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Prepared for:

CITY OF GREATER SUDBURY
200 Brady Street
Sudbury, ON
P3A 5P3

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED
314 Countryside Drive
Sudbury, ON
P3E 6G2
TEL: 705-522-8174

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update



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Table of Contents

Executive Summary	ii
1.0 Context.....	3
1.1 What is the Strategic Parking Plan?	3
1.2 Why does parking matter?	3
1.3 What is the parking challenge?.....	3
1.4 Who is impacted and how?.....	3
2.0 Planning Process	5
2.1 Project Team and Stakeholders	5
2.2 Applicable Policies	6
2.3 Previous Studies.....	10
3.0 Existing Parking Conditions	11
3.1 Study Area Overview	11
3.2 Data Collection	13
3.3 Existing Parking Utilization	13
4.0 Future Conditions and Parking Demand Projection	19
4.1 Proposed Developments within the Downtown Core.....	20
4.2 Future Parking Capacity Analysis.....	21
5.0 Mission and Strategic Goals	22
5.1 Mission.....	22
5.2 Guiding Principles.....	23
5.3 Priority Areas	23
6.0 Transportation Demand Management Toolbox.....	29
6.1 Implementation of Strategic Parking Plan.....	32
7.0 Conclusion and Recommendations	34

List of Figures

Figure 1: Study Area Parking Locations	12
Figure 2: Existing Parking Utilization by Lot - Normal Business Hours.....	14
Figure 3: Existing Parking Utilization by Lot - Friday Evening Activity	15
Figure 4: Existing Parking Utilization by Lot – Saturday Afternoon Activity	16
Figure 5: Existing Parking Utilization by Lot – Special Event Day	17
Figure 6: Existing Parking Utilization by Time Period	19
Figure 7: Parking Demand Sensitivity Analysis for all Analysis Periods	22
Figure 8: Guiding Principles.....	23
Figure 9: Parking Strategy TDM Toolbox.....	30

List of Tables

Table 1: Elgin Greenway – Change in Parking Supply	20
Table 2: Sudbury Community Arena/Event Centre – Change in Parking Supply	21
Table 3: Recommended Implementation Plan	33

List of Appendices

Appendix A	Existing Parking Inventory
Appendix B	Aerial Photos
Appendix C	Existing Parking Utilization

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Executive Summary

J.L. Richards & Associates Limited (JLR) was retained by the City of Greater Sudbury (CGS) to update their Downtown Strategic Parking Plan. The goal of this update is to ensure that Downtown Sudbury's parking supply can continue to support both its current needs, and the needs of potential future developments.

The Downtown Sudbury Strategic Plan Update was broken into two separate phases. The first phase was an exercise that refreshed the previous Downtown Parking Study (prepared by IBI Group, dated January 2011 and updated November 2018) with new parking demand data collected in the Downtown's South District and an updated review of the future parking supply in this area. This exercise was completed by JLR in 2023, titled **Phase A – South District Parking Study Update**. The second phase is an exercise that looks at collecting parking demand data for the entire downtown district and reviewing the future parking supply through public and stakeholder consultation. This exercise is the **Phase B – Strategic Parking Plan Update** (i.e., this report). This Phase B Update is being completed in conjunction with the Transit Mobility Hub Feasibility Study and will inform the Sudbury Arena Building Condition Assessment Report. This report will also explore the need to implement a new formalized parking structure within the downtown area, and if warranted, its potential size and location.

Phase A assessed the Downtown's South District as the CGS Council was looking for more immediate parking analysis results to support the future large municipal projects within the study area. Observed parking demand indicated that there is sufficient parking within the downtown's South District with the existing parking supply and demand. However, once the construction of various major downtown projects is completed, projected capacity issues were identified during special events with existing parking demand and in the future should parking demand increase. Various Transportation Demand Management (TDM) measures were outlined within the report to help alleviate any potential stress on the parking system with the Downtown's South District.

