416-856-7935

We want to build an organization where everyone loves their job and their leaders care fo.

From: Anoop Naik < Anoop. Naik@ConservationSudbury.ca>

Sent: November-29-23 10:30 AM

To: Michael Thompson <michael.thompson@tulloch.ca>

Cc: Sarah Woods <Sarah.Woods@ConservationSudbury.ca>; Kevin Jarus <kevin.jarus@tulloch.ca>; Kayla Schmidt

<kayla.schmidt@tulloch.ca>

Subject: RE: Huneault Subdivision Floodplain Evaluation

Caution! This message was sent from outside your organization.

Good Morning Michael,

Thank you very much for submitting the floodplain report and the HEC-Ras model files for the realigned reach of the tributary III of Whitson River. Conservation Sudbury has accepted the floodplain map submitted for the realigned reach of tributary III.

Also, we are satisfied with your professional assessment concerning the erosion issues with respect to the realigned channel.

The submission of the floodplain report and the addressing of the erosion issues satisfies Conservation Sudbury's concerns expressed in the email dated Jun 4, 2021.

The floodplain mapping and erosion hazard concerns addressed in the 31st August 2023 email are with respect to the realignment of the Tributary III of the Whitson River, these requirements don't address all the other council conditions for the Huneault Subdivision. Any questions or concerns regarding other council conditions please reach out to Sarah Woods.

Please feel free to reach me if you have any questions or concerns regarding this email.

Sincerely,

Anoop Naik Water Resources Specialist Conservation Sudbury 199 Larch Street Suite 401 Sudbury, ON P3E 5P9 Tel: (705) 674-5249 Ext: 205





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0 Keith Avenue & 0 Pinellas Road, Chelmsford

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Type:	Public Hearing
Prepared by:	Ugo Ufoegbune Planning Services
Recommended by:	General Manager of Growth and Infrastructure
File Number:	751-5/24-11

Report Summary

This report provides a recommendation regarding an application for Zoning By-law Amendment that seeks to permit a mix of single-detached, semi-detached and street-townhouse dwellings.

This report is presented by Ugo Ufoegbune, Senior Planner.

Resolution

THAT the City of Greater Sudbury approves the application by Bonaventure Development Company Ltd. to amend Zoning By law 2010-100Z by changing the classification from "R1-5", Low Density Residential One to "R1-5 (S)" Low Density Residential Special, "R2-2", Low Density Residential Two and "R3" Medium Density Residential those lands described as Lots 64-93, Pt Lot 94, 97-117, Blocks D, Part of Block C & E, Plan M-1058, Lot 1, Concession 3, Township of Balfour, as outlined in the report entitled "0 Keith Avenue & 0 Pinellas Road, Chelmsford" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting of April 28, 2025 subject to the following conditions:

- 1. That prior to the passing of an amending zoning by-law the owner shall submit a registered survey plan describing the lands to be rezoned to the satisfaction of the Director of Planning Services;
- 2. That a holding provision be applied to the lands until such time as the following item has been addressed:

That the owner has applied for and received all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure;

3. That conditional approval shall lapse on April 29, 2027, unless Condition #1 above has been met or Council has granted an extension.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The application to amend the zoning By-law is an operational matter under the Planning Act to which the City is responding. The application contributes to the 2019-2027 City of Greater Sudbury Strategic Plan goals

related to housing (Goal # 5) by adding to the range and mix of housing available in Chelmsford.

As a form of residential intensification in the existing built-up community of Chelmsford, the development proposal aligns with the recommendations of the Community Energy and Emissions Plan (CEEP).

Financial Implications

If the rezoning is approved, staff estimates approximately \$273,000 in taxation revenue in the supplemental tax year only, based on the assumption of three single detached, 8 semi-detached, and 56 townhouse dwelling units at an estimated assessed value of \$400,000, \$300,000, and \$275,000 respectively per dwelling unit at the 2024 property tax rates.

This additional taxation revenue will only occur in the supplemental tax year. Any taxation revenue generated from new development is part of the supplemental taxation in its first year. Therefore, the City does not receive additional taxation revenue in future years from new development, as the tax levy amount to be collected as determined from the budget process, is spread out over all properties within the City.

The amount of development charges will be based on final review of the property by the Building Services department, at time of building permit issuance.

Once development has occurred and the subdivision infrastructure has been transferred to the City, there will be additional on-going costs for future annual maintenance and capital replacement of the related infrastructure (i.e. Roads, water/wastewater linear pipes, etc.).

Report Overview

The application seeks to permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street (formerly Willow Crescent) to the north of Keith Avenue in Chelmsford. The submitted Concept Plan depicts a total maximum yield of 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) should the land use permission that are being sought be fully utilized.

The previous approval lapsed on April 13, 2024. It is noted that a registered survey plan is to be provided as a condition of approval to enact an amending zoning by-law with holding provisions as outlined in the original resolution and accompanying staff report (attached).

The Planning Services Division is recommending approval of the application for Zoning By-law Amendment in accordance with the Resolution section of this report.

Staff Report

Proposal:

This report reviews a request for approval of a rezoning application that would permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street on a block of land situated to the north of Keith Avenue and to the south of Pinellas Road in the community of Chelmsford. The development proposal would yield a maximum of 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) should the land use permission be utilized to their fullest extent.

The proposed rezoning requests to change the zoning classification on the subject lands from "R1-5", Low Density Residential One to "R1-5 (S)" Low Density Residential Special, "R2-2", Low Density Residential Two and "R3" Medium Density Residential. The owner has requested site-specific relief for Lot 94 to permit a reduced frontage of 15.0 m and a reduced lot area of 450.0 square meters where 17.0 m and 465.0 square meters are required respectively. Staff has no concerns with the requested site-specific relief.

The rezoning application was originally approved by the City's Planning Committee through recommendation PL2021-063 on March 22, 2021, which was later ratified by Council on April 13, 2021. Subsequently, the approval was extended for a period of one year until April 13, 2024. The approval lapsed and the applicant submitted a Zoning By-law Amendment Application, File # 751-5/24-11 on those lands described as Lots 64-93, Pt Lot 94, 97-117, Blocks D, Part of Block C & E, Plan M-1058, Lot 1, Concession 3, Township of Balfour, as outlined in the report entitled "0 Keith Avenue & 0 Pinellas Road, Chelmsford". The cross-reference subdivision file for this current application is File # 780-5/10001.

Existing Zoning: "R1-5", Low Density Residential One

The "R1-5" Zone permits a number of uses as shown in Table 6.1 of the Zoning By-law 2010-100Z including single-detached dwelling.

<u>Proposed Zoning:</u> "R1-5 (S)" Low Density Residential One Special, for Lot 94 to permit reduced lot area and frontage, "R2-2", Low Density Residential Two and "R3" Medium Density Residential.

The "R2-2" Zone permits duplex dwelling, and semi-detached dwelling, as well as all uses permitted in the "R1-5" Zone. The "R3" Zone permits uses as shown in Table 6.1 of the zoning By-law including duplex dwelling, multiple dwelling, and street townhouse dwelling.

Location and Site Description:

The subject land is shown in the location map. The subject lands are generally bounded by Pinellas Road to the north, Keith Avenue to both the south and to the east and Edward Avenue to the west in the community of Chelmsford. The subject lands that are to be rezoned have a total lot area of approximately 3.12 ha. The lands to be rezoned are presently vacant.

Surrounding Land Uses:

North: Low density urban residential land uses with the predominant built-form being single-

detached dwellings along Armand Crescent and Pinellas Road.

East: Low density urban residential land uses with the predominant built-form being semi-

detached dwellings along Keith Avenue and a large tract of vacant urban residential land.

South: Low density urban residential land uses with the predominant built-form being semi-

detached dwellings and duplex dwellings along Keith Avenue, a medium density residential development (i.e. Co-Operative D'Habitation Vallee Ouest) and a large tract of vacant urban

land.

West: Low density urban residential land uses with the pre-dominant built-form being single-

detached dwellings along Edward Avenue, Chelmsford Community Centre and Arena

to the north-west, and two public schools to the south-west.

The site plan showing parts to be rezoned to "R1-5(S)", R2-2 and R3 are attached to this report.

Site photos depict the subject lands as viewed from Keith Avenue where Winnipeg Street would be constructed to provide access to the proposed residential development. Photos of the subject lands and the immediately surrounding residential area also illustrates the lower density urban residential nature of those lands situated to the east of Edward Avenue along both sides of Keith Avenue.

Public Consultation:

The statutory Notice of Application was provided to the public by newspaper and to nearby landowners and tenants located within 120 m (400 ft) of the subject lands on December 17, 2024. The statutory Notice of Public Hearing dated April 5,2025, was provided to the public by newspaper and to nearby landowners and tenants located within 120 m (400 ft) of the subject lands.

The owner and agent were also advised of the City's policy recommending that applicants consult with their neighbours, ward councilor and key stakeholders to inform area residents of the application prior to the public hearing. The applicant did not provide a strategy for consulting with the public on the request to amend the current rezoning application, however, based on the staff report dated March 22, 2021, staff understood that the owner's agent hosted a public information session in 2019.

At the time of writing this report, the Planning Services Division received a comment from a member of the public dated January 2, 2025, concerned about the potential impact of the housing development on traffic in the area. The comment was sent to the City of Greater Sudbury Traffic and Transportation Department for review. The Traffic and Transportation Department noted that the proposed development is below the threshold in which a Traffic Impact Study would be required.

Policy and Regulatory Framework:

The property is subject to the following policy and regulatory framework:

- 2024 Provincial Planning Statement (PPS);
- 2011 Growth Plan for Northern Ontario;
- Official Plan for the City of Greater Sudbury; and,
- Zoning By-law 2010-100Z.

The PPS and the Growth Plan for Northern Ontario, along with the City's Official Plan, provide a policy framework for land use planning and development in the City of Greater Sudbury. This framework is implemented through a range of land use planning controls such as, but not limited to, zoning by-laws, plans of subdivision and site plans.

2024 Provincial Planning Statement (PPS):

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters are consistent with the 2024 PPS. The following PPS policies are pertinent to the application for Zoning By-law Amendment:

Section 2.3.1 General Policies for Settlement Areas

- 1. Settlement areas shall be the focus of growth and development. Within settlement areas, growth should be focused in, where applicable, strategic growth areas, including major transit station areas.
- 2. Land use patterns within settlement areas should be based on densities and a mix of land uses which:
- a) efficiently use land and resources;
- b) optimize existing and planned infrastructure and public service facilities;
- c) support active transportation;
- d) are transit-supportive, as appropriate; and
- e) are freight-supportive.
- 3. Planning authorities shall support general intensification and redevelopment to support the achievement of complete communities, including by planning for a range and mix of housing options and prioritizing planning and investment in the necessary infrastructure and public service facilities.
- 4. Planning authorities shall establish and implement minimum targets for intensification and redevelopment within built-up areas, based on local conditions.
- 5. Planning authorities are encouraged to establish density targets for designated growth areas, based on local conditions. Large and fast-growing municipalities are encouraged to plan for a target of 50 residents and jobs per gross hectare in designated growth areas.
- 6. Planning authorities should establish and implement phasing policies, where appropriate, to ensure that development within designated growth areas is orderly and aligns with the timely provision of the infrastructure and public service facilities.

Section 2.4.1 General Policies for Strategic Growth Areas

- 1. Planning authorities are encouraged to identify and focus growth and development in strategic growth areas.
- 2. To support the achievement of complete communities, a range and mix of housing options, intensification and more mixed-use development, strategic growth areas should be planned:
 - a) to accommodate significant population and employment growth;
 - b) as focal areas for education, commercial, recreational, and cultural uses;
 - c) to accommodate and support the transit network and provide connection points for inter- and intra-regional transit; and
 - d) to support affordable, accessible, and equitable housing.

Growth Plan for Northern Ontario:

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters conform with the Growth Plan for Northern Ontario. Staff has reviewed the planning matters contained within the Growth Plan for Northern Ontario and are satisfied that the application for Zoning By-law Amendment conforms to and does not conflict with the Growth Plan for Northern Ontario.

Official Plan for the City of Greater Sudbury:

The subject lands are designated Living Area 1 in the Official Plan for the City of Greater Sudbury.

The Living Area 1 land use designation includes residential areas that are fully serviced by municipal water and sewer and are the primary focus of residential development. Living Area 1 is seen as areas of primary focus for residential development given the desire to utilize existing sewer and water capacity and reduce the impacts of un-serviced rural development. New residential development must be compatible with the existing physical character of established neighborhoods, with consideration given to the size and configuration of lots, predominant built form, building setbacks, building heights and other provisions applied to nearby properties in the City's Zoning By-law.

Section 3.2.1 of the City's Official Plan outlines that the Living Area 1 designation permits low density residential uses up to a maximum density of 36 units per hectare and medium density residential uses up to a maximum density of 90 units per hectare. Medium density housing should be located in close proximity to Arterial Roads, public transit, main employment and commercial areas, open space areas and community/recreational services. Medium density development is to be located where adequate servicing capacities exist along with a road system that can accommodate the growth. High-density residential development is permitted only in the community of Sudbury.

Section 2.3.2 notes that the subject lands are within both a Settlement Area and the City's Built Boundary as delineated in Schedule 3 — Settlement Area and Built Boundary. Settlement Area land use patterns are to be based on densities and land uses that make the most efficient use of land, resources, infrastructure and public service facilities, minimize negative impacts on air quality and climate change, promote energy efficiency and support public transit, active transportation and the efficient movement of goods. Intensification and development within the Built Boundary is to be encouraged, while development outside of the Built Boundary may be considered in accordance with the policies of the Official Plan.

Section 3.2.1(5) of the City's Official Plan specifically outlines those matters to be reviewed when considering applications to rezone lands within the Living Area 1 designation:

- a) The site is suitable in terms of size and shape to accommodate the proposed density and built form;
- b) The proposed development is compatible with the surrounding neighbourhood in terms of scale, massing, height, siting, setbacks and the location of parking and amenity areas;
- c) Adequate on-site parking, lighting, landscaping and amenity areas are provided; and,
- d) The impact of traffic on local streets is minimal.

Section 2.3.3 of the Official Plan generally acknowledges that intensification of a property at a higher density than what currently exists through the development of vacant or underutilized lots is encouraged throughout the City. Intensification is considered to be essential to completing communities, making the most efficient use of land, resources, infrastructure and public service facilities, minimizing negative impacts on air quality and climate change, promoting energy efficiency and supporting public transit, active transportation and the efficient movement of goods. The key to intensification is to ensure that it occurs in a context sensitive manner. Intensification must be compatible with and reinforced the existing and planned character of an area.

Specifically, Section 2.3.3 includes the following applicable intensification policies:

- 1. All forms of intensification are encouraged in accordance with the policies of the Official Plan;
- 2. The City will aim to accommodate 20% of future residential growth and development through intensification within the Built Boundary;
- 3. Large scale intensification and development is permitted in strategic core areas such as the Downtown, Regional Centres and major public institutions, in accordance with the policies of the Official Plan;
- 4. Medium scale intensification and development is permitted in Town Centres and Mixed-Use Commercial corridors, in accordance with the policies of the Official Plan;
- 5. Intensification and development is permitted in established Living Area 1 lands, in accordance with the policies of the Official Plan;
- 6. Intensification will be encouraged on sites that are no longer viable for the purpose for which they were intended such as former commercial, industrial and institutional sites. It will also be encouraged where the present use is maintained but the addition of residential uses can be added in a complementary manner;
- 7. Intensification will be encouraged on sites with suitable existing or planned infrastructure and public service facilities;
- 8. Intensification will be compatible with the existing and planned character of an area in terms of the size and shape of the lot, as well as the siting, coverage, massing, height, traffic, parking, servicing, landscaping and amenity areas of the proposal;
- 9. The following criteria, amongst other matters, may be used to evaluate applications for intensification:
 - a. The suitability of the site in terms of size and shape of the lot, soil conditions, topography and drainage;
 - b. The compatibility proposed development on the existing and planned character of the area;
 - c. The provision of on -site landscaping, fencing, planting and other measures to lessen any impact the proposed development may have on the character of the area;
 - d. The availability of existing and planned infrastructure and public service facilities;
 - e. The provision of adequate ingress/egress, off street parking and loading facilities, and safe and convenient vehicular circulation:
 - f. The impact of traffic generated by the proposed development on the road network and surrounding land uses;
 - g. The availability of existing or planned, or potential to enhance, public transit and active transportation infrastructure;
 - h. The level of sun -shadowing and wind impact on the surrounding public realm;
 - Impacts of the proposed development of surrounding natural features and areas and cultural heritage resources;
 - The relationship between the proposed development and any natural or manmade hazards;
 - k. The provision of any facilities, services and matters if the application is made pursuant to Section 37 of the Planning Act. Where applicable, applications for intensification of difficult sites may be subject to Section 19.7; and,
- 10. Residential intensification proposals will be assessed so that the concerns of the community

and the need to provide opportunities for residential intensification are balanced.

Section 17.2.1 of the City's Official Plan generally encourages diversity in housing types and forms. Specifically, in order to encourage a greater mix of housing types and tenures it is the policy of the City's Official Plan:

- a. To encourage a wide range of housing types and forms suitable to meet the housing needs of all current and future residents;
- b. To encourage production of smaller (i.e. one and two bedroom) units to accommodate the growing number of smaller households;
- c. To promote a range of housing types suitable to the needs of senior citizens;
- d. Discourage downzoning to support increased diversity of housing options; and,
- e. Support new development that is planned, designated, zoned and designed in a manner that contributes to creating complete communities designed to have a mix of land uses, supportive of transit development, the provision of a full range of housing including affordable housing, inclusive of all ages and abilities, and meet the daily and lifetime needs of all residents.

Section 19.5.4 of the City's Official Plan permits the passing of amending zoning by-law under Section 36 of the Planning Act that contains a holding provision in order to specify which lands, buildings and structures may be developed at some point in the future. Specifically, a holding provision may be utilized for the following purposes:

- 1. When certain details of development have not yet been determined, or where certain conditions of development have not yet been met such as, but not limited to, development or servicing agreements with the City;
- 2. When the level of community services and/or infrastructure is not yet adequate to support the proposed use;
- 3. Where environmental conditions or constraints temporarily preclude development or redevelopment; and/or,
- 4. Where required studies have not yet been approved by the City.

Zoning By-law 2010-100Z:

The owner is requesting that the subject lands be rezoned from "R1-5", Low Density Residential One to "R1-5 (S)" Low Density Residential Special, "R2-2", Low Density Residential Two and "R3" Medium Density Residential in order to permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street (formerly Willow Crescent) and to the north of Keith Avenue in Chelmsford. The development proposal would total a maximum yield of 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) should the land use permission that are being sought are fully utilized.

Department/Agency Review:

The application, including relevant accompanying materials, was circulated to all appropriate agencies and departments. Responses received from agencies and departments have been used to assist in evaluating the application and to inform and identify appropriate development standards in an amending zoning bylaw should the application be approved.

During the review of the proposal, comments provided by circulated agencies and departments included the following:

Roads, Active Transportation, Transportation and Innovation, Roads Operation have each advised that they have no concerns from their respective areas of interest.

Drainage has no comments; however, it is noted that no-site Stormwater Management was not shown on the concept plan. As a reminder, on-site Stormwater Management is required per Council's condition # 39. Drainage will provide comments during the plan of Subdivision Design Construction Drawing Submission phase.

Conservation Sudbury has no objection or requirements for the rezoning of lands at 0 Keith Ave and 0 Pinellas Rd from "R1-5" to "R1-5(S)", "R2-2", "R3" and the retained R1-5. Subject property contains a wetland located at the south east corner and there is a historical watercourse bed that traverses the subject lands. Subject lands may also include unmapped watercourses and wetlands. Regulatory requirements for these hazards will be detailed prior to development or at the next draft plan approval extension.

Development Engineering noted that the approved construction drawings for this development, dated March 2022, have not been updated to reflect the stormwater management requirements imposed in March 2023. As such, the developer's engineer was notified that to proceed to construction they would need to update their design to meet the current draft plan of subdivision requirements. It is our understanding that the request at this time is for the Zoning By-law amendment only, and that the construction drawings and/or the lot fabric will be modified to suit. As the lot fabric on the previously approved construction drawings do not align with the lot fabric provided with this request, we understand that the construction drawings will be modified to match what is proposed.

Environment Planning has no concerns with this application.

BUILDING SERVICES COMMENTS:

We have reviewed your memo dated December 17, 2024, and based on the information provided, Building Services has the following comments:

- 1) We acknowledge the request to change the zoning classification on a portion of the subject lands from R1-5 (Low Density Residential) to R1-5(S) (Low Density Residential Special) to permit a reduced frontage of 15.0 m and a reduced lot area of 450.0 m² where 17.0m and 465.0 m² are required respectively. Building Services has no concerns with the requested site-specific relief.
- 2) In relation to the parts of the site plan identified as proposed R2-2 lots for semi-detached dwellings, to ensure the minimum required lot frontage and lot depths have been met in accordance with the Zoning By-Law 2010-100Z, the site plan should reflect the dimension for a line which is parallel, and a 6.0 metre distance from the front lot line (at the street line). A dimension for the depth of the lots should also be provided. Building services advised staff that this requirement has been satisfied.
- 3) Building Services will reserve further comment until Plan of Subdivision.

Applicant/Owner to also be informed of the following information:

- 4) Applicant/Owner to be aware that numerous lots identified on the site plan are located within a flood plain. The applicant should be aware that if building in an area of flood plain, some restrictions may apply. Special design considerations may be required on footings, foundations, and flood proofing.
- 5) Building permit and building permit documents to be submitted to the satisfaction of the Chief Building Official.

Planning Analysis:

The 2024 PPS, the 2011 Growth Plan, and the City of Greater Sudbury Official Plan, and other relevant policies and supporting guidelines were reviewed in their entirety. The following section provides a planning analysis of the application with respect to the applicable policies, including issues raised through agency and department circulation.

The proposed rezoning is consistent with the PPS for the following reasons:

- 1. The community of Chelmsford is an identified settlement area in the City's Official Plan. The proposed rezoning to permit the development of 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) would represent an improved mix of residential use and built-form permissions in this part of Chelmsford and should be promoted and is considered to be good land use planning.
- 2. Staff is of the opinion that the proposed development contributes positively to improving the mix of densities and land uses that would be permitted in this particular area along Keith Avenue and future Winnipeg Street in the community of Chelmsford. Staff notes that the lands are generally capable of being serviced with municipal water and sanitary sewer from Keith Avenue. Access to public transportation via GOVA is available to the west along Edward Avenue (i.e. Route 104 Azilda/Chelmsford), which provides direct route access to both the Chelmsford Community Hub and the Downtown Hub. Active transportation is also an option as there is an existing sidewalk along Keith Avenue providing a pedestrian connection to Edward Avenue to the west. Edward Avenue also has a sidewalk providing a further pedestrian connection opportunity to Highway #144 to the south of the lands. There are also a number of public open space and community facilities (e.g. Chelmsford Community Centre & Arena) that can be accessed through active transportation infrastructure that exists in the general area. Staff is of the opinion that the proposed rezoning will result in a good intensified use of the subject lands from a good land use planning perspective;
- 3. Staff is of the opinion that the application to rezone the lands will improve the possible mix of land use patterns in the general area and will serve to encourage and provide for increased housing opportunities in terms of promoting the intensification of a vacant and therefore underutilized lot located within the Chelmsford settlement area:
- 4. Staff is supportive of the opportunity for residential intensification and has noted above that public transportation is located in close proximity to the subject lands. The proposed residential intensification in this instance would facilitate the development of up to 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, and 56 street townhouse dwellings) should the proposed rezoning be approved and utilized to the fullest extent by the owner. Staff is satisfied that the proposed and resulting mix of urban residential uses and built-forms be reasonably accommodated on the lands with minimal disruption to abutting residential land uses. Suitable municipal infrastructure is also generally available subject to appropriate extensions and connections being made and staff would therefore encourage intensification in this location;
- 5. Staff is of the opinion that appropriate development standards can be achieved through the rezoning process that facilitates good and reasonable intensification that encourages a compact built-form, while avoiding or mitigating risks to public health and safety. Staff is satisfied that this particular mix of permitted residential uses and built-forms is well suited for the lands. Further to this, the "R1-5(S)", "R2-2", retained R1-5 and "R3" Zones that are being recommended by staff will ensure that the resulting development is reasonably accommodated and not out of character or excessive in nature given the site context;
- 6. Staff notes that the subject lands are surrounded by and adjacent to an existing and built-up urban residential area. It is further noted that the lands are also within the City's existing built-boundary. Staff is therefore of the opinion that together the proposed rezoning would facilitate and encourage the possibility of development proceeding in this area with a more compact built-form having a mix of urban residential uses at a density that will utilize the subject lands efficiently from a land, infrastructure and public service facilities perspective;

- 7. With respect to housing policies in the PPS, staff advises that in general the development proposal would contribute positively to the City's range and mix of housing options and densities to meet projected requirements for both current and future residents in Chelmsford. The proposed development would also continue to contribute positively to the City's requirement for the supply of residential units with servicing capacity that are suitably zoned to facilitate residential land for intensification and redevelopment; and,
- 8. More specifically, staff would note the following with respect to housing policies:
 - a) The proposed mix of urban residential land uses and built-forms would in general provide for an expanded range and potentially mix of housing options and densities in the community of Chelmsford. Staff is satisfied that no negative impacts would be generated should the rezoning be approved from a social, health, economic and well-being perspective in terms of those current and future residents living in the local community;
 - b) Staff is generally supportive of the proposed residential intensification and inclusion of semi-detached dwellings and street townhouses as permitted uses in addition to singledetached dwellings. The mix of residential uses and built-forms that would be permitted is not considered to be excessive from the perspective of balancing intensification opportunities against ensuring that there are no disruptions to the existing character of this particular urban residential neighbourhood in this part of Chelmsford;
 - c) Staff is satisfied through their review and circulation of the rezoning application that the proposed 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) can and should be appropriately directed to the subject lands as appropriate levels of municipal infrastructure (i.e. sanitary sewer and water infrastructure, public transportation, etc.) are presently available;
 - d) Staff is of the opinion that the development proposal would generally result in the efficient use of land and available municipal infrastructure. It is also noted that the improved housing options in this area would positively contribute to and encourage the use of public transportation in the immediate area;
 - e) Staff notes that there are at present no identified issues with respect to prioritization of intensification in the immediate area. Staff would further note that the development proposal would not negatively impact other intensification opportunities that may exist in the area; and,
 - f) Staff is satisfied that appropriate development standards contained within the existing standard "R1-5", "R2-2" and "R3" Zones can be utilized in an amending zoning by-law to accommodate the proposed development of the subject lands without negatively affecting the cost of housing and the existing character of the area. No negative impacts on public health and safety were identified through the review and circulation of the rezoning application.

Staff in general has no concerns with respect to the proposed rezoning conforming to the applicable policies in the Official Plan for the City of Greater Sudbury. Those policies relevant to the development proposal that would permit 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units and 56 street townhouse dwellings) are discussed below.

With respect to general Living Area 1 policies in the Official Plan that are applicable to the subject lands, staff notes that the proposed 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) would yield an overall site density of approximately 21 residential dwelling units per hectare, which is permitted and within the threshold of those low density residential policies set out and permitted in the City's Official Plan.

Staff notes that the lands have frontage on a Local Road (i.e. Keith Avenue) and are directly connected to a Collector Road (i.e. Edward Avenue). It is further noted that Winnipeg Street would be considered to be a Local Road once constructed. The nearest bus stop to the lands is situated approximately 68 m (223.10 ft) to the west on Edward Avenue. The lands are also situated in close proximity at a distance of approximately 400 m (1,312.34 ft) to a Provincial Highway (i.e. Highway #144) that provides further direct access to public transportation options. Staff is of the opinion that sufficient open space areas and community/recreational activities are also available in the general area of the subject lands. Staff notes that the lands are capable of being serviced by municipal water and sanitary sewer infrastructure.

Staff further notes that the subject lands are identified as being located within the Chelmsford Settlement Area and Built Boundary as delineated in Schedule 3 — Settlement Area and Built Boundary to the City's Official Plan. Staff advises that the proposed 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings) represents an opportunity to make efficient use of existing urban land supply and planned or available municipal infrastructure and other services that are already provided for within the City's Settlement Area and Built Boundary. Staff is further satisfied that no site-specific development standards would appear to be required in order to accommodate the proposed intensified residential land uses.

With respect to applicable intensification policies set out under Section 2.3.3 of the Official Plan, staff has the following comments:

- Staff notes that in general all forms of residential intensification are encouraged in the City's
 Official Plan. Staff further advises in this instance that the subject lands form a vacant and
 underutilized lot in the middle of a built-up urban residential environment. Provided that
 appropriate development standards (i.e. "R1-5", "R2-2" and "R3") are applied to the lands, staff is
 of the opinion that this form of residential intensification can be reasonably accommodated on the
 subject lands;
- 2. Staff notes that the proposed development would constitute development within the Built Boundary as these vacant lands are entirely surrounded by a built-up urban residential environment:
- 3. Staff in general has no concerns with respect to the proposed intensification in terms of compatibility with the existing and planned character of the area. Additionally, staff has no concerns regarding the size and shape of the lots and blocks, or the siting, coverage, massing, height, traffic, parking, servicing, landscaping and amenity areas of the development proposal that would facilitate construction of up to 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, 56 street townhouse dwellings).

In particular, with respect to applicable criteria set out in Section 2.3.3 that are being considered when evaluating applications that propose intensification, staff has the following comments:

- 1. Staff is generally of the opinion that the subject lands are of sufficient size and shape to accommodate up to a maximum of 67 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling units, and 56 street townhouse dwellings). Staff is satisfied that the Concept Plan demonstrates that the proposed development can be situated on the lands without requiring any site-specific relief that may cause or introduce conflict between land uses in the area. Staff can also advise that circulated agencies and departments identified no concerns with respect to topography during the review of the rezoning application;
- 2. Staff has noted in this report that the subject lands are generally surrounded by a mix of urban residential built forms and lower residential densities in this particular area of Chelmsford. The introduction of street-townhouses in particular to the area is considered compatible with the existing residential character of the area and an appropriate transition between existing lower density residential uses (e.g. single-detached and semi-detached dwellings). Medium density-built forms such as street-townhouses can be achieved through applying the appropriate development standards contained in the "R3" Zone, as well as those general provisions that require planting strips between said types of residential land uses. It is on this basis that staff are satisfied that the development proposal would not present any compatibility issues with respect to the existing and planned residential character that exists along Keith Avenue and Armand Crescent;
- 3. Staff is satisfied that the lands are capable of providing adequate on-site landscaping, fencing, planting and other measures that will have the effect of lessening any impacts that the development proposal would have on abutting properties or the existing urban residential character that exists along surrounding local streets. Staff would note however that the above opinion is based upon the street townhouses being zoned "R3" which properly contemplates the interface between lower density (e.g. "R1-5" & "R2-2") and medium density residential land uses in terms of minimum lot areas, minimum yard setbacks, planting strips, fencing, and so on;

- 4. Staff notes that the development proposal would involve the construction of a local road (i.e. Winnipeg Street) that is depicted on Plan M-1058, which was registered on August 3, 1977. Staff is of the opinion that the land uses proposed will be capable of providing adequate ingress and egress in terms of driveway entrances onto Winnipeg Street. It is further anticipated that appropriate off-street parking will be provided for each of the residential dwelling units as required under Part 5 Parking Provisions of the City's Zoning By-law. For clarity purposes, single-detached, semi-detached and street-townhouse dwellings are required to provide one parking space per dwelling unit located outside of the required front yard. The owner has not requested any site-specific relief as it relates to parking provisions. Staff also has no concerns with safe and convenient vehicular circulation that would be facilitated along Winnipeg Street and other surrounding local streets;
- 5. Roads, Traffic and Innovation reviewed the rezoning application and did not express any concerns with respect to any negative impacts related to the traffic that would be generated by the proposed development on the local road network and surrounding land uses.
- 6. As noted previously in this report, the lands are well accessed by public transportation to the west as GOVA is available to the west along Edward Avenue (i.e. Route 104 Azilda/Chelmsford), which provides direct route access to both the Chelmsford Community Hub and the Downtown Hub. As mentioned earlier, that the nearest transit stop is situated approximately 68 m (223.10 ft) to the west on Edward Avenue. There is also an existing sidewalk along the north side of Keith Avenue providing an existing active transportation link to Edward Avenue and out toward Highway #144 to the south of the lands:
- 7. Staff does not anticipate that any negative sun-shadowing and/or uncomfortable wind conditions would be generated on surrounding streets, parks and open spaces should the proposed rezoning be approved. It is noted that the proposed buildings would each be permitted to have a maximum height of 11 m (36.09 ft) as per the recommended "R1-5" (S), "R2-2" and "R3" Zone standards and sun-shadowing and/or uncomfortable wind conditions are not normally associated with buildings of this particular height;
- 8. In their review of the application, staff did not identify any areas of concern with respect to negative impacts of the development proposal on surrounding natural features and areas and cultural heritage resources;
- 9. Staff has no concerns with respect to the relationship between the proposed development and any nearby-identified natural or manufactured hazards.
- 10. There are no facilities, services or other matters associated with the development proposal that are subject to Section 37 of the Planning Act; and,
- 11. Staff generally concludes and would advise that the proposed residential intensification along Winnipeg Street would balance the concerns of the local community with the identified need for providing opportunities for residential intensification in the community of Chelmsford.

With respect to housing policies established under Section 17.0 of the Official Plan, staff notes that in general the development proposal would contribute positively to the range of housing types and forms available to both current and future residents of Chelmsford. Staff also understands that the proposed semi-detached dwellings and street townhouse dwellings could potentially offer and provide for a range of smaller (i.e. two bedroom) units that are capable of accommodating smaller households. Staff notes that future owners may utilize the City's secondary dwelling unit permissions to increase the range of housing options even further. The development proposal may also positively contribute to and provide for an additional housing option for senior citizens living in Chelmsford. Staff also advises that the proposed rezoning does not amount to a down-zoning of the subject lands. Staff is supportive of the rezoning from a housing perspective on the basis that it would contribute positively to the notion of creating complete communities designed to have a mix of land uses that are supportive of transit development and that offer the opportunity for providing affordable housing to people of all ages and abilities.

Staff is therefore of the opinion that the proposed rezoning conforms to the Official Plan for the City of Greater Sudbury.

The owner is requesting that the lands be rezoned from "R1-5", Low Density Residential One to "R1-5 (S)" Low Density Residential Special, "R2-2", Low Density Residential Two and "R3" Medium Density Residential. Apart from the site-specific relief for "R1-5 (S)" for lot frontage and area relief, development of the lands is expected to occur in compliance with the zoning that would be applicable to the lands should the application be approved. The special provisions required for Lot 94 on Registered Plan M-1058 can be confirmed through the registered survey plan that will be required in order to prepare an amending zoning by-law for the lands. Staff in general has no concerns with the requested "R1-5 (S)", "R2-2", retained R1-5 and R-3" zone categories.

Staff notes that a registered survey plan will be required in order to prepare the amending zoning bylaw for the legal description of the lands being those lands described as Lots 64-93, Pt Lot 94, 97-117, Blocks D, Part of Block C & E, Plan M-1058, Lot 1, Concession 3, Township of Balfour.

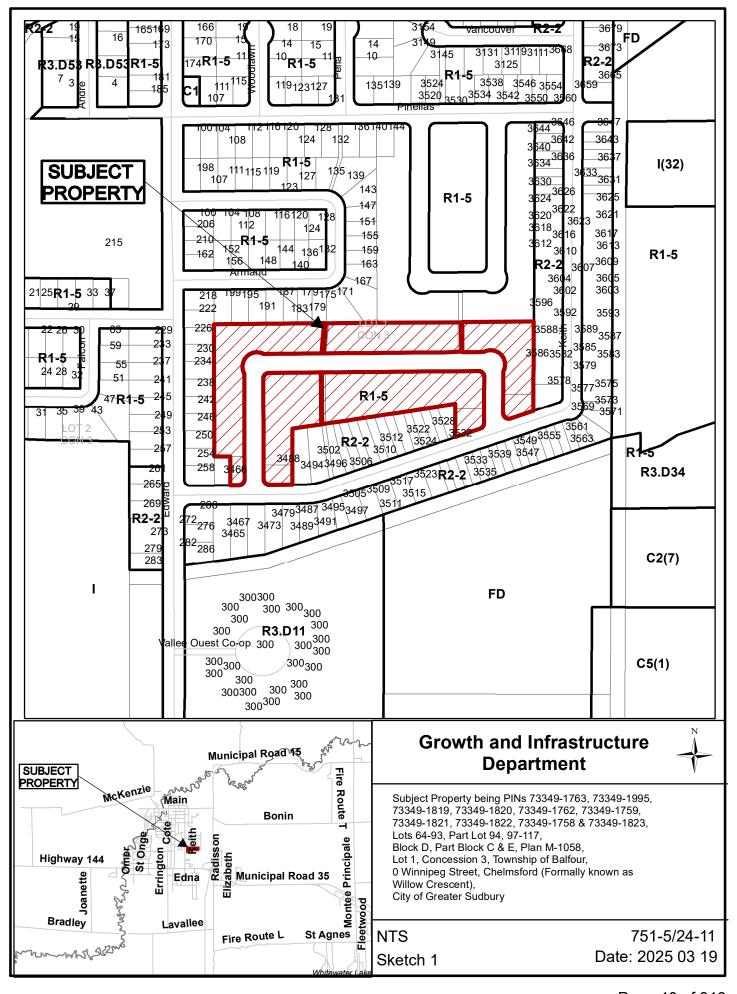
Conclusion:

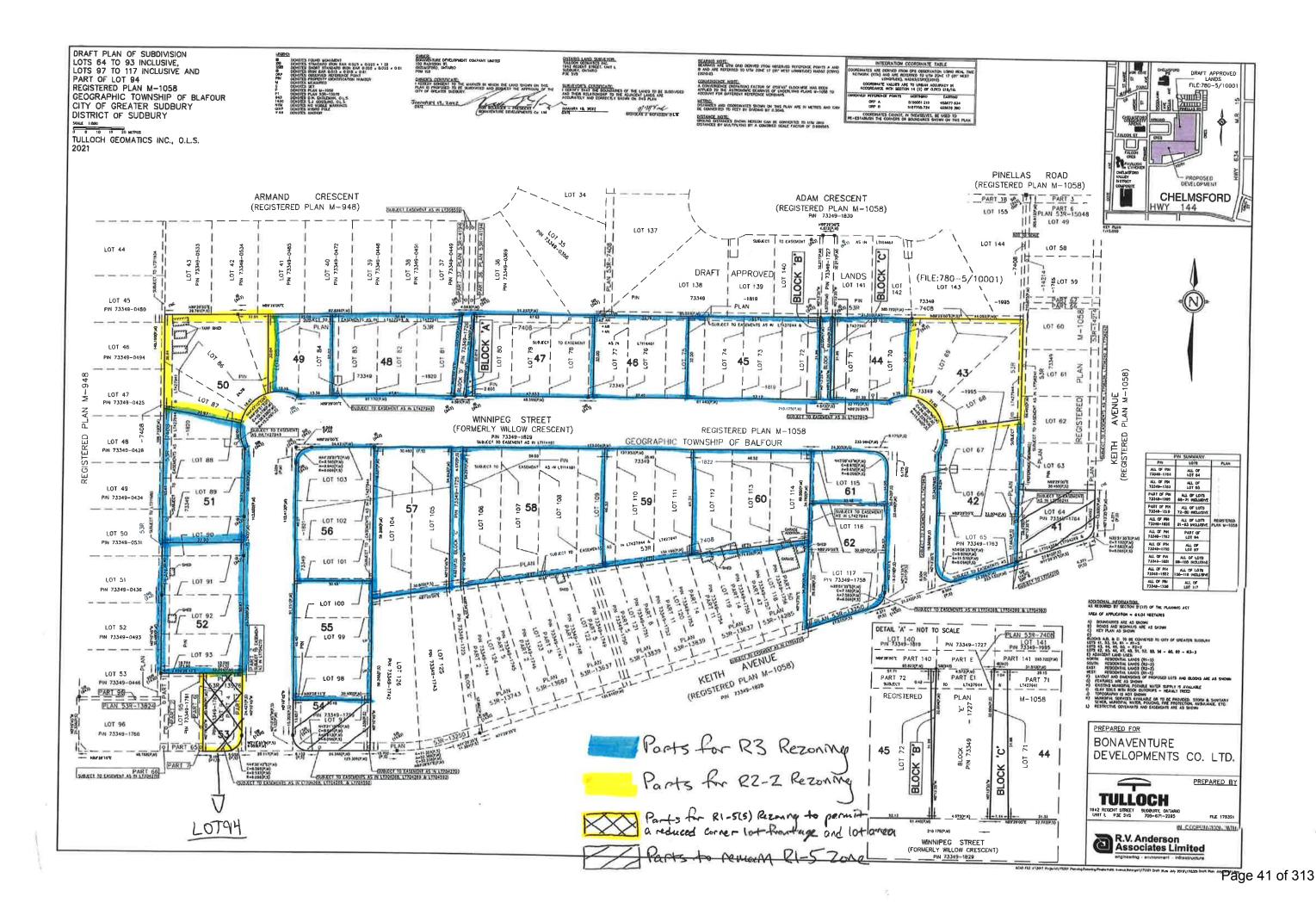
Staff has reviewed the development proposal and is generally satisfied that it conforms with the Official Plan for the City of Greater Sudbury. The development proposal is also generally consistent with the land use planning policy directions identified in the PPS. Staff also notes that the application conforms to and does not conflict with the Growth Plan for Northern Ontario.

The following are the principles of the proposed and recommended site-specific amending zoning by-law:

- 1. That the lands be rezoned to "R1-5 (S)" Low Density Residential Special, for Lot 94, "R2-2", Low Density Residential Two, retained portion of R1-5 and "R3" Medium Density Residential;
- 2. That the only site-specific relief provided be on those lands legally described as being Lot 94 on Registered Plan M-1058 to permit a reduced frontage of 15.0 m and a reduced lot area of 450.0 m² where 17.0 m and 465.0 m² are required respectively;
- 3. That a holding provision be utilized in order to ensure that prior to development:
 - a) That the owner prepares required materials, submit said materials for review and receive all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure;

The Planning Services Division therefore recommends approval of the application for Zoning By-law Amendment in accordance with the Resolution section of this report.





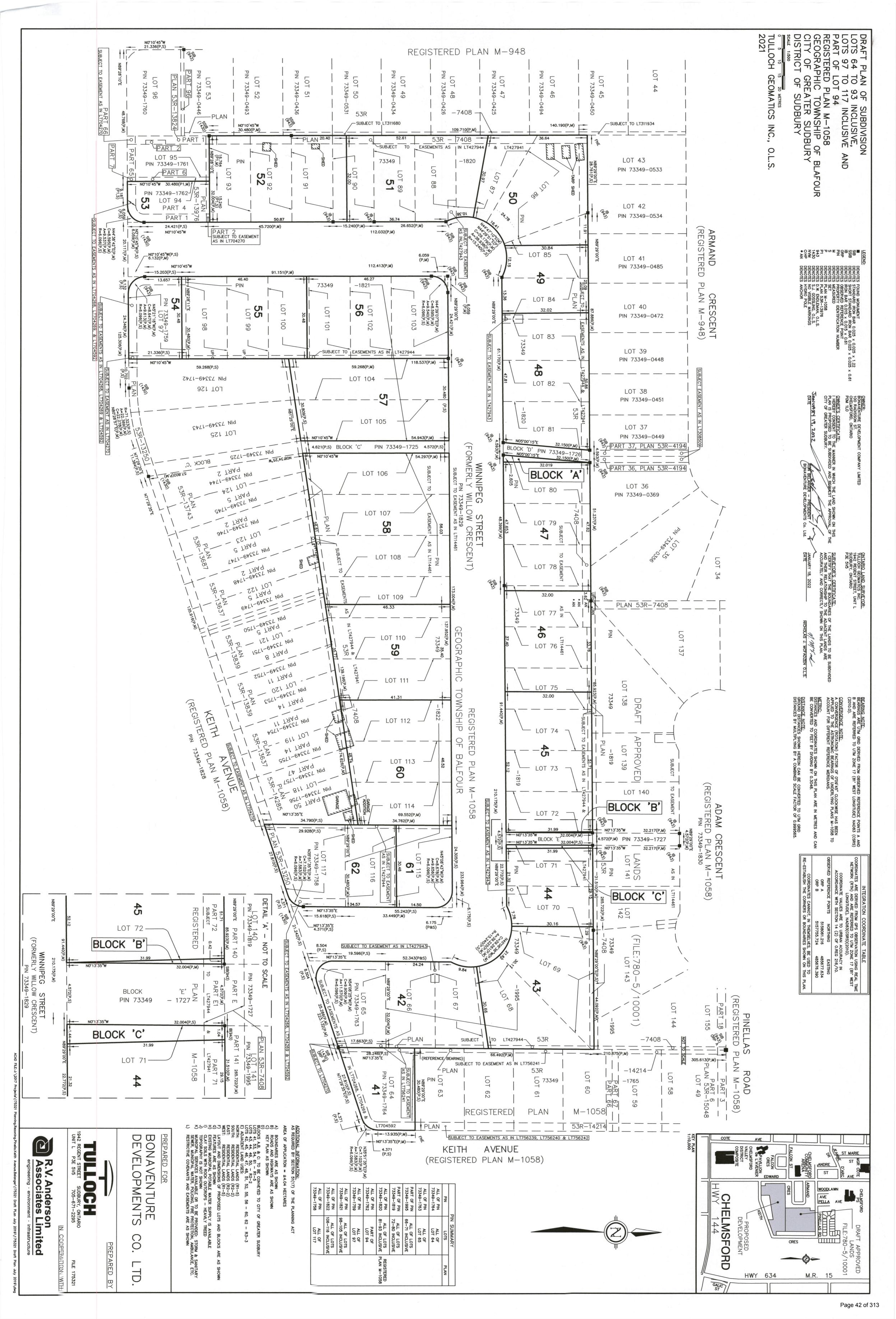




Photo # 1 Subject lands as viewed from Pinellas Road looking north to Keith Avenue. Photo taken February 27, 2025. CGS File 751-5/24-11



Photo # 2 – Subject lands as viewed from Keith Avenue looking north-west at the planned easterly access point of Winnipeg Street onto Keith Avenue. Photo taken February 27, 2025. CGS File 751-5/24-11.



Photo #3 – Existing low density residential development situated on the north side of Keith Avenue looking north-west. Photo taken February 27, 2025. CGS File 751-5/24-11.