Building upon the previous parking studies prepared by IBI and the Phase A – South District Parking Study, this Phase B report will serve as a new and forward-looking sustainable plan that will:

- Assess the existing on-street and off-street parking utilization in the entire downtown district during peak parking periods on a typical weekday, evenings, and weekends
- Forecast future parking demand and supply from potential developments
- Provide recommendations (including transportation demand management measures) to ensure that Downtown Sudbury's parking supply can meet future demand and ensure that the Council's 'Large Project' investments are supported by an adequate parking supply.

From the review and analysis in this study, it was determined that the existing and projected parking supply can accommodate up to a 100% increase in current parking demand during all selected peak periods and with spare capacity available, except for special event days where the parking system can accommodate only up to a 75% increase in demand. As such, no additional parking infrastructure is required to be constructed. Parking management strategies are provided in this report and are sufficient to efficiently manage the parking demand in Downtown Sudbury.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

1.0 Context

1.1 What is the Strategic Parking Plan?

The Strategic Parking Plan is meant focus resources for specific, obtainable parking goals. If resources are spread too thin, nothing will get accomplished (e.g., bringing a list when grocery shopping so money isn't overspent on the wrong items).

The parking management strategies herein will serve as a roadmap for the CGS Downtown parking future.

1.2 Why does parking matter?

A component of a successful and vibrant downtown is ensuring an adequate parking supply is provided to support local commercial/recreational activity, and residential land uses. However, the challenge every city is faced with, is defining and balancing what is needed versus what is desired in terms of parking. If parking is oversupplied and too convenient, most downtown travellers will choose to drive, causing network congestion that leads to reduced air quality, noise pollution and increased safety risks for vulnerable road users. On the other hand, if parking is under-supplied and inconvenient, downtown businesses may struggle to flourish, if the general population decides it is too difficult to visit downtown. Therefore, a successful parking plan should be coupled with transportation demand management (TDM) strategies and high-quality infrastructure to encourage sustainable travel mode choices (e.g., walking, biking and transit).

1.3 What is the parking challenge?

The purpose of this plan to is to address present challenges within the current parking system and determine how future parking utilization can be supported in Downtown Sudbury. Based on the previous parking studies, most patrons of downtown tend to park in the unformalized lots (i.e., gravel lots without marked parking spaces, on-street parking in some instances) such as the Elgin Street / CP Rail Lot. As these lots become full, it results in more circling to find a spot, or in the case of an unformalized lot, double parking, lane convergence, difficulty in maneuvering within the lot, etc. This creates an illusion of lack of parking as the existing parking supply is not utilized efficiently. There are multiple ways to help address this problem which are discussed within this report.

1.4 Who is impacted and how?

When considering the development of a Strategic Parking Plan, it is crucial to understand how proposed strategic recommendations and policies affect the different groups involved. Parking supply and demand impacts various stakeholders, including residents, business owners, the City, and the environment.

The Residents

Parking supply and demand have a profound impact on residents, influencing their daily lives and economic well-being:

- **Convenience and Access:** Many residents depend on parking infrastructure for access to their workplaces, services, and recreational activities. The proximity and availability of parking spaces directly affect the convenience and efficiency of their daily routines. A lack

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

of available parking can lead to time inefficiencies, increased frustration, and limited access to essential services and opportunities.

- **Economic Consequences:** Pricing practices associated with parking, including fees and fines, may impact residents' financial stability. High parking costs can strain household budgets, leading to reduced disposable income and potentially creating disparities in access to economic opportunities.
- **Lifestyle Adaptation:** The perceived scarcity of parking resources may compel residents to plan their activities around parking availability. This necessity for careful planning can restrict spontaneity and limit residents' ability to engage in impromptu activities, thereby influencing their lifestyle choices and mobility patterns.