Request for Decision PLANNING COMMITTEE

Alex Singbush,

Manager of Development Approvals



Tony Cecutti, General Manager

Growth & Infrastructure Services

				Ţype	of Decision			
Meeting Date	ng Date May 8, 2023			ic	Report Date	March 29, 2023		
Decision Requested	x	Yes		No	Direction Only			
				Re	port Title			
0 Keith Avenue & 0 Pi	nellas l	Road, (Chelms	sford				
Section Review				Div	ision Review	Department Review		
Mar Gnot	huch			7				

Kris Longston,

Director of Planning Services

Budget Impact		Resolution
This report has been reviewed by the and the funding source has been iden		THAT the City of Greater Sudbury approves the application by Bonaventure Development Company Ltd. to extend the approval of a Zoning By-law Amendment Application, File # 751-5/18-5, on those lands described as Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C, Plan M-1058, Lot 1, Concession 3, Township of Balfour, for a period of one year until April 13, 2024, as outlined in the report entitled "0 Keith Avenue & 0 Pinellas Road, Chelmsford" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting of May 8, 2023.
Background Attached		X Resolution Continued
Recommended by the De		Recommended by the C.A.O.
Report Prepared By:	File #	
Glen Ferguson Senior Planner	751-5/18-5	Ed Archer

ager of Growth ing Committee d Page 46 of 313

Date: March 29, 2023

Relationship to the Strategic Plan, Health Impact Assessment, and Community Energy and Emissions Plan (CEEP):

The application to extend a conditional rezoning approval under the City's Zoning By-law is an operational matter under the Planning Act to which the City is responding.

The development proposal will further contribute to the introduction of new housing options in Chelmsford and is therefore consistent with the goals and objectives (eg. Goal #5 – Housing) of the City's Strategic Plan. The current application to extend the conditional rezoning approval is therefore also considered to be consistent with the goals and objectives identified in the City's Strategic Plan.

As a form of residential intensification in the existing built-up community of Chelmsford, the development proposal aligns with the recommendations of the CEEP. The current application to extend the conditional rezoning approval that is applicable to the lands is therefore not expected to have any direct negative impacts on stated goals and recommendations contained within the CEEP.

Report Overview:

This application reviews a request to extend the approval of a rezoning application that would permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street on a block of land situated to the north of Keith Avenue and to the south of Pinellas Road in the community of Chelmsford. The development proposal would yield a maximum of 65 urban residential dwelling units (ie. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) should the land use permissions be utilized to their fullest extent. It is noted that a registered survey plan is to be provided as a condition of approval in order to enact an amending zoning by-law with holding provisions as outlined in the original resolution and accompanying staff report on the proposed rezoning of the lands. The original resolution and accompanying original staff report are both attached to this report for reference purposes. This is the first request to extend the conditional rezoning approval that was granted by the City's Planning Committee and Council. The processing fee for the requested extension has also been provided by the owner's agent. The Planning Services Division is recommending that the rezoning approval be extended for a one-year period until April 13, 2024.

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Title: Bonaventure Development Company Ltd.

Date: March 29, 2023

STAFF REPORT

Applicant:

Bonaventure Development Company Ltd.

Location:

Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C, Plan M-1058, Lot 1, Concession 3, Township of Balfour (0 Keith Avenue & 0 Pinellas Road, Chelmsford)

Application:

To extend a conditional rezoning approval on the subject lands that would amend By-law 2010-100Z being the Zoning By-law for the City of Greater Sudbury by changing the zoning classification of the subject lands from "R1-5", Low Density Residential One to "R1-5(S)", Low Density Residential One Special, "R2-2", Low Density Residential Two and "R3", Medium Density Residential.

Proposal:

Staff received a letter via email from the owner's agent dated March 23, 2023, requesting that the conditional rezoning approval be extended for a period of one year until April 13, 2024. If approved, this current request would be the first extension granted by the City's Planning Committee and Council. The owner has advised that they intend on continuing to work on the condition of rezoning approval that was approved by the City's Planning Committee and then later ratified initially by Council on April 13, 2021.

The rezoning once completed would permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street on a block of land situated to the north of Keith Avenue and to the south of Pinellas Road in the community of Chelmsford. The development proposal would yield a maximum of 65 urban residential dwelling units (ie. 3 single-detached dwellings, 8 semi-detached dwellings, 54 street townhouse dwellings) should the land use permissions be utilized to their fullest extent.

Site Description & Surrounding Land Uses:

The subject lands are generally bounded by Pinellas Road to the north, Keith Avenue to both the south and to the east and Edward Avenue to the west in the community of Chelmsford. The southerly portion of the lands that are to be rezoned have a total lot area of approximately 3.12 ha (7.71 acres) along with approximately two existing frontages along Keith Avenue measuring approximately 65.84 m (216.01 ft) on a westerly portion and 115.02 m (377.36 ft) along an easterly portion. The lands to be rezoned are presently vacant.

Surrounding uses are predominantly urban residential in nature comprised of a variety of built-forms ranging from single-detached dwellings to a medium density residential development (i.e. Co-Operative D'Habitation Vallee Ouest). There are also several large tracts of vacant urban lands in the surrounding area. The lands are also in close proximity to the Chelmsford Community Centre and Arena to the west and two public schools to south-west.

Title: Bonaventure Development Company Ltd.

Date: March 29, 2023

Planning Considerations:

The rezoning application was originally approved by the City's Planning Committee through recommendation PL2021-063 on March 22, 2021, which was later ratified by Council on April 13, 2021. The rezoning approval is conditional upon a registered survey of the lands being provided in order to allow for the preparation of an amending zoning by-law. Staff notes that the amending zoning by-law once prepared will include a holding provision that would not be removed from the lands until certain conditions are satisfied. The following items are to be included in a holding provision applicable to the subject lands:

- 1. That the owner has applied for and received all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure That the owner complete a Transportation Demand Management report to the satisfaction of the Director of Planning Services;
- 2. That the owner demonstrate that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury;
- 3. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the suitability of development to the satisfaction of Conservation Sudbury.

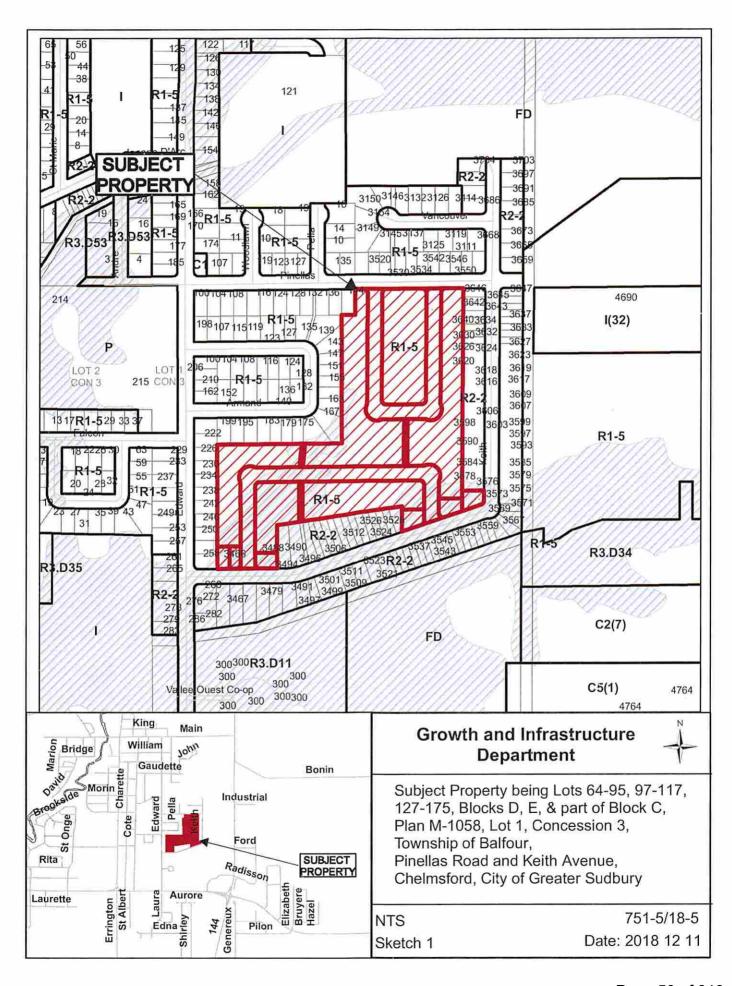
The owner's agent has indicated to staff in their request to extend their initial conditional rezoning approval that they wish to continue to pursue the rezoning of the subject lands. At the time of writing this report, a registered survey necessary for the purposes of enacting the amending zoning by-law has not been submitted. Staff notes that the owner's agent has noted in their extension letter request that they are proceeding soon with registration of survey plan that will allow for an amending zoning by-law to be prepared and enacted by Council.

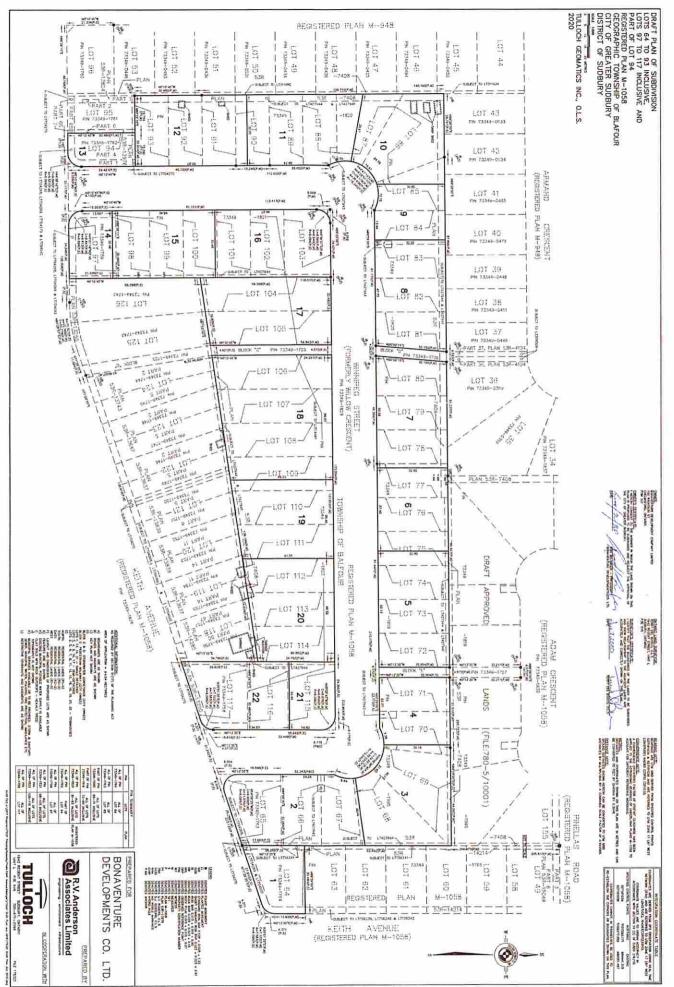
A copy of the <u>approved resolution</u> (refer to Pages 6 & 7) from the City's Planning Committee, which was ratified by Council on April 13, 2021, is attached to this planning report for reference purposes. A copy of the original <u>staff report</u> which recommended approval of the rezoning application is also attached to this planning report for reference purposes.

Staff has reviewed the request to extend the rezoning approval and has no concerns with a one-year extension at this time, but would reiterate that the amending zoning by-law with holding provision can only be enacted once a registered survey plan is provided which describes the lands that are to be rezoned.

Summary:

The owner's agent has indicated to staff that they wish to continue pursuing the rezoning of the subject lands, which would permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street on a block of land situated to the north of Keith Avenue and to the south of Pinellas Road in the community of Chelmsford. The development proposal would yield a maximum of 65 urban residential dwelling units should the land use permissions be utilized to their fullest extent. The original rezoning approval granted by the City's Planning Committee and Council is conditional upon a registered survey being provided to the Planning Services Division in order to allow for the preparation of an amending zoning by-law. This current request to extend the conditional rezoning approval would be the first extension granted by the City's Planning Committee and Council. The amending zoning by-law would eventually also include a holding provision tied to further conditions as outlined in this report. The owner's agent has provided the processing fee necessary for this conditional rezoning extension request. Staff therefore has no concerns and recommends approval of the request to extend the rezoning approval as it pertains to the subject lands for a period of one year until April 13, 2024.





Chy ,

Planning Committee Resolutions



Moved By Crucillor McCrustand No. PL2021-63
Seconded By Courtillor Landy-Altmon Date Monday, March 22, 2021

THAT the City of Greater Sudbury approves the application by Bonaventure Development Company Ltd. to amend Zoning By-law 2010-100Z zoning classification on the subject lands from "R1-5", Low Density Residential One to "R1-5", Low Density Residential Special, "R1-5(S)", Low Density Residential One Special, "R2-2", Low Density Residential Two and "R3", Medium Density Residential on those lands described as Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C, Plan M-1058, Lot 1, Concession 3, Township of Balfour, as outlined in the report entitled "Keith Avenue & Pinellas Road, Chelmsford," from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on March 22, 2021, subject to the following conditions:

- 1. That prior to the passing of an amending zoning by-law the owner shall submit a registered survey plan describing the lands to be rezoned to the satisfaction of the Director of Planning Services;
- 2. That a holding provision be applied to the lands and that the holding provision not be removed from the lands until such time as the following items have been addressed:
- a. That the owner has applied for and received all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure;
- b. That the owner demonstrate that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury;
- c. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the suitability of development to the satisfaction of Conservation Sudbury; and,
- 3. That the holding provision continue to permit only those residential land uses and accessory uses permitted in the standard "R1-5" Zone until Council has removed the holding provision.
- 4. That conditional approval shall lapse on April 13, 2023 unless Condition #1 above has been met or Council has granted an extension.

YEAS: McCausland Leduc Landry-ALtmann Kirwan

CARRIED

Monday, March 22, 2021

Councillor Kirwan, Chair

Committee Resolutions are not ratified until approved by City Council.



Bil	I 73 Requirements	Public Hearing No
	Regarding Re	esolution No. PL2021- 63
		Date March 22, 2021
Opti	on 1:	
	As no public comment, written or oral, has been recei Planning Committee's decision.	ved, there was no effect on the
•	on 2:	
	 Public comment has been received and considered a Committee's decision as the application represents get 	nd had no effect on Planning ood planning.
Opti	on 3:	
	Public comment has been received and considered a decision in the following manner:	nd has effected Planning Committee's
а)	
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e)		

Councillor Kirwan, Chair

ONLY THE OR GINAL OF THE MOTION IS AN OFFICIAL DOCUMENT



Request for Decision

Keith Avenue & Pinellas Road, Chelmsford

Presented To: Planning Committee
Presented: Monday, Mar 22, 2021
Report Date Monday, Feb 22, 2021
Type: Public Hearings
File Number: 751-5/18-05

Resolution

THAT the City of Greater Sudbury approves the application by Bonaventure Development Company Ltd. to amend Zoning By-law 2010-100Z zoning classification on the subject lands from "R1-5", Low Density Residential One to "R1-5", Low Density Residential One Special, "R2-2", Low Density Residential Two and "R3", Medium Density Residential on those lands described as Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C, Plan M-1058, Lot 1, Concession 3, Township of Balfour, as outlined in the report entitled "Keith Avenue & Pinellas Road, Chelmsford," from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on March 22, 2021, subject to the following conditions:

- 1. That prior to the passing of an amending zoning by-law the owner shall submit a registered survey plan describing the lands to be rezoned to the satisfaction of the Director of Planning Services:
- 2. That a holding provision be applied to the lands and that the holding provision not be removed from the lands until such time as the following items have been addressed:
- a. That the owner has applied for and received all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure;

Signed By

Report Prepared By

Glen Ferguson Senior Planner Digitally Signed Feb 22, 21

Manager Review

Alex Singbush Manager of Development Approvals Digitally Signed Feb 22, 21

Recommended by the Division

Stephen Monet Manager of Environmental Planning Initiatives

Digitally Signed Feb 22, 21 Financial Implications

Apryl Lukezic Co-ordinator of Budgets Digitally Signed Mar 7, 21

Recommended by the Department

Tony Cecutti General Manager of Growth and Infrastructure Digitally Signed Mar 8, 21

Recommended by the C.A.O.

Ed Archer Chief Administrative Officer Digitally Signed Mar 8, 21

- b. That the owner demonstrate that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury;
- c. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the

suitability of development to the satisfaction of Conservation Sudbury; and,

- 3. That the holding provision continue to permit only those residential land uses and accessory uses permitted in the standard "R1-5" Zone until Council has removed the holding provision.
- 4. That conditional approval shall lapse on April 13, 2023 unless Condition #1 above has been met or Council has granted an extension.

Relationship to the Strategic Plan / Health Impact Assessment

The application to amend the City's Zoning By-law is an operational matter under the Planning Act to which the City is responding.

Report Summary

This report reviews an application for Zoning By-law Amendment that seeks to permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street (formerly Willow Crescent) and to the north of Keith Avenue in Chelmsford. The submitted Concept Plan depicts a total maximum yield of 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) should the land use permissions that are being sought utilized to the fullest extent.

The proposed rezoning requests to change the zoning classification on the subject lands from "R1-5", Low Density Residential One to "R2-2", Low Density Residential Two and "R2-3", Low Density Residential Two, along with the retention of a north-easterly portion of the lands that are to remain "R1-5", Low Density Residential One. The owner has not requested any site-specific relief. Staff in general has no concerns with the requested "R1-5" and "R2-2" zone categories, but are not able to support the requested "R2-3" zone category, as it would be an inappropriate use in this particular location. The "R2-3" Zone is applied only to those older sections of the Sudbury community that have traditionally smaller lots with limited off-street parking opportunities. However, staff is supportive of applying the standard "R3" Zone to those lands that the owner has requested to be zoned "R2-3" as the proposed land use (i.e. street townhouses) are a medium density residential use that is contemplated by the "R3" development standards.

Conservation Sudbury and Development Engineering are supportive of the rezoning application, provided that a holding provision is applied to the lands in order to address a number of issues that must be resolved prior to development occurring on the lands. Specifically, the following matters are to be addressed with the use of a holding provision:

- 1. That the owner prepare required materials, submit said materials for review and receive all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure;
- 2. That the owner demonstrate that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury; and,
- 3. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the suitability of development to the satisfaction of Conservation Sudbury.

Staff is satisfied that the development proposal generally conforms with the Official Plan for the City of Greater Sudbury. The development proposal is also generally consistent with the land use planning policy

directions identified in the PPS. Staff also notes that the application conforms to and does not conflict with the Growth Plan for Northern Ontario.

The Planning Services Division is recommending approval of the application for Zoning By-law Amendment in accordance with the Resolution section of this report.

Financial Implications

If the rezoning is approved, staff estimates approximately \$220,000 in taxation revenue in the supplemental tax year only, based on the assumption of 3 single detached, 8 semi-detached, and 54 townhouse dwelling units at an estimated assessed value of \$400,000, \$300,000, and \$275,000 respectively per dwelling unit at the 2020 property tax rates.

This additional taxation revenue will only occur in the supplemental tax year. Any taxation revenue generated from new development is part of the supplemental taxation in its first year. Therefore, the City does not receive additional taxation revenue in future years from new development, as the tax levy amount to be collected as determined from the budget process, is spread out over all properties within the City.

In addition, this development would result in total development charges of approximately \$740,000 based on the assumption of 3 single detached, 8 semi-detached, and 54 townhouse dwelling units based on the rates in effect as of this report.

Once development has occurred and the subdivision infrastructure has been transferred to the City, there will be additional on-going costs for future annual maintenance and capital replacement of the related infrastructure (ie. Roads, water/wastewater linear pipes, etc).

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Staff Report

Proposal:

The application for Zoning By-law Amendment seeks to permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street (formerly Willow Crescent) and to the north of Keith Avenue in Chelmsford. The submitted sketch depicts 65 residential dwelling units.

In order to accommodate the proposed residential uses, the proposed rezoning would change the zoning classification of the subject lands from "R1-5", Low Density Residential One to "R2-2", Low Density Residential Two and "R2-3", Low Density Residential Two, along with the retention of a north-easterly portion of the lands that are to remain "R1-5", Low Density Residential One. Staff noted during preconsultation that the "R2-3" Zone is not appropriate in this setting given that the "R2-3" Zone was created specifically for and is intended to be used only in Sudbury's Downtown and older surrounding residential neighbourhoods. Staff therefore generally advises that the "R3", Medium Density Residential Zone would be most appropriate for the street townhouses that are being proposed. The policy contained in the City's Official Plan that resulted in the creation of the "R2-3" Zone is explained in detail further on in this report. The owner has not requested any site-specific relief.

The owner's agent submitted an application for pre-consultation that was considered by the Sudbury Planning Application Review Team (SPART) on April 5, 2017 (File # PC2017-038). The owner's agent met with staff following the SPART Meeting and has since returned their Pre-Consultation Understanding Agreement (PCUA) to the Planning Services Division. The owner's agent subsequently submitted a Zoning By-law Amendment application to the City for consideration. The owner has indicated to staff that they will not be submitting an application to amend an existing draft approved plan of subdivision on the lands at this time. SPART considered and provided comment and submission requirements for both a rezoning application and an application to amend the above noted and existing draft approved plan of subdivision.

The above noted application was submitted to the City on December 7, 2018, and was deemed complete on March 25, 2019, following the submission of additional required information. The application included the submission of a Concept Plan in support of the request to rezone the subject lands. Details with respect to the owner's public consultation strategy ahead of a public hearing at the Planning Committee was also provided.

Existing Zoning: "R1-5", Low Density Residential One

The "R1-5" Zone permits a bed and breakfast establishment having a maximum of two guest-rooms within a single-detached dwelling, a group home type 1 having a maximum of ten beds and within a single-detached dwelling, a private home daycare and a single-detached dwelling.

<u>Requested Zoning:</u> "R1-5", Low Density Residential One, "R2-2", Low Density Residential Two and "R2-3", Low Density Residential Two

The "R1-5" Zone permits a bed and breakfast establishment having a maximum of two guest rooms within a single-detached dwelling, a group home type 1 having a maximum of ten beds within a single-detached dwelling, a private home day care, and a single-detached dwelling. The "R2-2" Zone permits a duplex dwelling, linked dwelling, and semi-detached dwelling, as well as all uses permitted in the "R1-5" Zone. The "R2-3" Zone permits a multiple dwelling containing up to four dwelling units, a row dwelling containing up to four dwelling units, and a street townhouse, as well as all uses permitted in the "R2-2" Zone. The "R2-3" Zone contains development standards the specifically implement an Official Plan policy that pertains to recognizing older neighbourhoods in the community of Sudbury. The owner has not requested any site-specific relief.

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Location and Site Description:

The subject lands are generally bounded by Pinellas Road to the north, Keith Avenue to both the south and to the east and Edward Avenue to the west in the community of Chelmsford. The southerly portion of the lands that are to be rezoned have a total lot area of approximately 3.12 ha (7.71 acres) along with approximately two existing frontages along Keith Avenue measuring approximately 65.84 m (216.01 ft) on a westerly portion and 115.02 m (377.36 ft) along an easterly portion. The lands to be rezoned are presently vacant.

Surrounding Land Uses:

North: Low density urban residential land uses with the predominant built-form being single-

detached dwellings along Armand Crescent and Pinellas Road.

East: Low density urban residential land uses with the predominant built-form being semi-

detached dwellings along Keith Avenue and a large tract of vacant urban residential land.

South: Low density urban residential land uses with the predominant built-form being semi-

detached dwellings and duplex dwellings along Keith Avenue, a medium density residential development (i.e. Co-Operative D'Habitation Vallee Ouest) and a large tract of vacant

urban land.

West: Low density urban residential land uses with the pre-dominant built-form being single-

detached dwellings along Edward Avenue, Chelmsford Community Centre and Arena to the

north-west, and two public schools to the south-west.

The existing zoning and location map are attached to this report and together indicate the location of the lands subject to the Zoning By-law Amendment request, as well as the applicable zoning on other parcels of land in the immediate area.

Site photos depict the subject lands as viewed from Keith Avenue where Winnipeg Street would be constructed in order to provide access to the proposed residential development. Photos of the immediately surrounding residential area also illustrates the lower density urban residential nature of those lands situated to the east of Edward Avenue along both sides of Keith Avenue and along Armand Crescent.

Public Consultation:

The statutory Notice of Application was provided to the public by newspaper and to nearby landowners and tenants located within 120 m (400 ft) of the subject lands on March 25, 2019. The statutory Notice of Public Hearing dated March 4, 2021 was provided to the public by newspaper and to nearby landowners and tenants located within 120 m (400 ft) of the subject lands.

The owner and agent were also advised of the City's policy recommending that applicants consult with their neighbours, ward councilor and key stakeholders to inform area residents of the application prior to the public hearing. Staff understands that the owner's agent hosted a public information session in 2019, which had many local residents in attendance. The owner's agent has also advised staff that they have fielded a number of phone calls from local residents that are generally supportive of the development proposal. There was no additional formal in-person public meetings or sessions held by the owner or their agent since this time due to the ongoing Covid-19 global pandemic.

At the time of writing this report, the Planning Services Division has received several phone calls seeking clarification on the development proposal as well as one letter.

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Policy and Regulatory Framework:

The property is subject to the following policy and regulatory framework:

2020 Provincial Policy Statement (PPS);

- 2011 Growth Plan for Northern Ontario;
- Official Plan for the City of Greater Sudbury; and,
- Zoning By-law 2010-100Z.

The PPS and the Growth Plan for Northern Ontario, along with the City's Official Plan, provide a policy framework for land use planning and development in the City of Greater Sudbury. This framework is implemented through a range of land use planning controls such as, but not limited to, zoning by-laws, plans of subdivision and site plans.

2020 Provincial Policy Statement:

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters are consistent with the 2020 PPS. The following PPS policies are pertinent to the application for Zoning By-law Amendment:

- 1. With respect to Settlement Area policies, Section 1.1.3.1 outlines that settlement areas shall be the focus of growth and development;
- 2. Section 1.1.3.2 outlines that land use patterns within settlement areas shall have a mix of densities and land uses that efficiently uses land and resources, are appropriate for and efficiently use the infrastructure and public service facilities which are planned or available and avoid the need for their unjustified and/or uneconomical expansion, minimize negative impacts to air quality and climate change and promote energy efficiency, prepare for the impacts of a changing climate, are supportive of active transportation, are transit-supportive where transit is planned, exists or may be developed, and are freight-supportive;
- 3. Section 1.1.3.2 further outlines that land use patterns within settlement areas shall also be based on a range of uses and opportunities for intensification and redevelopment;
- 4. Section 1.1.3.3 outlines that intensification is to be promoted and opportunities for transit-supportive development, accommodating for a supply and range of housing options through intensification while taking into account existing building stock or areas, and the availability of suitable existing or planned infrastructure and public service facilities to accommodate needs are encouraged;
- Section 1.1.3.4 outlines that appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety;
- 6. Section 1.1.3.5 outlines that municipalities shall establish and implement minimum targets for intensification and redevelopment within built-up areas, based on local conditions;
- 7. Section 1.1.3.6 outlines that new development taking place in designated growth areas should occur adjacent to the existing built-up area and should have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities;
- 8. With respect to Housing Policies, Section 1.4 generally requires municipalities to provide for an appropriate range and mix of housing options and densities to meet projected requirements for current and future residents of the regional market area. This is to be achieved in part by maintaining at all times a three year supply of residential units with servicing capacity that are suitably zoned to facilitate residential intensification and redevelopment. This is also applicable to lands within draft approved or registered plans of subdivision;

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Section 1.4.3 further outlines that municipalities shall provide for an appropriate range and mix of housing options and densities to meet projected market-based and affordable housing needs of current and future residents of the regional market area by:

- a) Permitting and facilitating all housing options required to meet the social, health, economic and well-being requirements of current and future residents, including special needs requirements and needs arising from demographic changes and employment opportunities, as well as all types of residential intensification, including additional residential units, and redevelopment;
- b) Directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;
- Promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities and support the use of active transportation and transit in areas where it exists or is to be developed;
- d) Requiring transit-supportive development and prioritizing intensification, including potential air rights development, in proximity to transit, including corridors and stations; and,
- e) Establishing development standards for residential intensification, redevelopment and new residential development, which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.

Growth Plan for Northern Ontario:

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters conform with the Growth Plan for Northern Ontario. Staff has reviewed the planning matters contained within the Growth Plan for Northern Ontario and are satisfied that the application for Zoning By-law Amendment conforms to and does not conflict with the Growth Plan for Northern Ontario.

Official Plan for the City of Greater Sudbury:

The subject lands are designated Living Area 1 in the Official Plan for the City of Greater Sudbury.

The Living Area 1 land use designation includes residential areas that are fully serviced by municipal water and sewer and are to be the primary focus of residential development. Living Area 1 is seen as areas of primary focus for residential development given the desire to utilize existing sewer and water capacity and reduce the impacts of un-serviced rural development. New residential development must be compatible with the existing physical character of established neighborhoods, with consideration given to the size and configuration of lots, predominant built form, building setbacks, building heights and other provisions applied to nearby properties in the City's Zoning By-law.

Section 3.2.1 of the City's Official Plan outlines that the Living Area 1 designation permits low density residential uses up to a maximum density of 36 units per hectare, medium density residential uses up to a maximum density of 90 units per hectare and high density residential uses up to a maximum density of 150 units per hectare. Medium density housing should be located in close proximity to Arterial Roads, public transit, main employment and commercial areas, open space areas and community/recreational services. Medium density development is to be located where adequate servicing capacities exist along with a road system that can accommodate the growth. High-density residential development is permitted only in the community of Sudbury.

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Section 2.3.2 notes that the subject lands are within both a Settlement Area and the City's Built Boundary as delineated in Schedule 3 – Settlement Area and Built Boundary. Settlement Area land use patterns are to be based on densities and land uses that make the most efficient use of land, resources, infrastructure and public service facilities, minimize negative impacts on air quality and climate change, promote energy efficiency and support public transit, active transportation and the efficient movement of goods. Intensification and development within the Built Boundary is to be encouraged, while development outside of the Built Boundary may be considered in accordance with the policies of the Official Plan.

Section 3.2.1(6) of the City's Official Plan specifically outlines those matters to be reviewed when considering applications to rezone lands within the Living Area 1 designation:

- a) The site is suitable in terms of size and shape to accommodate the proposed density and built form;
- b) The proposed development is compatible with the surrounding neighbourhood in terms of scale, massing, height, siting, setbacks and the location of parking and amenity areas;
- c) Adequate on-site parking, lighting, landscaping and amenity areas are provided; and,
- d) The impact of traffic on local streets is minimal.

Section 3.2.1(7) of the City's Official Plan notes that a historical pattern of residential development around the Downtown and older sections of the Sudbury community are to be recognized in the City's implementing Zoning By-law. These areas are characterized by a mixture of dwelling types on small lots often with limited off-street parking availability. The applicable zoning in these areas is also intended to facilitate infilling and redevelopment that is compatible with the existing character of these residential areas. Staff advises that this policy was implemented in the City's Zoning By-law through the introduction of the "R2-3" Zone, which has been applied only to those older sections of the Sudbury community that have traditionally smaller lots with limited off-street parking opportunities. The "R2-3" Zone also includes flexibilities that allow for infill and redevelopment to be facilitated in older residential areas that are situated within the community of Sudbury. This policy is discussed in further detail later in this report.

Section 2.3.3 of the Official Plan generally acknowledges that intensification of a property at a higher density than what currently exists through the development of vacant or underutilized lots is encouraged throughout the City. Intensification is considered to be essential to completing communities, making the most efficient use of land, resources, infrastructure and public service facilities, minimizing negative impacts on air quality and climate change, promoting energy efficiency and supporting public transit, active transportation and the efficient movement of goods. The key to intensification is to ensure that it occurs in a context sensitive manner. Intensification must be compatible with and reinforced the existing and planned character of an area.

Specifically, Section 2.3.3 includes the following applicable intensification policies:

- 1. All forms of intensification are encouraged in accordance with the policies of the Official Plan;
- 2. The City will aim to accommodate 20% of future residential growth and development through intensification within the Built Boundary;
- 3. Large scale intensification and development is permitted in strategic core areas such as the Downtown, Regional Centres and major public institutions, in accordance with the policies of the Official Plan;
- 4. Medium scale intensification and development is permitted in Town Centres and Mixed Use Commercial corridors, in accordance with the policies of the Official Plan;

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5. Intensification and development is permitted in established Living Area 1 lands, in accordance with the policies of the Official Plan;

- 6. Intensification will be encouraged on sites that are no longer viable for the purpose for which they were intended such as former commercial, industrial and institutional sites. It will also be encouraged where the present use is maintained but the addition of residential uses can be added in a complementary manner;
- 7. Intensification will be encouraged on sites with suitable existing or planned infrastructure and public service facilities;
- 8. Intensification will be compatible with the existing and planned character of an area in terms of the size and shape of the lot, as well as the siting, coverage, massing, height, traffic, parking, servicing, landscaping and amenity areas of the proposal;
- 9. The following criteria, amongst other matters, may be used to evaluate applications for intensification:
 - a. The suitability of the site in terms of size and shape of the lot, soil conditions, topography and drainage;
 - b. The compatibility proposed development on the existing and planned character of the area;
 - c. The provision of on -site landscaping, fencing, planting and other measures to lessen any impact the proposed development may have on the character of the area;
 - d. The availability of existing and planned infrastructure and public service facilities;
 - e. The provision of adequate ingress/egress, off street parking and loading facilities, and safe and convenient vehicular circulation;
 - f. The impact of traffic generated by the proposed development on the road network and surrounding land uses;
 - g. The availability of existing or planned, or potential to enhance, public transit and active transportation infrastructure;
 - h. The level of sun -shadowing and wind impact on the surrounding public realm;
 - Impacts of the proposed development of surrounding natural features and areas and cultural heritage resources;
 - j. The relationship between the proposed development and any natural or man-made hazards;
 - k. The provision of any facilities, services and matters if the application is made pursuant to Section 37 of the Planning Act. Where applicable, applications for intensification of difficult sites may be subject to Section 19.7; and,
 - I. Residential intensification proposals will be assessed so that the concerns of the community and the need to provide opportunities for residential intensification are balanced.

Section 17.2.1 of the City's Official Plan generally encourages diversity in housing types and forms. Specifically, in order to encourage a greater mix of housing types and tenures it is the policy of the City's Official Plan:

- a. To encourage a wide range of housing types and forms suitable to meet the housing needs of all current and future residents:
- b. To encourage production of smaller (i.e. one and two bedroom) units to accommodate the growing number of smaller households;

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c. To promote a range of housing types suitable to the needs of senior citizens;

- d. Discourage downzoning to support increased diversity of housing options; and,
- e. Support new development that is planned, designated, zoned and designed in a manner that contributes to creating complete communities designed to have a mix of land uses, supportive of transit development, the provision of a full range of housing including affordable housing, inclusive of all ages and abilities, and meet the daily and lifetime needs of all residents.

Section 19.5.4 of the City's Official Plan permits the passing of amending zoning by-law under Section 36 of the Planning Act that contains a holding provision in order to specify which lands, buildings and structures may be developed at some point in the future. Specifically, a holding provision may be utilized for the following purposes:

- When certain details of development have not yet been determined, or where certain conditions of development have not yet been met such as, but not limited to, development or servicing agreements with the City;
- 2. When the level of community services and/or infrastructure is not yet adequate to support the proposed use;
- 3. Where environmental conditions or constraints temporarily preclude development or redevelopment; and/or,
- 4. Where required studies have not yet been approved by the City.

Zoning By-law 2010-100Z:

The owner is requesting that the subject lands be rezoned to "R2-2", Low Density Residential Two and "R2-3", Low Density Residential Two, along with the retention of a north-easterly portion of the lands that are to remain "R1-5", Low Density Residential One in order to permit a mix of single-detached, semi-detached and street-townhouse dwellings fronting Winnipeg Street (formerly Willow Crescent) and to the north of Keith Avenue in Chelmsford. The development proposal would total a maximum yield of 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) should the land use permissions that are being sought utilized to the fullest extent.

Draft Approved Plan of Subdivision:

The lands are also the subject of a draft approved plan of subdivision (i.e. Bonaventure Subdivision) that was approved initially by Council on November 25, 2010 (File # 780-5/10001). The draft approval consists of 83 low density urban residential lots and no lots have been registered at the time of writing this report. The lots are to be accessed from Pinellas Road to the north and Keith Avenue to the south. The owner has opted not to request an amendment to the existing draft approval that is set to lapse on November 25, 2021. The owner is advised that the rezoning application does not act to extend the above noted lapsing date associated with the draft approved plan of subdivision that is applicable to the entirety of the owner's land.

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Part Lot Control:

The owner's agent has advised staff they that intend on applying for an exemption from the part lot control provisions of the Planning Act at a later date in order to alter the existing lot fabric described as being Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C on Registered Plan M-1058. The alterations to the existing lot fabric would arrange the lands to be rezoned into lots and blocks that are suitable for the residential development that is being proposed. The above noted part lot control provisions are generally established under Section 50(5) of the Planning Act, while Section 50(7) enables a municipality to pass a by-law exempting part lot control from all or part of a registered plan of subdivision. Such a by-law has the effect of allowing the conveyance of a portion of a lot without requiring approval from the City's Consent Official. Staff would also note that if required Section 50(7.4) of the Planning Act would allow for an extension to the two-year period.

Department/Agency Review:

The application, including relevant accompanying materials, was circulated to all appropriate agencies and departments. Responses received from agencies and departments have been used to assist in evaluating the application and to inform and identify appropriate development standards in an amending zoning bylaw should the application be approved.

During the review of the proposal, comments provided by circulated agencies and departments included the following:

Active Transportation, Building Services, the City's Drainage Section, Fire Services, Operations, Roads, and Transit Services have each advised that they have no concerns from their respective areas of interest.

Conservation Sudbury is supportive of the rezoning, provided that a holding provision is applied to the lands and that said holding provision shall not be removed until the following requirements are satisfied. In particular, the conditions for removing the recommended holding provision would be as follows:

- 1. That a lot grading plan be provided that demonstrates that all proposed structures in the floodplain be flood-proofed to the satisfaction of Conservation Sudbury;
- 2. That all lots demonstrate safe access/egress to the satisfaction of Conservation Sudbury;
- 3. That any required fill in the floodplain be demonstrated to not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury;
- 4. That a storm-water management plan, including both quantitative and qualitative analyses be provided to the satisfaction of Conservation Sudbury. This storm-water management plan must demonstrate no net increase in flows out-letting in the natural system;
- 5. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required to the satisfaction of Conservation Sudbury that demonstrates the lands are suitable for development;
- 6. That a sediment and erosion control plan be provided to the satisfaction of Conservation Sudbury; and,
- 7. That a permit pursuant to Section 28 of the Conservation Authorities Act must be obtained.

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Development Engineering notes that there are approved construction drawings for the Bonaventure development, which date December 12, 2014. These construction drawings have not been updated to reflect the proposed changes to the lot fabric that would occur should the rezoning be approved. Development Engineering also notes that several of the proposed new street townhouse blocks as shown on the submitted Concept Plan would have approved municipal infrastructure passing through them. Development Engineering advises that the approved construction drawings and the existing lot fabric will need to be amended in order to accommodate the proposed development. The existing lot fabric and the approved construction drawings are not presently compatible and a holding provision should be placed on the lands until the above noted issues are properly addressed.

Transportation and Innovation notes that the rezoning proposes to permit semi-detached dwellings on the north-west and north-east "bulbed-out" corners along Winnipeg Street. The development of semi-detached dwellings on said "bulbed-out" corners or cul-de-sacs will result in a large percentage of the public road frontage being driveway access entrances. This arrangement is challenging for snowplowing operations, as there will be limited area for snow storage. In addition, the reduced available public road frontage limits the availability of on-street visitor parking which increases the demand for short-term parking on the remaining portion of Winnipeg Street. Transportation and Innovation recommends that only single-detached dwellings be permitted on these "bulbed-out" lots in the north-west and north-east corners of Winnipeg Street.

Planning Analysis:

The 2020 PPS, the 2011 Growth Plan, and the City of Greater Sudbury Official Plan, and other relevant policies and supporting guidelines were reviewed in their entirety. The following section provides a planning analysis of the application with respect to the applicable policies, including issues raised through agency and department circulation.

The proposed rezoning is consistent with the PPS for the following reasons:

- 1. The community of Chelmsford is an identified settlement area in the City's Official Plan. The proposed rezoning to permit the development of 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) would represent an improved mix of residential use and built-form permissions in this part of Chelmsford and should be promoted and is considered to be good land use planning. Staff would note however that the range of permitted residential uses and built-forms requires some restrictions given those comments received from Traffic and Innovation as it relates to semi-detached dwelling fronting "corner bulbs." These concerns are addressed later in this report;
- 2. Staff is of the opinion that the proposed development contributes positively to improving the mix of densities and land uses that would be permitted in this particular area along Keith Avenue and future Winnipeg Street in the community of Chelmsford. Staff notes that the lands are generally capable of being serviced with municipal water and sanitary sewer from Keith Avenue. Access to public transportation via GOVA is available to the west along Edward Avenue (i.e. Route 104 Azilda/Chelmsford), which provides direct route access to both the Chelmsford Community Hub and the Downtown Hub. Active transportation is also an option as there is an existing sidewalk along Keith Avenue providing a pedestrian connection to Edward Avenue to the west. Edward Avenue also has a sidewalk providing a further pedestrian connection opportunity to Highway #144 to the south of the lands. There are also a number of public open space and community facilities (e.g. Chelmsford Community Centre & Arena) that can be accessed through active transportation infrastructure that exists in the general area. Staff is of the opinion that the proposed rezoning will result in a good intensified use of the subject lands from a good land use planning perspective;

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3. Staff is of the opinion that the application to rezone the lands will improve the possible mix of land use patterns in the general area and will serve to encourage and provide for increased housing opportunities in terms of promoting the intensification of a vacant and therefore underutilized lot located within the Chelmsford settlement area:

- 4. Staff is supportive of the opportunity for residential intensification and has noted above that public transportation is located in close proximity to the subject lands. The proposed residential intensification in this instance would facilitate the development of up to 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, and 54 street townhouse dwellings) should the proposed rezoning be approved and utilized to the fullest extent by the owner. Staff is satisfied that the proposed and resulting mix of urban residential uses and built-forms be reasonably accommodated on the lands with minimal disruption to abutting residential land uses. Suitable municipal infrastructure is also generally available subject to appropriate extensions and connections being made and staff would therefore encourage intensification in this location:
- 5. Staff is of the opinion that appropriate development standards can be achieved through the rezoning process that facilitates good and reasonable intensification that encourages a compact built-form, while avoiding or mitigating risks to public health and safety. Specifically, the amending zoning by-law should apply "R1-5", "R2-2" and "R3" zoning to the lands without any site-specific relief being required or necessary given the site context. Staff is therefore satisfied that this particular mix of permitted residential uses and built-forms is well suited for the lands. Further to this, the "R1-5", "R2-2" and "R3" Zones that are being recommended by staff will ensure that the resulting development is reasonably accommodated and not out of character or excessive in nature given the site context;
- 6. Staff notes that the subject lands are surrounded by and adjacent to an existing and built-up urban residential area. It is further noted that the lands are also within the City's existing built-boundary. Staff is therefore of the opinion that together the proposed rezoning would facilitate and encourage the possibility of development proceeding in this area with a more compact built-form having a mix of urban residential uses at a density that will utilize the subject lands efficiently from a land, infrastructure and public service facilities perspective. Staff would also generally note that the development proposal will contribute positively to minimum targets for intensification and redevelopment within built-up areas that are identified in the City's Official Plan;
- 7. With respect to housing policies in the PPS, staff advises that in general the development proposal would contribute positively to the City's range and mix of housing options and densities to meet projected requirements for both current and future residents in Chelmsford. The proposed development would also continue to contribute positively to the City's required minimum three year supply of residential units with servicing capacity that are suitably zoned to facilitate residential intensification and redevelopment; and,
- 8. More specifically, staff would note the following with respect to housing policies:
 - a) The proposed mix of urban residential land uses and built-forms would in general provide for an expanded range and potentially mix of housing options and densities in the community of Chelmsford. Staff is satisfied that no negative impacts would be generated should the rezoning be approved from a social, health, economic and well-being perspective in terms of those current and future residents living in the local community;
 - b) Staff is generally supportive of the proposed residential intensification and inclusion of semidetached dwellings and street townhouses as permitted uses in addition to single-detached dwellings. The mix of residential uses and built-forms that would be permitted is not considered to be excessive from the perspective of balancing intensification opportunities against ensuring that there are no disruptions to the existing character of this particular urban residential neighbourhood in this part of Chelmsford;

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c) Staff is satisfied through their review and circulation of the rezoning application that the proposed 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) can and should be appropriately directed to the subject lands as appropriate levels of municipal infrastructure (i.e. sanitary sewer and water infrastructure, public transportation, etc.) are presently available;

- d) Staff is of the opinion that the development proposal would generally result in the efficient use of land and available municipal infrastructure. It is also noted that the improved housing options in this area would positively contribute to and encourage the use of public transportation in the immediate area:
- e) Staff notes that there are at present no identified issues with respect to prioritization of intensification in the immediate area. Staff would further note that the development proposal would not negatively impact other intensification opportunities that may exist in the area; and,
- f) Staff is satisfied that appropriate development standards contained within the existing standard "R1-5", "R2-2" and "R3" Zones can be utilized in an amending zoning by-law to accommodate the proposed development of the subject lands without negatively affecting the cost of housing and the existing character of the area. No negative impacts on public health and safety were identified through the review and circulation of the rezoning application.

Staff in general has no concerns with respect to the proposed rezoning conforming to the applicable policies in the Official Plan for the City of Greater Sudbury. Those policies relevant to the development proposal that would permit 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling and 54 street townhouse dwellings) are discussed below.

With respect to general Living Area 1 policies in the Official Plan that are applicable to the subject lands, staff notes that the proposed 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) would yield an overall site density of approximately 21 residential dwelling units per hectare, which is permitted and within the threshold of those low density residential policies set out and permitted in the City's Official Plan.

Staff notes that the lands have frontage on a Local Road (i.e. Keith Avenue) and are directly connected to a Collector Road (i.e. Edward Avenue). It is further noted that Winnipeg Street would be considered to be a Local Road once constructed. The nearest bus stop to the lands is situated approximately 68 m (223.10 ft) to the west on Edward Avenue. The lands are also situated in close proximity at a distance of approximately 400 m (1,312.34 ft) to a Provincial Highway (i.e. Highway #144) that provides further direct access to public transportation options. Staff is of the opinion that sufficient open space areas and community/recreational activities are also available in the general area of the subject lands. Staff notes that the lands are capable of being serviced by municipal water and sanitary sewer infrastructure. It should be noted however that Development Engineering has provided comments that construction drawings will need to be reconsidered and subsequently approved for the proposed development as the Concept Plan currently shows lots and blocks having approved municipal infrastructure passing through them.

Staff further notes that the subject lands are identified as being located within the Chelmsford Settlement Area and Built Boundary as delineated in Schedule 3 – Settlement Area and Built Boundary to the City's Official Plan. Staff advises that the proposed 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings) represents an opportunity to make efficient use of existing urban land supply and planned or available municipal infrastructure and other services that are already provided for within the City's Settlement Area and Built Boundary. Staff is further satisfied that no site-specific development standards would appear to be required in order to accommodate the proposed intensified residential land uses.