The City

From the City's perspective, parking supply and demand present both opportunities and challenges for municipal parking lots (i.e., not including privately-owned parking lots):

- **Revenue Generation:** Parking fees serve as a reliable revenue source for municipal authorities. The revenue generated from parking fees, fines, and permits can be allocated to fund essential municipal services and infrastructure projects, which makes parking infrastructure and policies a crucial aspect the City's economic system.
- **Maintenance and Infrastructure:** Maintaining the municipal parking facilities is the City's responsibility. Hence, it should be considered that additional infrastructure may require more labour and capital resources to maintain.
- **Land Use Constraints:** Finding suitable land for intensifying municipal parking facilities can be a complex endeavor. In some cases, land may not be available if additional parking area is required. Understanding the City's zoning by-law, policies and existing land use is important in developing parking strategic recommendations.
- **Parking System Management:** This encompasses strategies related to pricing, equitable allocation of parking spaces, and the integration of advanced technology to enhance operational efficiency. Managing the downtown's parking system is highly dependent on the City's available financial and logistical resources.

Business Owners

Parking supply and demand holds significant importance for business owners as it influences their operations and economic viability:

- **Customer Influence:** Parking availability significantly affects customer flow. Sufficient parking spaces often translate into increased foot traffic, potentially increasing sales and business revenue. Conversely, inadequate parking facilities might divert customers elsewhere, adversely impacting revenue streams and the overall business performance.
- **Employee Parking:** Adequate parking for employees is a crucial factor for job satisfaction and staff retention. Insufficient parking may hinder recruitment efforts and staff retention as employees may prefer workplaces with free and available parking spaces for their private vehicles.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

- **Financial Impact:** Business owners might bear the cost of providing parking for employees or customers if not provided by the City, affecting operational expenses and revenue.

Downtown Revitalization/Economic Development

In line with the Downtown Master Plan, the CGS is currently undertaking initiatives for the revitalization of Downtown Sudbury to support economic development. As such, all ongoing revitalization efforts and strategies for economic development will be affected by the parking system:

- **Urban Vibrancy:** A well-managed parking system contributes to a vibrant downtown atmosphere, attracting visitors and residents.
- **Real Estate and Investment:** The number of parking facilities may influence property values and attractiveness for investors and developers.
- **Community Perception:** Parking convenience or a lack of it shapes the perception of downtown areas and may impact people's preference in visiting the downtown.

The Environment

The environmental impacts of parking supply and demand are also a critical consideration and include:

- **Emissions and Air Quality:** Specific strategies and policies for the downtown parking system have the potential to reduce the number of vehicles on the road, leading to a decrease in vehicle emissions.
- **Road Network and Congestion:** Traffic congestion can be managed downtown with the efficient utilization of parking spaces. With the right strategies implemented, the number of vehicles searching for parking spaces may be able to be reduced.

2.0 Planning Process

2.1 Project Team and Stakeholders

To ensure a well-informed Strategic Parking Plan, the project team identified the City Divisions that would be able to provide valuable input. Divisions were informed about the project objectives, process, and their roles and responsibilities. They also participated in meetings during the course of the development of this Strategic Plan.

The meetings were facilitated by JLR, and included senior staff representation from:

- Planning Services
- Corporate Services
- By-Law Services
- Economic Development
- Strategic Initiatives
- Asset Management
- Infrastructure Capital Planning
- Engineering Services

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

2.2 Applicable Policies

The intention of the parking strategy is to align with previously completed studies, strategies, plans, etc. and to ensure there is a cohesive vision with regard to the future of the downtown core. The relevant policies and plans that support and guide the Strategic Parking Plan Update are as follows.

City of Greater Sudbury Strategic Plan

The City of Greater Sudbury Strategic Plan outlines the City's priorities from 2019 to 2027. The plan aims to showcase the changes that the City will make to improve the community's sustainability, economic competitiveness, and quality of life. The City's priorities as laid out in the plan include:

1. Asset Management and Service Excellence
2. Business Attraction, Development and Retention
3. Climate Change
4. Economic Capacity and Investment Readiness
5. Housing
6. Create a Healthier Community

Under each priority are several initiatives that will advance Greater Sudbury's standing as a centre of excellence in economic, social, and environmental innovation. The City's Strategic Plan will serve as a framework to ensure that any strategic recommendations for the proposed downtown parking system supports the City's priorities and broader objectives. The following objectives outlined in the Strategic Plan will be considered:

- Objective 1.1 – Optimize Asset Service Life through the Establishment of Maintenance Plans
- Objective 1.4 – Reinforce Infrastructure for New Development
- Objective 2.4 – Revitalize Downtown Sudbury with Investment that Supports and Leverages Private Investment
- Objective 3.2 – Develop and Strengthen Strategies and Policies to Mitigate Impact of Climate Change
- Objective 4.4 – Invest in Transformative Facilities, Spaces and Infrastructure Initiatives that Support Economic Activity
- Objective 6.2 – Invest in Infrastructure to Support Community Recreation with Focus on Quality of Life

Official Plan

The City of Greater Sudbury (CGS) Official Plan, updated in April 2019, provides policies and programs guiding land use planning decisions that reinforce and strengthen the CGS. The Official Plan (OP) recognizes Downtown Sudbury as the heart of Greater Sudbury and a strategic core area in northern Ontario where growth and development is prioritized.

The OP outlines how higher intensity and residential development can be accommodated in the Downtown Sudbury area. Regarding parking requirements, Section 11.4 of the OP states that the City may reduce parking requirements for development in Downtown Sudbury. This is to be achieved by encouraging the use of alternative modes of transportation like transit, cycling and/or walking, provision of shared parking facilities, and accepting payment-in-lieu of developers providing parking spaces. This policy is achieved through Sections 5.4 and 5.5 of the City's Zoning

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

By-Law (ZBL) which provides the minimum parking space requirements for residential and non-residential land uses in Sudbury. Notably, these sections exempt the Downtown Commercial (C6) Zone from the general parking standards, and instead establishes specific parking requirements for a limited range of residential uses as provided in the Zoning By-Law excerpt described later in this report.

The OP will inform the guiding principles that will be established to assist the City in making decisions around parking policies, management, enforcement, and sustainable transportation planning to execute this strategic plan.

Strategic Core Areas Community Improvement Plan

The Strategic Core Areas Community Improvement Plan (CIP), revised in February 2024, enables the City of Greater Sudbury to offer financial incentives like grants and loans to property owners and tenants within specific areas for property rehabilitation in line with the plan.

The CIP's goals include revitalizing key city areas including Downtown Sudbury, increasing residential populations in these areas, creating job opportunities, expanding the municipal tax base, and improving public spaces and infrastructure efficiency.

Various financial incentives are available, such as Tax Increment Equivalent Grants (TIEG), to encourage development and redevelopment in the strategic core areas. A 20-year TIEG program is available for a new parking structure containing approximately 200 parking spaces, aiming to increase parking availability and density in Downtown Sudbury.

Downtown Sudbury Master Plan

The Downtown Sudbury Master Plan (Master Plan), completed in 2012, describes the long-term vision and action strategy for the revitalization of Downtown Sudbury over the 2012 – 2022 period. It identifies strategies that can be undertaken to improve the quality and character of Downtown Sudbury. The strategies to be implemented are centred around three main complementary directives: Activity and Growth, Access and Connectivity, and Beauty and Pride.

The Master Plan offers the following strategic direction related to parking:

- The City should provide one municipal parking facility for overnight parking to support residential growth and test market interest in structured parking solutions for Downtown Sudbury.
- The City, Downtown Sudbury Business Improvement Area, and Downtown Village Development Corporation should implement the Elm Street Parking Pilot.
- To meet parking demands associated with new office development in the Innovation-Technology Park, a structured parking lot with integrated pedestrian bridge should be constructed at the site.

It should be noted that the first two of these strategic directions laid out in the Master Plan have been accomplished. It is understood that the Downtown Master Plan will be updated between 2024 and 2025 and as part of this update, the parking recommendations provided in the Master Plan will be revisited.