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With respect to applicable intensification policies set out under Section 2.3.3 of the Official Plan, staff has the following comments:

- Staff notes that in general all forms of residential intensification are encouraged in the City's Official Plan. Staff further advises in this instance that the subject lands form a vacant and underutilized lot in the middle of a built-up urban residential environment. Provided that appropriate development standards (i.e. "R1-5", "R2-2" and "R3" and not "R2-3") are applied to the lands, staff is of the opinion that this form of residential intensification can be reasonably accommodated on the subject lands;
- 2. Staff advises that the development proposal would contribute positively to the City's aim of accommodating 20% of all future residential growth and development through intensification within the Built Boundary. Staff from the City's Development Approvals Section has also confirmed with Community and Strategic Planning staff that the proposed development would constitute development within the Built Boundary as these vacant lands are entirely surrounded by a built-up urban residential environment:
- 3. Staff advises that the development proposal does <u>not</u> amount to large or medium scale intensification that would be otherwise directed to strategic core areas, such as the Downtown of Town Centre land use designations. The lands are however designated Living Area 1 and it is noted that intensification is permitted within this land use designation; and,
- 4. Staff in general has no concerns with respect to the proposed intensification in terms of compatibility with the existing and planned character of the area. Additionally, staff has no concerns regarding the size and shape of the lots and blocks, or the siting, coverage, massing, height, traffic, parking, servicing, landscaping and amenity areas of the development proposal that would facilitate construction of up to 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, 54 street townhouse dwellings).

In particular, with respect to applicable criteria set out in Section 2.3.3 that are be considered when evaluating applications that propose intensification, staff has the following comments:

- 1. Staff is generally of the opinion that the subject lands are of sufficient size and shape to accommodate up to a maximum of 65 urban residential dwelling units (i.e. 3 single-detached dwellings, 8 semi-detached dwelling, and 54 street townhouse dwellings). Staff notes that that the owner is not requesting any site-specific development standards in order to accommodate the above noted development on the lands. Staff is satisfied that the Concept Plan demonstrates that the proposed development can be situated on the lands without requiring any site-specific relief that may cause or introduce conflict between land uses in the area. Staff can also advise that circulated agencies and departments identified no concerns with respect to topography during the review of the rezoning application. In addition, with respect to drainage the City's Drainage Section has reviewed the rezoning application and has advised that they have no concerns with the development proposal. Building Services has also reviewed the rezoning application and has not identified any concerns with respect to soil conditions on the subject lands;
- 2. Staff has noted in this report that the subject lands are generally surrounded by a mix of urban residential built forms and lower residential densities in this particular area of Chelmsford. The introduction of street-townhouses in particular to the area is considered compatible with the existing residential character of the area and an appropriate transition between existing lower density residential uses (e.g. single-detached and semi-detached dwellings). Medium density built forms such as street-townhouses can be achieved through applying the appropriate development standards contained in the "R3" Zone, as well as those general provisions that require planting strips between said types of residential land uses. It is on this basis that staff are satisfied that the development proposal would not present any compatibility issues with respect to the existing and planned residential character that exists along Keith Avenue and Armand Crescent;

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3. Staff is satisfied that the lands are capable of providing adequate on-site landscaping, fencing, planting and other measures that will have the effect of lessened any impacts that the development proposal would have on abutting properties or the existing urban residential character that exists along surrounding local streets. Staff would note however that the above opinion is based upon the street townhouses being zoned "R3" which properly contemplates the interface between lower density (e.g. "R1-5" & "R2-2") and medium density residential land uses in terms of minimum lot areas, minimum vard setbacks, planting strips, fencing, and so on;

- 4. After reviewing the rezoning application, Development Engineering notes that the lands are capable of being serviced with municipal water and sanitary sewer infrastructure from Keith Avenue. While further design and construction work is required to be completed by the owner in order to provide municipal water and sanitary sewer, municipal infrastructure is to be considered available and planned to service the lands. Development Engineering has noted that there are approved construction drawings that would facilitate urban residential development that is in keeping with the draft approved plan of subdivision (i.e. Bonaventure Subdivision); however, these approved construction drawings do not contemplate the proposed changes to the range of permitted uses and the lots/blocks that are depicted on the Concept Plan that was submitted in support of the proposed rezoning. Development Engineering is supportive of the proposed rezoning provided that a holding provision is utilized in order to ensure the lands are properly serviced with municipal water and sanitary sewer infrastructure;
- 5. Staff notes that the development proposal would involve the construction of a local road (i.e. Winnipeg Street) that is depicted on Plan M-1058, which was registered on August 3, 1977. Staff is of the opinion that the land uses proposed will be capable of providing adequate ingress and egress in terms of driveway entrances onto Winnipeg Street. It is further anticipated that appropriate off-street parking will be provided for each of the residential dwelling units as required under Part 5 Parking Provisions of the City's Zoning By-law. For clarity purposes, single-detached, semi-detached and street-townhouse dwellings are required to provide one parking space per dwelling unit located outside of the required front yard. The owner has not requested any site-specific relief as it relates to parking provisions. Staff also has no concerns with safe and convenient vehicular circulation that would be facilitated along Winnipeg Street and other surrounding local streets;
- 6. Roads, Traffic and Innovation reviewed the rezoning application and did not express any concerns with respect to any negative impacts related to the traffic that would be generated by the proposed development on the local road network and surrounding land uses. Traffic and Innovation did provide comments that they are unable to support the proposed semi-detached dwelling lots and the "bulbed-out" corners as shown on the Concept Plan. Staff would note however that these semi-detached dwelling lots do appear to exceed the minimum lot frontage that is required for this type of built-form in the standard "R2-2" Zone. Staff would encourage the owner to consider the comments provided by Traffic and Innovation and comply with the minimum lot frontage development standard accordingly. The above is discussed in further detail later in this report;
- 7. As noted previously in this report, the lands are well accessed by public transportation to the west as GOVA is available to the west along Edward Avenue (i.e. Route 104 Azilda/Chelmsford), which provides direct route access to both the Chelmsford Community Hub and the Downtown Hub. As mentioned earlier, that the nearest transit stop is situated approximately 68 m (223.10 ft) to the west on Edward Avenue. There is also an existing sidewalk along the north side of Keith Avenue providing an existing active transportation link to Edward Avenue and out toward Highway #144 to the south of the lands;

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8. Staff does not anticipate that any negative sun-shadowing and/or uncomfortable wind conditions would be generated on surrounding streets, parks and open spaces should the proposed rezoning be approved. It is noted that the proposed buildings would each be permitted to have a maximum height of 11 m (36.09 ft) as per the recommended "R1-5", "R2-2" and "R3" Zone standards and sun-shadowing and/or uncomfortable wind conditions are not normally associated with buildings of this particular height;

- In their review of the application, staff did not identify any areas of concern with respect to negative impacts of the development proposal on surrounding natural features and areas and cultural heritage resources;
- 10. Staff has no concerns with respect to the relationship between the proposed development and any nearby-identified natural or manufactured hazards. Conservation Sudbury has reviewed the proposed rezoning and are supportive of the request, provided that a number of items are addressed prior to development by the owner. The owner is also specifically advised that development of the lands will require a permit pursuant to Section 28 of the Conservation Authorities Act as the lands are situated with a floodplain and development is regulated under Ontario. Staff is however recommending that several items be included in the holding provision in order to ensure that the lands develop in a manner that does not pose any risks to human life, health and safety. To clarify, this would be a necessary approach because the owner is wishing to utilize part lot control to adjust the lot fabric of the underlying registered plan of subdivision (i.e. Plan M-1058) in order to proceed to construction versus utilizing the more recent draft approved plan of subdivision conditions (i.e. Bonaventure Subdivision) that are applicable on the entirety of the lands:
- 11. There are no facilities, services or other matters associated with the development proposal that are subject to Section 37 of the Planning Act; and,
- 12. Staff generally concludes and would advise that the proposed residential intensification along Winnipeg Street would balance the concerns of the local community with the identified need for providing opportunities for residential intensification in the community of Chelmsford.

With respect to housing policies established under Section 17.0 of the Official Plan, staff notes that in general the development proposal would contribute positively to the range of housing types and forms available to both current and future residents of Chelmsford. Staff also understands that the proposed semi-detached dwellings and street townhouse dwellings could potentially offer and provide for a range of smaller (i.e. two bedroom) units that are capable of accommodating smaller households. Staff notes that future owners may utilize the City's secondary dwelling unit permissions to increase the range of housing options even further. The development proposal may also positively contribute to and provide for an additional housing option for senior citizens living in Chelmsford. Staff also advises that the proposed rezoning does not amount to a down-zoning of the subject lands. Staff is supportive of the rezoning from a housing perspective on the basis that it would contribute positively to the notion of creating complete communities designed to have a mix of land uses that are supportive of transit development and that offer the opportunity for providing affordable housing to people of all ages and abilities.

Staff is therefore of the opinion that the proposed rezoning conforms to the Official Plan for the City of Greater Sudbury.

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The owner is requesting that the lands be rezoned from "R1-5", Low Density Residential One to "R2-2", Low Density Residential Two, along with the retention of a north-easterly portion of the lands that are to remain "R1-5", Low Density Residential One. As has been mentioned previously in this report, no site-specific relief has been requested by the owner and as such, development of the lands is expected to occur in compliance with the zoning that would be applicable to the lands should the application be approved. Staff in general has no concerns with the requested "R1-5" and "R2-2" zone categories, but are not able to support the requested "R2-3" zone category, as it would be an inappropriate use in this particular location.

With respect to the lots depicted on the Concept Plan that are to be rezoned to "R1-5" and "R2-2" would generally each appear to comply with applicable minimum lot area, minimum lot frontage and minimum lot depth development standards. Staff notes that a special provision relating to a reduced minimum lot frontage for Lot 94 on Registered Plan M-1058 of approximately 15 m (50 ft) whereas a corner lot here would require 17 m (55.77 ft) is required should be included in the amending zoning by-law. Lot 94 on Registered Plan M-1058 is also slightly under from a minimum lot area perspective. The special provisions required for Lot 94 on Registered Plan M-1058 can be confirmed through the registered survey plan that will be required in order to prepare an amending zoning by-law for the lands. It is noted that this lot would be undersized from the perspective of constructing a semi-detached dwelling.

In particular, staff also notes that the proposed "R2-2" lots on the "bulbed-out" corners exceeds the minimum lot frontage and minimum lot area requirements should either a single-detached dwelling or semi-detached dwelling be constructed on these lots. Further to this, at the street-line each of the "bulbed-out" lots exceed the lot line length requirements at the street-line of Winnipeg Street. Staff do however remind the owner of the comments provided from Traffic and Innovation and note that compliance with the minimum development standards of the "R2-2" Zone are of importance given the snow clearing and storage demands that these types of urban residential lots generate.

With respect to the requested "R2-3" Zone, staff are however able to support applying the "R3" Zone to these lands which would allow for a range of both low and medium density urban residential land uses. Staff would again reiterate that the "R2-3" Zone was created and directly informed by an Official Plan policy, which recognizes and implements development standards that are to be utilized in the older residential neighbourhoods in the community of Sudbury. The "R3" Zone also properly contemplates the transitioning that is appropriate between lower and medium density land uses. For instance, staff would draw attention to Section 4.15.4 a) ii) which requires that a 3 m (9.84 ft) wide planting strip be provided where a lot zoned "R3" abuts a lot zoned "R1" (i.e. "R1-1" through "R1-5") or "R2" (i.e. "R2-1" through "R2-3").

This development standard ensures that an appropriate level of privacy buffering and open space is provided between low and medium density built-forms. The width of said planting strip can be reduced to 1.8 m (5.91 ft) where a planting strip contains an opaque wall or opaque fence having a height of 1.5 m (4.92 ft). Staff would therefore advise that rezoning the portion of the lands that would permit medium density residential uses be zoned "R3" and not "R2-3" in order to ensure that the best possible land use planning compatibility between densities is achieved.

Staff is also recommending that the lands be zoned with a holding provision in order to address comments received by Conservation Sudbury and Development Engineering. Prior to filing the rezoning application, the owner's agent has consulted with staff on this approach and staff advised that a holding provision could be supported as it would still act to ensure that these urban residential lands develop in an orderly manner. Specifically, the proposed holding provision would be in place and could not be removed from the lands until the following matters are addressed:

1. That the owner prepare required materials, submit said materials for review and receive all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure:

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2. That the owner demonstrate that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury; and,

3. That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the suitability of development to the satisfaction of Conservation Sudbury.

Staff notes that the timing of the application to exempt the lands from part lot control will largely depend on the owner's progress with the above noted matters. It is not necessary however to require any part lot control approvals as part of the holding provision. Therefore, the owner is cautioned that an application for exemption from part lot control should be prepared in a manner that is complementary to the timing of construction and the above noted matters having been addressed that would allow the holding provision to be removed from the lands.

Staff also notes that a registered survey plan will be required in order to prepare the amending zoning bylaw, as the resulting lot fabric would permit a mix of urban residential land uses that differs from the current legal description of the lands being Lots 64-95, 97-117, 127-175, Blocks D & E & Part of Block C, Plan M-1058, Lot 1, Concession 3, Township of Balfour.

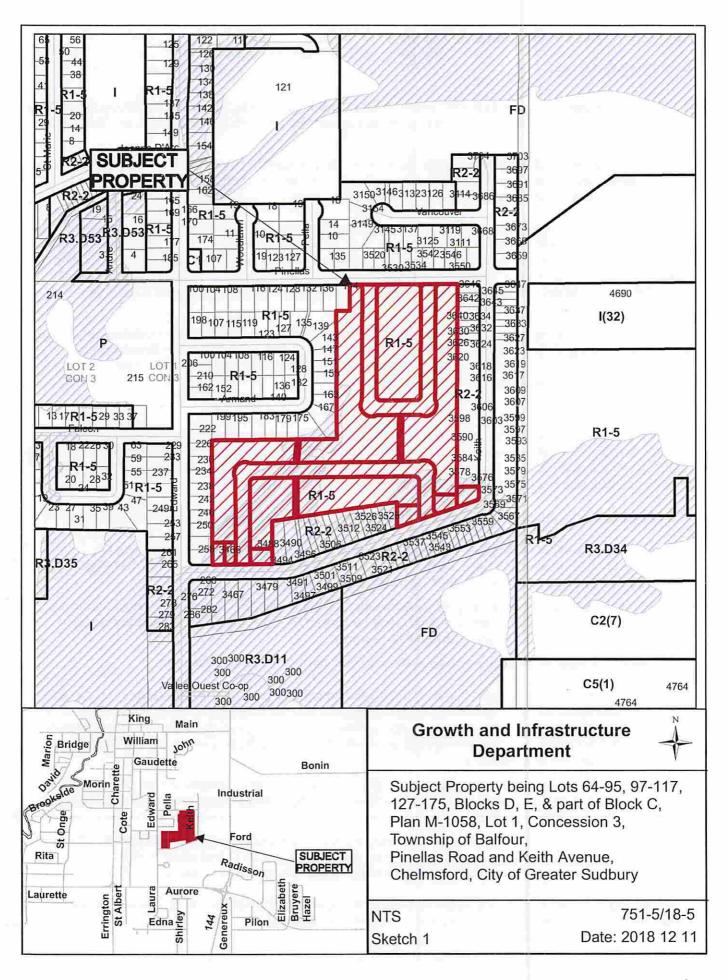
Conclusion:

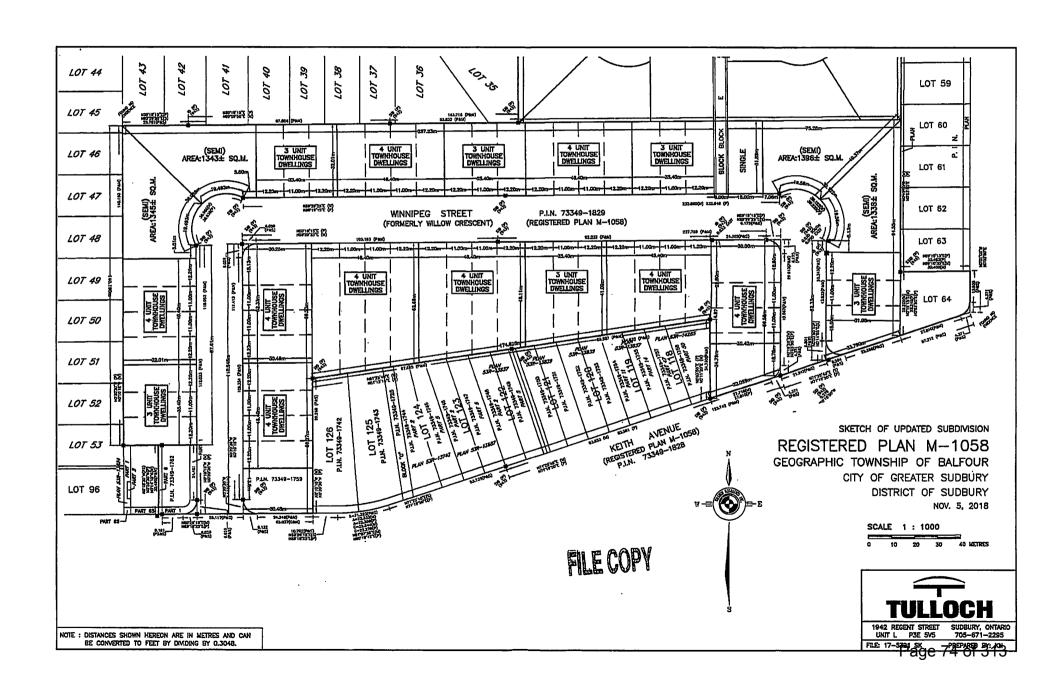
Staff has reviewed the development proposal and is generally satisfied that it conforms with the Official Plan for the City of Greater Sudbury. The development proposal is also generally consistent with the land use planning policy directions identified in the PPS. Staff also notes that the application conforms to and does not conflict with the Growth Plan for Northern Ontario.

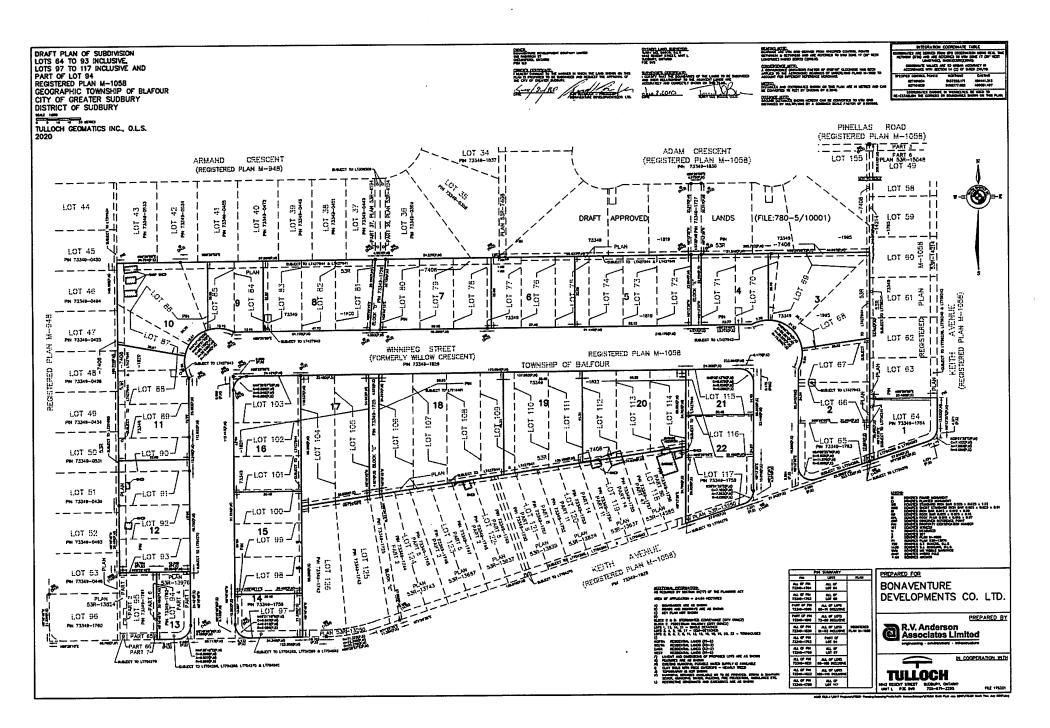
The following are the principles of the proposed and recommended site-specific amending zoning by-law:

- 1. That the lands be rezoned to "R1-5", Low Density Residential One to "R1-5", Low Density Residential Special, "R1-5(S)", Low Density Residential One Special, "R2-2", Low Density Residential Two and "R3", Medium Density Residential;
- 2. That the only site-specific relief provided be on those lands legally described as being Lot 94 on Registered Plan M-1058 and that said lands be zoned "R1-5(S)" in order to allow for a reduced minimum corner lot frontage and minimum lot area;
- 3. That a holding provision be utilized in order to ensure that prior to development:
 - a) That the owner prepares required materials, submit said materials for review and receive all final approvals related to development of the lots and the construction of Winnipeg Street, including but not limited to erosion and sediment control, lot grading, municipal infrastructure and servicing, and storm-water management all to the satisfaction of the General Manager of Growth and Infrastructure:
 - b) That the owner demonstrates that any fill to be placed in the floodplain will not negatively impact the flood retention capacity nor cause flooding impacts downstream to the satisfaction of Conservation Sudbury; and,
 - c) That a qualified professional identify the extent of any wetland on the subject parcels. Should it be determined that wetland exists, the submission of a geotechnical report is required demonstrating the suitability of development to the satisfaction of Conservation Sudbury.

The Planning Services Division therefore recommends approval of the application for Zoning By-law Amendment in accordance with the Resolution section of this report.







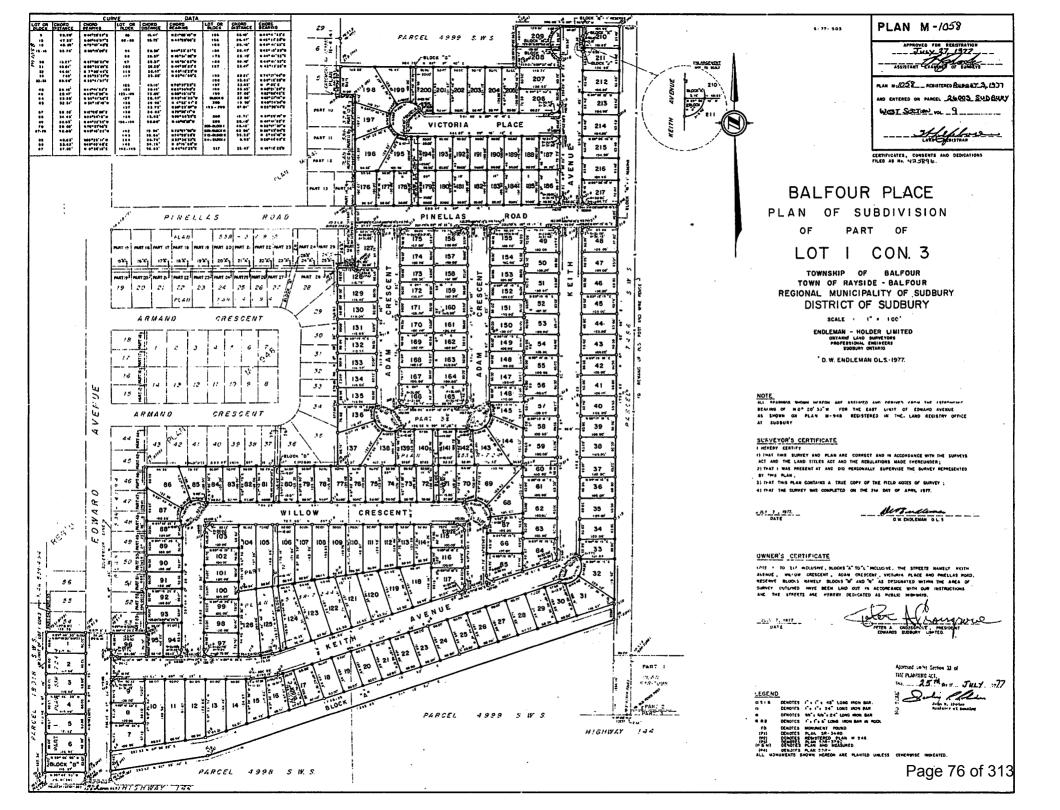




PHOTO #1 – Subject lands as viewed from Keith Avenue looking north at the planned westerly access point of Winnipeg Street onto Keith Avenue.



PHOTO #2 – Subject lands as viewed from Keith Avenue looking north-west at the planned easterly access point of Winnipeg Street onto Keith Avenue.

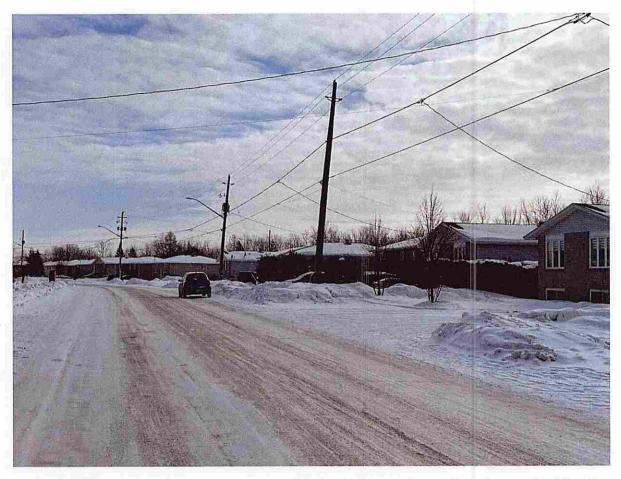


PHOTO #3 – Existing low density residential development situated on the south side of Keith Avenue looking east.

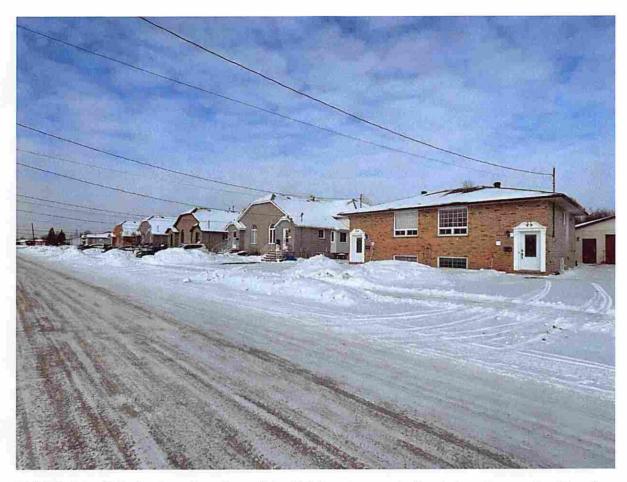


PHOTO #4 – Existing low density residential development situated on the north side of Keith Avenue looking north-west.

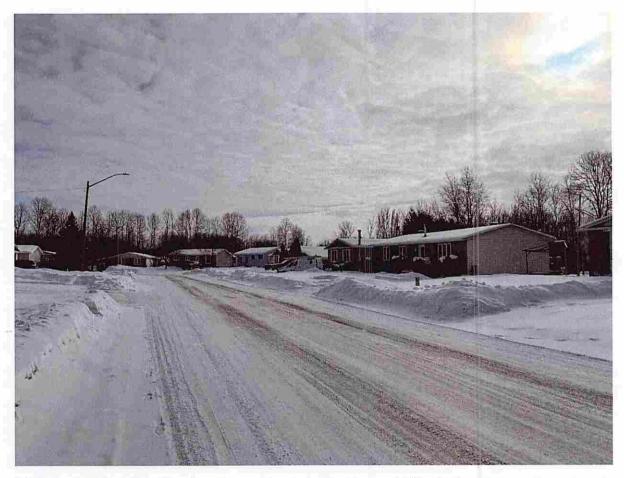


PHOTO #5 – Existing low density residential development situated on the south and east side of Armand Crescent looking east.

PLANNING SERVICES

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BONNAULVIURE DEVILOPMENT COMPANY LTD REGARDING
FILE # 751-5/18-5 REGISTERES PLAN M-1058
TOWNSHIP OF BARFOUR (KIETH AUE - PINEILAS RD).

PLANNING & DEVELOPMENT BUT I WISH TO MAKE
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54 William Avenue, Coniston

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Туре:	Routine Management Reports
Prepared by:	Stephanie Poirier Planning Services
Recommended by:	General Manager of Growth and Infrastructure
File Number:	N/A

Report Summary

This report provides a recommendation regarding a request to deem certain lots not to be part of a registered plan of subdivision, 54 William Avenue, Coniston.

Resolution

THAT the City of Greater Sudbury approves designating Lots 5 & 6, Plan M-89 as being deemed not to be part of a registered plan for the purposes of Section 50(3) of the Planning Act, as outlined in the report entitled "54 William Avenue, Coniston", from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025 and;

THAT Staff be directed to prepare a by-law for Council to enact deeming Lots 5 & 6, Plan M-89 not to be part of a plan of subdivision for the purposes of Subsection 50(3) of the Planning Act.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The designation of part of a Registered Plan to be deemed not to be a registered plan for the purposes of Section 50(3) of the Planning Act is an operational matter under the Planning Act.

Financial Implications

There are no financial implications associated with this report.

Report Overview:

Staff is recommending that Lots 5 & 6, Plan M-89 be deemed to not be part of a registered plan of subdivision as a means of consolidating the lots by way of common ownership and preventing the transfer of the individual lots without lifting of the deeming by-law.

STAFF REPORT

Location:

PIN 73560-0329 and PIN 73560-0842, Parcels 4907 and 23521, Lots 5 & 6, Plan M-89, Lot 4, Concession 3, Township of Neelon

Background:

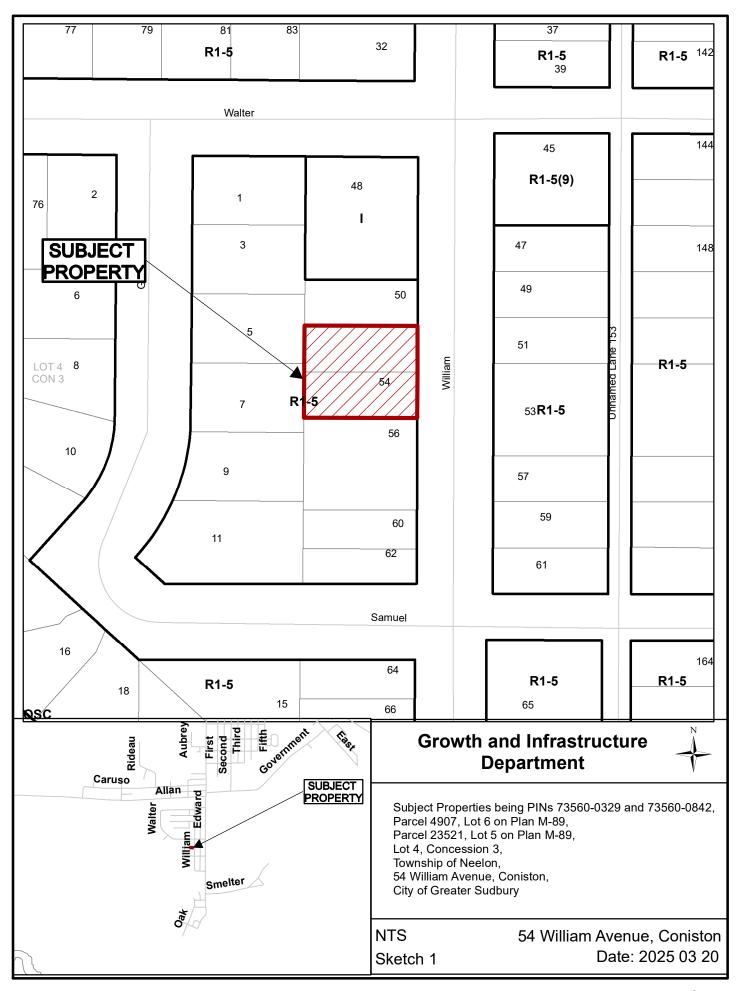
Section 50(4) of the Planning Act provides that the council of a local municipality may, by by-law, designate any plan of subdivision that has been registered for 8 years or more not to be a registered plan for the purposes of Section 50(3) of the Planning Act. Plan M-89 was registered in September of 1925. Subsection 50(3) of the Planning Act contains the subdivision control provisions preventing the transfer of land unless the land is within a plan of subdivision along with other restrictions and requirements.

The subject lands are designated 'Living Area I' in the Official Plan and are zoned "R1-5", Low Density Residential One in the Zoning By-law. The lands are known as 54 William Street and contain an existing residential dwelling on Lot 6. The current owner advised that they would like to be able to construct an addition to the dwelling which would encroach onto Lot 5. A request for a deeming by-law is required to enable the project.

In order to consolidate the land ownership as per the owner's request, it is recommended that a by-law be enacted by Council deeming Lots 5 & 6, Plan M-89 not to be a registered plan for the purposes of Section 50(3) of the Planning Act. The deeming by-law would be forwarded to the Registry Office and would appear on title to the property and would prevent the transfer of the lots individually. The lots could only be transferred together as long as the deeming by-law remains in place.

Staff has received an acknowledgement from the owner that they understand the implications of the deeming by-law and agree with the lots being deemed for the purposes of Section 50(3) of the Planning Act.

Passage of a deeming by-law does not affect the applicable zoning, and the owner is advised to ensure their project complies with the applicable zoning by-law standards (e.g. setbacks, maximum height and lot coverage).





White Road, Lively – Declaration of Surplus Land and Addition to Affordable Housing Land Bank

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Туре:	Routine Management Reports
Prepared by:	Tanya Rossmann-Gibson Real Estate
Recommended by:	General Manager of Corporate Services
File Number:	N/A

Report Summary

This report provides a recommendation in regard to declaring surplus vacant land north of White Road, Lively, and to add the land to the Affordable Housing Land Bank.

Resolution

THAT the City of Greater Sudbury declares surplus to the City's needs vacant land north of White Road, Lively, legally described as part of PIN 73375-0263(LT), part of Lot 6, Concession 4, Township of Waters, City of Greater Sudbury;

AND THAT the land be added to the Affordable Housing Land Bank, as outlined in the report entitled "White Road, Lively - Declaration of Surplus Land and Addition to Affordable Housing Land Bank", from the General Manager of Corporate Services, presented at the Planning Committee meeting of April 28, 2025.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The Land Banking Strategy aligns with Council's Strategic Priorities including "Expanding Affordable and Attainable Housing Options" and "Develop and Promote Solutions to Support Existing Housing Choices". The Land Banking Strategy is one of the actions of the Housing Supply Strategy and addresses actions outlined in the Housing goal of the Strategic Plan, which reflects Council's desire for all citizens, especially vulnerable populations, to have access to safe, affordable, attainable and suitable housing options in the City of Greater Sudbury.

The Land Banking Strategy aligns with the Climate Action Plans, creation of compact, complete communities.

Financial Implications

There are no financial implications associated with this report.

Background

The subject land measures approximately 3 acres in size and is zoned as I - Institutional. The location of the subject land is identified on the attached Schedule 'A' and photographs are shown on Schedule 'B'.

In 1970, the former Corporation of the Township of Waters (now City of Greater Sudbury) acquired the subject land as part of a larger parcel. The land to the east of the subject area has been developed into the Waters Cemetery.

The subject land is included within the Community Improvement Plan Project Area of the Affordable Housing Community Improvement Plan (AHCIP).

The AHCIP aims to facilitate the development of affordable housing units and direct those units to locations where they will benefit from proximity to public and private facilities and services while maximizing the use of existing infrastructure. A key component of the AHCIP is the land banking of municipal property.

Planning Services has requested that the subject land be considered as a potential site for the Affordable Housing Land Bank.

A proposal to declare the subject land surplus to the City's needs and to add it to the Affordable Housing Land Bank was circulated to all City departments and outside agencies in accordance with Property By-law 2008-174. The following comments were received:

- Housing Services supports declaring the land surplus for the land banking initiative.
- Conservation Sudbury indicated the presence of small wetlands along the road frontage of White Road. If these wetlands are not hydraulically linked to the wetland across the road and are under 0.5 hectares, they would not need to be preserved. However, if development is planned above them, a geotechnical analysis would be required. Otherwise, the wetlands could be preserved, with development located 12 meters away from the wetland boundary. Wetlands must be mapped before proceeding to any further planning application or building permit stage.
- Building Services noted that the subject land is zoned as Institutional (I). The recent amendment to the zoning by-law permits multi-residential development under the current Institutional zoning.
- Leisure Services (Cemetery Services) submitted the following comments from the Bereavement Authority of Ontario (BAO):
 - The land contemplated would need to be severed from the cemetery property and closed by the Ministry of Public and Business Service Delivery and Procurement.
 - Confirmation that there are no burials in the land proposed for donation must be submitted and a new survey of the property lines for the cemetery would need to be deposited with the BAO.
 - The BAO would prefer that the property line be a minimum of 4.57 metres or 15 feet away from the nearest burial.
 - As per Ontario Regulation 30/11, subsection 155 a cemetery operator shall ensure that any building other than a small-scale columbarium or a small-scale mausoleum is at least 4.57 metres or 15 feet away from any in-ground grave.
 - Notifying rights holders within 9.14 metres or 30 feet of the proposed alteration is outlined under O. Reg. 30/11,s. 148.
- Planning Services evaluated the site positively based on locational criteria and recommended land banking the subject land in support of the Affordable Housing Community Improvement Plan (AHCIP).

No further comments or objections were received.

The City will address conditions and requirements received through the circulation process as part of its Affordable Housing Land Banking Strategy. This strategy aims to derisk city-owned land, prepare properties for development, and ensure they are ready for affordable housing projects.

Affordable Housing Community Improvement Plan (AHCIP)

A key component of the Affordable Housing Community Improvement Plan (AHCIP) is the land banking of municipal property for use in connection with the Plan. The AHCIP empowers Council to acquire, sell, lease, prepare and dispose of property at below market value to achieve the objectives of the Official Plan and the Affordable Housing Strategy. Projects and potential land bank properties are evaluated based on development feasibility and locational criteria centered on tenant needs.

The subject property scored well under the AHCIP scoring matrix. Below is a summary of the affordable housing assessment.

Primary Criteria:

- **Settlement Boundary:** The property is located within the settlement boundary.
- **Transit Oriented:** The property is approximately 177 meters from Route 101 Lively, which operates with a 1-hour weekday frequency and a 2-hour weekend frequency.
- **Servicing Feasibility:** Once the Lively-Walden wastewater upgrades project is complete, there will be sufficient wastewater capacity. Currently, servicing terminates at the boundary of the Institutional Zone and would need to be extended to the site for connection.
- **Geotechnical Feasibility:** A preliminary review of orthophotography indicates potential elevation changes and some rock presence.

Secondary Criteria:

- **High Demand Area:** Lively-Walden is identified as a lower priority demand area concerning Social/Community Housing waitlists.
- Active Transportation: There are no sidewalks on White Road. The property is approximately 177 meters from a 350-meter section of "proposed" multi-use trail that connects to "existing" multi-use trails both to the north and south.
- **Open Space/Community Recreation:** The property is approximately 1000 meters from the Lively Ski Hill, Anderson Farm, and other recreational areas north of Highway 17, close to the Trans-Canada route.
- **Educational Facilities:** The site is over 1000 meters from five schools located north of Highway 17.
- **Food Security:** The site is approximately 275 meters from a Loblaws store on the opposite side of MR24.
- **Employment/Commercial Areas:** There are employment opportunities and commercial areas approximately 300-400 meters away along MR24.

If approved, the subject land will be declared surplus to the City's needs and added to the City's Affordable Housing Land Bank. A further report will follow with respect to any future transfer of the property.

Resources Cited

Property By-law 2008-174, as amended https://www.greatersudbury.ca/do-business/available-lands-and-buildings/general-procedures/bylaw-2008-174/

Affordable Housing Land Banking Strategy Phase 2 Update https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=53497

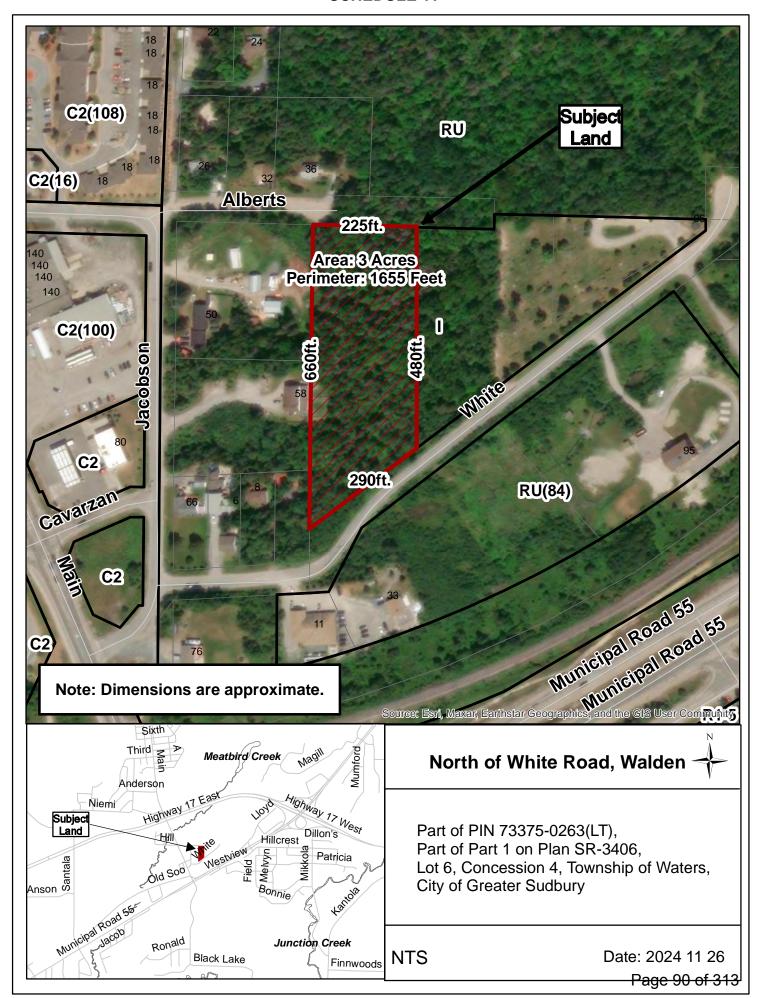
City of Greater Sudbury Strategic Plan 2019-2027 Revised 2023

<a href="https://www.greatersudbury.ca/sites/sudburyen/includes/themes/MuraBootstrap3/js/pdfjs-2.8.335/web/viewer_even_spreads.html?file=https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/report-pdfs/revised-strategic-plan-2023/#zoom=page-width

Draft City of Greater Sudbury Housing Supply Strategy, December 2023 https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=52176

Affordable Housing Community Improvement Plan, August 2018 https://www.greatersudbury.ca/do-business/planning-and-development/affordable-housing-strategy/housing-strategy-pdfs/affordable-housing-community-improvement-plan/

Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 https://www.ontario.ca/laws/regulation/110030#BK194



Schedule 'B'

Re: White Road, Lively – Declaration of Surplus Land And Addition to Affordable Housing Land Bank



View looking northeast from White Road



View looking northwest from White Road.



Municipal Road 55, Lively – Declaration of Surplus Land Walden Industrial Park

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Type:	Routine Management Reports
Prepared by:	Tanya Rossmann-Gibson Real Estate
Recommended by:	General Manager of Corporate Services
File Number:	N/A

Report Summary

This report provides a recommendation in regard to declaring surplus vacant land on the south side of Municipal Road 55, Lively, in the Walden Industrial Park.

Resolution

THAT the City of Greater Sudbury declares surplus to the City's needs vacant land on the south side of Municipal Road 55, Lively, legally described as part of PIN 73372-0227(LT), part of Lot 3, Concession 6, Township of Waters;

AND THAT the land be marketed for sale by the Economic Development division, as outlined in the report entitled "Municipal Road 55, Lively - Declaration of Surplus Land Walden Industrial Park", from the General Manager of Corporate Services, presented at the Planning Committee meeting of April 28, 2025.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report supports objectives 1.4 Reinforce Infrastructure for New Development, 2.0 Economic Capacity and Investment Readiness, and 2.1 Build Economic Development Initiatives to Support Existing Businesses of the Strategic Plan, and in particular, is supporting the City's capacity to respond to new opportunities and attract new businesses. This report has no direct connection to the Climate Action Plans.

Financial Implications

There are no financial implications associated with this report.

Background

Walden Industrial Park

The Walden Industrial Park (WIP) is one of the industrial areas within Greater Sudbury, highlighted in the

Employment Land Community Improvement Plan. It offers significant opportunities for business expansion, retention, and investment.

Spanning approximately 140 acres, WIP is recognized as one of the city's eight strategic employment areas in the Employment Land Community Improvement Plan. The land was originally purchased by the Sudbury Regional Development Corporation from Inco Limited in 1976 and later transferred to the former Regional Municipality of Sudbury, now the City of Greater Sudbury.

Developed around 30 years ago to attract industrial users, WIP is centrally located and stands as the largest Industrial Park in the region. It serves as a major economic hub for Greater Sudbury, with nearby Fielding Road seeing an average daily traffic count of about 1,700 vehicles. The park hosts a variety of property uses, predominantly heavy industrial applications such as fabrication and manufacturing, along with some light industrial, service facilities, and limited retail outlets.

Subject Land

The subject land measures approximately 17 acres in size and is zoned M3 – Heavy Industrial. Access to the land will be via an easement over City-owned land at the northwest limit, fronting Municipal Road 55, Lively.

The location of the subject land and easement area are identified on the attached Schedule 'A' and photographs are shown on Schedule 'B'.

The City's Economic Development division manages lands within the Industrial Parks and requested that the subject land be circulated to determine if a recommendation could be made to Council to declare the land surplus, in support of the Employment Land Strategy.

The Employment Land Strategy is a strategic initiative aimed at fostering economic growth and a diversified economy. It integrates planning, infrastructure, and economic development to ensure the City has an adequate supply of serviced employment land, along with the necessary policies and incentives to stimulate investment, development, and job creation.

The proposal to declare the subject land surplus was circulated to all City departments and outside agencies in accordance with Property By-law 2008-174. No objections were received. The following comments were received:

- Conservation Sudbury advised that future development must comply with its wetland guidelines. Generally, development is prohibited within 12m of the wetland boundary and development within 30m requires a permit from Conservation Sudbury.
- Building Services did not have any objections or conditions regarding the proposal to declare the lands surplus.
- Planning Services advised that this project aligns with the City's employment strategy and de-risking efforts. No concerns were raised.
- Economic Development is supportive of this approach as it aligns with Council's direction on derisking industrial land with development potential.

No further comments were received.

The information received from Conservation Sudbury regarding future development compliance will be addressed in the agreement of purchase and sale through an acknowledgement.

If approved, the land will be declared surplus to the City's needs and marketed for sale by the Economic Development division.

A further report will follow regarding any future sale transaction.

Resources Cited

Employment Land Community Improvement Plan

https://www.greatersudbury.ca/do-business/planning-and-development/community-improvement-plans-and-incentive-programs/financial-incentive-programs/employment-land-community-improvement-plan/elcip-report/

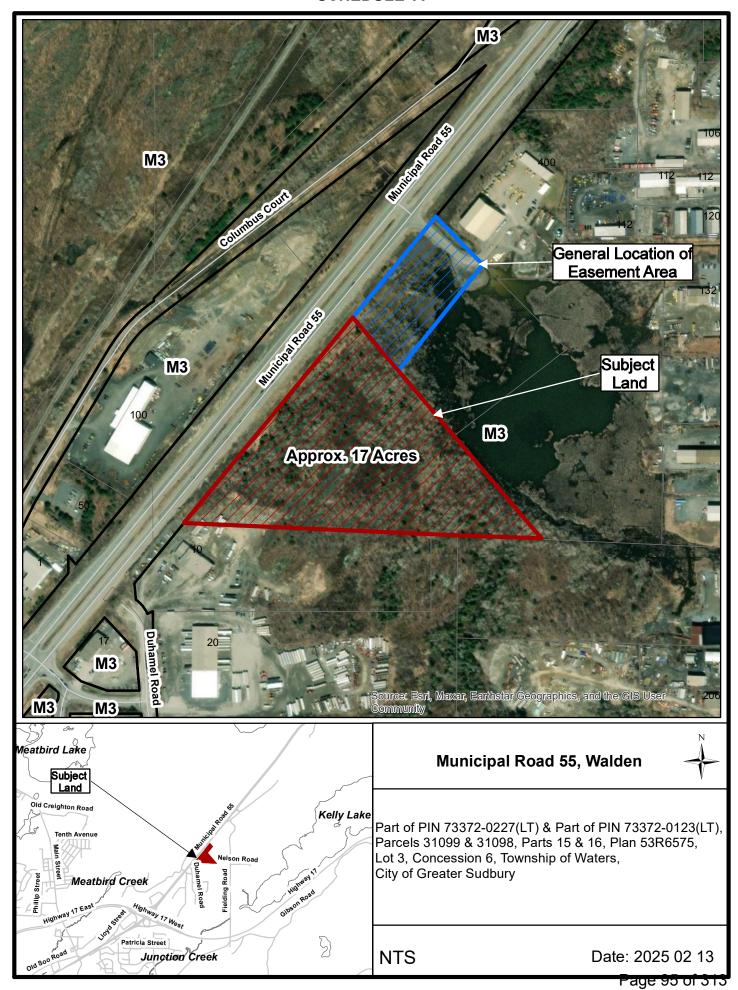
Employment Land Strategy

https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=47320

Property By-law 2008-174, as amended

https://www.greatersudbury.ca/do-business/available-lands-and-buildings/general-procedures/bylaw-2008-174/

SCHEDULE 'A'



Schedule 'B'

Re: Municipal Road 55, Lively
Declaration of Surplus Land Walden Industrial Park



View looking southeast from Municipal Road 55



View looking northeast from Municipal Road 55



Complete Street Design Guidelines – Transportation Planning Impacts

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Туре:	Presentations
Prepared by:	LyAnne Chenier Linear Infrastructure Services
Recommended by:	General Manager of Growth and Infrastructure
File Number:	N/A

Report Summary

This presentation provides information regarding the Complete Street Guidelines as well as their impact to the design of the transportation network.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report refers to "providing quality multimodal transportation alternatives for roads, transit, trails, paths, sidewalks, and connecting neighbourhoods and communities within Greater Sudbury" which is identified in the Strategic Plan under the strategic objective of Create a Healthier Community. This report also supports the "achieve 35% active mobility transportation mode share by 2050" as identified in the City of Greater Sudbury Community Energy and Emissions Plan (CEEP) by improving walking infrastructure.

Financial Implications

There are no financial implications.

Executive Summary

This report presents the City of Greater Sudbury's Complete Streets Design Guidelines (CSDG) and highlights their potential impacts the development processes, and the broader development community. The guidelines propose significant changes to street designs, including the implementation of 2:1 slopes for roadside ditches, narrowing lane widths, expanding sidewalk and cycling infrastructure, and incorporating landscaping elements. These changes aim to enhance safety, promote active transportation, improve public spaces, and align with the City's broader sustainability and growth objectives.

Introduction

The City of Greater Sudbury is introducing new Complete Streets Design Guidelines to better align road infrastructure with the city's vision of creating safer, more accessible, and environmentally sustainable streets for all users. These guidelines, which support the Complete Streets Policy approved by Council in 2018,

focus on enhancing active transportation options, improving connectivity, and fostering the livability and vibrancy of neighborhoods. The guidelines offer actionable recommendations to design streets that prioritize safety, accessibility, and multi-modal transportation.

Each street in Greater Sudbury plays a unique role and must be designed to reflect its specific context, whether existing or in future developments. Whether serving as a major transit corridor, residential commercial or industrial areas, or downtown areas with high pedestrian and cyclist activity, streets must fulfill multiple functions while balancing the needs of all users. The Complete Streets guidelines emphasize a context-driven approach, ensuring street designs align with both existing conditions and their future role in the transportation network, addressing functional needs and the surrounding area's characteristics.

The proposed guidelines will have a direct impact on the development community, influencing property development, site planning, and the design of roads within new subdivisions. Developers will be required to align road layouts and infrastructure with these new design principles, helping to create safer, more sustainable communities that supports active transportation. The guidelines outline key objectives such as:

- **Context-sensitive Design**: Tailor street designs to their specific roles within the transportation network.
- **Vibrant Public Spaces**: Design streets to attract pedestrians, cyclists, and community members, encouraging social interaction and local commerce.
- **Prioritize Transit and Active Transportation**: Integrate safe and efficient walking, cycling, and transit options to reduce dependency on private vehicles.
- Safety and Accessibility: Ensure streets accommodate users of all ages and abilities, promoting inclusivity and supporting a healthier community.
- Connectivity: Enhance the connectivity of the transportation network by linking key destinations.
- **Cost-effectiveness:** Consider environmental, social, and economic benefits and costs in street design to improve long-term resiliency.

By integrating Complete Streets principles, Greater Sudbury will promote a more sustainable, inclusive, and efficient transportation system. These design changes will not only improve the quality of life for residents but also support the city's growth, economic activities, and public health initiatives. The incorporation of Complete Streets design will also align with the city's ongoing commitment to enhancing transit infrastructure and promoting active mobility, ensuring greater accessibility and convenience for all residents.

Incorporating these guidelines into developments projects will not only help meet the city's sustainability and connectivity goals but will also boost economic growth, reduce vehicle operating costs, and create more vibrant public spaces.

Public Consultation

The Complete Streets Design Guidelines for Greater Sudbury have undergone extensive consultation to ensure they reflect the needs and priorities of the community. This process engaged a diverse range of stakeholders, including transportation professionals, community groups, accessibility advocates, and residents, to create a comprehensive and inclusive plan.

The draft road cross sections were first presented to the Operations Committee in June 2022. Following this, a public consultation period was held, lasting until September 30, 2022. During this time, staff actively engaged with the public at key events such as the Sudbury Market and Rib Fest. Additionally, staff presented the proposed cross sections to various advisory groups, including the Population Health Advisory Committee, the Seniors Advisory Panel, the Community Action Network Chair meeting, and the Development Liaison Advisory Panel (DLAC).

Feedback was collected through surveys, offering residents and stakeholders the opportunity to voice their opinions on critical elements such as cycle tracks, sidewalks, pedestrian amenities, parking, and more. The survey results indicated strong support for safer and more inclusive infrastructure, with a particular emphasis

on separated and protected bike lanes, the creation of multi-use paths, and the need for improved pedestrian amenities such as benches and greenery.

Key insights include:

- **Cycle Infrastructure**: Need for dedicated, separated cycling lanes and multi-use paths, especially connecting the city's cycling network.
- **Sidewalks and Pedestrian Safety**: The importance of wide, well-maintained sidewalks, particularly in residential and downtown areas. Winter maintenance and accessibility for people with disabilities were common concerns, with calls for safer pedestrian routes and improved snow removal.
- **Public Transit**: Enhancing public transit infrastructure, including more frequent services, better bus stops, and designated lanes.
- Parking and Traffic Flow: There were mixed opinions about on-street parking for businesses in
 downtown areas, with some supporting its presence for local businesses, while others expressed
 concern about the negative impact of parking on traffic flow and safety, particularly near busy
 pedestrian areas. For local residential roads, there is a preference for parking on one side, with a
 growing emphasis on incorporating cycling infrastructure and ensuring safe, accessible spaces for
 pedestrians.

Proposed Changes within the Complete Streets Guidelines

The proposed changes within the Complete Streets Design Guidelines include adjustments to road cross-section standards, with a focus on lane widths, sidewalk dimensions, and the integration of cycling infrastructure. Currently, urban roads in Greater Sudbury have a standard width of 9 metres for local roads or varying lane widths of 3.75 to 4.5 metres for arterial and collector roads, while rural roads range from 6.7 metres to 7.3 metres for local and collectors up to 14.6 metres for arterial roads. The proposed changes aim to narrow lane widths to 3.5 metres for arterial and collector roads and reduce the total road width to 7.5 metres for urban local roads and 6.0 metres for rural local roads. This reduction in road width will free up space for pedestrian and cycling infrastructure, such as wider sidewalks and dedicated bike lanes, while still maintaining traffic flow.

For sidewalks, the guidelines propose widening sidewalks from 1.5 metres to 1.8 metres to better accommodate mobility devices and strollers. This will improve pedestrian mobility, especially in high foot traffic areas. The guidelines also include a strong focus on cycling infrastructure, recommending the addition of dedicated bike lanes and cycle tracks, particularly on arterial and collector roads. The incorporation of safe cycling routes will enhance connectivity within the city's growing active transportation network, offering an alternative to car travel and encouraging more sustainable commuting options.

Another significant change is the proposal to adjust slopes on local and collector rural cross sections for roadside ditches from the current 3:1 to a 2:1 ratio. This adjustment will create space for bike lanes, sidewalks, and wider paved shoulder space for active transportation within the existing right-of-way, enhancing safety without expanding the roadway. Both designs have low expected collision frequencies, supporting their safety.

Additionally, the guidelines propose integrating more landscaping features, such as additional trees, shrubs and benches, along roadways. These features will not only improve the aesthetic appeal of streets but also provide environmental benefits like improved air quality and stormwater management. The addition of benches for rest areas will also help create more inviting public spaces.

Emergency vehicle access has been a key consideration in the proposed changes. The guidelines recommend ensuring roads are wide enough to accommodate larger emergency vehicles, such as fire trucks, while also incorporating narrower lane or road widths, which will help slow traffic and improve safety for all road users.

Impacts on Development in the Community

The Complete Streets Design Guidelines were developed to support the Complete Streets policy, adopted in 2018, and provide a consistent approach for integrating key elements into road projects and new roads. These guidelines focus on improving road safety, accessibility, and sustainability. These guidelines will have some impact on how developers approach road design for new subdivisions and developments, whether industrial, commercial, or residential.

When developers apply for approval of industrial, commercial, or residential subdivisions, the City requires that the designs for local, collector, and arterial roads (both urban and rural) comply with the same standards as those used in road reconstruction projects. This includes 1.5 metre sidewalk on one side of a local roads, and both sides of collector and arterial roads. Urban arterial and collector roads must include cycle tracks or bike lanes, while rural roads require 2 metre paved shoulders for active transportation. These requirements align with the City's Official Plan, and are enforced through the Zoning By-law, which regulates land use and ensures development follows the City's planning and design goals.

As part of the Site Plan Control process, developers must include or contribute to the future installation of sidewalks, cycle tracks, or bike lanes. They are also required to include landscaping, like tree planting, along these roads as part of new developments or road improvements resulting from new development.

The new design standards propose narrowing lane widths for arterial and collector roads to 3.5 metres, as well as reducing road widths of urban local roads to 7.5 metres. The guidelines also propose increasing sidewalk widths from 1.5 metres to 1.8 metres. This change will improve pedestrian mobility, especially for those with mobility devices or strollers, and will make new roads more inclusive.

The City currently has both rural (open ditch) local roads (where lot sizes are larger, and houses are farther apart) and rural local roads in urban areas (where lot sizes are smaller, and houses are closer together). There is currently only one standard for these types of roads. For rural local roads, the Complete Streets Design Guidelines propose a cross-section similar to the current standard, with the key difference being narrower road widths to 6.0 metres and additional landscaping for trees and shrubs. For rural local roads in urban areas, rather than following the current practice of urbanizing the road (which involves adding curb, gutter, storm sewers, sidewalks, etc.), the Complete Streets Design Guidelines propose a new cross-section that retains the rural character (with open ditches) while narrowing road width to 6.0 metres, adding a sidewalk and additional landscaping elements such as trees, shrubs, and benches. This new cross-section for rural local roads in urban areas was specifically designed to provide the municipality with an option that avoids full urbanization in already built-up areas, offering a more cost-effective and context-sensitive solution for these neighborhoods.

When a new road is built, including in a development, it is typically urbanized, meaning it follows urban cross-sections that include curb and gutter systems, stormwater management infrastructure, sidewalks, and other essential urban features. As the city grows, new subdivisions are designed to integrate with the existing urban infrastructure, ensuring effective stormwater management and reducing risks like flooding and erosion. The benefit of urbanization with curb and gutter systems is that it maximizes land use. These systems take up less space compared to open ditches and culverts, which require more room for drainage. This makes curb and gutter systems a more practical solution in urban areas where space is limited, allowing developers to optimize land while maintaining effective stormwater control. Curb and gutter systems also provide a cleaner, more organized appearance, which aligns with the visual preferences of urban environments. Open ditches, on the other hand, are often considered less attractive in residential and commercial areas.

The proposed changes to the Complete Streets Design Guidelines will have a manageable impact on developers' costs. For all new roads, wider sidewalks will increase initial costs, but these will be offset by savings from narrower road widths, reducing the amount of paving required. On urban collector roads, cycle tracks, bike lanes, and landscape features are already part of the design. For rural collector roads, the 2-metre paved shoulder is also included, so no additional cost will result from these features. As part of the Site Plan Control process, developers are required to include or contribute to the future installation of sidewalks, cycle tracks, or bike lanes, which may incur higher initial costs due to sidewalk widening. The new design cross section for rural local roads in urban areas, which preserves a rural feel with open

ditches while adding sidewalks, offers cost savings compared to full urbanization. However, the City will need to review each new development application individually to determine if adopting this cross-section is appropriate, taking into account the specific impacts of accepting this design for new roads and the total life cycle cost of the assets. This review will ensure that the design is suitable for each development's context and needs, in alignment with the City's Official Plan, which prioritizes active transportation infrastructure, and the Zoning By-law, which regulates land use and ensures developments are consistent with the City's broader planning and design goals.

Conclusion and Next Steps

The Complete Streets Design Guidelines offer a strategic, flexible approach to transforming Greater Sudbury's transportation network into a safer, more accessible, and sustainable environment. The guidelines are adaptable to the unique context of each road and neighborhood. The city will monitor and adjust the guidelines as needed, incorporating concepts like infill development and low impact development.

If adopted, staff will complete a comprehensive review of all relevant City policies, procedures, best practices, and current standards to ensure consistency with Complete Streets principles. This review will ensure that the guidelines continue to align with the objectives of community impact, resource management, sustainable development, and quality control, with the goal of creating a well-organized, livable, and thriving community. The review will consider not only the integration of Complete Streets principles but also the impact from a road maintenance and sustainability perspective, ensuring that future developments are built with long-term viability in mind.

Additionally, staff will develop criteria and guidelines to determine when a rural road cross-section in an urban area can be used for new development. This will help make the decision-making process transparent to the development community, ensuring clarity and consistency in planning and development decisions.

The city's ongoing development of the Roads and Transportation Asset Management Plan will play a critical role in prioritizing capital road projects. During the development of the capital budget, the guidelines will be reviewed to determine which elements should be included in each project, ensuring that funds are allocated efficiently. A key part of this process will be the use of data like past collision history, traffic speeds, and active transportation user volumes to identify areas in need of Complete Streets upgrades. For instance, roads with lower Average Annual Daily Traffic (AADT) and lower speeds may not require dedicated cycling lanes or wider sidewalks, as the needs of these areas may differ. Additionally, the current sidewalk priority index will be reviewed to further guide these decisions. Staff will return with future reports which will expand on the criteria that will be used to guide this decision-making process which will be applicable to development driven projects.

Resources Cited

City of Greater Sudbury: *Transportation Master Plan (2016)*, Accessed online: https://www.greatersudbury.ca/live/transportation-parking-and-roads/roads/drafttransportation-master-plan1/

City of Greater Sudbury: *Complete Streets Policy (2018)*, Accessed online: https://pub-greatersudbury.escribemeetings.com/filestream.ashx?documentid=5548

City of Greater Sudbury: *Urban Forest Master Plan* (2024), Accessed online: https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=55627

City of Greater Sudbury: Community Energy and Emissions Plan (2019, revised 2021), Accessed online: https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=55627
https://www.greatersudbury.ca/sites/sudburyen/assets/File/Comms/FINAL%20Greater%20Sudbury%20CEE
P.pdf

City of Greater Sudbury: *Official Plan*, Accessed online: https://www.greatersudbury.ca/city-hall/reports-studies-policies-and-plans/official-plan/op-pdf-documents/current-op-text/

Accessibility for Ontarians with Disabilities Act (AODA): Government of Ontario. (2005). *Accessibility for Ontarians with Disabilities Act (AODA)*. Accessed Online: https://www.ontario.ca/laws/statute/05a11





Greater Sudbury Complete Streets Design Guidelines

April 2025



Photo Credits

Unless otherwise specified, all photos were provided by the City of Greater Sudbury or by members of the WSP project team.

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Chapter 1 Introduction to Complete Streets

1.1 Vision and principles

In recent years, Complete Streets have become increasingly popular among municipalities across Canada and the United States. The philosophy behind a Complete Streets approach is not merely to redesign streets but to broaden their ability to service local communities. Historically, streets have been planned almost exclusively to optimize the throughput of motor vehicle traffic.

While a necessary function, a road-centric perspective has neglected opportunities to accommodate other travel modes and support a wider range of roadway functions. This includes infrastructure improvements to increase access and comfort for active transportation and public transit. The Complete Streets approach encourages designs that better balance considerations for the different transportation modes that share streets, with an underlying focus on enhancing road safety.

The approach does not mandate a design of multimodal roadways for universal contexts but acknowledges that streets should be designed to address the transportation requirements and placemaking functions of adjacent land uses. Complete Streets Design Guidelines (CSDG) serve as flexible tools to assist municipalities in designing, implementing, and preserving Complete Streets on their road network.



Purpose of the guideline

The CSDG acts as a tool to implement the Complete Streets policy through new roads and road reconstruction projects. The CSDG should be used in addition to the Engineering Design Manual and other technical resources by City staff to review development applications and linear infrastructure capital projects.

The Guidelines are intended to be used by the City, the development community, and broader community. The development community are expected to apply the CSDG in the design of development driven roadway projects. The community should use the Guidelines to interpret design and provide feedback on City projects.

Users of the Guidelines are encouraged to review the entirety of the Guidelines to understand how each component fits together. The Guidelines are broken into five chapters and two appendices:

- Chapter 1 Introduction to Complete Streets: Provides an overview of what Complete Streets are and the role of the Guidelines.
- Chapter 2 Elements of Complete Streets: Describes the different Complete Streets zones, design elements and parameters.
- Chapter 3 Street design: Includes a summary of road typologies that apply to Greater Sudbury and example cross sections.
- Chapter 4 Intersection and transition design: Includes design principles that may be applied in the design of any intersection or transition and provides example designs.
- Chapter 5 Planning for Complete Streets: Describes the design process for implementing Complete Streets.
- Appendix A Glossary of Terms Definitions are provided for key terms used throughout the Guidelines.
- Appendix B Audit Tool The tool is used to support City staff in the implementation of Complete Streets as described in Chapter 5.

Definition of Complete Streets

A Complete Street is designed to consider the needs of all users, such as people who walk, roll, cycle, take transit or drive, and people of varying ages and abilities. While not every type of use or user may be accommodated on every street, the goal is to build a city with a well-functioning street network that supports and sustains our quality of life. There is no single way in which to make a street 'complete'. It depends on many factors including the character and context of each particular street.

Complete Streets have many benefits that include the following:

- Encourage people to walk, cycle and take transit,
- Better physical and mental health outcomes for people of all ages,
- Reduce the chance of injury or death,
- Support a better balance between motorized travel and other uses,
- More space for landscaping and green infrastructure, which contributes to healthier air, more shade, better stormwater management and makes our city more resilient to the effects of climate change, and,
- Desirable cities with a high quality of life. Businesses want to locate and stay where streets are attractive. Residents put down roots where they can walk and bike or socialize with fellow street users.



1.2 Greater Sudbury context

The City of Greater Sudbury is centrally located in northern Ontario situated on the Canadian Shield in the Great Lakes Basin and is composed of a rich mix of urban, suburban, rural, and wilderness environments. Greater Sudbury is 3,627 square kilometres in area, making it the geographically largest municipality in Ontario and second largest in Canada. With a 2023 population of 179,965 (Statistics Canada), Greater Sudbury is also a regional hub for many Ontario residents who live in nearby communities. These visitors come to the city to visit with family and friends, for cultural and educational experiences, such as Science North and Dynamic Earth, for entertainment, for shopping, for conducting business, and for accessing health care.

There are several unique characteristics within Greater Sudbury that impact the way Complete Streets are designed and implemented. These characteristics include a winter city, rural and urban contexts, low population density per area, and capital and operating budget constraints.



Winter city and winter maintenance

The City of Greater Sudbury may be considered a "Winter City" as a northern community with a long winter season, snowy, very cold weather, and harsh climatic conditions. Greater Sudbury receives a high volume of snowfall in winter months that impacts snow plowing and snow storage practices on its roadways.

Snow storage and maintenance practices also impact opportunities for landscaping in boulevards and medians, adjustments to lane width, application of low impact development (LID), and year-round accessibility of some active transportation facilities.

The City's existing Winter Maintenance practice includes the use of salt and sand that must be considered in the placement of landscaped boulevard spaces or LID treatments next to the roadway. Bicycle infrastructure is also temporarily closed over the winter months.

The CSDG responds to Greater Sudbury's winter conditions through the intentional design of streetscapes that are safe, comfortable, desirable and aesthetically pleasing throughout the winter months. Design elements such as lane widths, furnishing zones and placement of cycling facilities are considerations for Greater Sudbury's winter design



Rural and urban contexts

Greater Sudbury includes both rural and urban contexts and cross sections. The design and function of rural and urban roadways can vary dramatically, which is reflected in the approach to designing them. Rural roadways connect communities divided by large stretches of low-density land-use. Given the distances travelled along rural roadways, motor vehicles and freight are typically prioritized modes and speed limits are often higher than urban areas. While they may be primarily used by motor vehicles, rural roadways can attract cycling and pedestrian traffic near residential communities or along scenic corridors for recreational trips. Transit may also operate on rural roadways depending on the areas serviced by local transit agencies. Urban roadways, in comparison, attract a wider range of users who navigate a denser road network with shorter distances between intersections. In urban environments, consideration must be made for the needs of different modes and curbside uses, such as parking and loading. Given the greater degree of pedestrian activity to create placemaking in urban areas, these roadways typically feature more dynamic streetscaping and urban design.

Urbanized cross sections typically refer to streets that address stormwater requirements through curbs, gutters, and catch basins and generally have buried utilities. Rural cross sections typically refer to streets with ditches on both sides and overhead utilities (hydro poles). Rural cross sections may exist in urbanized areas.

In Greater Sudbury, there are several local residential streets with rural cross sections. The CSDG includes roadway classifications that account for urban and rural contexts and cross sections that support multimodal design.

Capital and operating budget

The City of Greater Sudbury maintains 3,600 lane kilometres of municipal road network, 440 kilometres of sidewalk, 140 lane kilometres of cycling facilities (including mixed-use trails and signed bike routes), and 1,100 bus stops.

The City balances maintaining the existing road network in a good state of repair in alignment with sound asset management practices, investing in new construction and reconstruction. As a result of funding constraints due to its large physical area, the City must carefully consider where Complete Streets are implemented, and which design elements are included. The Complete Streets Guidelines provide guidance to decision makers on these trade-offs.



History of Complete Streets in Greater Sudbury

Policy backing

Complete Streets have a strong policy backing in the City of Greater Sudbury's strategic documents. The Complete Streets concept was introduced in the Transportation Study Report (TSR - a transportation master plan document) with a set of policy directions related to the planning, construction, operation, and maintenance of the transportation network to support all users. Complete Streets is woven throughout the TSR. Complete Streets was reinforced through updates to roadway classifications and cross sections, active transportation plans, and sidewalk policies in the TSR.

Ongoing development

The City has continued to develop the Complete Streets concept through the Complete Streets Policy and linear capital project investments. In 2018, the City of Greater Sudbury Council approved the Complete Streets Policy. The policy requires that the City plan, design, construct, operate, and maintain the transportation network to provide an extensive and integrated network of facilities that are safe and convenient for people of all ages and abilities travelling by foot, bicycle, public transit, or vehicle. The City implements Complete Streets through the context-sensitive design of new roadways and reconstruction or rehabilitation of existing roadways where the entirety of the roadway is being replaced within the existing road allowance and maintenance programs. The policy states that the City will enact appropriate and timely bylaws, procedures, processes, programs, guidelines, and standards that support the delivery of Complete Streets. City divisions responsible for implementing the policy include Infrastructure Capital Planning, Engineering Services, Transit Services, Linear Infrastructure Services, and Planning Services.

Implementation

Following the Complete Streets policy creation in 2018, the City successfully implemented 20 capital road projects through 2023. Project examples include:

- Kingsway Boulevard from Silver Hills Drive to Falconbridge Road
- Walford Road from Regent Street to Paris Street
- Roy Street from Wilfred Street to Renfret Street
- Second Avenue from Scarlet Road to Kenwood Drive

Vision for Complete Streets in Greater Sudbury

Safety and accessibility: To create great places and enhance the quality of life of residents, the City of Greater Sudbury will provide safe, accessible streets for all users.

Improved quality of life: Complete streets will improve quality of life for Greater Sudbury residents and attractiveness of the community over the long-term by providing a balanced and connected transportation system that enhances public health and safety, livability, equity, affordability, and that supports increased economic activity and opportunity.



1.3 Applications and limits of the guidelines

Approach

The Guidelines are intended to provide an integrated approach to inform, streamline, and better coordinate decision-making and commenting when reviewing development applications and linear infrastructure capital projects. The Guidelines also act as a unifying document that ensures a consistent approach to the design of the right-of-way and provides a means to balance competing interests at the outset of the road design process.

Application

In alignment with the Complete Streets policy, the Guidelines apply to the design of new roadways and reconstruction or rehabilitation of existing roadways where the entirety of the roadway is being replaced within the existing road allowance.



Chapter 2 Elements of Complete Streets

2.1 Overview of street design zones

The Complete Streets approach is about considering the needs of all road users including pedestrians, cyclists, transit riders, and motorists and building streets to balance these needs and prioritize road safety. Beyond the mobility of various road users, Complete Streets prioritize placemaking, the creation of places in our streets that contribute to healthy ecosystems, social inclusion, and vibrant business activity. Mobility and placemaking priorities need to be balanced with the need to accommodate critical utilities and enable efficient maintenance and operations.

This chapter outlines the elements of Complete Streets and their respective design principles and key considerations. The elements of Complete Streets include the following, as presented in **Figure 1**.

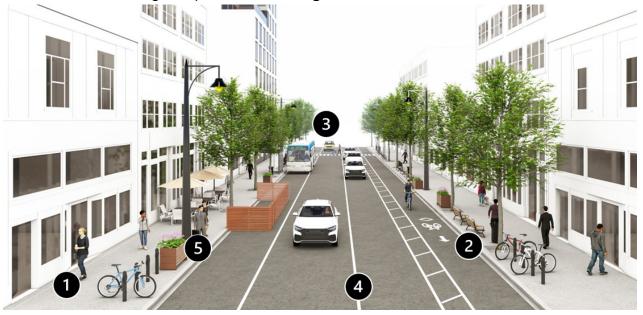


Figure 1

- Pedestrian realm and streetscaping: The part of the street that provides physical space for pedestrian activity, including sidewalks, street trees, and other amenities. Designing for sufficient accessibility, comfort, safety, and connectivity contributes to a thriving pedestrian realm and a sense of place on Greater Sudbury's streets.
- 2 Cycling and multi-use facilities: Include physically separated, designated, or shared facilities to accommodate cyclists within the road right of way. Providing low-stress conditions helps make cycling an attractive option for a wide range of ages and abilities.

- **Public transit facilities:** Cover the full range of the transit user experience from start to end of trip, including the journey to the stop or station, comfort and safety while waiting for transit, and the efficiency of movement for transit vehicles along their routes.
- 4 Travelled way: Serves an important role in providing efficient goods movement and emergency response, and in allowing people to freely move about the City. Complete streets enable the efficient movement of vehicles through the travelled way while ensuring the safety of all road users and building a sense of place.
- 5 Utilities and municipal services: Comprise essential services such as water supply, sewers, electricity and telecommunications, lighting, and gas supply. These services are generally accommodated within the public right of way and are key considerations in the design and maintenance of Complete Streets.

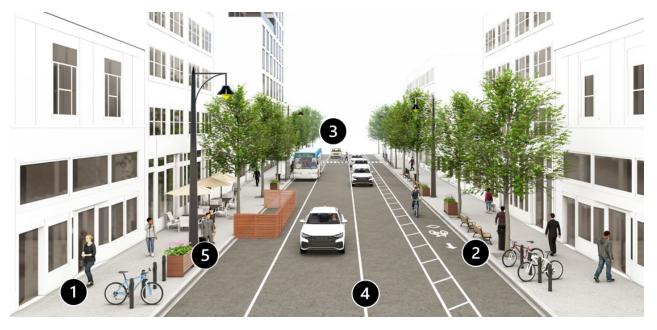


Figure 1. Street design zones

2.2 Pedestrian realm and streetscaping

The integration of pedestrian infrastructure is essential for creating a Complete Street environment that caters to the needs and preferences of all users. Walking, rolling, and other forms of human-powered transportation are not only sustainable but also promote equity by providing accessible travel options for all. Streetscape enhancements to promote pedestrian experience and safety can increase business activity, property values, and tax revenue. A well-designed pedestrian realm also supports social interactions and physical health for people.

This chapter focuses on the design principles, elements that form an inviting environment for pedestrians, and specific design considerations for Greater Sudbury's winter season.

The following resources can be referenced for more information on pedestrian realm and streetscape design:

- Design of Public Spaces Standards under the Ontario Integrated Accessibility Standards regulations
- Ontario Traffic Manual (OTM) Book 15: Pedestrian Crossing Treatments
- National Association of City Transportation Officials' (NACTO) Urban Street Design Guide



Design principles for pedestrian-oriented streets

In order to encourage pedestrian activity in Greater Sudbury, design principles and objects consider pedestrian needs and encourage pedestrian activity. **Table 1** lists out design principles for pedestrian-oriented streets.

Table 1. Complete Streets pedestrian realm design principles

Design Principle	Motivation	Desired Result
Prioritize safety	Pedestrians, especially children and seniors, are the most vulnerable road users. Complete Street design must prioritize safety for these users	Attention should be paid to areas where pedestrians may come into contact with vehicles, such as at intersections, driveways, and parking areas. Where there are dedicated pedestrian facilities, creating a physical separation between the pedestrian space and the roadway can improve feelings of security and comfort for pedestrians.
Promote accessibility	The term "pedestrians" encompasses a broad range of individuals who use the street, including those who may be using strollers or assistive devices such as wheelchairs, canes, or guide dogs. It is important to note that not all pedestrians move at the same pace, as some, such as children, seniors, or individuals with	The built environment should accommodate a wide range of mobility needs, with street design that removes existing accessibility barriers and avoid forming new ones in the process.

Design Principle	Motivation	Desired Result
	disabilities, may have slower walking speeds.	
Provide connectivity	Out of all modes, pedestrians are the most sensitive to route directness and elevation change. Street designs that do not accommodate pedestrian crossings on all legs should be discouraged in major arterial intersections.	The pedestrian realm should be designed to provide safe connectivity to key destinations via sidewalks, trails, and frequent crossing locations along a corridor. Signage to guide pedestrians to their destinations should be clear, concise, and easy to understand. Illumination on street connections can also motivate pedestrians for wayfinding and connectivity purposes.
Foster comfort and placemaking	Pedestrians move at their own pace, and well-designed pedestrian realms encourage people to interact with the land use around them. Pedestrians can choose to socialize, rest, or shop. The streetscape should be designed to complement and contribute to the character of a neighbourhood.	The pedestrian experience should be tailored in order to create a vibrant and enjoyable environment that complements the unique characteristics of the area. For example, streets with a focus on placemaking may include amenities beyond wide sidewalks such as seating, patio space, or frequent mid-block crossing opportunities.

Pedestrian realm zones

The pedestrian realm is comprised of the following zones, as presented in **Figure 2**:

- 1 Marketing zone
- 2 Clearway
- 3 Furnishing zone; and,
- 4 Edge zone.

Along some corridors such as urban arterials, an in-boulevard cycle track may be located between the edge zone and the rest of the pedestrian zones. **Table 2** defines and summarizes the design parameters for the pedestrian realm zones.

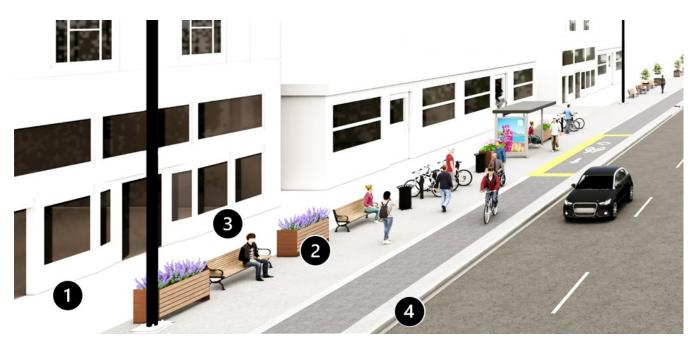


Figure 2. Pedestrian realm zones

Table 2. Pedestrian zone descriptions and design parameters

Zone	Description	Target value	Minimum value
Marketing/frontage zone	This space is allocated for advertisement and patio furniture, or signage. Also acts as a transition zone between adjacent properties and sidewalk.	Varies	0.5 m
Clearway	This space provides an unobstructed path for pedestrian traffic. The clearway width should be wider in areas with high anticipated pedestrian volumes such as along a Main Street.	1.8 – 3.0 m	1.5 m
Furnishing zone	This space enhances the aesthetic of the pedestrian zone, by placing light poles, trees, plants, patios, and other street furniture. This zone can be located on either side of the clearway. When placed between the edge zone and the walkway, it can act as an additional buffer zone between pedestrian traffic and vehicular traffic.	2.0 – 3.0 m	1.75 m
Edge Zone	This space is the zone between vehicular traffic and pedestrian and/or cycling movements, often used as snow storage. Information and regulatory signage for vehicles, drainage can all be placed within the edge zone.	Varies	0.3 m

Clearway

Widths for pedestrian clearway typically range from 1.5 metres for a traditional sidewalk to as wide as 3.0 metres in areas with high pedestrian activity. The clearway width should accommodate maximum pedestrian flow anticipated for the corridor. Thus, development projects that intensify land uses and increase pedestrians should be considered when choosing an appropriate clearway width.

Construction of clearways and placement of utilities are vital for efficient pedestrian through movement. The vertical grade of the clearway is usually the same as the roadway and should not exceed 3% for distances over 200m in best practice. In areas where grade exceeds 5%, additional design consideration is recommended to reduce the clearway's slope. As pedestrians are sensitive to route directness and comfort, reducing slope (when possible) can improve pedestrian accessibility. For cross slope, 2% is typically used for drainage. Specific thickness, slope, material, and widths should be consulted in the City's Engineering Design Guide.

Metal surfaces should be avoided in the clearway, such as maintenance holes and utility grates, due to an increase of slip hazard for pedestrians. This is especially problematic during wet and icy conditions, which are prevalent in the region. When possible, such metal surfaces should be placed on the edge zone, or adjacent to the clearway.



Furnishing zone

Amenities are extremely important for a welcoming and inclusive pedestrian realm. All components should be situated outside of the pedestrian clearway within the furnishing zone. All objects and furniture are subject to the Engineering Design Manual, and should consider local area plans, design aesthetic, and heritage. Common amenities found in or appropriate for Greater Sudbury are summarized in this chapter.

Streetlighting

The following are considerations for streetlighting:

- Usually located between the pedestrian clearway and the roadway, however, can be located between property line and pedestrian way for local road typologies.
- A pedestrian scale lighting illuminates sidewalks and is positioned lower than a typical streetlight. This can be used to illuminate the clearway in upcoming development projects.
- If located in a downtown setting, pedestrian-scaled streetlighting is most appropriate to encourage pedestrian throughfare. The streetlight pole design could include banners, hanging baskets, and other decorative elements, as shown in **Figure 3**.



Figure 3. Example of pedestrian-scaled lighting in Greater Sudbury

Seating

Seating improves accessibility and comfort for pedestrians. Often, landscaping and seating elements can be combined within the same furnishing zone (**Figure 4**). Seating is highly recommended in areas with high pedestrian activity, and near hospitals and seniors' homes.



Figure 4. Example of seating in the pedestrian realm

Landscaping

Greenery, such as grass, shrubs and trees, improve the aesthetics of the streetscape. Trees provide shade for pedestrians, and can also reduce the urban heat island effect. Minimum requirements for trees include adequate volume and quality of soil to sustain tree health. Soil cells, which are modular structures designed to provide the necessary soil volume and aeration for tree roots to grow and thrive, may be required in constrained urban areas to support healthy tree growth.

The City's Urban Forest Master Plan provides further guidance for increasing the tree canopy within urban areas. It recommends capital work projects, such as Complete Streets road projects, as opportunities to expand the tree canopy.



Figure 5. Example of landscaping in Chelmsford

Wayfinding facilities

Pedestrian-oriented maps and wayfinding signage should be provided in tourist areas, with information and destination directional language.

Wayfinding can also incorporate cycling, trail, and roadway information.



Figure 6. Example of wayfinding signs directing pedestrians and cyclists to utilize the railway tunnel in Sudbury

Source: Google Earth

Parking metres and pay stations

Typically located between pedestrian clearway and roadway. Facilities should be regularly maintained and well-marked for ease of access.



Figure 7. An example of a parking metre in Downtown Sudbury

Frontage furniture

Sidewalk patios have gained increased popularity as they encourage outdoor dining and support commercial activity for locals and businesses.

Frontage furniture can be configured along the roadway curb (replace on-street parking), building or alleyway.

Patios can take up most of the pedestrian space, and the clearway width and alignment must be protected to ensure safe flow of pedestrian traffic.

Specific guidelines on patio widths and alignment can be found in the City's Road Occupancy By-law.

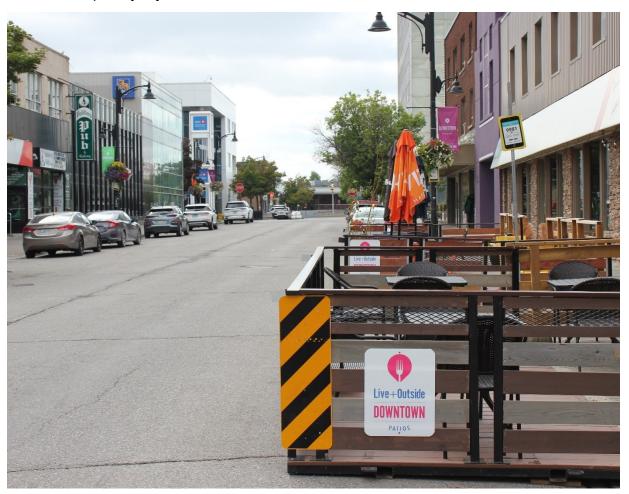


Figure 8. An example of a sidewalk patio in Downtown Sudbury

Bicycle parking and transit stops

Typically located between pedestrian clearway and roadway aligned with other street furniture such as streetlights or seating.



Figure 9. An example of a bike parking rack in Downtown Sudbury

Edge zone and snow storage

As Greater Sudbury is a winter city, space for snow storage should be allocated whenever possible. Accessibility for Ontarians with Disabilities Act (AODA) requires the City to maintain a minimum 1.5m clear width in the winter in publicly owned sidewalks. Cycling lanes can be used for snow storage if space is unavailable. Pedestrian clearway should ideally be at least 1.0m away from the curb for snow storage, or within the amenities area. However, mature trees in some neighbourhoods may prevent this design from being implemented. Furthermore, a straight clearway alignment makes snow removal easier. Deviation from a straight clearway alignment, especially at intersections, should be discouraged. Specific guidelines on snow removal and winter maintenance can be found in the City's Active Transportation Winter Maintenance Policy.

Intersections and mid-block crossings

The location and alignment of pedestrian crossings impact how far a pedestrian must travel to reach a crossing and determined the time pedestrians are exposed to traffic while crossing the street. Pedestrian crossing distances should be minimized to accommodate for pedestrians with low mobility or with additional accessibility needs. Tactile walking surface indicators must be installed at both ends for all signalized intersections with pedestrian crossings. The crossing should also be in a straight alignment with the clearway to maximize connectivity. An intersection crossing includes many components, as follows.

Crosswalk pavement markings

Pavement markings are used to identify the pedestrian crossing area to pedestrians and to drivers. Two painted parallel lines are regularly used at intersections.

Ladder or zebra pavement markings are recommended for stop controlled, signalized intersections, roundabouts, or channelized right turns, at high pedestrian activity locations.



Figure 10. Ladder pavement marking on midblock of Elm Street.

Raised crossings and raised intersections

Raised crossings or intersections should be considered where traffic calming is desired. This design modification creates a vertical deflection in vehicles and reduces the speed of traffic. Raised crossings increase the visibility of pedestrians crossing the intersection and signal to drivers that they are entering a pedestrian zone when navigating the intersection. Implementation of raised intersections and crossings should include consultation with emergency services.

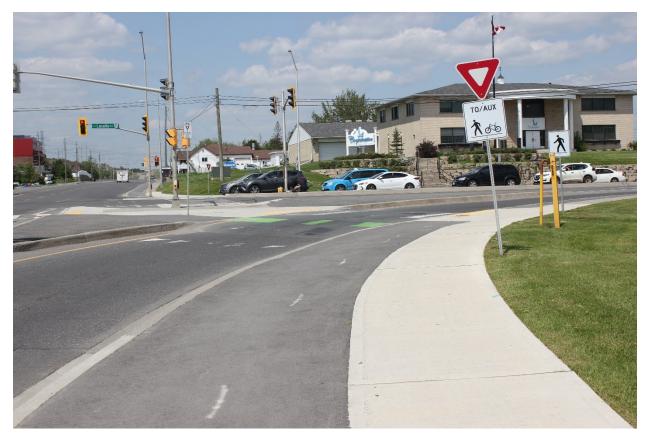


Figure 11. Example of a raised crosswalk.

Mid-block crossings

The Official Plan lists a range of minimum intersection spacing for all road classifications. Arterial roads (200 metre, or 400 metre for high-speed streets) require a much higher intersections separation distance, compared to local or collector roads (60 metre). Thus, it is important to consider the midblock distance to prevent unsafe crossings from occurring. This may include a centre median or a refuge island to divide crossing distance into smaller, acceptable distances.

OTM Book 15 outlines the criteria for ideal pedestrian crossing distances at midblock crossings, based on existing or future crossing demand.

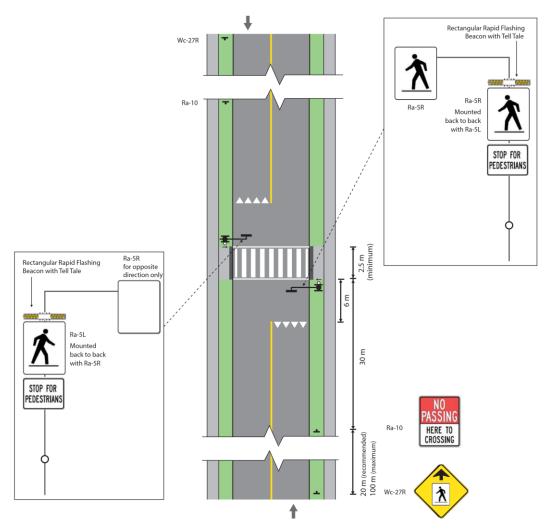


Figure 12. Example of midblock crosswalk for a two-lane roadway.

Source: OTM Book 15 (2016)

AODA compliant pushbuttons

Newly installed pushbuttons must be AODA compliant during its installation, positioning, and implementation process. Pushbuttons provide an auditory and tactile accessibility aid and trigger a walk signal.



Figure 13. An AODA-compliant pedestrian pushbutton in Sudbury.

Signalized pedestrian walk phase

A pedestrian walk phase should be incorporated in all signalized locations. This provides a safe opportunity for pedestrians to cross the street. Pedestrian signals provide the opportunity to incorporate leading pedestrian intervals, which provide a head start for pedestrians before vehicles are given the green light. This improves visibility and allows pedestrians to establish themselves in the crosswalk, increasing their safety and making it more likely for drivers to yield to them.



Figure 14. A signalized pedestrian walk phase with AODA compliant pushbuttons.

2.3 Cycling and multi-use facilities

Cycling is a healthy, low-impact, climate-friendly, and affordable form of transportation that reduces automobile dependency. Street design has a direct influence on cyclists' perceived comfort and safety while cycling.

This chapter outlines principles and design features that promote a healthy cycling environment, while recognizing and mitigating risks for all users within the road right-of-way (ROW).

The following resources can be referenced for more information on cycling facility planning and design:

- Ontario Traffic Manual (OTM) Book 18, Cycling Facilities
- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide

Design principles for cycling

In order to encourage cycling activity in Sudbury, design principles and objects consider cyclist needs and encourage cycling. **Table 3** lists out design principles for cyclist-oriented streets.

Table 3. Complete Streets cycling design principles

Design principles	Motivation	Desired result
Design for all ages and abilities	Designing cycling facilities for the comfort and safety of people of all ages and abilities to encourage people to cycle more often and improve safety for vulnerable road users.	Cycling facility selection and design should account for local context. On high-speed high-volume corridors, facilities should be physically separated. On lower volume corridors, the focus should be on reducing motor vehicle speeds and volumes, in order to reduce the speed differential between modes.
Promote connectivity and guidance	A connected and well signed network provides direct access to	The cycling network is fully connected with minimal gaps between facilities. Practitioners

Design principles	Motivation	Desired result
	destinations across the City making cycling an attractive way to travel.	should work towards eliminating missing links in the network.
		Guidance for wayfinding and directional information should be intuitive and clear to direct users to key corridors and destinations within the network and warn users of gaps and conflict zones.
Provide cycling supportive facilities	Attractive and well- maintained cycling facilities beyond cycle tracks and bike lanes such as greenery, adequate lighting, and secure bike parking and lockers help complete	The design of the cycling network should consider the implementation of end-of-trip facilities such as secure parking, showers, lockers, and repair stations. Other intermodal facilities, such as bike racks on buses and indoor parking at
	the cycle ecosystem and encourage bicycle use.	major bus stations, can increase transit ridership and cycling within the City.