The Downtown Sudbury Master Plan is a foundational document that will influence the management and optimization of existing parking lots downtown.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Zoning By-Law

The consolidated Zoning By-Law for the City of Greater Sudbury (2010-100Z) contains parking regulations for new developments within the City. Section 5.5.2 specifies requirements for parking supply, parking spaces (e.g., dimensions, location, access, etc.) and the provision of accessible, barrier-free parking spaces based on the total number of spaces provided. The Zoning By-Law lists the number of parking spaces required for the C6 Zone – Downtown Commercial. Minimum parking space requirements are provided for 3 different residential developments (Boarding house dwelling or shared housing, dwelling units and hotels). No other land-use developments (i.e., non-residential land uses) in the downtown region are required to provide parking.

The By-Law also makes provisions for relief from parking requirements as permitted under the cash-in-lieu by-law in Section 5.2.8.

Community Energy and Emissions Plan

The Community Energy and Emissions Plan (CEEP) is the long-term plan to reduce carbon emissions and pollution in Greater Sudbury by reducing greenhouse gas emissions (GHG) caused by human activity to as close to zero as possible and removing remaining emissions from the atmosphere.

One of the initiatives introduced in this plan is the adoption of Electric Vehicles (EV) to reduce vehicle emissions. This would require changes to the parking infrastructure to accommodate and encourage the use of EV's. The downtown core is projected to host the highest density of charging stations due to greater population and employment density, and the number of residents without off-street parking. Some of the municipal policy initiatives recommended in the CEEP for EV adoption include:

- Create Zoning By-Law requirements to provide charger outlets for 50% of parking spaces in all new multi-family buildings and 25% of parking spaces in all new commercial buildings.
- Encourage retrofitting 10% of parking spaces in existing buildings through the provision of funding via incentives or rebates.
- Update relevant city plans, by-laws, and planning documents to include special provisions for EV charging infrastructure and assignment of preferred EV parking spaces.

The CEEP Phase One Implementation Plan includes a review to reduce the City's Commercial and Residential Parking Standards with the aim of limiting land space requirements for urban development and to encourage transit-supportive developments. Reductions to the current commercial parking standards were proposed for GOVA Routes #1 and #2, where bicycle parking or bus lay-bys are provided, retail stores, restaurants, convenience stores, personal service shops, and shopping centres. These reductions to the parking standards have been implemented in the current Zoning By-Law as outlined in Section 5.3.1 and Section 5.5.1.1 of the Zoning By-Law. Implementation of changes to the parking standards are expected to reduce emissions as a result of personal vehicle use and increase the use of transit. In relation to parking strategies, the CEEP provides guidance in integrating parking considerations with the broader goal of reducing emissions from transportation.

In a significant move, the Federal Government of Canada has recently announced a strategic push to support the country's adoption of EVs. Currently, there are over 25,000 public EV chargers in Canada. The Federal Government has allocated over \$1.2 billion to encourage the installation of more EV charging stations, aiming to install up to 43,000 chargers across the country.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Greater Sudbury Transit Action Plan

The Transit Action Plan aims to propose both immediate and long-term strategies to improve transit services, infrastructure, and support measures, thereby enhancing the connectivity and service provided by Greater Sudbury's transit system. The City of Greater Sudbury is currently implementing the Transit Action Plan and is undertaking a Transit Hub Mobility Feasibility Study. The outcomes of the latter study will inform future parking directions in Downtown Sudbury depending on the location and design of the new Downtown Mobility Hub.

This Strategic Parking Plan will complement the directives laid out in the Transit Action Plan to provide initiatives for encouraging the effective linking of parking facilities with public transportation hubs.

Transportation Demand Management Strategies

Transportation Demand Management (TDM) is the application of policies, programs, services, and products to influence people's travel decisions and encourage the use of sustainable modes of transportation. TDM strategies seeks to solve transportation problems through both people and infrastructure-focused ways.