Types of facilities

Many types of cycling facilities can be incorporated onto Greater Sudbury's streets according to the appropriate context. These include physically separated facilities such as cycle tracks, physically separated cycling lanes, and multi-use paths, conventional and buffered bicycle lanes, and shared facilities such as neighbourhood bikeways, mixed traffic operation, and paved shoulders.

Physically separated bikeways

Physically separated bikeways provide a safer riding experience for cyclists by providing horizontal and, in some cases, vertical separation from adjacent motor vehicle traffic. This is achieved through the use of physical barriers, such as curbs, bollards, or planters, to create a separation between cyclists and vehicles. These types of barriers also provide a more comfortable experience for cyclists of all ages and abilities, encouraging an increase in cycling along the corridor.

Physically separated bikeways should be considered on high-speed, high-volume corridors such as Urban Arterials and Connectors. The following facility types can be considered:

Physically separated bicycle lanes: Delineated bikeways with physically separation from the roadway with a horizontal buffer and separation elements such as flexible bollards, pre-cast or cast-in-place concrete curbs, planters, and medians.



Figure 15. An example of a physically separated bicycle lane in Toronto.

Cycle tracks: Physically separated bikeways that are both horizontally and vertically separated from the roadway by a curb and buffer. These often run parallel to the sidewalk within the boulevard and are for exclusive use of cyclists.

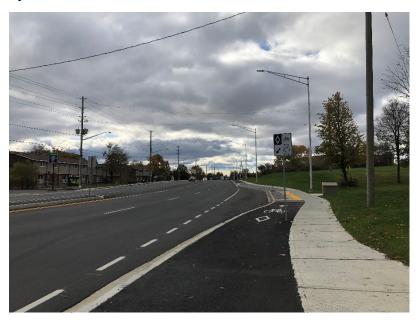


Figure 16. An example of a cycle track along 2nd Avenue N.

Multi-use paths: A separated pathway that allows both pedestrian and cyclist movements on the same clearway. In-boulevard multi-use paths are generally parallel to the roadway within the street boulevard whereas multi-use trails are dedicated corridors separate from the right-of-way.



Figure 17. An example of a multi-use path on Notre Dame Ave

Bicycle lanes

Bicycle lanes are designated spaces for cyclists along the roadway without any physical separation. Bike lanes are lineated from adjacent vehicle lanes with paint and may include a horizontal buffer. These facilities do not provide the level of comfort and safety for cyclists that physically separated facilities provide and are therefore appropriate on corridor with low to medium volumes and operating speeds such as Main Streets.

Conventional bicycle lanes: Marked lanes on a roadway that are designated for use by cyclists. They are typically located alongside the curb and are demarcated with painted lines and signs.



Figure 18. Example of a conventional bike lane in Greater Sudbury.

Buffered bicycle lanes: Conventional bike lanes that have a horizontal painted buffer between the bike lane and the adjacent motor vehicle lane.



Figure 19. Example of a buffered bike lane in Halton Hills.

Source: Town of Halton Hills

Shared cycling facilities

Shared cycling facilities do not provide any distinct operating space for cyclists but may include amenities such as traffic calming.

Neighbourhood bikeways: Also known as "neighborhood greenways," these are low-stress streets that prioritize cyclists and pedestrians through traffic calming measures such as speed humps and traffic circles. At intersections with arterial roads, connectivity can be promoted by installing wayfinding signage, refuge islands, and cyclist-activated actuated signals. The goal is to reduce frequent stops for cyclists and provide a comfortable cycling experience along the bikeway.



Figure 20. Modal filters on a neighbourhood bikeway in Toronto

Source: Toronto Star

Mixed traffic operation: Unless specifically prohibited, cyclists are permitted to travel on all roadways. Mixed traffic operation is suitable on low speed, low volume corridors such as Local Residential streets and may include signage along designated bike routes.



Figure 21. An example of mixed traffic operation in Brantford

Source: City of Brantford

Paved shoulders: A section of the road that runs parallel to the main travel lane, and is intended for parked motor vehicles, emergency services, pedestrians, and cyclists, as well as to provide support for the road structure. On roads with higher speeds and traffic volume, the shoulders should typically include a buffer to increase the separation between motorists and cyclists traveling in the same direction. Rural roads typically accommodate cyclists with paved shoulders.

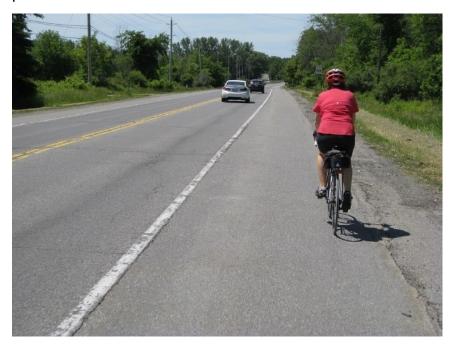


Figure 22. Cyclist riding on a paved shoulder in Ottawa

Source: GoBiking.ca

Table 4 summarizes desired dimensions by cycling facility type. The following should also be considered:

- When buffered bike lanes are adjacent to on-street parking, include a 1.0 metre parking buffer, 1.5 metre lane, and 0.3 metre buffer.
- For paved shoulders, refer to OTM Book 18 for selection of buffer and paved shoulder widths based on motor vehicle volumes and speeds along rural roads.

Refer to OTM Book 18 Cycling Facilities for more details on facility selection and design considerations.

Table 4. Recommended cycling facility dimensions

Facility types	Desirable	Suggested minimums
Physically separated bicycle lane	1.8 metre lane + 1.0 metre buffer (one-way) 3.5 metre lane + 1.0 metre buffer (two-way)	1.5 metre lane + 0.3 metre buffer (one-way) 2.7 metre lane + 0.3 metre buffer (two-way)
Cycle tracks	2.0 – 2.5 metres (one-way) 3.5 – 4.0 metres (two-way)	1.5 metres (one-way) 3.0 metres (two-way)
Multi use paths	3.5 – 4.0 metres	3.0 metres
Conventional bike lanes	1.8 metres	1.5 metres
Buffered bike lanes	1.8 metre lane + 1.0 metre buffer	1.5 metre lane + 0.3 metre buffer
Paved shoulders	1.5 – 2.0 metres	1.2 metres

Additional supportive elements for cyclists

Bicycle parking and wayfinding are essential elements of cycling infrastructure that support cycling as a means of transportation. Bike racks, suitable for both short and long-term parking, should be provided in various styles and placed in key locations such as commercial areas, schools, and parks. These racks should be well-lit, easily accessible, and positioned in a way that allows bicycles to be locked upright. Bicycle parking should not obstruct pedestrian or cycling paths, and should be separate from travel lanes. It is important to consider peak demand and surrounding land uses when determining the appropriate amount of bicycle parking.

Clear and consistent wayfinding signage is crucial for cyclists, particularly for those who are new to the area or visiting as tourists. These signs should guide riders to important destinations and should be adjusted for bicycle-specific distances. Wayfinding signage should also remain accessible during winter by ensuring regular maintenance and snow clearing.

Bicycle and vehicular crossings

Intersections and driveways are particularly high-risk areas for collisions and conflicts between cyclists and vehicles. To mitigate these hazards, the streetscape should be designed with the appropriate considerations for cyclist safety. This includes paying attention to the geometry of cycling facilities, vehicle speeds and turning volumes, and visibility of cyclists to other road users. **Chapter 2.6** includes further discussion about bicycle parking along the street curbside.



Intersections

OTM Book 18 outlines the following four recommended options for designing intersections that incorporate cycling infrastructure:

Setback crossing: Setback crossings shift the cycling facility away from the roadway at intersections. This creates a dedicated area for motorists to yield to cyclists without disrupting through traffic, reducing the back pressure to complete the turning movement in a hurry. Setback crossings enhance the visibility of cyclists to turning motorists by increasing the angle of approach, making it more likely for a crossing cyclist to be visible to the motorist outside of their right blind spot.

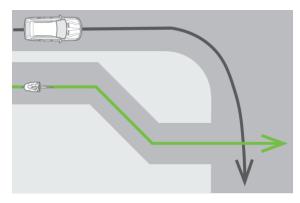


Figure 23. Setback crossing

Source: OTM Book 18

Adjacent crossing: The cycling facility crosses the intersection adjacent to, or with minimal setback from, the adjacent motor vehicle lanes. This is most suitable for on-road or in-boulevard facilities and where space for a setback crossing is limited at intersections.

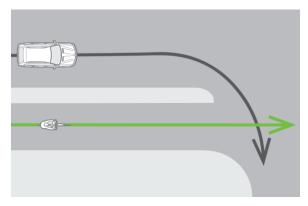


Figure 24. Adjacent crossing

Source: OTM Book 18

Greater Sudbury

Complete Streets Design Guidelines

Bicycle lane between through lane and turn lane: The cycling facility runs between the main through lane and the dedicated turning lane at an intersection. This treatment exposes cyclists to motorists changing lanes for their turns. It is suitable for lower-speed roads with on-road cycling facilities.

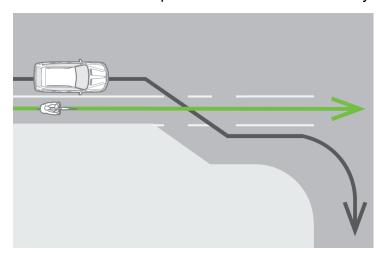


Figure 25. Bicycle lane between through and turn lane

Source: OTM Book 18

Mixing zone: The cycling facility transitions into a shared space between turning motorists and cyclists ahead of an intersection. These zones remove physical separation between the cycling facility and the motor vehicle lane. This is most suitable for lower speed environments with on-road cycling facilities.

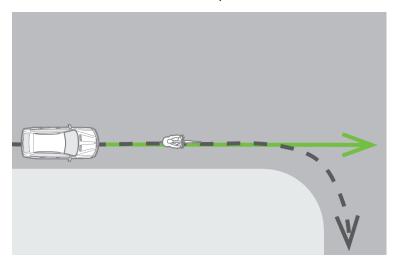


Figure 26. Mixing zone

Left turns at intersections present a significant hazard for cyclists, as they can be exposed to vehicle traffic without proper design treatment. Green pavement markings can be used to identify and highlight areas of potential conflict, such as intersection crossings or other areas where increased visibility is beneficial.

OTM Book 18 recommends the following design options for left turn treatments at intersections:

Protected intersection corner: This design uses a corner safety island and setback crossing to provide physical separation between queuing cyclists and turning motorists. The configuration allows cyclists to complete left turns as two-stage turns. **Chapter 4** provides more details on protected intersection designs.



Figure 27. Example of a protected intersection corner

Source: Protected Intersection Guide, Ontario Traffic Council

Two-stage queue box: Designated space for cyclists to queue while completing an indirect left turn. This can be implemented within the boulevard or on the road.

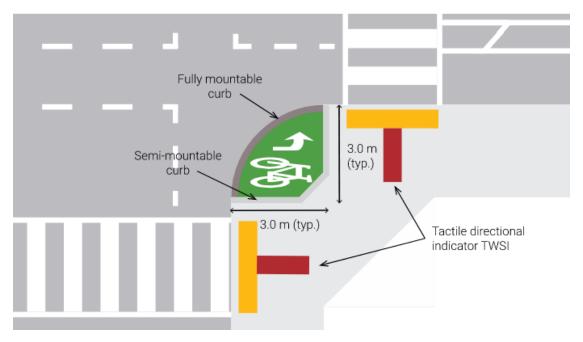


Figure 28. In-boulevard two-stage queue box

Source: OTM Book 18

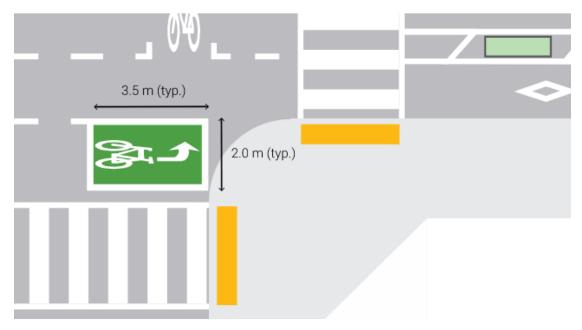


Figure 29. On-Road two-stage queue box

Bike box: Designated queuing space for cyclists installed in front of the vehicle stop line, allowing for direct left turns and greater visibility of cyclists to motorists. This leaves cyclists exposed to conflicts with vehicles and should be considered on lower speed and volume roadways.



Figure 30. Bike box

Source: City of Guelph

Direct left turn with protected signal phase: This design uses a protected traffic signal phase for single-stage left turns, minimizing cyclist exposure to vehicles



Figure 31. Direct left turn

Driveways

When designing a cycling facility that crosses residential or commercial driveways, it is important to take measures to mitigate potential conflicts between cyclists and vehicles entering or exiting the property. Sample design treatments for driveway crossings are as follows:

Pavement markings: Cycling facilities crossing driveways should include bicycle stencils and directional arrows. For higher volume driveways, consider the use of green thermoplastic to highlight the conflict area.

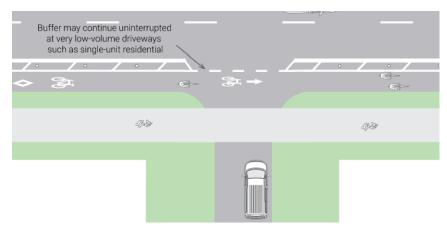


Figure 32. Low-volume driveway treatment

Source: OTM Book 18

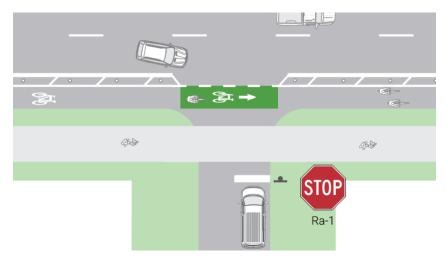


Figure 33. High-volume driveway with green thermoplastic treatment.

Setback crossings: For in-boulevard cycling facilities such as cycle tracks and multi-use paths (MUP), consider setback crossings of 4-6 metres to improve visibility of vulnerable road users to turning motorists.

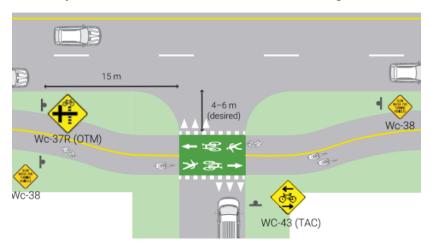


Figure 34. High-volume driveway treatment with MUP.

Source: OTM Book 18

Continuous cycle track: Both the cycle track and sidewalk maintain elevation across the driveway. This clearly conveys to motorists that they are crossing a pedestrian and cyclist zone when entering or exiting the driveway. Raising cyclist and pedestrian crossings at driveways can help reduce motor vehicle speeds and improve safety for vulnerable road users.

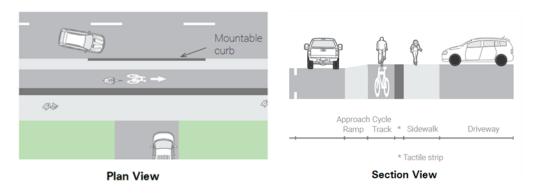


Figure 35. Continuous cycle track driveway treatment.

Source: OTM Book 18

Further information about these options and additional design principles for cycling facility intersection approaches and crossings can be found in Section 6 of OTM Book 18. **Chapter 4** of these Guidelines also provides illustrations and design considerations of common intersection designs for Greater Sudbury.

2.4 Public transit

Public transit is a viable method of transportation for people seeking to travel within Greater Sudbury. A Complete Street enhances transit service by supporting facilities that promote safety, efficiency, accessibility, and reliability. There are a variety of benefits associated with use of public transit, including the following:

- Accessibility: Provides an opportunity for travel for people with disabilities and those who do not have access to a personal vehicle or bicycle
- 2 Affordability: Transit fare is relatively more affordable than traditional personal vehicle costs, thereby providing people with lower incomes an opportunity to travel
- **Mobility:** Public transit typically provides connections to employment, essential services, shopping, and entertainment opportunities across the City

Effective transit facility design can help ensure that public transit remains safe, reliable, accessible, and efficient throughout the City's transit network. Complete Streets design principles play an important role in the experience of using public transit by providing access, safety, and design considerations.

This chapter further describes the design principles and corresponding considerations for the City. It outlines considerations to support the City's transit system facility design through the lens of Complete Streets philosophies. The term "transit facilities" refers to the physical infrastructure of the transit system, including the following key elements:

- Stop design
- Lane design
- Intersection design

The following resources can be referenced for more information:

- National Association of City Transportation Officials (NACTO) Transit
 Street Design Guide
- Ontario Traffic Manual (OTM) Book 18, Cycling Facilities
- Accessibility for Ontarians with Disabilities Act (AODA), Transportation Standard

GOVA transit family

With the establishment of the City of Greater Sudbury's transit system (GOVA), the City is supporting public transit as a viable mode of transportation for all ages and abilities. An accessible transit system can be made more robust by aligning the facility design with Complete Streets principles.

GOVA is comprised of the following three types of transit services:

GOVA: Provides fixed-route operations with high-frequency service. The routes provide travelers access and connections to popular destinations and mobility hubs across the City.



Figure 36. GOVA transit bus

Source: GOVA Transit

GOVA Zone: Formerly known as TransCab, the GOVA Zone service provides on-demand taxi service that connects to GOVA transit routes at local mobility hubs. This service is geared towards those residing in less populated areas of Greater Sudbury who do not have access to the conventional bus routes.



Figure 37. GOVA Zone service taxi

GOVA Plus: Provides enhanced accessibility features and vehicles for individuals with disabilities. GOVA Plus uses a specialized transit fleet and spans the same service area as other GOVA services.



Figure 38. GOVA Plus transit vehicle

Source: CBC News

Design principles

To align with Complete Streets requirements, transit improvements and new transit developments across the City should be designed in accordance with the overarching design principles summarized in **Table 5**.

Table 5. Complete Streets transit design principles

Design principles	Motivation	Desired Result
Provide safe and comfortable transit facilities	Transit facilities play a large role in the user experience of public transit, as they are located at both origin and destination of a transit trip.	Helps ensure that transit remains a safe and attractive mode of travel for city residents by enhancing the transit user experience, especially while waiting for a transit vehicle.
Accommodate multimodal travel	Multimodal travel is used to access and leave transit facilities. Access to transit stops and hubs	Enhancing access at transit stops for people walking, cycling, or driving can help improve

Design principles	Motivation	Desired Result
	should be integrated with the active transportation network to support access to and from transit vehicles by different modes.	access to the transit system and increase the catchment area of a transit stop.
Provide priority access to transit vehicles for greater transit efficiency	A reliable transit system supports customers with timely, efficient travel with minimal disruptions. Increasing transit system reliability can help support transit as a viable alternative to personal vehicles.	Helps ensure efficiency of transit vehicle movements, thereby increasing the reliability of the transit system and improving the transit user experience.



Accommodating transit on Complete Streets

As the City continues to grow, strategic transit investments will ensure a resilient and connected network. These transit developments can be accommodated by implementing specific designs for transit facilities, as described later in this chapter.

Future improvements to the City's transit network should consider several key principles and corresponding strategies. These strategies are possible treatments that can support the increase of transit mode share by addressing possible challenges to transit travel while satisfying the relevant goals of Complete Streets principles.

The strategies presented in this chapter are preliminary considerations, and further analysis would be necessary to confirm the applicability of the treatment relevant to the context and requirements of the transit system element upgrade

The key principles and corresponding strategies are as follows:

Interactions between transit vehicles and other modes

Relevant design principle: Accommodate multimodal travel

Potential challenges: Conflicts between transit vehicles and pedestrians, cyclists, or motor vehicles due to transit infrastructure.

Facility design considerations: Transit vehicle onboarding and bus shelter placement should not significantly impact cyclist movement. Bus stops should also be designed to reduce conflicts between cyclists and passengers using the pedestrian clear zone.

Other design considerations: Adequate signage should be considered along corridors with transit vehicles conflicting with other modes.



Access experience

Relevant design principle: Provide safe and comfortable transit facilities

Potential challenges: Transit facilities that have an inaccessible location or no furnishings may be a hindrance to transit users, especially in winter months.

Facility design considerations:

- Provision of shelters:
- Available seating;
- Comfortable lighting;
- Adequate space for maneuvering and waiting;
- Tactile walking surface indicators;
- Detectable warning surfaces along raised landing pads, platform edges, and curb cuts;
- Provision of comfortable pedestrian crossings; and,
- Dedicated bicycle parking or bike share stations.

Other design considerations:

- Provide information to support trip planning;
- Compliance with the Accessibility for Ontarians and Disabilities Act (AODA);
- Compliance with the Greater Sudbury Transit Action Plan (2019); and,
- Wayfinding for travellers to access nearby transit facilities.

Lanes and intersections

Relevant design principle: Provide priority access to transit vehicles for greater transit efficiency

Potential challenges: Shared travel lanes with other vehicles and frequent queueing at major intersections may result in increased travel times and reduced transit efficiency

Facility design considerations: Allocating travel lanes for transit use or introducing queue jump lanes to avoid delays due to vehicle congestion. Consider transit signal priority at high volume intersections to reduce delays at the intersection.

Other design considerations: Consider limiting parking along roads with frequent transit to ensure parked vehicle do not conflict with buses.

The accommodation of transit on Complete Streets considers the perspectives of both the transit vehicle and the transit user. These perspectives have been considered in the design options later presented in this chapter.

The result of successful transit accommodation is minimal conflict between transit vehicles, transit users, and other modes based on facility design. The various options for facility design ensure that transit remains integrated across the different typologies within the City's road network.

Table 6 provides a summary of conflicts that can be mitigated using the corresponding facilities later outlined in this chapter.

Table 6. Key challenges and corresponding facilities that can support conflict reduction

Facility design type	Transit vehicle challenges	Transit user challenges
Stops	Conflicts with cyclists	Conflicts with cyclists and motorists
Lanes	Conflicts with motorists	Transit vehicle delay
Intersections	Conflicts with motorists	Transit vehicle delay



Stop design types

Transit stops should be designed with safety, comfort, and accessibility in mind. The stop designs for consideration echo the strategies previously described in this chapter. The following should be considered for transit stops:

- Stops should be maintained in accordance with the Winter Maintenance Practices outlined in Chapter 5.5.
- Considered with respect to the context of the surrounding road network, traffic volumes, and projected transit usage. The features and characteristics of the lanes should also be considered when evaluating potential impacts. Further details on lane design are presented later in this chapter.

There are multiple elements involved with a transit stop. As presented in **Table 7**, Complete Streets provides both minimum and target values for the stop width.
The stop width selection would be based on the surrounding road infrastructure.

Table 7. Recommended stop widths

Element	Desirable	Constrained
Platform length	9.0 m – 15.0 metres	9.0 metres
Transit shelter and street furniture clearance from bikeway	0.5 metres	0.3 metres
Clearance width along traffic curb edge	1.8 metres	0.5 metres
Curbside transit stop width	3.0 metres	2.5 metres

Further information regarding the stop design types and their intersections with adjacent cycling and pedestrian facilities can be found in the OTM Book 18, Cycling Facilities.

Shared cycle track platform

A shared cycle track platform stop (Figure 39) may be used by both cyclists and transit vehicles and is typically used when right-of-way constraints exist.



Figure 39. An example of a shared cycle track platform stop

Approximate length of curb affected: Bus length

Interactions between transit vehicle and other modes: As the cycle track is elevated away from the roadway, conflicts between a transit vehicle and cyclists are mitigated as they are fully separated.

Interactions between transit user and other modes: The typical elevation of cycle track is sidewalk level. Any transit shelters should be designed to open onto the sidewalk, and not the cycle track. This will help ensure pedestrians do not walk onto the cycle track when accessing the transit vehicle. The transit loading area will coincide with the cycle track, thereby requiring cyclists to stop behind the transit vehicle. This allows pedestrians to safely board or exit the transit vehicle, while mitigating conflicts between cyclists and transit vehicles.

Considerations for implementation: Due to the interplay of cyclists and pedestrians at the shared cycle track platform stop, it is important to consider an educational campaign and signage to inform travellers on how to use the facility.

Shared space stop

A shared space stop (**Figure 40**) is primarily a cycling facility that is shared with transit vehicles. The cycling facility is at road level. Unlike the shared cycle track platform, the transit vehicle temporarily merges into the bike lane to accommodate loading or unloading of passengers.

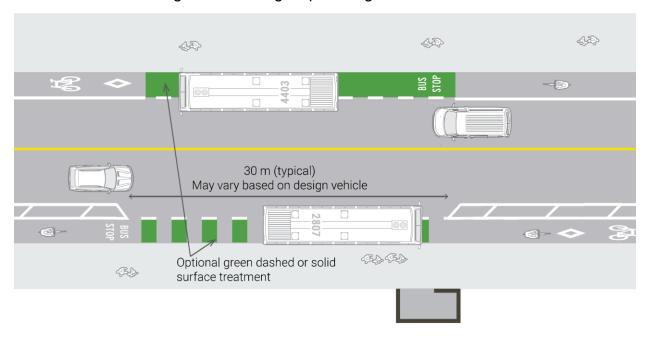


Figure 40. Typical shared space stop

Source: OTM Book 18

Approximate length of curb affected: Minimum 30 metres

Interactions between transit vehicle and other modes: During boarding, the transit vehicle will partially use both the cycle track and the adjacent motor vehicle lane. This placement allows the transit vehicle to re-enter the flow of traffic without merging. To accommodate the stopped transit vehicle, cyclists and motorists are required to stop behind the transit vehicle. Alternatively, cyclists and motorists may choose to merge into the adjacent lane to maintain their flow.

Interactions between transit user and other modes: Transit vehicles stop directly adjacent to the platform, minimizing conflicts between boarding and alighting passengers and other road users.

Considerations for implementation: Unlike the shared cycle track platform stop, the shared space stop poses increased complexity for cyclists interacting with transit vehicles. Merging into the adjacent lane with ongoing traffic flow, for

example, can reduce the comfort for cyclists. Shared space stops should typically only be used in instances where transit is considered high priority, or in constrained corridors where retrofitting is necessary. It is also necessary to consider an educational campaign and signage to inform travellers on how to use the facility.

Bus bay stop

A bus bay stop (**Figure 41**) provides a designated space for transit vehicles along the edge of the road; this can be a dedicated bus bay or a right turn lane. The platform is located adjacent to the layby or right turning lane, requiring the transit vehicle to pull out of a through lane and merge prior to accessing the bus bay stop.

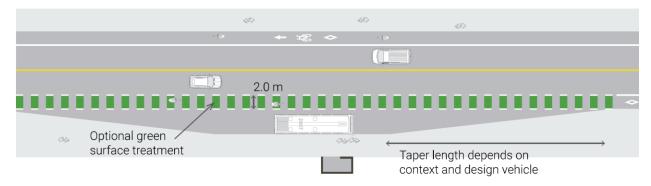


Figure 41. Typical bus bay stop

Source: OTM Book 18

Approximate length of curb affected: Minimum 30 metres

Interactions between transit vehicle and other modes: The merging of the transit vehicle into the rightmost lane to accessing the bus bay can cause the following conflicts:

- If the cross section includes an on-road cycling facility, such as a cycle track, the transit vehicle would have to cross the cycle track to access the bus bay. This would reduce cyclist comfort and safety; and
- The transit vehicle would be required to merge back into the motor vehicle lane after boarding has been completed. This maneuver is prone to delays, which in turn can reduce the efficiency of transit operations.

Interactions between transit user and other modes: Transit vehicles stop directly adjacent to the platform, minimizing conflicts between boarding and alighting passengers and other road users.

Considerations for implementation: A key consideration for the bus bay stop is that it requires additional roadway space beyond the curb lane, which may not be available for certain corridors. This type of stop is appropriate for corridors with higher speed and volumes, as it operates as a layover to accommodate high passenger volumes. Mitigation measures, such as transit signal priority and queue jump lanes, should be considered to help minimize transit vehicle delay.

Rural bus stops

A rural bus stop can be accessed along the shoulder of the road. The bus stop requires the transit vehicle to pull out of the curb lane and travel into the shoulder. When exiting the stop, the transit vehicle merges back into the adjacent traffic flow.



Figure 42. Rural bus stop in Greater Sudbury

Approximate length of curb affected: 16.5 metres

Interactions between transit vehicle and other modes: Cyclists may use the shoulder in rural areas, as there is limited access to other cycling facilities. In these cases, the cyclists would have to stop or merge into the adjacent lane to accommodate the transit vehicle. These scenarios would reduce cyclist comfort and safety.

Motor vehicles may also use the shoulder to park or pullover, in which case the transit vehicle's access to the rural bus stop may be delayed.

The transit vehicle would be required to merge back into the motor vehicle lane after boarding has been completed. This maneuver is prone to delays, which in turn can reduce the efficiency of transit operations.

Interactions between transit user and other modes: Some rural areas may not provide sidewalk facilities for pedestrians. In these cases, the pedestrians will be required to share the shoulder space with cyclists, motor vehicles, and transit vehicles. This may delay the transit vehicle and decrease the safety for pedestrians.

Considerations for implementation: This type of stop is appropriate in rural areas with lower fixed route transit frequencies. Due to higher anticipated passenger waiting times, consideration should be made to increase the comfort and safety of the bus stop. Possible design elements to improve the comfort and safety include a bus shelter, seating, and adequate lighting. Appropriate signage should also be utilized to inform road users of the upcoming transit stop.

Lane design types

In addition to the stop design types described previously in this chapter, transit lane design can also be used to design a corridor to meet the Complete Streets design principles. Lane design improvements can be implemented as part of new road construction or road improvements to ensure cost effectiveness.

This chapter further details the following three possible lane design alternatives for the City:

- Dedicated transit lanes,
- Reserved lanes, and,
- Queue jump lanes.

Consideration of these optional alternatives for future road projects could help improve transit efficiency within the City's network. Lanes must be maintained in accordance with the Winter Maintenance Practices outlined in **Chapter 5.5**.

Dedicated transit lanes

Dedicated transit lanes (are typically used along Bus Rapid Transit (BRT) corridors to accommodate the higher frequency of transit vehicles. Transit vehicles may exclusively travel on dedicated transit lanes, which are delineated using physical barriers or pavement markings. Emergency and maintenance vehicles are also typically permitted on dedicated transit lanes.

The lanes may be positioned between travel lanes and the adjacent boulevard, or alternatively in the centre of the roadway with travel lanes on either side. The pavement markings indicate "Bus Only" lettering and a corresponding diamond.



Figure 43. An example of a dedicated transit lane

Source: Metrolinx

Due to their exclusive nature, these lanes accommodate greater passenger volumes with decreased delays. The resulting increase in transit efficiency makes dedicated transit lanes an effective choice along corridors with high congestion and motor vehicle volumes.

Key considerations when evaluating the suitability of this lane design alternative include the merging of transit vehicles in and out of the dedicated transit lanes, as well as the potential conflict with motor vehicle turning movements.

Reserved lanes

Reserved lanes prioritize specific vehicles such as high-occupancy vehicles (HOV), bicycles, transit vehicles, taxis, and emergency vehicles. A reserved lane should be identified using "reserved lane" overhead signage that is installed at 100-metre intervals throughout the lane, accompanied with a diamond symbol. The signage should clearly indicate the permitted vehicles, as well as restricted days and times.



Figure 44. Reserved lane in Victoria, BC

Source: CBC News

These lanes provide greater flexibility to accommodate various modes without changing the physical lane infrastructure. The prioritization is indicated on signage for restrictions applied for certain days of the week or peak periods during the day.

Key considerations when evaluating the suitability of this lane design alternative include transit route frequency, as well as traffic volume fluctuations throughout the day. The reserved lanes should accommodate the variability in usage of different modes.

Queue jump lanes

A queue jump lane permits transit vehicles to bypass queued adjacent motor vehicle traffic at intersections. This is achieved with a dedicated transit facility that uses transit signal priority to allow transit vehicles to get a head start.

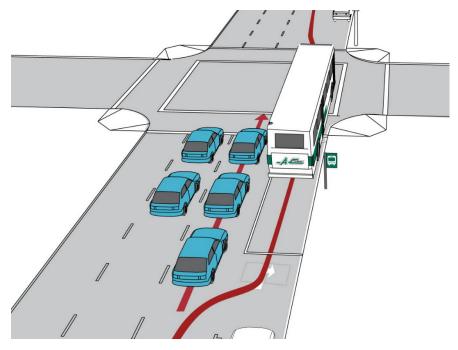


Figure 45. Typical queue jump lane design

Source: The Genesis Centre

Queue jump lanes provide an opportunity for transit vehicles to avoid the delay due to traffic congestion, thereby supporting transit network efficiency.

Queue jump lanes should be considered for corridors with higher traffic volumes that reduce transit efficiency at intersections. Transit efficiency may also be reduced by right-turning traffic, for which various signal options or a dedicated right-turn lane should be considered. The intersection design alternatives described later in this chapter can be considered for implementation to further support the transit prioritization at queue jump lanes.

Intersection design types

Intersection design is another opportunity to help align a corridor to Complete Streets principles by accommodating transit vehicles at intersections to improve the overall transit network efficiency. The alternatives described in the following sections can be used in conjunction with the lane design types previously presented in this chapter.

For further reading regarding intersection design types, please refer to the OTM Book 12, Traffic Signals.



Transit Signal Priority (TSP)

TSP strategies complement the various lane design alternatives by reducing stall time for transit vehicles at intersections. TSP alternatives are currently undergoing implementation within the City, and should continue to be considered for corridors with higher traffic volumes or higher-frequency transit.

TSP strategies for consideration include:

- Shortening of red cycle when transit vehicles are detected at the intersection;
- Coordinating signals across a transit corridor to ensure green lights for transit vehicles at each intersection;
- Shorter signal cycles at intersections for those corridors with an absence of transit vehicle detection technology; or
- Providing a dedicated transit signal.

A key benefit of TSP alternatives is that they make use of existing traffic signals, which can be understood by all road users and is a safer alternative than solely relying on signage.

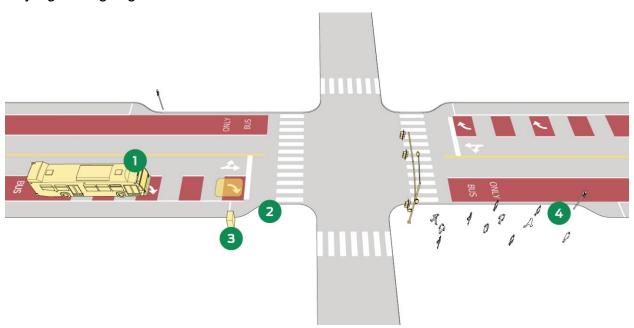


Figure 46. Example of an intersection with TSP and a dedicated bus lane

Source: NACTO Transit Street Design Guide

Curb radii and stop bars

Curb radii and stop bars are important considerations for transit vehicle accommodations at intersections along transit corridors. The curb radius is a measure of the size of the right-turn corner (refer to **Chapter 4** for more details on curb radii), and stop bars are pavement markings indicating where vehicles should queue prior to entering the intersection.

Evaluation of curb radii and stop bars is necessary at intersections along transit routes with frequently right-turning buses to ensure sufficient vehicle accommodation.

In scenarios with smaller curb radii, the right-turn would be tighter for transit vehicles. To ensure a safe and efficient maneuver, the stop bar can be placed further away from the intersection to allow the transit vehicle to oversteer using the oncoming lane without conflicting with stopped vehicles.

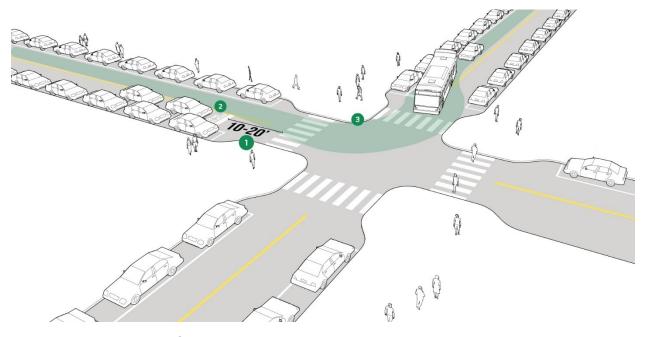


Figure 47. Example of an intersection with a stop bar setback to accommodate for a turning transit vehicle

Source: NACTO Transit Street Design Guide

2.5 Travelled way

To align with the principles of Complete Streets, it is important to balance the needs of all road users and to consider the context of the street within the overall road network.

Previously built roadways tended to allocate excessive space to vehicles, thereby limiting mobility choices and leading to an over-prioritization of private motor vehicle travel. In contrast, the Complete Streets approach supports the safe and efficient multimodal travel of goods, people, and emergency services.

This chapter describe various considerations for "travel lanes", which refer to portions of the street between the curbs on urban roads or edge of shoulders on rural roads generally intended for vehicular travel.

For more details on Design Vehicles, Control Vehicles, and Design Speed selection, refer to the following sources:

- TAC Geometric Design Guide for Canadian Roads
- NACTO Urban Street Design Guide



Design principles

The following design principles that should be considered when evaluating a street for new construction or reconstruction:

Consider the street context: The context of a street should be considered to ensure effective design by identifying whether it primarily serves movement or access functions. A movement-oriented street prioritizes faster movement of road users with minimal disturbances by accommodating the following:

- Higher speeds;
- Greater separation between road users; and
- Prioritizing limited access to the roadway to minimize conflict.

Alternatively, access-oriented streets prioritize road user access by accommodating the following:

- Slower speeds;
- Property access; and
- Curbside activity.

Considering the street context helps ensure effective design by identifying the primary function of the street. This is achieved by reviewing the characteristics and adjacent land use context.

The design should clearly communicate the identified function of the road and encourage user behaviours supporting that function.

Prioritize safety: The goal of effective design is to create safer streets as a proactive preventative measure, rather than a retroactive reactionary one. Prioritizing safety helps minimize the severity and likelihood of conflicts between road users through careful design choices that maximize safety.

Design roadways to accommodate multimodal movement: Complete Streets philosophies highlight the importance of considering the role road design plays in accommodating and encouraging multimodal travel. Roadway design should consider the trade-offs between allocating space for motor vehicles and other Complete Street elements within the ROW.

The roadway should be designed with sufficient space available for all users within the overall ROW, and curb-to-curb space solely dedicated to high-speed movement of motor vehicles should be avoided.

Street characteristics

Effective road design considers the users of a roadway depending on frequency and vehicle size, Design vehicles are "regular" users of a given street, while control vehicles are infrequent users that should be accommodated. As presented in **Figure 48**, the vehicle type with largest turning requirements is used for both design and control vehicles to ensure sufficient turn accommodation. The following key considerations must be made when selecting the design and control vehicles:

- Street context: It is necessary to understand the context of a street prior to selecting the design vehicle for the road. For most urban roads, such as those in the City, a Medium Single Unit (MSU) truck or Bus (B-12) should be considered as the design vehicle.
- Adopting standards: Adopting a standard that accommodates both a design and a control vehicle is an important consideration when aligning with Complete Streets principles. This adopted standard supports the selection of minimum mid-block lane widths and design treatments at intersections, such as curb radii.

Design for the **design vehicle**.



Largest frequent vehicle. Often a delivery truck (MSU), city bus (B-12), or passenger vehicle (P).

Accommodate the **control vehicle**.



Largest infrequent vehicle. In urban areas, often a semi-trailer (WB-20). On neighbourhood streets, may be a garbage truck or fire truck.

Manage the speed of **passenger vehicles**.



Passenger vehicles are typically the most common vehicle, and are capable of higher, more dangerous speeds.

Figure 48. Design and control vehicles

Source: NACTO Don't Give Up at the Intersection Guide

Selecting the design and control vehicles helps achieve the goal of road design, which should be to accommodate the larger vehicles without being overdesigned.

Complete Streets philosophies point towards accommodation of multimodal travel in all aspects of road design, including speed. The design speed of a road should consider interactions with vulnerable road users while being contextually appropriate. The design speed of a Complete Street should be equivalent to the posted speed limit. In addition, the geometric elements should discourage drivers from operating above the speed limit. Higher speeds can increase the likelihood of fatalities and severe injuries for all users of the road. The key benefits of lowering the design speed are increasing safety, reducing the likelihood of fatalities, and minimizing the risk of injury.

Road design plays a crucial role in setting the design speed, and Complete Streets philosophies provide design strategies to reduce speeds. Roadway infrastructure and streetscaping design considerations to lower design speeds in vulnerable areas include the following:

- On-street parking;
- Street-oriented buildings
- Narrow travel lanes; and
- Furnishing zone located close to the curb.

One effective technique to reduce speeds includes implementation of traffic calming measures, which are further described in this chapter. The following street characteristics may be considered for the road design. The key drawbacks and benefits of these street characteristics and their role in the Complete Street should be reviewed prior to implementation.



Lanes

Lanes accommodate vehicular travel for motor vehicles, transit buses, or trucks. Lane width is an important consideration for road design with its ability to influence travel speed. In the context of Greater Sudbury, a constant lane width of 3.5 metres typically is applied. This lane width accommodates all vehicles and typologies while also providing space as snow storage in winter months.

The following should be considered:

- Lane widths are measured from curb-to-curb for a road, inclusive of gutters.
- Minimum of 6 metre width clearance is required per the Ontario Building Code for emergency vehicle access.



Figure 49. Example of lanes with snow storage

Table 8 provides a summary of lane width parameters for consideration. Selection of a lane width should prioritize the safety of all road users, especially vulnerable populations.

Table 8. Summary of lane width parameters

Element	Desirable	Constrained
Through lanes and turning lanes	3.5 metres	3.25 metres
Curb lanes	3.5 metres	3.5 metres
On-street parking lane (inclusive of gutter)	2.4 metres	2.0 metres
Required parking lane buffer	On-street parking should be restricted for at least 2 metres from driveways, 9 metres from an intersection, and 9 metres from crosswalks.	1.5 – 2.5 metres required at both ends of an accessible parking space.



Medians

Medians serve as a continuous separation for traffic travelling in opposite directions and are placed linearly along the centre of the roadway. Medians provide several safety and streetscaping benefits to the roadway, including the following:

- Space to install signal poles, light standards, and signage;
- Reduction in potential for motor vehicle head-on collisions;
- Reduction in turning conflicts due to restricted midblock turning access; and,
- Opportunities to provide pedestrian refuges to reduce crossing distances for pedestrians.



Figure 50. An example of a median in Greater Sudbury

Several considerations for median implementation include:

- Reduction of motor vehicle access to properties on the opposite side of the street;
- Increased capital and maintenance costs; and,
- Usage of ROW space which may have otherwise been allotted to other Complete Street elements.

A cost-benefit analysis that reviews the above considerations is necessary prior to implementing a median. Goals such as the reduction of collisions can be achieved through alternate solutions such as traffic calming.

Roads with higher volumes and speeds benefit greatly from medians. Medians should typically not be used on urban streets with narrow lane widths or where access is a priority. On streets with multiple accesses, a two-way left turn

(TWLT) lane should be considered as an alternative to mitigate conflicts between through traffic and left-turning traffic.

This chapter provides a summary of median treatments and their characteristics for further consideration. Public and staff education is necessary to communicate the benefits and ongoing maintenance of medians.

Planted medians

Median depth: Raised from road surface

Infrastructure: Soft surface such as a planted boulevard, curb extension, bed, or planter.

Key benefits:

- Reduction of urban heat from paved surfaces.
- Aesthetically pleasing.
- Contributes towards natural stormwater management
- May be used as additional snow storage if width is adequate.

Key considerations:

- Short or long-term irrigation necessary. Can be semi-manual or pumped.
- Mowing may be necessary in some cases.
- Requires additional ROW space to accommodate streetscaping.

Planted Drainage

Median depth: Raised from road surface

Infrastructure: The raised edges encompass a soft surface such as an open ditch swale, rain garden, or bioswale. As a low-impact development (LID), this type of median can provide low-cost stormwater management.

Key benefits:

- Natural stormwater management.
- May be used as additional snow storage if width is adequate.

Key considerations:

 Relevant measures would need to be taken to reduce the impacts of salt saturation such as selecting salt tolerant species in the median. Requires additional ROW space to accommodate streetscaping and drainage.

Painted (Flush)

Median depth: Flush with road surface

Infrastructure: Painted road space that provides separation between opposing lanes and can be converted into left turn lanes. Applicable to roadways with closely spaced accesses.

Key benefits: Can be used to channelize left-turns at stop-controlled intersections, signalized intersections with limited ROW, or corridors with closely spaced commercial entrances, and rural areas.

Key considerations:

- Low maintenance requirements, typically road maintenance requirements would apply.
- Does not provide significant safety improvements compared to a physical median.

Curb (Raised)

Median depth: Raised from road surface

Infrastructure: Paved surface along high volume and high-speed roads

Key benefits: If a raised curb has sufficient width (minimum 2.1m), it can serve as a pedestrian refuge island.

- Can be used as a streetscaping opportunity if width can sufficiently accommodate trees.
- Increased motorist safety when adjacent to a turn lane.
- May be used as additional snow storage if width is adequate.

Key considerations:

- Typical road maintenance requirements would apply. If streetscaping involves vegetation, moving or irrigation would also be necessary.
- Requires additional ROW space to accommodate paved surface.

Traffic calming

The purpose of traffic calming strategies is to reduce vehicle volumes and speeds, enabling people of all ages and abilities to safely use the road. Traffic calming is typically applied along collector and local roads.



Figure 51. Southview Drive in Sudbury with speed reductions and speed bumps

There are two types of traffic calming – horizontal and vertical deflections. Horizontal deflections require the motorist to travel horizontally to avoid the traffic calming infrastructure, while vertical deflections require the reduction of speed to maintain comfort.

Examples of horizontal deflections include:

- Roundabouts: The roundabout provides a circular path for motorists, requiring the reduction of speeds when circulating;
- Chicanes: Chicanes are curves or obstacles (such as parking) along the road that force motorists to shift laterally to avoid obstacles and reduce speeds to remain comfortable;
- Lateral pavement markings (rural roads): Lateral pavement markings require motorists to shift their position laterally along a road, forcing them to reduce speeds to do so; and,
- Curb extensions: Curb extensions result in physical and visual narrowing
 of the roadway which encourage motorists to reduce their speed. Curb
 extensions can be located at intersections or mid-block and can improve
 safety for crossing pedestrians by reducing crossing distances and
 increasing pedestrian visibility.

Examples of vertical deflections include:

- Speed bumps or speed humps: These vertical mounds force motorists to reduce speeds to maintain comfort;
- Raised crosswalks: The height of this crosswalk leads to reduction in vehicular speed, allowing pedestrians to cross safely. This type of crosswalk can be either placed at an intersection or midblock; and
- Raised intersections: Raised intersections meet the curb through ramps and require motorists to reduce their speeds when approaching and crossing an intersection.

Traffic calming helps support active transportation by reducing vehicle speeds and creating an environment more conducive to walking and cycling. Some of the recommended Complete Streets infrastructure is also commonly used to fulfill the purpose of traffic calming, such as medians, curb radii, and on-street parking.

For further information, please refer to the following resources:

- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- Federal Highway Administration, Traffic Calming ePrimer
- City of Greater Sudbury Traffic Calming Policy
- Transportation Association of Canada, Canadian Guide to Traffic Calming
 Second Edition (2018)



Road diets

A road diet accommodates all road users by replacing motor vehicle travel lanes with other uses or space for other travel modes. Applying a road diet provides more equitable access to the road for multimodal transportation or streetscaping.



Figure 52. An example of a street with a road diet and a bike lane

The following are key considerations for road diets:

Average annual daily traffic (AADT): AADT is a high-level measure of traffic volumes along a road and may be used to determine the initial feasibility of a road diet. A road with an AADT value lower than 20,000 vehicles per day and consisting of four or more lanes may be further evaluated for implementation of a road diet, as recommended by the Federal Highway Administration.

Peak hour operations: Peak hour operations refer to the highest traffic volumes along a road, typically occurring during the early morning or evening peak periods. The feasibility of a road diet should be assessed based on the impact on peak volumes. Lower peak volumes can typically support the implementation of a road diet, subject to further technical analysis.

Turning volumes and patterns: Movement patterns, property accesses alongside the road, and the spacing between locations of turning movements should be analyzed when considering a road diet. It is necessary to confirm traffic suitability for a road diet by analyzing existing and projected movements for the road segment. Two Way Left Turn (TWLT) lanes provide additional safety along road segments with multiple property accesses by removing left turning vehicles from through traffic lanes, reducing the likelihood of rear-end collisions.

Complete Streets Design Guidelines

Cycling and pedestrian facilities: Existing cycling facilities, such as bike lanes or sidewalks, can help guide the placement of road diets. Published documentation, such as a Cycling or Trails Master Plan, may identify possible gaps in the active transportation network where road diets could be warranted. A road diet may improve safety outcomes for cyclists and pedestrians by reducing motor vehicle speeds through lane width reductions and by providing additional space for physical separation and buffers between modes.

For further information, please refer to the following resource:

Road Diet Informational Guide – Safety, Federal Highway Administration



Curbside management

The curbside of a street acts as a transition between the boulevard and road platform of a Complete Street. The curbside portion of the ROW serves a variety of functions such as parking and loading, along with recreational uses such as parklets. This chapter provides further detail regarding the management of such uses.

On-street and accessible parking

Parking is an important design element to consider when developing a street in alignment with Complete Streets principles. On-street parking is one of the most common uses for the curbside. Whether for private vehicles or commercial loading zones, it is important to design a roadway to allow for smooth transitions for parked or moving vehicles while minimizing disruption to other road users.

Accessible parking facilities and loading facilities should be provided as per the minimum requirements outlined in the AODA. The AODA requires the City to consult relevant municipal accessibility advisory committees to determine the design, ideal location, and appropriate number of parking spaces to provide. Design specifications have been previously summarized in **Table 8**. Further considerations for on street and accessible parking are summarized in this chapter.

Physical infrastructure

On-street parking should typically be parallel to the curb, as angled parking can:

- Increase potential conflicts;
- Reduce sightlines for exiting drivers; and,
- Takes up a significant amount of the ROW.

In addition, parking should be framed with curb extensions at either end to discourage illegal parking and reduce pedestrian crossing distances.

For accessible parking and loading, hard spaces (such as paved or concrete) should be provided in the adjacent boulevard. Accessible curb ramps should be provided at the front or rear of the space.

Location

On-street parking should be located within dedicated lay-by areas for roads with speed limits below 60 km/h. Accessible parking and loading should be located as close to nearby accessible residential and commercial entrances as possible.

Active transportation facility accommodation

Maintaining proper sightlines is necessary for motor vehicles to accommodate active transportation. The required buffer restrictions help maintain proper sightlines, increase vulnerable user visibility, a refuge for pedestrians exiting vehicles, and protection for cyclists from opening vehicle doors. Lower speeds can also help reduce risk of collisions.

Conflicts may occur for active transportation facilities adjacent to parking and loading spaces. Mitigation strategies include marking pedestrian crossing areas across the facility, providing additional buffer width between the parking lane and cycling facilities, and narrowing cycling facilities in a constrained ROW. Refer to OTM Book 18: Cycling Facilities for more details on designing cycling facilities adjacent to parking lanes.

Key benefits

The key benefits for on-street parking are that it may reduce the need for offstreet parking and can also act as a traffic calming tool. Providing accessible parking and loading spaces ensures that the street is built for all ages and abilities.

Other considerations

The use of through lanes for off-peak parking is not recommended. Excessive on-street parking may have adverse impacts due to the perception of "empty lanes", increasing speeds and reducing overall safety of the corridor.



Loading zones

The following two types of loading zones that should be considered when designing the curb:

- Pedestrian loading zones: Refer to safe spaces on the side of the road that allow passengers to mount and dismount from a vehicle. These pick-up and drop-off areas help accommodate those who choose to take taxi or ridesharing vehicles.
- 2 Freight loading zones: Although typically used in commercial settings, the prevalence of online shopping and deliveries have extended the need for freight loading zones in residential and industrial areas. These loading and curbside delivery zones should typically accommodate single-unit trucks for up to 30 minutes. Freight loading zones should be designed as a shared resource with adjacent private and public uses within a neighborhood.

Pedestrian loading zone

With ridesharing becoming increasingly accessible, the need for loading zones is becoming greater. A lack of dedicated loading zones along a road can lead to taxis or rideshare vehicles double parking, parking in bike lanes, or cruising along streets while looking for a place to load or unload. Not only would this unnecessarily increase vehicle kilometres travelled, but also increases the potential for conflicts with other road users.

This can be avoided through the proactive provision of dedicated loading zones, in accordance with the following considerations:

- Providing a loading zone at the beginning of a block is generally more space efficient than providing them in the middle or end of a block. This is due to vehicles having a longer entry distance entering the loading zone, rather than leaving it; and
- When loading zones are located adjacent to cycling facilities, one possible consideration is to increase the width of the buffer. This provides sufficient space for pedestrians to wait within the buffer or walk along it to reach the nearest crossing. Further details on buffer widths for cycling facilities are provided in Chapter 2.3.

Freight loading zone

Due to their size, trucks pose a significant risk to cyclists. The placement and design of freight loading zones along corridors with cycling facilities should minimize conflicts between cyclists and people loading and unloading the vehicles. This can be achieved by various strategies including:

- Designing loading zones with similar features to accessible on-street parking zones, as described earlier in Chapter 2.5, or,
- Locating loading zones on intersecting streets.



Parklets

Parklets and pop-up patios have grown more prevalent across Canada to support outdoor dining and commercial activity for locals and businesses. Curbside space may be used to accommodate parklets, thereby activating the streetscape and providing opportunities for temporary installations.

Physical infrastructure

Examples of temporary installations include:

- Public art installations;
- Green space;
- Seating, or dining areas.

Active transportation facility accommodation

Accessibility design considerations for parklets include:

- Ensuring a wide, accessible route connecting the sidewalk to the parklet entry;
- A firm, stable, and slip resistant parklet surface;
- A regularly cleaned sidewalk with minimal slope and cracks;
- An unobstructed and minimally sloped entrance area; and
- Adequate turning and resting space for a wheelchair.

Key benefit

Parklets can be used seasonally and converted to temporary snow storage, which can be of benefit to the City.

Other considerations

Parklets should be installed and maintained in collaboration with community groups to ensure their long-term viability.

Bike parking

To better support cyclists in alignment with Complete Streets principles, the provision of bike parking within the right-of-way should be considered.

Physical infrastructure

Curbside space may be used to support cycling by placing infrastructure including:

- On-street bike racks;
- Bike corrals; or,
- Bike share stations.

Active transportation facility accommodation

To make the most efficient use of curbside space, bike parking should be located along corridors with high volumes of cyclists. Bike parking that is located along main streets can provide access to local amenities and businesses, further incentivizing everyday cycling across the City.

Key benefit

In contrast to vehicle parking, bike parking is a far more efficient use of curbside space. The area of one to two vehicle parking spaces typically accommodates approximately eight to fourteen bike parking spaces.

Other considerations

The space may also be reserved for dock-free bicycles as to provide parking locations that do not obstruct the sidewalk.



Figure 53. An example of bike parking in Greater Sudbury

Driveways and accesses

A road network presents various types of crossings for users of all modes. Crossings should be designed to maximize safety for vulnerable populations and motor vehicles. Further details on intersections and transition design are provided in **Chapter 4**.

The following are preliminary considerations for various types of crossings identified in a road network.

Motivation

Driveways are an essential part of roadways, facilitating the access to and from properties along the side of the road. However, this access produces conflicts on roadways and reduction of safety for vulnerable users. A key impact on pedestrians and cyclists is the excess need for caution when crossing a driveway due to higher vulnerability.

Physical infrastructure

To remain in alignment with Complete Streets philosophies, driveways should be consolidated, minimized, or avoided for mobility-focused streets. Rather, driveways should be provided along side streets wherever possible.



Other considerations

In scenarios where driveways cannot be shifted or removed entirely, the design of the active transportation facilities crossing the driveway should be considered. The curb cut should be minimized as much as possible, and sidewalks or cycle tracks should be continued across the driveway. Continuation of active transportation infrastructure helps reduce the vulnerability of pedestrians and cyclists.



Figure 54. Residential driveways along a side street in Greater Sudbury

2.6 Green infrastructure

Green infrastructure refers to natural elements integrated into the streetscape that provide ecological and hydrological functions. These functions include mitigating urban heat island effect, improving biodiversity, air quality, energy efficiency, and stormwater management. Incorporating green infrastructure can improve the aesthetics of the streetscape, enhance the comfort of pedestrians, cyclists, and transit users, and contribute to the overall health and well-being of residents.

As a city that has received international recognition for achievements in regreening and municipal energy retrofits, Greater Sudbury is well-positioned to integrate green infrastructure into its streets. The City's Official Plan recognizes that urbanization increases impervious surface cover, which hinders the infiltration of stormwater and creates significant erosion, pollution, and flooding problems. The purpose of managing stormwater is to control the quantity and quality of runoff to reduce erosion and flooding and to improve the quality of runoff to streams, rivers, lakes, and groundwater. Integrating low impact development (LID) practices and green infrastructure where the conditions are appropriate into street design can help the City in addressing environmental objectives outlined in key documents such as the City's Official Plan, Biodiversity Action Plan, and Community Energy and Emissions Plan (CEEP).

This chapter outlines the design principles and best practices for implementing successful stormwater management and green infrastructure systems that align with Greater Sudbury's objectives of creating sustainable, functional, and safe streets. By integrating green infrastructure, the City can continue its regreening efforts and ensure that its natural environment remains a defining feature of its image and appeal.

For more details on the City's objectives and policies related to green infrastructure and the natural environment, please refer to:

- Part III of Greater Sudbury's Official Plan: Protecting the Natural Environment
- City of Greater Sudbury's Regreening Program
- Living Landscape: A Biodiversity Action Plan for Greater Sudbury
- Community Energy and Emissions Plan (CEEP)
- Urban Forest Master Plan

Street Tree Policy for the City of Greater Sudbury

Design principles

Consider low impact stormwater management features

Stormwater runoff can cause erosion, flooding, and degrade water quality. Stormwater management aims to control the harms associated with runoff to protect the built and natural landscapes.

Low impact development features in complete streets are considered where conditions are appropriate to help reduce the burden on stormwater sewer system, and support the City's stormwater management objectives.

Complement active transportation

Encourage walking and cycling in the city by enhancing pedestrian and cyclist comfort level and interest through shading, foliage, flowers, and textures.

Use greenery, trees, and other vegetation to provide shading, cooling, noise reduction, and support placemaking goals. Place vegetation to ensure visibility and appropriate sightlines to ensure safety for all road users.

Further information can be found in the City's Urban Forest Master Plan.



Figure 55. Street trees planted within the right-of-way in Greater Sudbury

Select context appropriate plant species

Selecting context appropriate plant species can greatly enhance the sustainability and ecological value of the landscape. By using plant species that are well-suited to the site's specific conditions, such as climate, soil type, and water availability, the landscape can thrive with less need for maintenance and watering. Additionally, selecting native plant species and maximizing biodiversity can promote habitat creation, protect against invasive species, and improve ecological health.

Consult the City's Forestry department for support selecting resilient, climate-adaptive plant species that respond well to typical road stressors such as heat, drought, overwatering, salt, and wind. Use local and provincially native plants whenever possible.

Focus on soil quality

Healthy soil supports the growth of roots and provides plants with essential nutrients, water, and oxygen. Additionally, healthy soil helps to retain water, reduce erosion, and sequester carbon. By prioritizing soil quality, we can support long-term environmental and agricultural sustainability.

Ensure soil type and makeup is supportive of plant growth, provide an adequate volume of soil per plant, minimize compaction, and promote a healthy root habitat.



Types of green infrastructure

The key types of green infrastructure to be included within the right-of-way of a Complete Street include street trees and other stormwater management features such as rain gardens.

Street trees

Street trees refer to trees planted with the street right-of-way, providing numerous benefits such as shade, aesthetic enhancement, environmental improvement, and support for a healthier and more vibrant community.

Key benefits

Healthier and more walkable communities: Street trees provide shade, reducing the heat island effect and creating more comfortable walking environments. The presence of street trees encourages people to walk and engage in outdoor activities, promoting a healthier and more active lifestyle.

Environmental benefits: Street trees play a vital role in mitigating the environmental impacts of urbanization. They improve air quality by absorbing pollutants, such as carbon dioxide, and releasing oxygen. Street trees also act as natural filters, capturing dust and particulate matter, thus improving overall air quality. Additionally, they help to reduce stormwater runoff by absorbing rainfall and promoting infiltration into the ground, reducing erosion and flooding risks.

Habitat for urban wildlife: Street trees provide important habitats and food sources for urban wildlife, including birds, insects, and small mammals. They contribute to urban biodiversity and support the ecological balance in cities. By integrating green spaces through street trees, the City can foster a healthier and more sustainable urban ecosystem.

Enhanced aesthetics and sense of place: Street trees enhance the visual appeal of streetscapes, making them more attractive and inviting. The presence of a vibrant tree canopy creates a pleasant pedestrian environment, softening the visual impact of buildings and infrastructure. Street trees also contribute to a sense of place, giving neighborhoods a distinctive character and identity.

Key considerations

"Right tree, right place" selection: The selection of tree species should align with best practices, considering factors such as size, native suitability, and diversity. Species that tolerate road salt, drought conditions, and have

appropriate form and structure should be given priority. In cases where space is limited, small trees and shrubs in above-ground planters can be considered as alternatives. Refer to the Street Tree Policy for the City of Greater Sudbury for further details on species selection.

Soil volumes and drainage: Providing adequate soil volumes is crucial for the long-term health and vitality of street trees. Additionally, when hard surfaces surround tree planting areas, strategies such as soil cells, soil corridors, or root bridges should be considered to ensure optimal root system health. Proper drainage systems should also be implemented to minimize the impact on nearby sub-surface utilities.

Coordination with utilities: Early coordination with utility providers is crucial to ensure that the placement of street trees maximizes root space while avoiding interference with subsurface utilities. This coordination helps prevent future conflicts and ensures the long-term health of the trees.

Maintenance plans: Developing maintenance plans in consultation with the City's Tree Warden during the preliminary design phase is essential. These plans should account for potential conflicts between the tree canopy and overhead wires or street lighting. Regular maintenance and pruning should be incorporated to promote healthy growth and prevent any obstructions or safety hazards.

Preserving mature trees: When planning construction activities within or near the boulevard, efforts should be made to retain and incorporate existing mature trees. These trees contribute significantly to the character of the community and provide valuable ecosystem benefits. Their preservation should be prioritized whenever possible.

Stormwater management

Stormwater management involves implementing strategies to effectively control and mitigate the impact of stormwater runoff in urban areas. Low-impact development (LID) features, such as rain gardens, permeable pavement, cisterns, and grassed swales, are innovative techniques used to collect, store, and filter stormwater closer to its source. Integrating LID features along roads and boulevards, can help reduce runoff volume, minimize erosion and flooding, enhance water quality, and improve the overall environmental sustainability of their stormwater systems. Additionally, LID features contribute to the creation of vibrant, walkable communities that prioritize both human well-being and ecological health.



Figure 56. LID features in Greater Sudbury

Key benefits

Stormwater management: LID features, including rain gardens, help reduce the burden on the city's storm sewer system by managing stormwater runoff volume and reducing the risk of erosion and flooding. They also filter sediments and pollutants, improving the quality of water that enters the City's waterways.

Aesthetics and streetscape enhancement: LID features contribute to the attractiveness of the streetscape, providing green spaces and landscaping. Rain gardens, in particular, can serve as traffic calming devices when designed as curb bump-outs.

Biodiversity and pollinator support: Including a mix of native perennials, grasses, and plants that attract pollinators in LID features enhances the city's biodiversity and promotes a healthier ecosystem.

Key considerations

Design and grading: When conditions for LID are appropriate proper consideration for grading of hard surfaces and the positioning of inlets near LID features should be given during the design process to effectively direct stormwater toward these features.

Plant selection: Rain gardens should be planted with native species that can tolerate wet and dry conditions, as well as winter salt. Choosing appropriate vegetative species is crucial for the success and resilience of LID features.

Maintenance: Developing maintenance plans for LID features, including rain gardens, is essential to ensure that vegetation does not encroach on pedestrian clearways, the spaces remain attractive, and the intended level of stormwater treatment is maintained.

Adaptation to space constraints: In constrained right-of-way areas or when raingarden maintenance is not feasible, alternative LID systems like subsurface infiltration galleries or third pipe systems can be considered in urban settings. In rural contexts, ditches along the roadway edges can also serve stormwater management purposes.

Coordination with the City's Maintenance Department: Collaboration with maintenance staff is important during the preliminary design phase to ensure that stormwater management features align with best practices, remain visually appealing, and function effectively over time.

2.7 Utilities and municipal services

Utilities and municipal services should be considered in the development of Complete Streets due to their placement within the road ROW. Examples include gas supply, lighting, electricity, storm sewers, telecommunications, and water supply. Effective street design that supports the ROW functions will accommodate the safe installation of utilities and municipal services, maximize the longevity of infrastructure and investments, and mitigate the impacts of harsh climate conditions.

This chapter describes the design principles and considerations for installation of utilities and municipal services on public streets, in alignment with Complete Streets philosophies.

For more details on the City's public utility objectives, systems, programs, and placement, please refer to Section 12 of Greater Sudbury's Official Plan



Design principles

The following four design principles should be considered during new construction or reconstruction of public roads, in the context of utilities and municipal services:

Follow existing processes

Designing, installing, and maintaining utilities and municipal services are complex processes involving different stakeholders ranging from the City to individual utility providers. Following existing processes helps ensure that utility and municipal service designs adhere with:

 The requirements of Greater Sudbury Utilities Incorporated (GSU Inc.), Enbridge Gas, and other utilities. Chapter 5 includes a list of key stakeholders for Complete Streets projects, including utility providers.

- Utilities should be included in the design process; and
- The City's engineering standards such as outlined in the City's Engineering Design Manual

Facilitate access to underground utilities

Underground utilities should be easy to access, with sufficient clearance between adjacent utilities to accommodate maintenance or replacement. The ROW should be used efficiently by combining and joining utilities, wherever possible. Facilitating access helps ensure utilities are accessible and efficiently placed, with the following considerations:

- Positioned underneath soft surfaces by avoiding asphalt or concrete to help facilitate easy access;
- The horizontal and vertical clearance between various utilities should be large enough to avoid interfering with adjacent utilities during maintenance or replacement;
- Effective use of space within the ROW can be achieved by combining communication and electrical utilities into a single utility trench; and
- As utilities should be greatly separated from trees, joint use trenches may be incorporated to avoid fanning or spreading of utilities.

Design driven by surface-level uses, not utilities

The design of Complete Streets should prioritize the needs of all road users and surface operations. This helps accommodate the flexibility of underground utilities placement. Underground utilities have more flexibility in terms of their lateral placement, and therefore should be typically coordinated to fit into a given Complete Streets design unless otherwise required by specific constraints.

Visual impacts

Placemaking and the public realm are key elements of Complete Streets. Considering the visual impact of utilities helps minimize negative visual impacts as much as possible for above ground utilities. For example, electrical or communication poles should be designed with consideration of the surrounding streetscape.

The following chapters describe the key considerations for underground and above-ground utilities, in alignment with the four design principles.

Considerations for underground utilities

This chapter provides a summary of the underground utilities and their corresponding considerations. The City's Engineering Design Manual should be used in all cases to guide the underground utility design.

Watermains and water services

Purpose: Supply drinking water to fire hydrants and City residents in residential, commercial, and industrial buildings

Infrastructure considerations:

- Broken watermains can result in loss of water services for nearby buildings and can cause flooding. If not addressed immediately, flooding can cause significant infrastructure damage and increase safety risks.
- To facilitate emergency access to broken watermains, the preferred location for a watermain under the boulevard.



Figure 57. Example of a fire hydrant in Greater Sudbury

Storm sewers

Purpose: Collect precipitation runoff from buildings, roadways, and other hard surfaces through drains and catch basins

Infrastructure considerations:

- Maintenance holes and grates should be positioned outside the wheel path of motor vehicles and bicycles to avoid degradation of the surrounding pavement.
- Catch basins should be located upstream of pedestrian crosswalks and should be avoided in driveway curb depressions to keep them clear of stormwater and ice.
- Catch basin grates within a cycling facility should be designed with herring bone openings or other similar design with gaps, such as side inlet catch basins, that do not run parallel to the path of travel. These designs will help ensure that cyclists wheels do not get caught in the gaps, increasing safety.



Figure 58. Example of a catch basin in Greater Sudbury

Sanitary sewers

Purpose: Collect and transport wastewater from residential, commercial, and industrial buildings to be treated at wastewater treatment facilities before being discharged into a receiving body of water

Infrastructure considerations: Maintenance holes and grates should be positioned outside the wheel path of motor vehicles and bicycles to avoid degradation of the surrounding pavement.



Figure 59. Sanitary sewer in Greater Sudbury

Electrical and communications

Purpose: Transport electricity and facilitate communication across the City **Infrastructure considerations:**

- Installing electrical and communication utilities underground can help mitigate the downsides of overhead wiring. However, this is associated with a significant increase in cost, complexity, implementation, and maintenance.
- Underground wiring requires transformer boxes to be installed at surface level. Transformer boxes should be located as close to the property line as possible and away from snow storage areas. The alignment of underground wires should be consistent with the alignment of the City's ROW as much as possible.
- Wherever possible and financially feasible, the City should install underground electrical and communication wiring.

Gas mains

Purpose: Supply natural gas throughout the City as a primary source of fuel and heating for residential and commercial markets

Infrastructure considerations: Within the road ROW, gas mains are generally located beneath the boulevard near the property line. Natural gas is primarily supplied to the City by Sudbury Hydro and Enbridge Gas.

Considerations for above ground utilities

This chapter provides a summary of the overhead utilities and their corresponding considerations. The City's Engineering Design Manual should be used in all cases to guide the overhead utility design.

Overhead electrical and communications

Purpose: Transport electricity and facilitate communication across the City **Infrastructure considerations:**

- Overhead electrical and communication utility wires allow for low-cost implementation and easier access for maintenance than underground wires. However, overhead wires are more susceptible to weather conditions including ice, falling tree branches, and heavy winds. They can also negatively impact aesthetics and conflict with street trees.
- The number of utility poles in the public ROW should be reduced to minimize the impacts on utility wires. This can be achieved by coordinating traffic signal, street lighting, and utility pole installation.



Figure 60. Overhead utility wires in Greater Sudbury

Lighting

Purpose: Contributes to enhancing the safety and accessibility of public space for pedestrians, cyclists, and motorists at night throughout the City

Infrastructure considerations: The design should consider the pedestrian experience while balancing the City's energy and climate goals. Design should be in alignment with the following City polices:

- Light Pollution Policy, and,
- Pedestrian Lighting Standards for Roads Rights-of-Way.

Minimizing blind spots along the ROW and coordination with the location of street trees to minimize street light obstruction are two possible considerations to support pedestrian safety.



Figure 61. Decorative lighting in Greater Sudbury

Chapter 3 Street design

3.1 Complete Streets design considerations

Previous chapters of these guidelines present Complete Streets philosophies and design elements. This chapter builds on this foundation by presenting the Complete Streets designs for each street typology across Greater Sudbury's road network. Complete Street typologies are a classification framework that identify how travel modes and street uses are prioritized within Complete Streets initiatives. The design of each typology reflects the modal priority and placemaking objectives of its adjacent land-use. Furthermore, typologies should:

- Recognize common geometric/operational constraints with the consideration that every context possible cannot be addressed; and,
- Complement but not contradict the role of functional roadway classifications. This may be achieved by describing what typologies are and their relationship to functional road classifications.

In addition to travel mode and street use priorities, mobility and placemaking functions are considered during the development of each typology. **Table 9** describes the difference between the two functions and their application in Complete Streets.

Table 9. Mobility and placemaking functions in Complete Streets

Application	Mobility	Placemaking
Definition	Through movement – ability to move people along a corridor	Pedestrian realm and urban design elements that encourage interaction with adjacent land-use
Mode considerations	Wider ROW and enhanced separation between modes may be required depending on modal priority	Increased interaction between modes and curbside activity/friction
Land use considerations	Generally, roadways with greater intersection spacing and limited land-use/curbside access (ex. roads in rural areas and thoroughfares connecting to highways)	Highest in commercial and mixed-use areas with street-facing land-uses (ex. main streets and commercial avenues)

Street typologies are split by urban and rural contexts, and reflect the differences in density and land use in terms of road design, multimodal infrastructure, and streetscaping. In addition to reflecting the existing land uses, typologies can also be used to reflect anticipated future developments and accommodate projected changes in land use. **Figure 62** summarizes the nine typologies described in this chapter, which are in alignment with the land contexts outlined in Greater Sudbury's Official Plan. **Chapter 3.2** provides general design guidance for each typology.

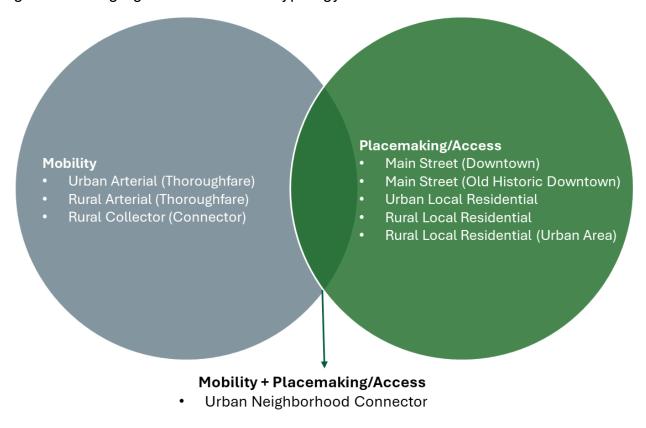


Figure 62. Complete Streets typology overview

3.2 Design guidance by street type

This section explores the design considerations for each of the nine Complete Street typologies, along with sample cross section renderings illustrating the general features as a starting point. The specific streetscaping elements and right-of-way configurations described in this chapter for each typology will be applied differently based on the surrounding context of the road. Further design guidance to support adaptation of cross sections based on contextual factors is provided in **Chapter 5**.

Urban contexts

Key defining features of urban contexts are their higher population density and a wide but concentrated variety of land uses. The typologies presented in the following sections apply to urban contexts and have been designed with the population density and land uses in mind.

Urban areas experience multimodal travel from residents as well as working commuters or tourists from across the city and beyond. The typologies presented reflect this transportation demand with a higher level of multimodal support and separated facilities for streets in mixed-use areas which would experience a higher level of travel and mobility, such as arterials. As urban areas move from a mobility focus to a placemaking focus, there is a reduction in design speed to allow for shared multimodal operations.

From a utilities perspective, all urban typologies typically have a curb and gutter. If a ditch is desired in place of a curb and gutter, a rural typology could be applied in the urban context. This typology scenario is described later in this chapter.

The following typologies are described in this chapter in an urban context:

- Arterial (Thoroughfare);
- Neighborhood Connector;
- Main Street (Downtown);
- Main Street (Old Historic Downtown); and,
- Local Residential.

Arterial (Thoroughfare)

The Arterial (Thoroughfare) typology provides efficient connections between the city and other major centres outside the city and/or separate communities/activity centres within the city. Movement is a primary consideration. Enhanced transit facilities may be provided on these streets.



Figure 63: Urban Arterial (Thoroughfare) typology

Defining features

Corresponding functional classification(s):

Primary Arterial

Secondary Arterial

Typical ROW range: 30 – 45 metres

Design speed range:~50-60~km/h

Mobility vs placemaking: Mobility

Example streets: Lorne Street, Kingsway Boulevard

Complete Streets considerations

Design objectives/goals:

- Accommodate different modes in separated facilities
- Limit access
- Focus on pedestrian realm and transit

Pedestrian realm:

- Separated sidewalks on both sides of the street
- The furnishing zone provides placemaking features such as seating and planters

Cycling facilities:

- Physically separated cycle track with a 0.8 metres buffer from the roadway and 0.3 metres buffer delineating the cycle track and the sidewalk
- Bicycle parking provided in the furnishing zone

Transit facilities:

- Enhanced stop amenities within the furnishing zone
- Integrated bus/bike platforms within the cycle track adjacent to boulevard edge

Travelled way:

- 3.5 metres travel lanes
- 2 lanes in either direction with a TWTL if access is prioritized or a median where access should be limited to improve safety outcomes
- Parking is restricted to facilitate through movement

Utilities and municipal services:

 Bury utilities where financially feasible, use furnishing zone for streetlighting (or overhead utilities if not burying electrical or communication wires)

Neighbourhood Connector

The Neighbourhood Connector typology connects residential neighbourhoods, industrial areas, and commercial retail neighbourhoods to higher order streets. These streets have a multimodal focus and often connect residents to community activity centres. Speed and volumes are limited.



Figure 64. Urban Residential Collector (Neighbourhood Connector) typology

Defining features

Corresponding functional classification(s):

Tertiary Arterial

Collector

Typical row range: 20 – 30 metres

Design speed range: 40 - 50 km/h

Mobility vs placemaking: Mobility + Access

Example streets: Auger Avenue, Marcus Drive, Walford Road

Complete Streets considerations

Design objectives/goals:

- Accommodate different modes in separated facilities
- Focus on active transportation and transit

Pedestrian realm: Separated sidewalks on both sides of the road

Cycling facilities: Physically separated cycle track with a 1.1 metres buffer from the roadway and 0.3 metres buffer delineating the cycle track and the sidewalk

Transit facilities:

- Enhanced stop amenities within the furnishing zone
- Integrated bus/bike platforms within the cycle track adjacent to boulevard edge

Travelled way:

- 3.5 metres travel lanes
- Parking provision varies by context

Utilities and municipal services: Bury utilities where financially feasible, use furnishing zone for streetlighting (or overhead utilities if not burying electrical or communication wires)

Main Street (Downtown)

The Main Street (Downtown) typology connects a mixture of residential, commercial, and institutional uses. These streets are multimodal with an emphasis on public realm and streetscaping elements. Main Streets focus on prioritizing pedestrians, and intentional reduction of motor vehicle speeds. They provide amenities such as parking and placemaking features to support pedestrians.



Figure 65: Main Street (Downtown) typology

Defining features

Corresponding functional classification(s): Collector

Typical row range: 20 – 30 metres

Design speed range: 30 - 50 km/h

Mobility vs placemaking: Placemaking

Example streets: Cedar Street, Larch Street

Complete Streets considerations

Design objectives/goals:

- Accommodate different modes in separated facilities
- Focus on placemaking and active transportation
 - Limit vehicular access

Pedestrian realm:

- Wide separated sidewalks on both sides of the street
- Placemaking amenities such as planters and seating
- Frequent crossing opportunities

Cycling facilities:

- Parking protected on-street bicycle lanes
- Bicycle parking provided in the furnishing zone

Transit facilities:

Bus stop pad and signage integrated within the furnishing zone

Travelled way:

- 3.5 metres travel lanes
- 1-way street with single lane
- Parking provision on one or both sides of the street

Utilities and municipal services: Bury utilities where financially feasible, use furnishing zone for streetlighting (or overhead utilities if not burying electrical or communication wires). Further information can be found in the City's Downtown Master Plan

Main Street (Old Historic Downtown)

The Main Street (Old Historic Downtown) typology connects a mixture of residential, commercial and institutional uses located in historic townships, such as Chelmsford, Levack, or Capreol. These streets have a strong sense of place, as they are the Main Streets of towns within the former Regional Municipality of Sudbury. They are multimodal and have a pedestrian priority. These streets emphasize a placemaking function.



Figure 66. Main Street (Old Historic Downtown) typology

Defining features

Corresponding functional classification(s):

Secondary Arterial

Collector

Typical ROW range: 20 – 30 m

Design speed range: 30 - 50 km/h

Mobility vs placemaking: Placemaking

Example streets: Main Street in Chelmsford

Complete Streets considerations

Design objectives/goals:

- Accommodate different modes in separated facilities
- Focus on placemaking and pedestrians
- Limit vehicular access

Pedestrian realm:

- Separated sidewalks on both sides of the street
- Placemaking amenities such as planters
- Frequent crossing opportunities

Cycling facilities: Dedicated bicycle lanes or shared facilities (could include traffic calming for improved safety outcomes)

Transit facilities: Enhanced stop amenities within the furnishing zone

Travelled way:

- 3.5 m travel lanes
- Parking provision on one or both sides of the street

Utilities and municipal services: Bury utilities where financially feasible, use furnishing zone for streetlighting (or overhead utilities if not burying electrical or communication wires)

Local Residential

The local residential street typology are slow residential streets with low volumes that provide a sense of place for residents. These streets act as a place for neighbours to connect.



Figure 67. Urban Local Residential typology

Defining features

Corresponding functional classification(s): Local

Typical ROW range: ~20 metres

Design speed range: 30 - 60 km/h

Mobility vs placemaking: Access

Example streets: Brenda Drive, Struthers Street

Complete Streets considerations

Design objectives/goals:

- Accommodate various modes by supporting slow traffic
- Accommodate frequent accesses
- Focus on placemaking and pedestrians

Pedestrian realm: Separated sidewalks on one side of the street

Cycling facilities: Mixed traffic operation (could include traffic calming for improved safety outcomes)

Greater Sudbury

Transit facilities: Generally limited transit

Travelled way:

- 7.5 metres road platform (including parking)
- Parking provision on one or both sides of the street

Utilities and municipal service: Bury utilities where financially feasible, use furnishing zone for streetlighting (or overhead utilities if not burying electrical or communication wires)

Rural contexts

Key defining features of rural contexts are their lower population density and dispersed land uses. The typologies presented in this chapter apply to rural contexts and have been designed to accommodate the lower population density and land uses in mind.

Rural areas experience multimodal travel from residents and long-distance commuters, as well as goods movement across the city and beyond. The typologies presented reflect this transportation demand with moderate multimodal support to accommodate long-distance mobility. As rural areas move from arterial to local roads, placemaking is introduced as an additional focus.

From a utilities perspective, all rural typologies have a ditch. As described earlier in this chapter, the "Rural Local Residential (Urban Area)" typology presents a unique design for streets that fall within urban contexts but make use of a ditch instead of a curb and gutter.

The following typologies are described in this chapter in a rural context:

- Arterial (Thoroughfare);
- Collector (Connector);
- Local Residential; and,
- Rural Local Residential (Urban Area).

Arterial (Thoroughfare)

The Arterial (Thoroughfare) typology are streets that connect the City with other major centres outside the City and connect rural communities within the City. Facilitates long distance person or goods movement travel with a mobility priority.



Figure 68. Rural Arterial (Thoroughfare) typology

Defining features

Corresponding functional classification(s):

Primary Arterial

Secondary Arterial

Typical ROW range: 30 – 45 metres

Design speed range: 50 - 60 km/h

Mobility vs placemaking: Mobility

Example streets: Capreol Road (MR 84), Municipal Road 35

Complete Streets considerations

Design objectives/goals:

- Accommodate various modes, focusing on people and goods movement
- Support active transportation and transit where volumes and demand are high
- Focus on mobility and accommodating higher speeds

Pedestrian realm:

- Buffered Paved Shoulder
- (Optional) Multi-use path behind ditch outside the clear zone

Cycling facilities:

- Buffered Paved Shoulders
- (Optional) Multi-use path behind ditch outside the clear zone can be considered where cyclist volumes are expected to be high, such as connections between trail systems or tourist destinations

Transit facilities: Generally limited transit, shelters are provided by road edge where necessary

Travelled way:

- 3.5 metres travel lanes
- Parking restricted

Utilities and municipal services:

- Stormwater management through ditches at road edge
- Overhead utilities behind ditch

Collector (Connector)

The Collector (Connector) typology connect residential neighbourhoods with major activity centres in rural areas. The distance between neighbourhoods and activity centres may be longer than in urban areas.



Figure 69. Rural Collector (Connector) typology

Defining features

Corresponding functional classification(s):

Tertiary Arterial

Collector

Typical ROW Range: 20 - 30 metres

Design Speed Range: 50 - 60 km/h

Mobility vs Placemaking: Mobility

Example Streets: Valleyview Road

Complete Streets considerations

Design objectives/goals:

- Accommodate various modes, focusing on people and goods movement
- Support active transportation
- Focus on mobility

Pedestrian realm: Buffered paved shoulders

Cycling facilities: Buffered paved shoulders

Transit facilities: Generally limited transit, shelters are provided by road edge

where necessary

Travelled way:

3.5 metres travel lanes

Parking on one or both sides

Utilities and municipal services

- Stormwater management through ditches at road edge
- Overhead utilities behind ditch

Local Residential

The Local Residential typology are low volume residential streets that provide access to residential and commercial properties in rural areas.



Figure 70. Rural Local Residential typology

Defining features

Corresponding functional classification(s): Local

Typical ROW range: ~20 metres

Design speed range: 30 - 50 km/h

Mobility vs placemaking: Access

Example streets: Gravel Drive (Val Therese), Bonin Street (Chelmsford)

Complete Streets considerations

Design objectives/goals:

- Accommodate slow moving traffic and active transportation
- Accommodate increased access

Pedestrian realm: No dedicated facilities

Cycling facilities: Mixed Traffic Operation (consider traffic calming)

Transit facilities: Generally limited transit

Travelled way:

- 6 metres pavement width (7 metres platform includes soft shoulder)
- 1 lane in either direction
- Parking allowed on one or both sides

Utilities and municipal services

- Stormwater management through ditches at road edge
- Overhead utilities behind ditch

Rural Local Residential (Urban Area)

The Rural Local Residential (Urban Area) typology connect residential neighbourhoods to higher order streets. These streets have a multimodal focus and often connect residents to community activity centres. Speed and volumes are limited.



Figure 71. Rural Local Residential (Urban Area) typology

Defining features

Corresponding functional classification(s): Local

Typical ROW range: ~20 metres

Design Speed range: 30 – 50 km/h

Mobility vs placemaking: Access

Example streets: Percy Avenue (Val Caron)

Complete Streets considerations

Design objectives/goals:

- Accommodate slow moving traffic and active transportation
- Accommodate increased access

Pedestrian realm: Sidewalk on one side behind ditch

Cycling facilities: Mixed Traffic Operation (consider traffic calming)

Transit facilities: No transit

Travelled way:

• 6 metres pavement width (8 metres platform includes soft shoulder)

Parking allowed on one or both sides

Utilities and municipal services:

- Stormwater management through ditches at road edge
- Overhead utilities behind ditch

Chapter 4 Intersection and transition design

This chapter outlines the Complete Streets principles for intersection design, recognizing that land use context and intersection road typologies will impact how intersections should be designed to promote predictable and safe movements. This chapter includes six sample intersection designs to illustrate how these principles can be applied to common intersection types, with a focus on local context and design flexibility. It is important to note that these designs do not cover every scenario or serve as definitive designs, and designers should apply the principles based on the specific local context.

Further guidance can be found in:

- Global Alliance on Accessible Technologies and Environments' (GAATES)
 Integrated Accessibility Standards for Exterior Paths of Travel (2005)
- Ontario Traffic Manual (OTM) Book 12: Traffic Signals (2012);
- OTM Book 15: Pedestrian Crossing Treatments (2016);
- TAC Geometric Design Guide for Canadian Roads (2017);
- National Association of City Transportation Officials' (NACTO) Don't Give
 Up at the Intersection (2019);
- OTM Book 18: Cycling Facilities (2021);
- OTC Protected Intersection Guide (2023); and,
- Accessibility for Ontarians with Disabilities Act (AODA) Regulation 191/11 (2024).

4.1 Intersection design principles

Table 10 outlines Complete Streets intersection design principles which act as a guide for both geometric and operational design considerations. Application of these principles leads to the creation of intersections that work for all types of road users. It is important to note that the intersection's road typology and land use context will have an impact on how the intersection should be designed.

Table 10. Complete Streets Intersection Design Principles

Design principle	Motivation	Desired result
Safety first	Intersections have a higher potential for conflicts between road users than at mid-block locations. Vulnerable road user safety should be prioritized for all intersections to reduce the likelihood of injury in the event of a collision.	Design should encourage predictable movements, interactions between conflicting movements should occur at slow speeds, and good visibility and short crossing distances should be provided.
Ensure accessibility	Intersections should be accessible for people of all ages and abilities to ensure that they can safely and comfortably navigate the intersection.	Curb cuts, tactile walking surface indicators (TWSI), audible signals, and other accessibility features should be included in the design to meet AODA standards.
Minimize delay	Long cycle lengths that delay pedestrians or cyclists may result in non-compliance by those users, increasing the likelihood of unpredictable movements and reducing safety. Along transit corridors, minimizing transit delay should be a priority since long travel times can be a deterrent to transit ridership.	Traffic signal operations should be designed to minimize delay for all road users. By optimizing signal timing, prioritizing efficient movement of all modes, and incorporating pedestrian-friendly features, intersections can be designed to reduce wait times and improve travel experiences, while also enhancing safety and accessibility.

4.2 Intersection design elements

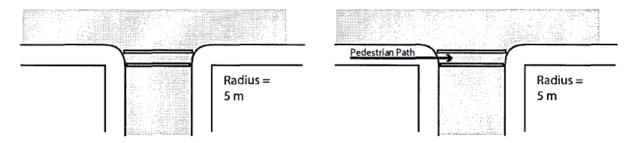
Recommended intersection design elements for the City can be classified into four categories: Geometric, Accessibility, Traffic Calming, and Traffic Controls. These categories can be broken down as follows:

- Geometric features help enhance safety at intersections for all modes.
 Examples include corner radii (curb extensions), smart channels, truck aprons, raised medians/refuges, and protected intersections
- Accessibility features support pedestrians with accessibility needs.
 Examples include Tactile Walking Surface Indicators (TWSI) and Accessible Pedestrian Signals (APS).
- Traffic calming helps reduce speeds at the intersection to support vulnerable users. Examples include traffic diverters, planter boxes, and pavement treatments; and,
- Traffic controls help provide priority to alternate modes such as transit, pedestrians, and cyclists. Examples include Transit Signal Priority (TSP), Leading Pedestrian Intervals (LPI), and Leading Bicycle Intervals (LBI).

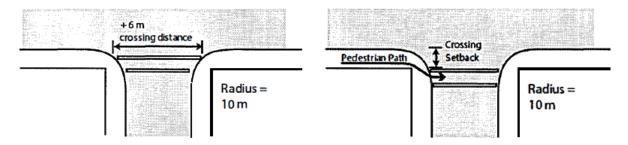
The following chapters further describe various elements within each category.

Geometric feature: corner radii (curb extensions)

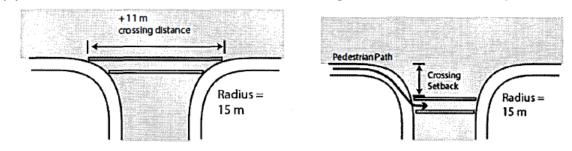
Corner radii play a crucial role in determining the speed of turning vehicles through an intersection and impact pedestrian crossing distances. Larger corner radii encourage high-speed turns and result in longer pedestrian crossing distances, which can increase the risk of conflicts with motor vehicles. On the other hand, smaller corner radii promote lower vehicle turning speeds and can help reduce the likelihood and severity of collisions with vulnerable road users at intersections. **Figure 72** shows the relationship between corner radii, crossing distance, and pedestrian path.



(A) A 5 m corner radius allows for both short crossing distance and pedestrian directness



(B) A 10 m radius necessitates a trade-off between crossing distance and directness for pedestrians



(C) A 15 m radius necessitates a trade-off between crossing distance and directness for pedestrians, and may lead to higher motor vehicle turning speeds

Figure 72. Relationship between corner radii, crossing distance, and pedestrian path.

Source: TAC Geometric Design Guide for Canadian Roads

Designing corner radii is dependent on both the design and control vehicles (Chapter 2.5). The design vehicle refers to the largest typical vehicle that frequently turns right at the intersection. Intersections should be designed to allow the design vehicle to negotiate the intersection with ease, typically starting from the curb lane and remaining to the right side of the centerline (or the right half of the roadway, where there is no marked centerline) on the receiving roadway.

The control vehicle, which is the largest vehicle that infrequently turns right at the intersection, must also be physically accommodated. However, it may be required to take a wider turning path using adjacent lanes on the approach and receiving streets.

Designing effective turning radii is critical for selecting appropriate corner radii (Figure 73). Effective turning radii are determined based on the typical travel path used by motor vehicles navigating around a corner, and it considers factors like on-street parking, bicycle lanes, and multiple receiving lanes. Designing for vehicles with the effective turn radius may allow the use of a substantially smaller physical corner radius, which can help reduce pedestrian crossing distances. In older areas of development with small corner radii, existing radii should generally be maintained, even if they do not accommodate the design or control vehicles, unless there is a history of operational concerns.

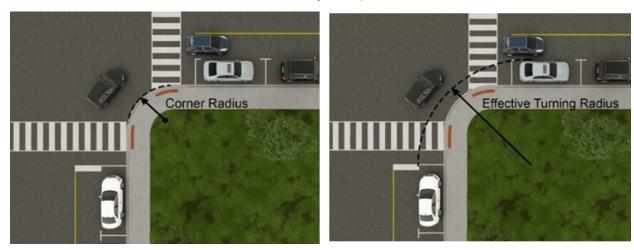


Figure 73. Corner Radii and Effective Turn Radii

Source: TAC Geometric Design Guide for Canadian Roads

It is essential to monitor redesigned intersections over time to determine how the new corner radii affect driver speeds, turning paths, and overall behavior. Practitioners should expect a transition period for motorists to adjust their behavior when curb radii are reduced at an intersection. Signs of vehicles mounting the curb or encroaching in adjacent lanes to complete right turns in the first weeks following the adjustment should not be viewed as a sign of failure. Redesigned intersections should be monitored for a period of several months to assess the impact of the new corner radii on driver speeds, turning paths, and overall behavior.