The City completed a Transportation Demand Management Plan in April 2018 which outlines programs and measures that will allow residents in Greater Sudbury to better use transportation resources and create a transportation system that encourages a more even mode share between driving, carpooling, walking, cycling, and transit. The following programs outlined in the plan help regulate parking demand and promote sustainable modes of transportation.

- Flexible work hours which can reduce both peak hour travel demand and lessen the impact of parking in a given area.
- Telecommute which reduces demand for travel and lessens parking needs.
- A compressed work week which reduces travel demand during peak hours and lessens the need for parking.
- Ride-matching which reduces commuting costs and demand for parking spaces.
- Bicycle parking, which is a space saving, cost-effective, and environmentally friendly alternative to car parking.
- Higher priced parking which aims to create a mode shift which reduces parking demand as paid parking can shift people to more sustainable transportation modes.
- Parking areas, such as Park and Ride facilities, that either provide access to transit services for residents who may not have access to service or areas where people can meet up to share rides into their destinations.
- Carshare/Bikeshare reduces the amount of single occupant vehicle trips which reduces travel and parking costs. The City is currently updating its Traffic Impact Study Guidelines which will allow for priority parking spaces for carpools within parking lots to encourage more people to carpool together to common locations.

These programs will form the basis for building the Parking Strategy TDM Toolbox, which is discussed further in **Section 6.0**. The Parking Strategy TDM Toolbox aims to reduce potential stress experienced by the parking system within the downtown area.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Traffic and Parking By-Law

The consolidated By-law 2010-1 of the CGS, dated November 2023, outlines the parking and stopping restrictions in the City, regulations for accessible parking, provisions for parking on public and private property, and penalties for parking meter violations. Specified regulations relevant to parking are described in the following schedules to the By-Law:

- Schedule “B” – Parking Prohibited at Any Time
- Schedule “C” – Parking Prohibited in Specified Places at Stated Times
- Schedule “D” – Parking Restricted at Specified Places at Stated Times
- Schedule “E” – Angle Parking Permitted
- Schedule “F” – Stopping Prohibited in Specified Places at Stated Times
- Schedule “G” – Loading Zones
- Schedule “H” – Designated School Bus Loading Zones
- Schedule “I” – Parking Meter Zones
- Schedule “V” – Designated Parking Spaces
- Schedule “Y” – On-street Permit Parking

Regulations regarding parking and stopping as stated in the By-Law vary by location, time of day, maximum allowable parking/stopping duration and required fees or permits.

This By-law will provide a regulatory framework to set standards for parking lot design in space optimization and enforcement of parking regulations. It will be referred to for the management of existing parking lots and considerations for shared parking policies.

2.3 Previous Studies

Previous Strategic Parking Plan Reports

In 2012, the Downtown Master Plan was informed by a 2011 Strategic Parking Plan for Downtown Sudbury. This Strategic Parking Plan assessed existing and future parking needs and developed a long-term and sustainable parking plan. Using information available at that time, including a survey of on and off-street parking demand, this report concluded that there was a general balance between current parking demand and supply. The report also concluded that the existing parking supply may not be sufficient to accommodate future growth and suggested the creation of structured parking facilities as a solution. Given the high demand for parking lots south of Larch Street, this report suggested that the redevelopment of parking lots in the southeast downtown area should be considered and planned for to support future growth and development proposals, potentially consolidating at-grade surface parking into a parking structure.

In 2018, an update to the City of Greater Sudbury Downtown Parking Study was prepared, which examined the potential impact that Place des Arts and the Junction East and West projects would have on downtown parking. This study reviewed parking supply and demand changes since 2011, estimated existing parking conditions by factoring data collected in 2011 and assessed post construction parking needs. The study concluded that there is sufficient parking downtown, on an overall system basis. However, the study also concluded that after Place des Arts and the Junction are constructed, the future supply of parking may not meet future parking demand. As such, recommendations from the study included a centrally located parking structure of approximately 315-500 parking spaces and that the City should undertake a new comprehensive parking demand survey to confirm the study’s findings, as the recommendation for a new parking structure was based on observed parking demand data from 2011.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Phase A – South District Parking Study

In 2023, the CGS retained JLR to update the previous parking analysis and conclusions for the South District, as part of the Junction East project. The 2023 South District Parking Study refreshed the previous parking studies with new parking demand data collected in the Downtown's South District and an updated review of the future parking supply. This study only assessed the Downtown's South District as the CGS City Council was looking for more immediate parking analysis results to support the large projects within the study area.

From the study, observed parking demand indicated that there is sufficient parking within the Downtown's South District with the existing parking supply. However, once the large development projects outlined within the report are completed, there are projected capacity issues during a special event with existing parking demand.

3.0 Existing Parking Conditions

3.1 Study Area Overview

Land Use Context

The study area for this analysis is bound by St. Anne Street and Davidson Street to the north, the Canadian Pacific rail tracks to the south/west and Paris Street to the east. The study area represents the majority of Downtown Sudbury and all on-street and off-street parking facilities that are within that area.

Parking Inventory

Within the study area, there are 14 surface parking and one underground lot totalling approximately 1,852 off-street municipal parking spaces. On-street parking is permitted on Elgin Street, Durham Street, Elm Street, Lisgar Street, Larch Street, Cedar Street, Grey Street, and Shaughnessy Street, which is an additional 330 parking spaces, for a total of 2,182 municipal parking spaces available within the Downtown. The private parking inventory is maintained from the 2018 Downtown Parking Study completed by IBI. This study identifies 1,466 private (off-street) parking spaces within the downtown. This brings the total number of available parking spaces to 3,648 parking spaces. Based on this, off-street parking spaces make up 91% (1,852 spaces) of the downtown parking inventory while the remaining 9% (330 spaces) is on-street parking.

It should be noted that total amount of parking can vary within the Downton District as efficiency can be gained or lost when parking stalls are not delineated (e.g., on-street parking and gravel lots do not have parking stalls delineated). Currently, the Energy Court lot (Map ID-11), Elgin Street YMCA Lot (Map ID-14), Shaughnessy B Street (West) Lot (Map ID-5) and a portion of the Elgin Street Lot east of the train station (Map ID-6) are gravel lots.

The parking lots in the downtown have hourly rates ranging from \$1.30/hour to \$1.50/hour, daily maximums ranging from \$8.25 to \$15, and monthly passes ranging from \$41 to \$82 per month. On-street parking is free after 5 PM and on weekends, and free after 6 PM and on weekends for municipal lots. The complete parking inventory in the study area by type and number of parking spaces is provided in **Appendix A**.

The following **Figure 1** presents the study area with the existing parking supply in the downtown region by location and corresponding Map IDs.