Geometric feature: smart channels

On streets where speed and mobility are prioritized, right-turn lanes are commonly used to separate turning vehicles from faster-moving through traffic, and to facilitate efficient traffic flow. However, while they can improve safety and efficiency for vehicles, they can also create challenges for pedestrians and cyclists by increasing the distance they must cross and creating conflict areas with through cycling traffic.

Where dedicated right turn lanes are warranted, a simple or compound radius right-turn lane is preferred over a right turn channel to create a safer and more efficient turning experience. In cases where this is not possible, smart channels may be applied to increase the street entry angle and decrease turning speeds, creating a more consistent yield condition for drivers as shown in **Figure 74.** Additional guidance for right-turn lane design can be found in Sections 9.14.3 and 9.14.4 of the TAC Geometric Design Guidelines for Canadian Roads.

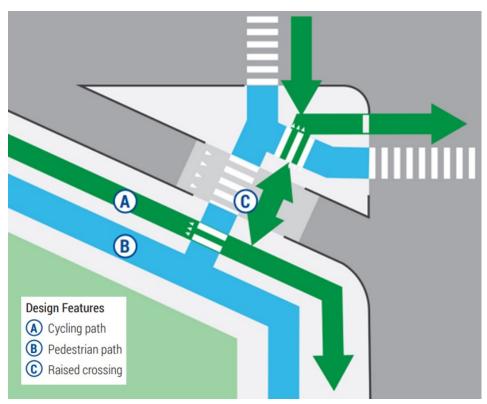


Figure 74. Smart channel protected corner

Source: Protected Intersection Design Guide, City of Ottawa

Geometric feature: truck aprons

Large vehicles require additional space to turn at the intersection safely and comfortably. A truck apron provides additional, mountable space that serves as a greater degree of separation from the curb. As shown in **Figure 75**, truck aprons can help support separation from vulnerable road users such as cyclists and pedestrians.

Left-turn traffic calming devices can also be considered at large signalized intersections to reduce the speed of left turns. The traffic calming device is mountable to support large vehicle turning requirements but helps to enforce a perpendicular approach for passenger vehicles to crosswalks to improve the visibility of people walking or cycling. **Figure 76** shows the modification to turning movements with the traffic calming measure.

Incorporating a truck apron at intersections along goods movement or waste management corridors can help accommodate trucks while reducing the corner radius for other vehicles on the road. A truck apron also serves as a speed reduction device, particularly for smaller vehicles. Further guidance can be found in NACTO's Don't Give Up at the Intersection document.

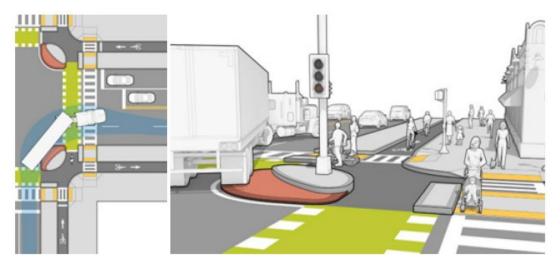


Figure 75. (Left) An overhead view of a mountable truck apron (Right) An onstreet view of a truck using the mountable truck apron

Source: MassDOT Separated Bike Lane Planning & Design Guide

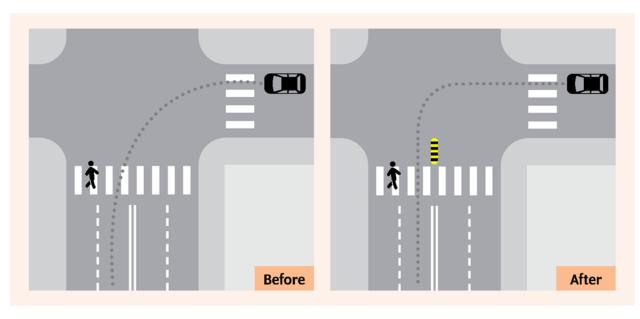


Figure 76. Left-turn traffic calming

Source: City of Toronto

Geometric feature: raised medians/refuges

Raised medians separate traffic flow and barricade opposing movements from potential conflicts. In urban settings, raised medians may have curb and gutter to improve stormwater drainage. In Complete Streets, raised medians are often added to prevent head-on collisions, and to provide refuge for pedestrians. By providing a space for pedestrians, pedestrians with mobility needs are accommodated by extending the walk time over two signal phases instead of one. This in return can improve traffic flow by providing adequate green time for specific traffic movement. Raised medians can also be used as an access management technique by limiting the number of locations where left turns can be made.

Raised medians also provide an excellent opportunity for additional streetlighting, vegetation, and banners to improve the corridor aesthetics. For instance, historical streets can have decorations along the raised median for aesthetic purposes. An example of a raised median is shown in **Figure 77**.



Figure 77. Raised median in Greater Sudbury

Geometric feature: protected intersections

Protected intersections help support vulnerable road users, such as cyclists and pedestrians, cross in a safe manner. A protected intersection supports increased pedestrian and cyclist visibility, promotes vehicle yielding, and provides shorter crossings. Further information can be found in the Ontario Traffic Council (OTC) Protected Intersection Guide.

Protected intersections have the following provisions for pedestrians, cyclists, and motorists (**Figure 78**).

Pedestrians

Pedestrian islands help reduce the crossing distance while enhancing the visibility for turning vehicles. Islands can also help increase the volume capacity of the intersection by accommodating large volumes of pedestrians. To support accessibility requirements, islands should be a minimum of 2.1 metres, with a preferred width of 2.7 metres. Lastly, accessibility features can be incorporated on pedestrian islands to improve the accessibility of the intersection for those using personal mobility devices. **Crossing markings** for pedestrians provide increased visibility.

Cyclists

Bikeway setbacks (crossride setbacks) provide larger separation between cyclists and vehicles, allowing for increased visibility. Increased visibility provides cyclists adequate time to make crossing decisions in the presence of turning vehicles. Crossing markings for cyclists provide a degree of separation from crossing pedestrians while serving as directional guidance. Bike yield lines to avoid collisions with pedestrians and signal the upcoming crossing may also be implemented, where appropriate.

Motorists

Corner islands provide motorists with adequate separation from cyclists and pedestrians while waiting to turn. Islands may be mountable if large turning vehicles are expected. Corner islands further provide the opportunity for cyclists to queue in preparation to cross, reducing the crossing distance.

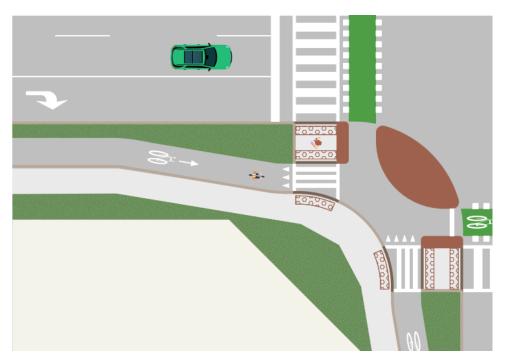


Figure 78. Design features for a protected intersection.

Source: OTC Protected Intersection Guide

Accessibility feature: Tactile Walking Surface Indicators (TWSI)

Tactile Walking Surface Indicators (TWSIs) are a high colour contrast textured surface treatment used for wayfinding or to identify hazards. They are designed to be detectable by those travelling by foot or using a cane. TWSIs can be used to direct and alert pedestrians with vision loss or other disabilities. **Figure 79** shows an example of a TWSI in Greater Sudbury.

Tactile Direction Indicators (TDIs) are used for guiding vulnerable road users towards transit stops, crosswalks, and other locations within open areas. TDIs indicate direction of travel through parallel elongated bars and crossings through perpendicular raised bars to indicate crosswalks.

Tactile Attention Indicators (TAIs) are used for identifying potential hazards and upcoming decisions to be made by the pedestrian. Through truncated domes, TAIs alert pedestrians to street crossings, conflicts with other modes (i.e. vehicles), or changes in elevation.

In Greater Sudbury, TWSIs are typically TAIs with truncated domes. They are installed on the edge of transit platforms as well as along slopes of pedestrian curb ramps/cuts, with a setback between 150-200 mm from the curb edge. Examples of conditions under which TWSIs would be installed include signalized intersections, commercial driveways, and unsignalized intersections with minor roads.



Figure 79. Example of a TWSI in Greater Sudbury

Accessibility feature: Accessible Pedestrian Signals (APS)

Accessible Pedestrian Signals (APS) support pedestrians with limited or no vison to identify when to safely cross the street based on auditory and tactile indicators (**Figure 80**). APS is activated through a pushbutton which indicates direction of crossing. Possible indicators include speech messages or a series of repeating sounds that differ based on direction of crossing.

To maintain accessibility and meet AODA requirements, the APS should be placed up to 1.5 metres away from the crosswalk with one button per pole.



Figure 80. Accessible Pedestrian Signal at an intersection

Traffic Controls

Traffic controls include both unsignalized and signalized design treatments. Signalized intersections provide an opportunity to enhance multimodal crossing. Priority can be given to alternate modes through traffic signal modifications. Leading Pedestrian Intervals (LPI) and Leading Bicycle Intervals (LBI) provide additional time and increasing safety for crossing pedestrians and cyclists. Transit service can be enhanced by using Transit Signal Priority (TSP), which helps reduce transit delays at the intersection.

Further information regarding traffic controls can be found in OTM Book 12 and the OTC Bicycle Traffic Signals Guide.

LPI: LPI can be considered for intersections with longer crossing distances or high volumes of conflicting turning movements, where pedestrians would benefit from additional crossing time. LPI can also be considered for intersections with high pedestrian volumes. The pedestrian crossing indication is provided 4 to 6 seconds in advance of green indications for motorists, helping pedestrians cover a larger distance before vehicles start crossing or turning. LPI implementation locations should be assessed in alignment with the City's Leading Pedestrian Interval Policy.

LBI: Similar to LPI, LBI can be considered for intersections where there are high volumes of conflicting turning movements. They can also be considered for intersections with dedicated cycling infrastructure, such as cycle tracks or bike lanes. The cyclist crossing indication is provided in advance of green indications for motorists, allowing cyclists to enter the intersection and conflicting areas, increasing visibility and helping cover distance.

TSP: TSP helps prioritize transit vehicle movement over all other movements at the beginning of a signal phases. If TSP is used for protected transit movements, the transit vehicle will move first while all other modes, including pedestrians, remain stopped. If the transit movement is not protected, non-conflicting movements may also be allowed alongside TSP. TSP can be considered along existing and future corridors with frequent transit service, particularly where transit vehicles experience high amounts of delay or there are a high number of turning movements.

Typical intersection design treatments

This chapter outlines six sample designs that correspond with the following six common intersections across the City. The traffic control presented in these designs is for example purposes only, and future projects are subject to the City's all-way stop and traffic control warrant processes.

- Urban Dedicated Intersection: Neighborhood Connector intersecting with Downtown Main Street
- Low Speed Intersection: Two Local Residentials intersecting with each other
- Large Urban Protected Intersection: Two Urban Arterials intersecting with each other
- 2-Way Stop Controlled Intersection: Rural Connector intersecting with Rural Arterial
- Rural Roundabout: Two Rural Arterials intersecting with each other
- Stop Controlled T-Intersection: Historic Main Street intersecting with Neighborhood Connector



Urban Dedicated intersection

This intersection between a Neighbourhood Connector and Downtown Main Street demonstrates an intersection that serves the purpose of connecting travelers to and from the Downtown. The design vehicle is MSU and the control vehicle is WB-19. The intersection is signalized and conflicting uses may be separated physically through protected signal phasing.



Figure 81. Urban Dedicated Intersection

- The intersection shows two different types of bike facilities meeting including a parking protected on-street bike lane and a cycle track. A bike box supports cyclists turning left from Downtown Main Street to the Neighborhood Connector.
- The curb radius reduces the crossing distance for pedestrians and forces turning vehicles to slow down. The setback furnishing zone also allows for a large day light triangle to improve the visibility of cyclists and pedestrians that may be crossing the road.
- Pavement markings shown within the corner radii act as a truck apron for larger vehicles. This area can either include pavement markings or mountable curbs suitable for larger vehicles. Physical barriers (such as planters) or curb extensions can be considered where no large turning vehicles are anticipated.

Low Speed intersection

The Low-Speed intersection features the intersection of two urban local residential roads that is stop controlled in both directions. Pedestrians are prioritized at this intersection through features that slow cars down, reduce pedestrian crossing distances and enhance pedestrian visibility at crossings. The design vehicle is a passenger car, and the control vehicle is a garbage truck. Control vehicles are expected to oversteer and negotiate with passenger vehicles to maneuver in the intersection.



Figure 82. Low-Speed Intersection

- Curb extensions or curb bulb outs are the predominant feature at this intersection. The curb extension narrows the roadway to reduce the overall crossing distance for pedestrians and provides a generous waiting area to maximize visibility of pedestrians. Curb extensions have a tight curb radius to encourage turning vehicles to slow down.
- Optional traffic calming measures may be considered with this intersection including raised intersections to support speed reduction and improve the pedestrian crossing environment.

Large Urban Protected intersection

Urban Arterial intersections are large due to the right-of-way and turning movements required to support high traffic volumes. A protected intersection that includes protected signal phasing such as protected left-turn phases and separation of users, greatly enhances the safety of pedestrians and cyclists. The goal of this design is to minimize conflicts between turning vehicles and vulnerable road users.



Figure 83. Large protected urban intersection

- The corridor widens at the intersection to provide dedicated left-turn and right-turn lanes for vehicles. This increases the capacity of the intersection and allows for protected left-turn lanes. Where space is not available, the City may consider land acquisition or simplifying traffic operations to remove dedicated left or right turn lanes.
- The crossride setback from the motor vehicle lane to the bicycle crossride enables better sightlines and more time for drivers to stop for pedestrians and people on bicycles.
- A forward stop bar places people on bicycles who are waiting further ahead than motor vehicles. This improves their visibility and reduces the potential for conflicts.

- The corner safety island separates and protects the bicycle and pedestrian space and enforces the appropriate curb radii to support rightturning vehicles.
- Truck aprons are provided on all corners to support larger vehicles.

Two-Way Stop Controlled intersection

The Two-Way Stop-Controlled intersection is a simple rural intersection design example that applies to lower volume roads. This intersection features a Rural Arterial and a Rural Connector with stop control on the Rural Connector.



Figure 84. Two-Way Stop Controlled Intersection

- Stop-bars are located further back from the intersection to prevent large turning vehicles from encroach on oncoming traffic.
- Paved shoulder pavement markings are extended into the intersection to enforce an appropriate turning radius.
- The paved shoulder buffer extends to the turning radius to continue separation for cyclists using the shoulder.

Rural Roundabout

The Rural Roundabout intersection is a typical intersection used for Rural Arterial roads which include buffered paved shoulders for cyclists. The roundabout addresses the safety and operations for cyclists and vehicles due to the rural context. The roundabout design is based on OTM Book 18: Cycling Facilities (2021), the TAC Canadian Roundabout Design Guide (2017) and NCHRP Report 672.



Figure 85. Rural roundabout

- Pedestrians and cyclists operate on the perimeter of the roundabout fully separated from motor vehicle traffic. The paved shoulder used by cyclists should transition into the boulevard on the approach. Cycle tracks around the perimeter of the roundabout may operate as two-way facilities if it provides a more direct path of travel.
- Buffered shoulders transition to raised medians through the roundabout to enforce separation between vehicles and cyclists. Yield lines, also know as shark's teeth, are included at crossing locations to indicate to cyclists and pedestrians that through vehicles have the right-of-way.
- A truck apron is provided on the central median to support large vehicle turning movements.

Stop Controlled T-intersection

The Stop-Controlled T-intersection features the intersection of the Main Street Historic and the Neighbourhood Connector. This intersection features a transition from on-street buffered bike lanes on the Main Street Historic to cycle tracks on the Neighbourhood Connector. Stop control is provided on the Neighbourhood Connector.



Figure 86. Stop-Controlled T-Intersection

Key features for this intersection include:

- Stop-bars along the south leg are located further back from the intersection to prevent large turning vehicles from encroaching on oncoming traffic.
- Bike facilities which continue through the intersection onto the near-side of the Main Street Historic, marked by elephant feet signage.
- A pedestrian crossing with a median/refuge island and signage.

Chapter 5 Planning for Complete Streets

5.1 Complete Streets design considerations

This chapter of the CSDG intends to inform and outline the planning and design process of a Complete Streets project. Complete Streets projects generally follow the steps outlined in this chapter; however, project-specific deviations may apply. Common city-specific considerations for Complete Streets, such as winter maintenance, are also highlighted in this chapter. Overall, this chapter integrates the elements from the previous chapters to facilitate the practical application of Complete Streets principles.

Constructing, operating, and maintaining a Complete Streets network is a multistep process that involves coordination with several municipal departments, stakeholder groups, and the community at large. This process typically encompasses four distinct stages, as illustrated in **Figure 87**. These four stages are recommended for new construction or major reconstruction projects of the City's streets, including developer-led construction.

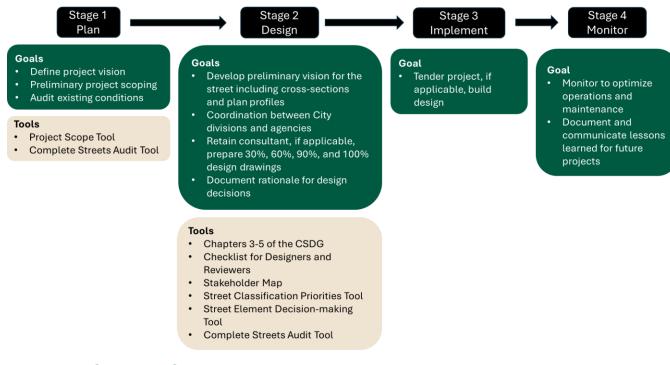


Figure 87. Complete Streets project process

5.2 Planning stage

Complete Streets design is an approach that considers the needs of all road users, including pedestrians, cyclists, public transportation users, and motorists. Typically, street improvement projects are initiated for reasons such as major reconstruction, water or wastewater replacement and rehabilitation, or greenfield development. These projects can all be approached with a Complete Streets lens, considering the needs of all road users in the design process.

Before constructing any street elements, the planning stage dictates the direction, and the purpose of the project. Depending on the budget and scope of the project, the duration and complexity of the planning involved can vary. This chapter outlines processes, tools, and strategies to be considered when applying a Complete Streets approach to a new project.

Defining street corridor vision and goals

Defining the corridor vision and goals is a crucial step in the planning stages of a Complete Streets project. It involves reviewing the existing and future planning and policy context, as well as engaging key stakeholders to ensure their involvement in developing the project vision. Practitioners should leverage the Complete Streets principles outlined in **Chapter 1** and the proposed typology of the street to guide the development of the vision and goals for the identified corridor.

The goals developed should include desired outcomes for all modes and street elements, considering multimodal transportation and sustainability objectives. Early engagement with stakeholders can set the stage for ongoing proactive engagement throughout the project life cycle. Additionally, **Chapter 5.3** includes a list of common stakeholders that should be engaged for projects to ensure that their perspectives and needs are incorporated into the vision and goals.

Monitoring

Monitoring is a crucial aspect of the Complete Streets framework. By collecting and analyzing municipal data, practitioners can identify high-risk areas and prioritize them for improvements. This can include analyzing collision data, traffic volume, transit ridership, and pedestrian and cycling activity. In addition to identifying areas for improvement, data can also be used to evaluate the effectiveness of a Complete Streets project. To do this, practitioners should develop site-specific performance indicators during the planning stage, and collect baseline data for each indicator. This will enable them to compare pre-

and post-installation data and assess the impact of the project on the established vision and goals. By incorporating monitoring into the project life cycle, practitioners can ensure that the Complete Streets network continues to meet the needs of all road users over time. This chapter provides further details on monitoring and Complete Streets performance indicators.

Auditing

Auditing is an important process that helps to evaluate the completeness of specific street segments and determine which elements of Complete Streets should be prioritized. This evaluation can be based on various factors, such as stakeholder feedback, data analysis, or reviewing as-built designs. By auditing a corridor, areas which require enhancements can be assessed and a project scope that addresses these needs can be developed. Auditing a corridor (Figure 88) that is identified for road reconstruction is a helpful step in the planning process as it helps to ensure that Complete Streets projects are tailored to the specific needs of each corridor.

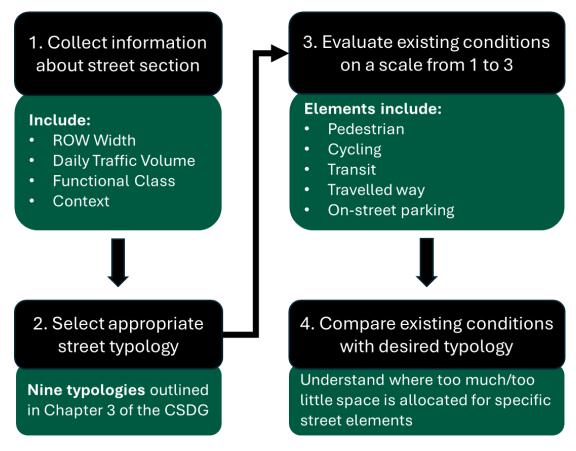


Figure 88. Auditing process for Complete Streets

Complete Streets Audit Tool

Appendix B: Audit Tool is a valuable tool for assessing the completeness of street segments and determining the appropriate project scope to enhance completeness. The tool allows for the evaluation and visualization of the existing or proposed design of a street, based on the desired balance of priorities for the relevant street typologies as defined by the Complete Streets Condition Definitions and Street Element Matrix described further in this chapter.

The tool is an interactive Excel file that allows users to input relevant information about the corridor, select the relevant typology, assess current or proposed street conditions for each Complete Streets element and evaluate them based on the desired conditions for that typology. The bar graph output indicates whether current conditions for a specific street classification surpass, align with, or fall short of the priorities for each Complete Streets element.

An example evaluation of an Urban Local Residential Typology is shown in **Figure 89**.

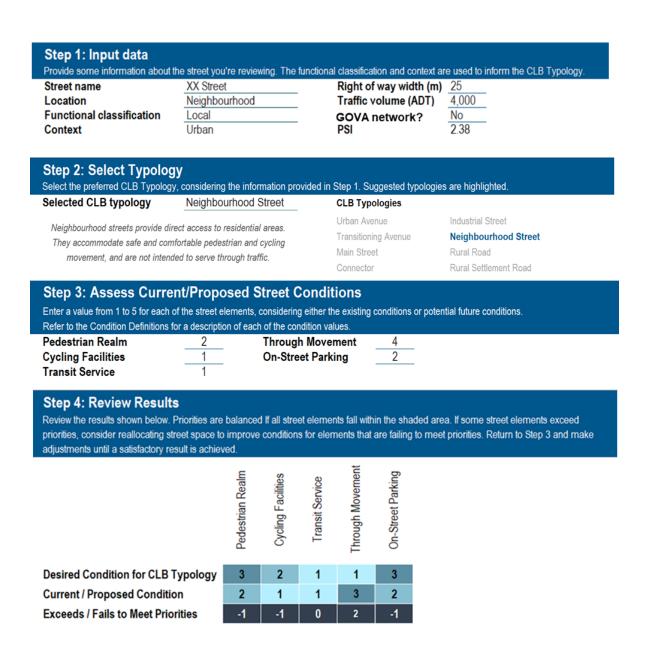


Figure 89. Sample evaluation of the Urban Local Residential Typology using the Audit Tool

If the value in the "Exceeds / Fails to Meet Priorities" is negative, then the Current / Proposed Condition is failing to meet the intent for that element for selected street typology. If the value is positive, the street elements exceed priorities, consider reallocating street space to improve conditions for elements that are failing to meet priorities. Return to Step 3 and adjust until a satisfactory result is achieved.

Street element condition definitions

The following tables contain the definitions for each Complete Streets element, which are used to describe the desired conditions for each typology and to assess the condition of an existing street. Each element is assigned a rating from 1 to 3, which reflects the level of accommodation or level of service for that street element.

Table 11. Level of accommodation for pedestrian realm elements

Score	Urban	Rural
1	No sidewalk or multi-use path (MUP)	No shoulder
2	Sidewalk with 1.5 metre – 1.8 metre pedestrian clearway on one side of the roadway	1.5 metre – 1.8 metre paved shoulder with 0.5 metre painted buffer
3	 Sidewalk with > 1.5 metre pedestrian clearway with 0.3 metre edge zone (measured from back of curb) on both sides of the roadway, or 3.0 metre MUP with 0.8 metre edge zone on both sides of the roadway Street trees / furnishing zone 	Sidewalk with 1.5 metre – 1.8 metre pedestrian clearway on one side of the roadway

Table 12. Level of accommodation for cycling facilities

Score	Urban	Rural
1	Shared space: No dedicated cycling facilities or shared operations	Shared space
2	Bike lane, buffered bike lane, or advisory bike lane, in conditions supported by OTM Book 18 nomograph. Minimum 1.5 metre width	1.5 metre paved shoulder with 0.5 metre painted buffer

Score	Urban	Rural
3	 Separated facility: Physically separated bike lane, cycle track, or: Minimum 1.5 metre (one way), preferred 1.8 metre width MUP: 3.0 metre preferred and 2.4 metre minimum Minimum 0.6 m buffer from motor vehicle traffic 	1.8 metre paved shoulder with 1.0 metre painted buffer

Table 13. Level of accommodation for transit service

Score	Urban or rural
1	 No transit service or transit service; or Stop has no hard surface pad
2	 Infrequent local transit service (less than half an hour in peak periods). Stops have hard surface pad allowing passenger
	boarding/alighting from all doors and include static route mapping/schedules.
	Frequent local transit service (every 15-30 minutes).
3	 Most stops have basic transit amenities such as seating, lighting, and static route mapping/schedules. All stops have hard surface pad allowing passenger boarding/alighting from all doors.

Table 14. Level of accommodation for travelled way elements

Score	Urban	Rural
1	Design treatments promote slow speeds and divert through traffic.No marked centreline.	Less than 6.5 metre pavementNo paved shoulder

2	 3.5 metre lane width Centreline may or may not be marked. No continuous centre turn lane. May include auxiliary turn lane at intersections. 	 7.0 metre pavement Centreline may or may not be marked No paved shoulder
3	 3.5 metre lane width May include continuous centre turn lane. May include auxiliary turn lanes at intersections. 	Minimum 1.0 metre paved shoulders

Table 15. Level of accommodation for on-street parking

Score	Urban or rural	
1	On-street parking is not provided.	
	 Permanent or off-peak parking if there is sufficient space in the ROW and demand cannot be met with off-street supply. 	
2	 Parking may be provided in specific locations only (where needed, or where curbside space is available), and may not be provided on every block. Parking may be on one or both sides of the street. 	
3	 Permanent or off-peak parking is provided. Parking is provided on most blocks along majority of the curb on one or both sides of the street. 	

Street Element Matrix

The matrix presented in **Figure 90** can be used to determine the desired conditions by Complete Street element for each street typology based on the Street Element condition definitions previously described from **Table 11 to Table 15**.

	Pedestrian Realm	Cycling Facilities	Transit Service	Travelled Way	On-Street Parking
Urban Arterial (Thoroughfare)	3	3	3	3	1
Main Street (Downtown)	3	2	2	2	3
Main Street (Old Historic Downtown)	3	2	3	2	2
Neighborhood Connector	3	3	3	2	1
Urban Local Residential	2	1	1	1	2
Rural Arterial (Thoroughfare)	2	3	2	3	1
Collector (Connector)	2	2	2	3	1
Rural Local Residential	1	1	1	2	2
Rural Local Residential (Urban Area)	3	1	1	2	2

Figure 90. Complete Streets Element Matrix

Project Scope Tool

The Project Scope Tool (Figure 91) is a flowchart designed to assist staff in determining the suitable project scope for a specific roadway or corridor. The tool considers the schedule for major replacement of utilities and municipal services, which is the key parameter that has the most significant impact on the project's scope.

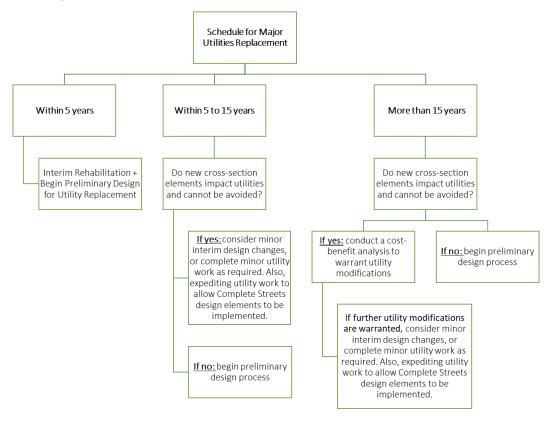


Figure 91. Complete Streets Project Scope Tool

The Project Scope Tool is recommended for use during the initial planning stages of a Complete Streets project. However, as more details are uncovered in the conceptualization stage regarding potential utility impacts, the tool should be revisited to ensure that the project is appropriately scoped. The condition and scheduled replacement of subsurface utilities are essential factors in determining the scope of a road reconstruction project. This tool can be used iteratively throughout the Planning and Design stages of the Complete Streets project.

5.3 Design stage

After the planning stage, the design stage begins by identifying the essential components of the corridor. This includes the corridor's cross section, street elements, and other specific design components. The cross sections for the relevant street typology in **Chapter 3** and the corresponding intersection treatments outlined in **Chapter 4** can serve as a solid starting point for the design. Afterward, the design should be refined based on several core design considerations, including the accommodation of user groups and services, adjacent land uses, network considerations, and relevant user considerations. To keep track of the key steps and considerations during the adjustment of the conceptual design, project managers and designers can utilize the Designer Checklist tool provided in this chapter.

Designer Checklist Tool

Step 1: Select corresponding typology from Chapter 3.

 Review design elements and target dimensions for the relevant typology and advance to Step 2.

Step 2: Select corresponding intersection design examples from Chapter 4.

 Review design principles and features that should be incorporated at intersections along the corridor and advance to Step 3.

Step 3: Review design considerations for each street element.

Accommodation of the following elements are key design considerations.

- If the answer is no to any of the following questions, the project lead should provide a rationale for why the variance is being proposed and how the proposed concept design will be consistent with Complete Streets principles.
- If yes, advance to the next element in this Step.

Pedestrian realm and placemaking

• Are the pedestrian elements contained in the corresponding cross section (Chapter 3) incorporated into the proposed concept design? Do they have similar size/width, distribution along the corridor, and positioning as the elements in the cross section?

Cycling facilities

• Are the cycling and multi-use facility elements contained in the corresponding cross section (Chapter 3) incorporated into the proposed concept design? Do they have similar size/width, distribution along the corridor, and positioning as the elements in the cross section?

Transit facilities

• Are the transit supportive elements contained in the corresponding cross section (Chapter 3) incorporated into the proposed concept design? Do they have similar size/width, distribution along the corridor, and positioning as the elements in the cross section?

Motor vehicles

Are the motor vehicle supportive elements contained in the corresponding cross section (Chapter 3) incorporated into the proposed concept design? Do they have similar size/width, distribution along the corridor, and positioning as the elements in the cross section?

Utilities and municipal services

• Are the utilities and municipal services contained in the corresponding cross section (Chapter 3) incorporated into the proposed concept design? Do they have similar depth, configuration, and positioning as the elements in the cross section and do they meet the City's guidelines?

Note

The rationale for any no responses to the questions in the checklist should be evaluated with a combination of professional judgment and engagement with relevant stakeholders to determine if the proposed variance is acceptable. For example, if proposed planting zones have narrower widths than target values in the guideline, any changes should be consulted to determine if the soil volumes would be adequate, and that the variance is acceptable in this case.

Designers should review the existing conditions of the roadway. If the existing lane widths are narrower than what is prescribed in **Chapter 3** and there are no traffic operations issues, consider maintaining the existing lane widths and adjusting other elements in the cross section accordingly.

Step 4: Review and revise the conceptual cross section based on land use considerations.

Place types

Are there any place type provisions or secondary plans that would affect the design of the corridor?

 If yes, determine whether any modifications are appropriate based on the provisions and document the rationale for any changes.

Utilities and municipal services

Are any of the utilities along the corridor schedules for replacement or construction?

• If yes, update inputs in the Project Scope Tool and explore opportunities to align project scopes, design parameters, and construction phasing.

Urban design guidelines and streetscape master plans

Are there any area-specific urban design guidelines or streetscape master plans that may influence the design?

 If yes, determine whether any modifications are appropriate based on the provisions and document the rationale for any changes.

Community Improvement Plans (CIPs)

Are any segments of the corridor located within a CIP area?

If yes, ensure the appropriate contacts are involved as stakeholders.
 Determine if any streetscaping or right-of-way related CIP policies apply.

Conservation Authority (CA)

Are any segments of the corridor located within Conservation Sudbury's regulated area?

 If yes, ensure that the appropriate Conservation Sudbury representative is engaged as a stakeholder and determine if any relevant watercourse or natural resource area protection policies apply.

Indigenous communities

Are there First Nations, Métis, and/or Inuit communities that could be impacted?

 If yes, contact relevant First Nations, Métis, and/or Inuit representatives and engage them as project partners.

Rail authorities

Do any segments of the corridor intersect with railway facilities?

 If yes, consult with the relevant railway authority to determine if there are existing regulations or future plans that could influence design considerations.

Future development

Is development activity anticipated along the corridor?

If yes, consult with the appropriate land use planner to identify parcels with existing or expected development applications, as well as any land dedication requirements or cash contributions for sidewalks. In addition, consult with key landowners, and analyze future needs and travel patterns along the corridor.

Step 5: Review and revise the conceptual cross section based on network considerations.

Pedestrian network

Is the corridor identified as a City rehabilitation process?

- If yes, refer to the City's Sidewalk Priority Index (SPI) for the addition of pedestrian facilities and prioritize a comfortable and connected pedestrian realm, including wide sidewalks.
- If no, refer to the City's Official Plan and implement pedestrian infrastructure in alignment with the roadway classification and typology.

Cycling network

Are any segments of the corridor aligned with the planned cycling network outlined in the City's Transportation Study Report?

 If yes, prioritize comfortable cycling facilities and associated amenities such as bicycle parking and intersection treatments, and connections to trails or major active transportation corridors.

Transit network

Are any planned or existing transit routes aligned to any segment of the corridor? Whether or not the corridor is part of a current transit route, consider appropriate accommodations for GOVA Plus, increased ridesharing activity, or other emerging technologies.

If yes, coordinate with GOVA to review existing and forecasted routing and ridership and provide rider amenities and transit priority treatments as appropriate. Ensure roadway geometry accommodates transit vehicles.

Freight/truck route network

Are any segments of the corridor aligned with a Designated Truck Route?

 If yes, review roadway geometry parameters to ensure that trucks are appropriately accommodated along the corridor.

Operational and traffic calming issues

Are there known issues regarding motorist behaviour or road operations along any segments of the corridor?

 If yes, determine if appropriate geometric changes and / or traffic calming measures can be incorporated into the design.

Step 6: Review and revise the conceptual cross section based on user considerations.

Complete Streets should be designed to accommodate all users. However, in areas where specific user groups are anticipated to be more prevalent, it may be appropriate to adjust the design to support the user group, such as widening sidewalks near medical facilities or incorporating traffic calming measures near schools. If the listed groups are prevalent along the corridor, they should influence the project's design considerations.

Children (proximity to a school)

 If yes, consider providing wider sidewalks, designated pick-up and dropoff areas, traffic calming, and in-boulevard cycling facilities.

Post-secondary students

 If yes, consider providing wider sidewalks, providing high-capacity cycling facilities, and increasing transit priority in proximity to post-secondary institutions and student housing.

Individuals accessing care

 If yes, provide wider sidewalks, frequent seating opportunities and shaded areas, and well-designed accessible transit drop-off areas near seniors' residences, hospitals, and related facilities.

Businesses without off-street parking or laneways

 If yes, consider providing loading zones to facilitate deliveries and pickups for local businesses.

Engagement, collaboration, and consultation

Consultations with the public, key stakeholders, and agencies can inform key project decisions ultimately made by the City. Consultation and coordination are important aspects of the Complete Streets design process. The public should be engaged early in the planning process to gather input on design priorities and local issues. Designing with a Complete Streets approach often requires establishing links between various uses of the right-of-way that may not be as apparent in traditional street design. For instance, including a cycling facility in the boulevard requires consideration of various factors such as the positioning of street trees, separation from the motor vehicle lane, consideration of on-street parking demand, the placement of utility poles and street furniture, separation from the sidewalk, and integration with transit stops. Responsibility for each of these elements frequently rests with different agencies, divisions, and stakeholders. Hence, cooperation among the many stakeholders is crucial to ensure that investments are optimized, and project objectives are met.

The Stakeholder and Partner List (**Table 16**) is a tool that identifies all the potentially impacted parties from various municipal departments, public and private entities, and non-profit groups. While this tool provides a starting point for engagement, the project team should prioritize key stakeholders to address specific project concerns with a tailored consultation plan. It is recommended to apply the International Association for Public Participation (IAP2) spectrum of public participation to approach stakeholder groups.

Table 16. Stakeholder and Partner List

Туре	Name
Internal City divisions	Linear Infrastructure Services
	Engineering Services
	Environmental Planning Initiatives
	 Infrastructure Capital Planning
	Transit Services (GOVA)
	Leisure Services
	 Traffic and Transportation
	Planning Services
	 Economic Development
	Paramedic Services
	Fire Services
	 Indigenous Relations Specialist
Utilities and railways	 Agilis Networks
	Bell Canada
	Eastlink
	 Canada Post
	 Greater Sudbury Hydro inc.
	 Hydro One
	 Canada National Railway
	 Huron Central Railway Inc.
	 Conservation Sudbury
	Ontera
	 Toromont Energy
	Union Gas

Туре	Name
	 Enbridge
	Vianet
Advisory and technical	Mobility and Cycling
organizations	Organizations Environmental and Conservation
	 Environmental and Conservation Organizations
	 Business and Community Associations
	 Canadian National Institute for the Blind (CNIB)
Education	 Public and Catholic School Boards
	 Conseil scolaire public du Grand Nord de l'Ontario
	 Conseil scolaire catholique Nouvelon
	 Sudbury Student Services Consortium
	Laurentian University
	 Cambrian College
	 Collège Boréal
Other governing	 Provincial Ministries
authorities	Ministry of Transportation (MTO)
	 Ministry of Infrastructure
	Ministry of Municipal
	Affairs and Housing
	 Adjacent Indigenous Nations

Туре	Name	
	 Conservation Sudbury 	
Major employers or institutions	As applicable	

Street elements

While balancing all elements of Complete Streets, some locations may have restricted space within the roadway's right-of-way. The Street Element Tool (Figure 92) assists the project team to determine options to consider when the right-of-way width is not wide enough to accommodate all the desired elements for the road typology. It is important to understand the trade-offs in a reduction of a Complete Streets element, and to ensure the ultimate design still convey the original vision of the Complete Streets project.

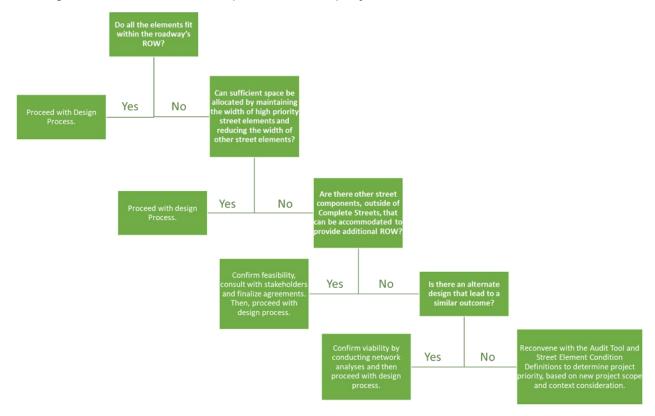


Figure 92. Street Element Tool

Minimum dimensions within ROW

In roadways with constrained ROW, the minimum widths may need to be used for some street elements. When designing with minimum widths, practitioners should consider several factors, including anticipated user volumes, the relative priority of each element based on street classification and project objectives, the impact of operations and maintenance, the need for physical separation of vulnerable road users and motorists, and the permanence of the facility. If minimum dimensions are required, designers should assess whether a posted speed limit reduction is appropriate, alert and guide road users through pinch points and constrained areas using signage and pavement markings, maintain appropriate sightlines for safety, and monitor user behavior in the area following implementation to determine if project goals are being met. In a constrained right-of-way, integrating street elements to use the same space for multiple functions may be necessary to avoid designing to minimum dimensions. This could involve integrating elements like the shared cycle track platform stop described in Chapter 2 or using curbside management to alternate on-street parking or flex zones with curb bump outs to provide space for street tree planters or transit shelters.

5.4 Implementation stage

Implementation of a Complete Streets project involves the transition from the design stage to the construction stage. Once the design stage is completed, the tender and construction award process can begin.

Tendering

The tendering process is a critical stage in the implementation process, as it is important to ensure that the contractor selected has the appropriate experience and competency to implement all the design elements in the street design. The city or developer should identify a contractor with the necessary skills and expertise to carry out the project successfully and communicate the desired goals for the corridor defined in the Planning Stage.

During the construction process, it is crucial to maintain open lines of communication between the design staff/consultants, contract administrators, and contractors to ensure that all street elements are constructed appropriately and that trade-offs made during implementation are documented and well communicated with project stakeholders.

Outreach and initiation

The public education strategy is another important aspect of the implementation stage. Complete Streets designs may include elements that are unfamiliar to residents, and to minimize confusion and optimize operations, a public education strategy should be developed prior to opening the facility with new design features. Examples of outreach strategies include signage, billboards, online/in-person events, and project webpages.

5.5 Monitoring and maintaining stage

Monitoring multimodal project initiatives and existing infrastructure is an important step to ensuring that a Complete Street project is meeting the intended goals set out in the planning stage. It is important to establish a methodology for measuring success and integrating lessons learned into future work. To assess the outcomes of a Complete Streets project, a monitoring strategy should be employed. Creating key metrics, baseline conditions, usage patterns, and lessons learned is advisable for effective monitoring.

- Key metrics: Metrics should be chosen to reflect the Complete Streets vision and goals. These metrics can be used to compare before and after the implementation of Complete Streets. For example, an increased use of active transportation facilities in a specific geographical area of interest measured by counters.
- Baseline conditions: Data on the baseline conditions, collected prior to project construction during the planning stage, informs the project team on the street's existing conditions. This can be used to compare with the data collected after a Complete Streets project, to fully understand the impact of the project under each key metric.
- Usage patterns: A Complete Streets project can change travel behaviour over time, and can have patterns between each season and mode. It is important to consider performing monitoring activities for different modes over long periods of time such as 6- to 12-month intervals and during various seasons and times of day. Furthermore, Complete Streets can fulfill a latent demand for transit and active transportation that was previously not met by existing roadways, by promoting mobility for a certain mode user group. It is important to understand whether there are other locations that can be candidates for similar Complete Streets projects that may also have latent demand or underlying usage patterns.
- Communicate and document lessons learned: Data collected during the monitoring stage, lessons learned throughout the planning and design process, and outcomes of the project can inform future projects during the planning stage. Lessons learned should be documented and shared with relevant City departments and stakeholders to inform future Complete Streets projects and any future updates to the Complete Streets Design Guide.

Winter maintenance

Winter maintenance and street design for the City's roadways should complement each other. On urban roadways with sidewalks, snow is typically stored in the buffer zone between pedestrians and the roadway. This buffer zone may be the furnishing zone or the cycling facility along the corridor. Currently, cycling facilities are used for snow storage in Greater Sudbury. Should the City explore clearance of cycling facilities, designers should consider additional buffer space between the facility and the roadway as a potential space for snow storage.

On rural roadways without sidewalks, snow storage is typically in the shoulder or adjacent to the roadway edge. Reallocation of snow storage could be considered in future development areas, where rural roadways may be converted to urban roadways. The conversion of shoulders into parking lanes or buffer zones may impact snow storage, due to the introduction of curb and gutter and lowered storage capacity. These impacts should be documented during the design process and the winter maintenance and operations groups at the City should be included as stakeholders in the process to ensure the design will be conducive to effective snow clearance.

Appendix A: Glossary of Terms, Abbreviations, and Acronyms

Abbreviation	Term	Definition
AADT	Annual Average Daily Traffic	The average 24-hour, two-way traffic on a roadway for the period from January 1st to December 31st within a single calendar year.
AODA	Accessibility for Ontarians with Disabilities Act	Provincial legislation and associated regulations that set targets and provide for the development of standards for making the Province accessible to all Ontarians by 2025.
APS	Accessible pedestrian signals	Auxiliary devices that supplement traffic control signals to aid pedestrians with vision losses (and those with both visual and hearing impairments) in their road crossing. Information is communicated in non-visual format such as audible tones, verbal messages, and/or vibrotactile indications to provide cues at both ends of a crossing when activated.
ATS	Accessible Transportation Services	Intended for people with physical or functional disabilities or health conditions who are unable to access fixed-route public transit. Eligibility is considered on a case-by-case basis and is not based on a particular disability, or income level.
B-12	Standard Single- Unit Buses	Typical bus size on Canadian streets.
BIA	Business Improvement Area	An association of commercial property owners and tenants within a defined area who work in partnership with the City to create thriving, competitive, and safe business areas that attract

Abbreviation	Term	Definition
		shoppers, diners, tourists, and new businesses.
BRT	Bus Rapid Transit	A high-quality bus-based transit system that delivers fast and efficient service that may include dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms and enhanced stations.
CIP	Community Improvement Plan	A tool that allows a municipality to direct funds and implement policy initiatives toward a specifically defined project area.
EA	Environmental Assessment	The environmental assessments process ensures that governments and public bodies consider potential environmental effects before an infrastructure project begins.
EV	Electric Vehicle	Vehicles that are either partially or fully powered on electric power.
HCD	Heritage Conservation District	A defined geographical area within a municipality that is protected under a local bylaw to ensure conservation of its existing heritage character.
ноv	High-Occupancy Vehicle	A motor vehicle carrying more than a specified minimum number of people and therefore permitted to use a traffic lane reserved for such vehicles.
IAP2	International Association for Public Participation	An international professional organization with a mission to advance the practice of public participation.

Abbreviation	Term	Definition
ITE	Institute of Transportation Engineers	An international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs.
LBI	Leading Bicycle Interval	Gives people on bicycles a head start in front of turning vehicles, providing a priority position in the right of way.
LID	Low Impact Development	An innovative approach to land development that mimics the natural movement of water in order to manage stormwater (rainwater and urban runoff) close to where the rain falls.
LOS	Level of Service	A qualitative measure of traffic flow at an intersection dependent upon vehicle delay and vehicle queue lengths at the approaches. Specifically, Level of Service criteria are stated in terms of the average stopped delay per vehicle for a 15-minute analysis period.
LPI	Leading Pedestrian Interval	A form of an exclusive pedestrian phase where a walk indication (generally around 4 to 6 seconds in duration) is provided in advance of the corresponding vehicle green indications to give pedestrians a head start on parallel or turning traffic.
LSU	Light Single-Unit Trucks	Vehicle configurations designed to transport property, where the cargo carrying capability of the vehicle is integral to the body of the vehicle. LSU's typically weigh 14,000 lbs and under.

Abbreviation	Term	Definition
MMLOS	Multimodal Level of Service	Similar to LOS, but MMLOS seeks to measure the performance and consider the trade-off between cycling, walking, transit, and vehicular modes.
MSU	Medium Single-Unit Trucks	Vehicle configurations designed to transport property, where the cargo carrying capability of the vehicle is integral to the body of the vehicle. LSU's typically weigh between 14,000 and 26,000 lbs.
мто	Ontario Ministry of Transportation	The provincial ministry of the Government of Ontario responsible for transport infrastructure and laws.
MUP	Multi-Use Path	A shared pedestrian and cycling facility that is physically separated from motor vehicle traffic by a hard-surfaced splash pad or by a grass strip. It is often referred to as part of a boulevard within the roadway or highway right-of-way.
NACTO	National Association of City Transportation Officials	An association of 89 major North American cities and transit agencies formed to exchange transportation ideas, insights, and practices and cooperatively approach national transportation issues.
NCHRP	National Cooperative Highway Research Program	Conducts research in problem areas that affect highway planning, design, construction, operation, and maintenance in the United States.
ОР	Official Plan	An official plan describes an upper, lower or single tier municipal council or

Abbreviation	Term	Definition
		planning board's policies on how land in a community should be used.
ОТМ	Ontario Traffic Manual	Publications providing information and guidance to transportation practitioners and to promote the uniformity of treatment in the design, application and operation of traffic control devices and systems across Ontario.
OTM Book 12	Ontario Traffic Manual: Book 12, Traffic Signals	Provides some elementary instructions to beginners and a reference for experienced persons for the design and operation of traffic signals.
OTM Book 15	Ontario Traffic Manual: Book 15, Pedestrian Crossing Treatments	Provides guidelines for justification, treatment system selection and treatment system design for new pedestrian crossovers on low-speed and low-volume roads.
OTM Book 18	Ontario Traffic Manual: Book 18, Cycling Facilities	Provides practical guidance on the planning, design and operation of cycling facilities in Ontario.
Passenger Cars	Passenger Cars	A road motor vehicle, other than a motorcycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver).
PXO	Pedestrian Crossover	Any portion of a roadway distinctly indicated for pedestrian crossing by signs on the highway and lines or other markings on the surface of the roadway as prescribed by the regulations and the Highway Traffic Act.

Abbreviation	Term	Definition
ROW	Right of Way	Allocation of right of movement to a road user, in preference over other road users; The width of the road allowance from the property line on one side to the property line on the opposite side of the roadway is also known as right-of-way.
SWM	Stormwater Management	The planning, design and implementation of systems that mitigate and control the impacts of storm runoff and other components of the hydrologic cycle.
TAC	The Transportation Association of Canada	A not-for-profit, national technical association that focuses on road and highway infrastructure and urban transportation. While TAC does not set standards, it is a principal source of guidelines for planning, design, construction, management, operation, and maintenance of road, highway, and urban transportation infrastructure systems and services.
TMP	Transportation Master Plan	A comprehensive strategic planning document that defines policies, programs and infrastructure improvements required to address transportation and growth needs.
TSP	Transit Signal Priority	Transit Signal Priority (TSP) tools modify traffic signal timing or phasing when transit vehicles are present either conditionally for late runs or unconditionally for all arriving transit.

Abbreviation	Term	Definition
TWSI	Tactile Walking Surface Indicators	A colour contrasting and tactile surface treatment that is used for one of two purposes:
		1. Tactile Attention Indicator (TAI): A TWSI comprising truncated domes that alert people to the presence of a hazard or a decision-making point, such as a street crossing, impending change in elevation, or conflicts with other transportation modes.
		2. Tactile Direction Indicator (TDI): A TWSI that uses elongated, flat-topped bars to facilitate wayfinding in open areas, including guiding pedestrians with vision loss or other disabilities to crosswalks or transit stops. The elongated bars indicate the travel direction.
		In this manual, unless otherwise specified, the term "TWSI" is used to refer to an attention indicator.
WB-19	WB-19 Tractor Semitrailers	Large tractor semi-trailer truck

Appendix B: Audit Tool



Employment Land Community Improvement Plan – Program Review 2025

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Type:	Managers' Reports
Prepared by:	Emily Trottier Economic Development
Recommended by:	Chief Administrative Officer
File Number:	N/A

Report Summary

This report provides a recommendation regarding the outcomes of the Employment Land Community Improvement Plan (ELCIP) to date. These proposed adjustments will improve clarity in the application, eligibility, and assessment process while strengthening alignment with Council's strategic priorities in order to refine a successful initiative.

Resolution

THAT the City of Greater Sudbury directs staff to prepare and implement program refinements to the Employment Land Community Improvement Plan as outlined in the report entitled "Employment Land Community Improvement Plan – Program Review 2025" from the Chief Administrative Officer, presented at the Planning Committee Meeting of April 28, 2025.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The ELCIP supports economic growth by leveraging a community improvement plan to attract investment and enhance business development. It aligns with:

- Strategic Plan Goal 1.4: Utilizing community improvement plans to incentivize economic growth.
- Strategic Plan Goals 2.1 and 2.3: Supporting business growth, streamlining development processes, and fostering investment readiness.
- Community Energy & Emissions Plan (CEEP) Goal 1: Encouraging sustainable development and compact, complete communities.

Additionally, by prioritizing investment in Clean Tech and Life Sciences sectors, the program contributes to a cleaner, healthier community, reducing pollution and improving air and water quality in alignment with CEEP objectives.

There are no financial implications associated with this report. The proposed refinements are expected to enhance program effectiveness.

The ELCIP consists of a single program: the Tax Increment Equivalent Grant (TIEG). Employment Lands CIP approvals for Tax Increment Equivalent Grants (TIEG) are funded by assessment growth the year where property taxes have been levied and the property has been reassessed. This means that a grant/transfer payment will be included in future years budgets, however the municipality will experience assessment growth to offset this incremental increase.

Background

Program Review and Proposed Enhancements

Since its adoption by City Council on June 27, 2023, and the program launch in December 2024, the ELCIP has generated significant interest:

- Over 20 pre-application consultations
- 5 applications in draft format
- 1 approved application

A thorough review, including feedback from applicants and best practices from similar programs in Ontario (e.g., Sault Ste. Marie, North Bay, Port Colborne, and Niagara Region), has identified both strengths and opportunities for refinement. The recommended amendments will enhance clarity, maximize economic benefits, and further align the program with Council's strategic vision.

Core Program Structure: Tax Increment Equivalent Grant (TIEG)

The ELCIP will continue as a single-program initiative, using the TIEG model. Under this approach:

- The grant is funded based on reassessed municipal property taxes, ensuring financial sustainability.
- The City initially reimburses a portion of collected taxes, fostering immediate investment while benefiting from long-term revenue growth.
- Beyond the grant period, the City gains increased tax revenue and broader economic benefits, including job creation and business expansion.

Proposed Amendments

To optimize the program, the following refinements are recommended:

- Refining Eligible Uses: Replace "Industrial Use" with "Eligible Use" and introduce clear definitions to attract investment across high-impact sectors aligned with provincial and federal priorities.
- Enhancing the Scoring Matrix: Adjust criteria to align grant terms with investment size and job creation thresholds.
- Incentivizing Strategic Priorities: Introduce additional scoring measures that reward projects aligned with intensification areas, economic diversification, innovation, and sustainable design.
- Implementing a Sliding Scale for Tax Reinstatement: Introduce a structured approach for reintroducing municipal taxes in certain categories, ensuring incremental financial benefits for the City.

These refinements will enhance the ELCIP's ability to attract high-quality investments, support job creation, and strengthen Greater Sudbury's position in the global economy.

Recommendations and Next Steps

Staff recommends initiating the Planning Act amendment process to implement these program refinements.

Key steps include:

- Circulating the amended ELCIP to the Ministry of Municipal Affairs and Housing for provincial review.
- Engaging the public to gather feedback on the proposed changes.
- Incorporating stakeholder input into the final amendments.
- Presenting the updated ELCIP to City Council for adoption.

By strengthening an already successful program, these refinements will amplify its impact, ensuring Greater Sudbury remains a competitive and attractive destination for investment and economic growth.

Resources Cited

- 1. "Community Improvement Plan Process and Funding", report presented at the September 14, 2021 Council Meeting https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=41791
- "Employment Land Strategy", report presented at the August 9, 2022 Finance and Administration Committee https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=47318
- "Employment Land Community Improvement Plan", report presented at the March 28, 2023 Finance and Administration Committee Meeting https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=48918
- "Employment Land Community Improvement Plan Request for adoption" report presented at the June 26, 2023 Planning Committee meeting https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=49917



Scenic View Subdivision Street Name

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Type:	Managers' Reports
Prepared by:	Robert Webb Planning Services
Recommended by:	General Manager of Growth and Infrastructure
File Number:	N/A

Report Summary

This report provides a recommendation regarding a request to rename Covington Crescent within the Scenic View subdivision to Carrington Drive.

Resolution

THAT the City of Greater Sudbury approves the renaming of Covington Crescent as shown on Plan M-1003 to Carrington Drive as outlined in the report entitled "Scenic View Subdivision Street Name" from the General Manager of Growth and Infrastructure, presented at the Planning Committee Meeting of April 28, 2025;

AND THAT the necessary By-law be prepared.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The request to rename Covington Crescent within the Scenic View subdivision is an operational matter under By-law 2006-266, the City's Street Naming and Numbering Policy, to which the City is responding.

Financial Implications

There are no financial implications associated with this report.

Report Overview:

This report reviews a request by the developer of the Scenic View subdivision to rename their street known as Covington Crescent to Carrington Drive prior to any homes being occupied to avoid a duplicate street name with Covington Avenue in Garson and allow for more accurate addressing for purposes such as emergency response. The Planning Services Division is recommending that the application be approved as outlined and noted in the Resolution section of this report.

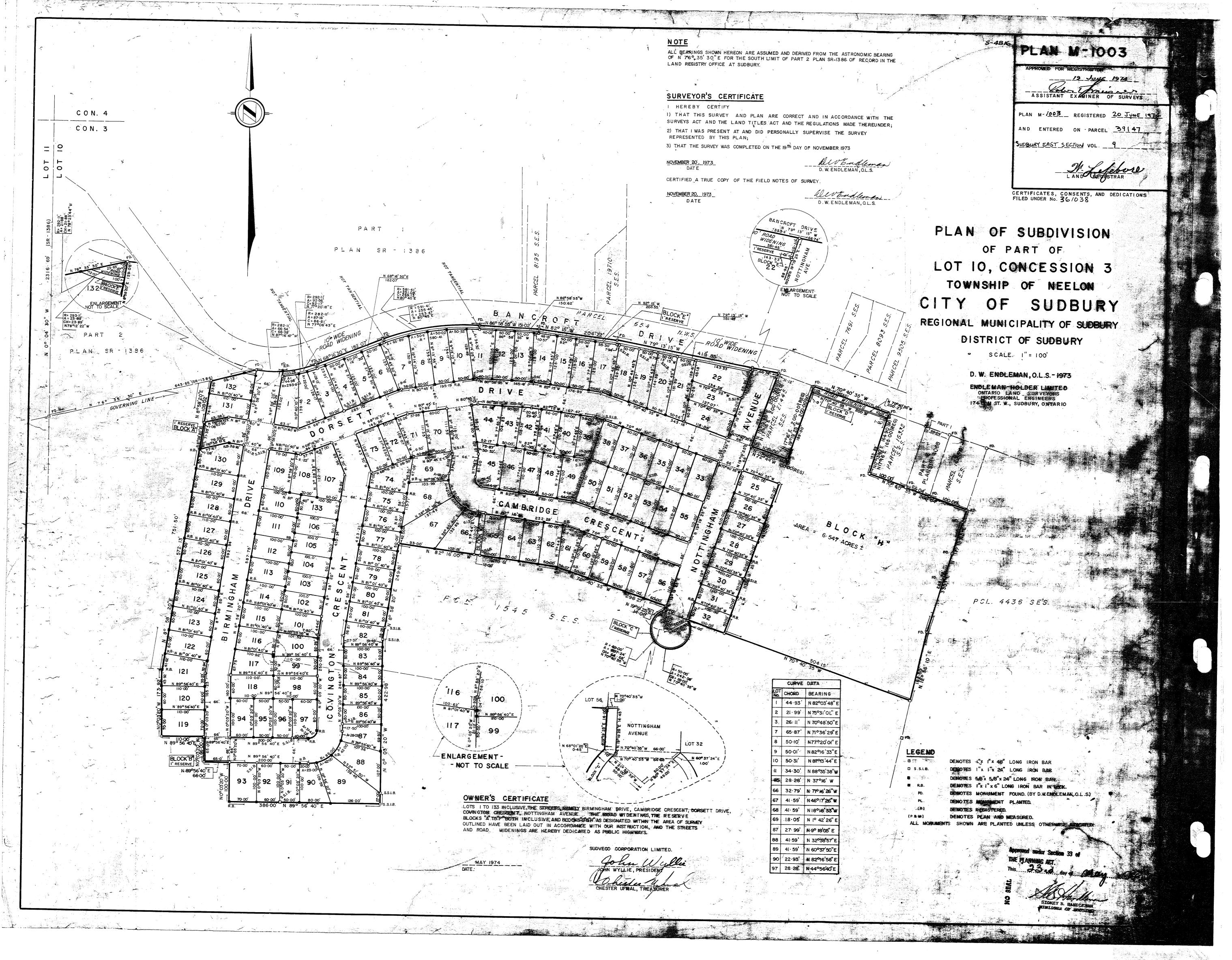
STAFF REPORT

Plan M-1003 (print attached) was registered on May 23, 1974, and shows 133 residential properties. The original development was limited to the developing of lots on Dorsett Drive between Birmingham Drive and Nottingham Avenue. The City approached the developer during the design of the Coving Crescent portion and requested that they consider an alternate name for the street as another Covington already exists withing the City of Greater Sudbury. After discussions with the developer, they requested that Carrington Drive be considered as a replacement street name.

The Street Naming and Numbering Policy attached as Schedule A to By-law 2006-266 includes as part of the street naming criteria that duplicate names with the same parent name but different designation should be avoided (i.e. Smith Street, Smith Road). In this regard, it is noted that there was another form of Covington within the City of Greater Sudbury and this application is to ensure that a duplicate street name is avoided.

Conclusion

Staff recommends approval of the request as described in the Resolution section on the basis that it is consistent with the Street Naming and Numbering Policy, both parties agree with the proposed name, and it avoids the duplication of a street name within the City.



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PLANNING SERVICES

C. A. Potinia C. A. Potinia A. Stephen D. Kivi Technical Service D. Nadorozna

BY-LAW 2006-266

A BY-LAW OF THE CITY OF GREATER SUDBURY TO ADOPT A STREET NAMING AND NUMBERING POLICY

WHEREAS the Council of the City of Greater Sudbury wishes to adopt a Street Naming and Numbering Policy;

NOW THEREFORE THE COUNCIL OF THE CITY OF GREATER SUDBURY HEREBY ENACTS AS FOLLOWS:

- 1. The Street Naming and Numbering Policy attached hereto as Schedule "A" and forming part of this By-law is hereby adopted.
- 2. This By-law repeals By-law 2006-225.
- 3. This By-law shall come into force and take effect immediately upon the final passing of same.

READ A FIRST AND SECOND TIME IN OPEN COUNCIL this 29th day of

November, 2006.

Mayor

Clerk

READ A THIRD TIME AND FINALLY ENACTED AND PASSED IN OPEN

COUNCIL this 29th day of November, 2006.

wayor

Clerk

-1-

2006-266

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City of Greater Sudbury

Street Naming and Numbering Policy

<u>Purpose</u>

The City of Greater Sudbury wishes to adopt a policy and procedures for the naming and numbering of municipal addresses.

Background

The naming and numbering of civic addresses is a City responsibility. This process is normally carried out as part of lot and subdivision creation.

Under the *Municipal Act, 2001*, S.O. 2001, c. 25, a municipality is required to pass a specific by-law to name or rename a public highway. Municipalities are also given the power to name private roadways without assuming these roadways for public use.

Roadways and property lots are normally created through the registration of plans of subdivision, or by approval of severances. Civic numbers are then allocated to these lots by the City's technical services section, and issued to the owner of the property at the time of the issuance of a building permit. The allocation of new municipal addresses may also occur as part of the renaming of existing streets.

Prior to the creation of the City of Greater Sudbury, each of the previous seven area municipalities were responsible for allocating street names and allocating numbers to lots along streets. Many of these municipalities had various processes and by-laws for the allocation of street names and addresses. This work is now carried out through the City's Technical Services Section.

With no formal integration of street naming policies in these previous municipalities, there arose both duplication of street names, and variation in the street numbering systems.

With the incorporation of the City of Greater Sudbury, there is now an opportunity and a requirement to unify and standardize all existing by-laws and procedures, made urgent as a safety measure.

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Problems Associated With Duplicate Names

A street name and lot or building address for a specific geographic location is the linchpin municipalities and organizations around the world use in linking, storing and manipulating data. The duplication (and higher-number replication) of names created with the repeated amalgamation of the previous 33 municipalities now forming the City of Greater Sudbury, as well as differences in numbering protocols, has had a substantial and severe ripple effect.

The lack of uniqueness of a street name can cause confusion, frustration, and time loss. In emergency situations this can mean the loss of valuable seconds, if not minutes or longer, in the response time by emergency vehicles. This is a major concern for all Emergency Services, both those under the City's control, and those provided by other utilities, agencies, or Ministries.

Problems Associated With Numbering

Variations in numbering and methods of numbering do lead to confusion. The following is one example where the variation in the civic numbering system creates confusion. Along the east side of an existing residential street, the houses are numbered 2122, 2130, 1134, 2099, 2101... On this same street, directly across from house number 2130, is house number 2094. This form of civic numbering inconsistency occurs when address numbers are assigned using various conventions.

Confusion in street numbering could and has led to delays in emergency response. All emergency service organizations have a major stake in responding to a crisis situation in a timely manner. Discussions with the Greater Sudbury Police Communications Supervisor revealed that there are serious concerns with the problem of variations in house numbering conventions. Street addresses are so important that the section of the *Municipal Act 2001* which allows municipalities to "establish, maintain and operate a centralized communication system for emergency response purposes" (9-1-1 service), allows municipalities to enter and affix civic numbers to private buildings. Visible and consistent street numbering is a major factor in an emergency response system.

Themes

The literature indicates that municipalities applied many various conventions to allocate street names and civic numbering. The street naming conventions range from names based on themes to formal alphabetical requirements. We see this form of theme naming in the Moonglo development with names such as Telstar and Moonrock. In the Brossard part of Longueuil, Quebec, the streets in each area start with the same letter.

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In other municipalities sequential numbers and letters are used for street naming.

POLICY STATEMENTS

Street Name Criteria

Names must not be duplicated within the City, or which sound similar or have similar spelling (*Ellen Street, Helene Street*). Duplicate names with the same parent name but different designation should also be avoided (*Smith Street, Smith Road*), unless they are linked by geography and are non-confusing (*Smith Court* or *Smith Lane* could be permitted if they front on *Smith Street*.)

Names should not be confused with a designation (*Southpark Court, Avenue Road, Circle Drive*). Cardinal directions cannot be used as a street name.

Roadways should not have a directional component differentiating one street separated by a major roadway (*Red Deer Lake Road North, Red Deer Lake Road South*).

Street names that are numerical must be spelled out as opposed to using numbers (*Fifth Avenue*, not 5th Avenue).

Any names that do not fall within the guidelines should be brought to the Committee for review.

Style

Street names should be unique or sufficiently distinguishable as to minimize confusion during emergency calls.

Street names must not be frivolous or in poor taste.

Street names should not be complicated. Street names should not have unconventional spellings, except for historical purposes.

Commemorative Street Naming Principles

Street names honouring individuals should be unique, distinctive, and meet the street name requirements as set out in this report.

Commemorative street names should be understandable, recognizable and explainable to the citizens of the City, and should respect the values of all members of our

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community.

Naming requests for commemorative street names should come from community groups, or organizations, not individuals. Commemorative street names should reflect and respect the history, heritage and culture of the community.

Commemorative street names should reflect an individual's or organization's significant contributions to public life in general, and to the City of Greater Sudbury in particular. Names should not be used which could be regarded as an advertisement for a specific product, service or company. Names which duplicate common facility names should be avoided.

With concurrence of the Canadian Legion, street signs for streets named after veterans or battles Canadians fought, are to be marked by a poppy to give honour 365 days a year, in order to honour and commemorate those who sacrificed so much for all Canadians.

Names of specific living individuals should be avoided, unless in exceptional circumstances, with the approval of Council. When naming a street after an individual, every care should be taken to ensure that the name selected reflects an individual of such extraordinary prominence and lasting distinction that no other individuals, families or organizations can come forward and suggest alternative names.

All requests for commemorative street names should be submitted in writing, and shall include the rationale for the proposed name. In the case of a proposal to honour an organization or individual, documentation of the individual or group's record is required. Letters of support from appropriate organizations and individuals that provide evidence of substantial community support for the proposed name are required.

All requests will be forwarded to the Technical Services Section for review within the framework of this policy. As part of the review, staff will ensure that the contributions of an organization or individual are well-documented and broadly acknowledged within the community.

All requests for naming will be circulated to stakeholder groups, including all emergency responders, for comments.

Where the naming request is substantiated and has documented support by the community, it will be brought forward in an option package for City Council's consideration, either for inclusion in the City's Approved Street Name List, or for a

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change of a street name.

Approved Street Names

To assist in addressing the problems associated with duplicate street names, staff has collected names that occur in other municipalities and from other sources, and that do not exist within the City of Greater Sudbury. This list should be adopted by Council from time to time as the Approved Street Name List.

This list of approved street names should be used in the development of any plan of subdivision, but subdividers are encouraged to develop their own themes and suggested names.

Street Name Changes

The City of Greater Sudbury has streets that cross old municipal boundaries and change names. As an example, *St. Laurent Street* becomes *Valley View Road* at the old municipal boundary, mid-block. This should be avoided where possible. If a street name change is inevitable, the change of street names must occur at an intersection, not mid-block.

Names and Street Function

Having industrial traffic entering a residential area due to the street name should be discouraged. Generally, a street should have one name throughout its entire length. In new subdivisions, sections of a street that changes function, from an industrial roadway to a residential street at clearly defined locations, such as at an arterial or collector roadways, should be given unique names.

Non-Continuous (Broken) Streets

Ideally, streets are developed as part of one plan of subdivision. When streets are extended or will be extended due to an expansion of the subdivision, or the creation of an adjacent subdivision, discontinuity of a named street can occur. Topography also plays a major role in breaking named streets into different sections.

Where road sections are permanently separated by a gap or will not be linked into one continuous roadway in the foreseeable future, consideration should be given to choosing a unique name to each portion of the street. If it is to be expected that the gap will be completed within a few years, the broken streets may be allowed to remain, but the numbering of houses should anticipate the completion.

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Private Access

There exist many developments and properties that share accesses over private roadways and lanes. This creates confusion in addressing and locating properties. The creation of street names for the private roadways or lanes would allow for efficiently locating houses and buildings by emergency services as well as the public.

It is recommended that all private driveways that serve as the only public access for two or more properties shall be named. Laneways that do not serve as the only public access for a property should not be named.

It is recommended that all street signs for these named roadways be designated private. Private road street names shall have the street name signs, and an appropriate designation such as Private Road on the sign or directly below the street name sign. This is to inform the public that a named roadway is private and is outside municipal responsibility.

Street Classifications

Roadways are designed and constructed with specific functions in mind. Primary arterials such as *The Kingsway* and the *Notre Dame Avenue/Paris Street* corridor have as their primary function the movement of a large number of people and goods between areas within the City of Greater Sudbury. Arterials also tie the City of Greater Sudbury to the Provincial highway network and the outside world. They are designed to carry high volumes of traffic at high speeds.

Conversely, laneways are normally designed to serve as secondary access to abutting properties, and are generally narrow, normally with enough space for only one vehicle to travel at a time.

The City of Greater Sudbury shall formally allocate prefixes to street names based on roadway function and design.

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Street Classifications

1. Arterials and Collectors

Avenue/Ave - A wide public roadway normally lined with trees or other ornamentation that extends over more than one area.

Boulevard/Blvd - Major roadway that connects two or more areas within the City and/or to the provincial Highway network, and can be constructed with boulevard or median ornamentation.

Drive/Dr - A roadway designed to carry higher volumes of traffic, or to join two or more areas within the City, or areas to major arterials.

Highway/Hwy - Provincially-designated roadways that connect towns or cities.

Parkway/Pky - Major transportation corridor that extends over more than one area of the City of Greater Sudbury, and is in a park-like setting.

Road/Rd - A roadway whose main function can be either that of an arterial roadway or a local street.

Street/St - A public road whose main function can be either that of an arterial roadway or local street.

Hiérarchie des routes

1. Artères et routes collectrices

Avenue/av - Une large voie publique longée d'arbres ou d'autres ornements, qui s'étend sur plus d'un secteur.

Boulevard/boul - Une route majeure parfois longée d'accotements et dont les voies peuvent être séparées par des terre-pleins, reliant au moins deux secteurs de la ville entre elles ou au réseau de routes provinciales.

Promenade/prom - Une route conçue afin d'accueillir un plus grand volume de circulation ou qui assure la liaison entre au moins deux secteurs de la ville, ou qui les relie aux artères majeures.

Route/rte - Une route désignée par la province reliant des villages ou des villes.

Parkway/parkway - Une voie de communication majeure qui s'étend sur plus d'un secteur du Grand Sudbury, et qui est située dans un environnement naturel.

Chemin/ch - Une route dont la fonction principale est soit celle d'une artère ou d'une rue locale.

Rue/rue - Une route publique dont la fonction principale est soit celle d'une artère de circulation ou d'une rue locale.

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2. Minor (Local) Roadways

Alley/Alley - A narrow roadway with the same functions as that of a "Lane", often private.

Circle/Cir - A roadway that completes a loop on itself; this designation can be used for a private roadway.

Court/Crt - A short residential street that is often closed at one end or joins two adjacent streets.

Crescent/Cres - A curved or arcshaped roadway, especially one that opens onto the same street or adjoining streets.

Gardens/Gdns - Usually applied to private roadways, but can be applied to minor roadways with noticeable vegetation.

Gate/Gate - A short roadway, being the main access to a subdivision. This designation can be used for cul-de-sacs or roadways to private developments

Green/Green - A residential roadway or cul-de-sac usually having adjacent open space.

Grove/Grove - A residential street normally located near water or a wooded area.

Heights/Ht - A roadway located on a hill or escarpment.

2. Routes (Locales) secondaires

Allée/allée - Une route étroite, souvent privée, ayant les mêmes fonctions qu'une ruelle.

Cercle/cercle - Une route qui forme une boucle; on peut également employer cette appellation pour désigner un chemin privé.

Cour/cour - Une courte rue résidentielle, souvent sans issue à un bout, ou qui relie deux rues voisines.

Croissant/crois - Une route en courbe ou en arc, qui donne ordinairement sur la même rue ou sur des rues voisines.

Jardin/jardin - S'applique ordinairement aux chemins privés, mais peut désigner une route secondaire aménagée le long d'une végétation visible.

Gate/gate - Une courte route, étant la voie d'accès principale à un lotissement. Cette appellation peut également désigner un cul-de-sac ou la voie d'accès à un lotissement privé.

Green/green - Une route ou un cul-de-sac résidentiel généralement attenant à une aire ouverte.

Bosquet/bosquet - Une rue résidentielle qui se situe ordinairement près de l'eau ou d'une zone boisée.

Hauteurs/haut - Une route située sur une colline ou un escarpement.

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Hill/Hill - A roadway that services abutting properties, located on a hill or rise.

Lane/Lane - A narrow roadway usually servicing the back of properties; this designation can be used for residential roadways, normally in a rural setting.

Line/Line - A rural roadway, generally along a Lot or Concession line.

Mews/Mews - A residential street.

Montée/Mtée - A roadway usually located on a hill or escarpment.

Place/PI - A roadway normally associated with a relatively open area such as a public square or a short street.

Plaza/Plaza - Normally applied to private roadways or developments. This designation can be used for public roadways, especially ones associated with open areas.

Row/Row - A residential street, often containing row housing.

Trail/Trail - A winding or curving route, normally through the countryside.

Terrace/Ter - A roadway usually located on a hill or escarpment. This designation can also be used for a private residential cul-de-sac.

Côte/côte - Une route qui dessert des propriétés attenantes, située sur une colline ou un coteau.

Ruelle/rle - Une route étroite qui dessert ordinairement l'arrière des propriétés; cette appellation peut aussi désigner une route résidentielle, ordinairement en milieu rural.

Rang/rang - Une route rurale qui suit ordinairement une ligne de lot ou de concession.

Mews/Mews - Une rue résidentielle.

Montée/mtée - Une route généralement située sur une colline ou un escarpement.

Place/place - Une route ordinairement associée à une aire relativement ouverte, telle qu'une place publique, ou une courte rue.

Plaza/plaza - Désigne ordinairement une route ou un projet d'aménagement privé. Cette appellation peut également désigner une voie publique, surtout si elle est associée à un espace ouvert.

Rangée/rangée - Une rue résidentielle, souvent bordée de maisons en rangée.

Sentier/sent - Un chemin sinueux ou en courbe, ordinairement en campagne.

Terrasse/tsse - Une route généralement située sur une colline ou un escarpement. Cette appellation peut également désigner un cul-de-sac résidentiel privé.

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View/View - A roadway that serves abutting properties, is on an elevated topography, and offers a view.

Way/Way - A roadway designed to serve abutting properties, and may change compass direction from time to time.

Perspective/persp. - Une route qui dessert des propriétés attenantes dont le relief est haut, et qui offre une vue sur le paysage.

Passage/pass - Une route conçue pour desservir des propriétés attenantes, qui peut changer de direction de compas de temps à autre.

It should be noted that there are many more designations than those listed above. Canada Post has a bilingual list of 149 street designations. The list supplied above should be used as a base, but not as an exhaustive list, and any additional designation should be evaluated for its appropriateness for the roadway being named.

Bilingual Status

The City of Greater Sudbury has a policy that fosters its bilingual heritage. The following is the appropriate passage relating to signing.

"Signage and Other Identification

Signage produced by or for the City of Greater Sudbury and intended for public viewing shall be in both official languages or shall make use of international symbols (icons)."

In furtherance of this policy, all names associated with public roadways or private roadways should be legally designated with appropriate designations in both official languages, and all street name signage should include the abbreviated designations.

Any and all new or replacement signage shall be bilingual.

First Nation and Multi-Cultural Heritage

The City of Greater Sudbury is proud of its First Nation and multi-cultural heritage. The selection of new names for streets or replacement names should reflect this heritage wherever possible. If a name is to be replaced, it should be replaced with a name that continues the original ethnic heritage already there. New names in portions of the City should reflect the ethnic make-up of that community so that Finnish names, for example, are used in areas where those of Finnish descent may be numerous.

Use of Designations

Many City street signs do not contain designations. As these are replaced from time to time, they should be replaced with signs containing the full designations, in order to

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assist in location finding and addressing (Bessie Avenue, not just Bessie).

Font Selection and Backgrounds

The former municipalities now forming part of the City of Greater Sudbury have had numerous font sizes and colour schemes for the street naming signs. Those are becoming consistent over time, but are not to be undertaken as a special project. Font size is to be large and legible, and consisting of both upper case and lower case letters. Designations such as "st." or "rue" are to be used on all new signs.

The signs should be of high contrast between text and background and in appropriate circumstances may be large signs consisting of retro-reflective backgrounds.

Street Numbering

The allocation of street numbers for each lot can be carried out using various procedures. Address numbers must take into account present uses of the property as well as how the property may be developed. Since these street numbers are relatively permanent they must apply not only the present use of the property but should also consider possible alterations. A property presently developed as a single-family unit can be redeveloped as a duplex. The future possible uses of a property must be considered in allocating street numbers.

In many municipalities, road patterns were created using various protocols. In the Canadian West, many municipalities developed using a grid system. In other areas, due to topography or existing highway networks, radial road patterns were developed.

The grid system allowed street addresses to be numbered based on defined city blocks, such as having the nearest block to the main roadway numbered in the 100s. Others used the major east/west, and north/south roadways as a starting point and numbered properties based on fixed distances from these baselines. As an example, a property with 15m frontage would have street addresses different by four from the abutting two properties, while a property with 10m frontage would only differ by two numbers from the adjacent properties.

Other jurisdictions overlaid uniform latitudinal and longitudinal grids to produce civic numbers. This would see addresses along all north/south roadways that are between two parallels of latitude have the same range of numbers. In many of these municipalities, boundaries such as a major highway or a lake allow for a reference line from which to commence civic numbering.

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The City of Greater Sudbury has a mixture of radial and grid street layouts, often constrained by topography. Any street numbering convention must take into account barriers to common starting points, any possibility of roadway extension, and the numbering pattern within the area.

This policy addresses this issue by creating a list of major roadways used to create a starting point for street numbering.

As an example, streets running north and south from Municipal Road 15 would have the street addresses increasing from Municipal Road 15. Streets that cross Municipal Road 15 would see either a change in name, or a numerical system that starts from its south end and continues across Municipal Road 15.

General Conventions Street Numbering System

The following roadways will be used as the starting point for numbering.

- 1) Municipal Roads 4, 10, 15, 24, 34, 35, 39, 46, 55, 66, 67, 70, 71, 73, 80, 84, 85, 86, 89, 90, and 537
- 2) All other Arterials and Collector roadways as designated in the City of Greater Sudbury Official Plan.

Streets will be deemed running east/west or north/south based on their predominant direction. Even civic numbers will be applied to the north and east sides of streets. Odd numbers will be applied to the south and west sides of streets. On roadways that change alignment, even and odd numbers will never be transposed.

On roadways that are crescent or loop shaped, properties on the outside or longest roadway frontage will be allocated even numbers.

On roadways that are crescents or loops, properties on the inside or shortest roadway frontage will be allocated odd numbers.

Numbering of properties shall increase by two numbers for each 3m of frontage along the public roadway.

On roadways that have unequal frontages due to alignment changes, sharp curves or connecting intersections, numbers shall be set aside to create, as closely as possible, numbers that are consistent with the facing properties.

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Numbering systems along a roadway shall commence from an arterial or highest classification of roadway. If adjacent roadways are of equal importance, the numbering system shall commence from east to west, or north to south, or consistent with the numbering system within the immediate area.

On roadways that are partially completed, numbers shall be assigned as if the roadway was completed and commencing from the highest classification of adjoining roadway. If the roadway does or will bisect a higher classification of roadway, the most easterly or northerly end of the roadway will be the starting point.

On cul-de-sac roadways, civic numbers on the right hand side entering the cul-de-sac shall be odd civic numbers.

On multiple-unit developments, the unit designator shall be the prefix followed by a dash and street address (123- 445 Fred St., or Unit 123-445 Fred St.) When the alphabet is used to designate units in a development, the unit designator shall follow the address number (115b Fred St.)

<u>Shopping Plazas, Malls, Industrial Parks, Condominiums, Townhouse</u> <u>Developments</u>

Shopping plazas, malls, industrial parks, condominiums and townhouses will have one address for each structure on the property. Each of the owners units, clients or rental units within a plaza, mall, condominium, townhouse development or industrial park shall have an alpha or numeric designator. Industrial parks, condominiums or townhouse developments with a common access will be assigned a designated name for the major common lane or roadway and addresses for each unit or structure will be assigned as set out in this policy.

House Number Signs

The importance of finding a home or business for emergency vehicles cannot be understated. For this reason the previous municipalities addressed the question of signage in an attempt to make addresses visible from the public roadway. With the implementation of the 9-1-1 emergency communication system, the municipalities carried out concerted efforts to have all property in the coverage area signed with a civic number. Two-sided retro-reflective signs with the property's civic number were installed at the intersection of driveways and roadways for all rural homes and businesses.

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Private driveways serving more than one residence had special signs indicating the range of the civic numbers being serviced by the driveway.

In urban settings where this form of signing would not be universally accepted, numbers installed on houses were acceptable. Criteria were developed for numbers to be used, their location, and in what situations other types of civic numbers would be acceptable.

The previous criteria varied, and in some instances conflicted with requirements of other municipalities. The following is an attempt by the City of Greater Sudbury to address the differences, and to be acceptable to both the emergency services and to the public.

The following signing requirements are based on existing criteria, and uses distances from the public roadway as a basis for number heights.

Urban Properties Numbering Display

Minimum Character Size

Maximum Setback

7.5mm (3 inch)	Up to 3m (10ft)
15mm (6inch)	Up to 9.1m (30ft)
11mm (4.5 inch)	Up to 15.3m (50ft)
Municipal numbers must be posted at the street	Over 15.3m

A number on the building must be visible at all times from the street, in either direction. The number must be in a numerical format (cursive or roman numerals are not acceptable). The number and background must be in contrasting colours.

Street Posted Numbers

A number posted at the street must have a letter height of 7.5mm (3 inch) and be white on green with retro-reflective numbers. The sign is to be installed on a post at the intersection of the driveway and roadway, at a height of no less than 1.2m (4ft.) and less than 2.1m (7ft.) The sign shall be two-sided with the municipal number on both sides, installed at a right angle to the roadway.

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Assigned civic retro-reflective numbers shall also be installed on both sides of rural mailboxes. If the mailbox is installed on the same side as the driveway, the mailbox can be displayed in lieu of the previously required sign.

Multi-occupancy projects must have one main number that may be located on either a pylon sign or a separate sign at the street.

Nonconforming signs

The approval of this signing policy will create many residences that may not meet the new criteria. Though it would be ideal that once passed, all civic numbers would be changed to meet the criteria, as in most new by-laws the City shall allow a grandfathering provision to allow all existing signs to be acceptable until altered. At that time the new signs should be altered to meet the existing criteria.

There are instances that may exist of signs that may not meet the provisions of this Bylaw but meet the intent for conspicuousness. The acceptance of variation in civic number types is hereby delegated to the Technical Services Section.

Variations to the Policy

All numeric civic addresses on structures that pre-exist the passage of this By-law are deemed legal nonconforming, and may continue until altered.

The General Manager of Growth and Development may approve requests for the installation of civic address numbers that do not meet this By-law, but address its intent for conspicuity. This power may be delegated to the Technical Services Section.

Request for Name Change

In order to maintain continuity and minimize confusion, name change requests should not be considered lightly, and should be handled only where it is appropriate to do so.

If a name change request deals with a duplicated, interrupted (broken), or other street name that requires amendment, then the request should be considered by Council or by a Committee established to deal with street naming issues. In this case, the costs associated with advertising and the name change should be borne by the City.

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In the case of a private street being named, no advertising costs are involved, and it is in the City's interest to have the street formally referred, and so the City should absorb the costs of any necessary street signs.

In the case of a request to rename an existing public street that is not duplicated or otherwise in need of change, whether the request is commemorative or otherwise, the associated cost of advertising and signage should be borne by those requesting the change and the City should consider the matter accordingly before proceeding.



Valley East Employment Lands Expansion

Presented To:	Planning Committee
Meeting Date:	April 28, 2025
Type:	Managers' Reports
Prepared by:	Bailey Chabot Planning Services
Recommended by:	General Manager of Growth and Infrastucture

Report Summary

This report provides recommendations to direct staff to undertake Planning Act processes to swap settlement area, amend the Official Plan, and Zoning By-law to allow for the expansion of the Valley East Industrial Park on City-owned lands, with the intent of offering the land for sale to the respective abutting property owners.

Resolution

Resolution 1:

THAT the City of Greater Sudbury directs staff to undertake the process to swap settlement area land as outlined in the report entitled "Valley East Employment Lands Expansion" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025.

Resolution 2:

THAT the City of Greater Sudbury directs staff to undertake the process to redesignate the Val Caron and Coniston parcels as outlined in the report entitled "Valley East Employment Lands Expansion" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025.

Resolution 3:

THAT the City of Greater Sudbury directs staff to undertake the process to rezone the Val Caron parcel as outlined in the report entitled "Valley East Employment Lands Expansion" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025.

Resolution 4:

THAT the City of Greater Sudbury directs staff to undertake the process to declare surplus the Val Caron parcel land as outlined in the report entitled "Valley East Employment Lands Expansion" from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on April 28, 2025.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

Expanding the Valley East Employment Lands aligns with Council's Strategic Priorities including "2.1 Build Economic Development Initiatives to Support Existing Businesses, Attract New Businesses and Promote Entrepreneurship". It supports the creation of compact communities (Goal 1) as outlined in the CEEP.

Financial Implications

There are no financial implications associated with this report.

Staff Report

BACKGROUND:

Employment Land Strategy

The City of Greater Sudbury Employment Land Strategy (ELS) was completed in 2022, with three goals:

- 1. To improve the city's economic competitiveness and encourage the development of employment land:
- 2. To ensure that the Employment Land Strategy, policies, and incentives, support projected economic growth and development; and,
- 3. To maintain an employment land inventory by applying a planning methodology that promotes the provision of an appropriate land supply.

Through this work, and based on population and industrial trends analysis, the ELS determined that there is a demand for approximately 35-50 net hectares of industrial land to support growth in industry to 2046. The ELS recommends ensuring a suitable supply of "at least 100 net hectares of industrial land (essentially double the forecast need) to accommodate anticipated demand through 2046". To achieve this growth, the ELS includes the following recommendation:

"The City may wish to explore a mechanism to facilitate expansions to the existing Settlement Area boundary for industrial uses in key locations where demand has historically been observed, where existing infrastructure can be leveraged, and where motivated landowners are eager to pursue opportunities."

Valley East Industrial Park (VEIP)

The Valley East Industrial Park (VEIP) is located in the community of Val Caron and is generally bound by Main Street to the north and Valleyview Road to the south. The lands are all designated General Industrial pursuant to the City's Official Plan, and generally zoned 'M1', Mixed Light Industrial/Service Commercial. The VEIP includes 81 privately owned parcels as well as parcels owned by the City. The parcels are served by local roads being Belisle Drive, White Street, Trudeau Drive, and Lamondin Street.

Lands that form part of the VEIP are highly desirable given the proximity to the higher order road network, the existing municipal water and wastewater services, the generally flat topography, and distance from conflicting land uses, such as residential and institutional lands. The City owns lands within and adjacent to the VEIP that can help support industrial land needs and the expansion of the VEIP if made available for

sale.

Main Street Subject Property Municipal Drain Valleyview Road

Figure 1 - The Val Caron parcel identified with the bifurcating municipal drains shown.



Figure 3 - Approximate extent of floodplain associated with Val Caron Drain A.

Figure 3 - Approximate extent of wetlands on the Val Caron parcel.

The Val Caron Parcel - VEIP Expansion

The City owns a large parcel of land directly to the east of the VEIP known municipally as 0 Valleyview Road in Val Caron ('Val Caron parcel'). The Val Caron parcel is legally described as PINs 73501-2139 & 73501-2142 SRO, Parts 2 & 3 on Plan 53R-19366, Part Lot 8, Concession 5, Township of Blezard. The Val Caron parcel (shown in Figure 1) is located east of Belisle Drive. north of Valleyview Road, and is accessed via Sunset Drive. The Val Caron parcel is generally rectangular in shape and is approximately 21.4 ha (52.9 acres). The Val Caron parcel is relatively flat, is bifurcated by two municipal drains, and contains natural hazards regulated by Conservation Sudbury. The northerly municipal drain, Val Caron Drain A, has a mapped floodplain and an erosion hazard as shown in Figure 2. The southerly municipal drain, Horizon Drain A, has an assumed flood plain as well as an erosion hazard. The site also contains wetland, generally coincidental with the extent of the floodplain south of Val Caron Drain A as shown in Figure 3 below. The Val Caron parcel is not within the settlement area, is designated

Rural per the City of Greater Sudbury's Official Plan, and is zoned 'RU', Rural, pursuant to Zoning By-law 2010-100Z.

Proposal

To allow for the expansion of the VEIP to include the Val Caron parcel, staff are proposing a settlement area exchange, an Official Plan Amendment, and a Zoning Bylaw Amendment to redesignate and rezone the Val Caron parcel to General Industrial and 'M1', Mixed Light Industrial/Service Commercial consistent with lands within the VEIP. The settlement area exchange is proposed to be with City-owned lands that are designated General Industrial and located in the community of Coniston ('Coniston parcel').

The Coniston parcel is known municipally as 4092 Bancroft Drive, Coniston and is legally described as PIN 73560-1290, Parcel 21098A SEC SES, Part Lot 5, Concession 3, Township of Neelon. The Coniston parcel is within the settlement

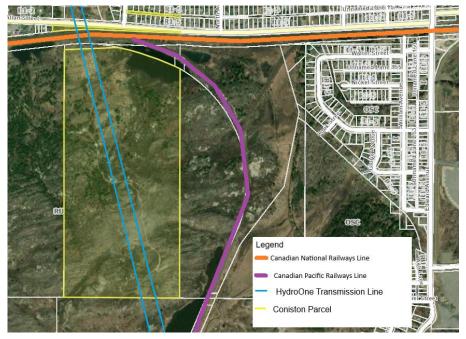


Figure 4 - The Coniston Parcel

area but is not serviced, is not accessible by road, and is bifurcated by two HydroOne transmission lines (shown in Figure 4). The Coniston parcel is approximately 41.7 ha (103 acres), is generally rectangular in shape, and contains changes in elevation across the parcel. The Coniston parcel is adjacent to a Canadian National Railways line to the north, which connects with a Canadian Pacific Railways line to the east. The Coniston parcel has limited marketability because it lacks road access and essential services, resulting in fewer opportunities for development.

Staff are proposing to remove land from the settlement area at the southwest corner of the Coniston parcel. The area of land to be

removed is to be equal with the amount of land to be added to the settlement area of the Val Caron parcel to maintain a net-zero balance in the settlement area of the City. The lands to be removed from the settlement area on the Coniston parcel are proposed to be redesignated Rural, consistent with the adjacent lands. The Coniston parcel is already zoned 'RU', Rural, so a rezoning for these lands is not required.

By maintaining the north quadrant within the settlement boundary, the City preserves future development opportunities if access to the land can be secured.

Other Considerations

As noted earlier in the report, the Val Caron parcel contains natural hazards that may limit development. Through the review process, staff will work with Conservation Sudbury to establish the limits of development and ensure that lands offered for sale are developable.

CONCLUSION

To support industrial development in a highly desirable area, staff are proposing Planning Act processes to support the expansion of the Valley East Industrial Park on City-owned lands. A complete planning analysis will be offered at that time with any further recommendations. Once complete, staff are proposing to offer the lands for sale to the respective abutting property owners, subject to Council approval.