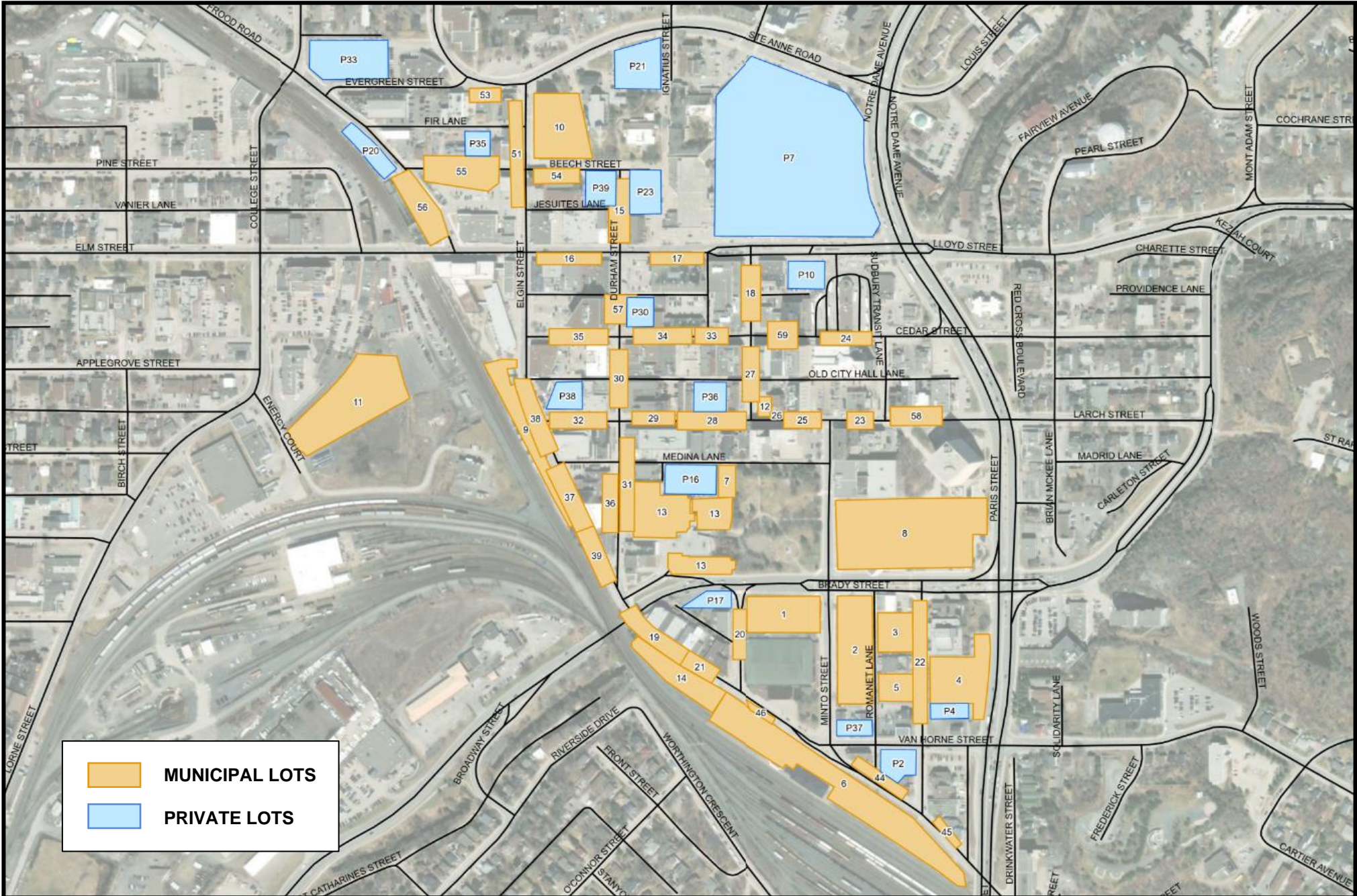


Figure 1: Study Area Parking Locations

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

3.2 Data Collection

Data collection for the Strategic Parking Plan follows the same collection periods as the previous Phase A Parking Study and IBI reports. Data was collected during normal business hours (e.g., between 10 AM and 3 PM), Friday evenings with restaurant, shopping, and nightlife/recreational activity (e.g., between 5 PM and 9 PM), Saturday afternoons with commercial and recreational activity (e.g., between 12 PM and 3 PM), and during a special event (e.g., a Sudbury Wolves game, festival, concert, etc.).

Quantifying how much parking demand the downtown experiences during peak times, the CGS collected aerial photos on the following dates/time periods:

- Wednesday, June 28th, 2023, from 7:00 AM to 8:30 PM (i.e., normal business hours)
- Friday, July 7th, 2023, from 5:15 PM to 7:15 PM (i.e., Friday evening activity)
- Saturday, July 8th, 2022, at 1:00 PM (i.e., Saturday afternoon activity)
- Friday, September 29th, 2023, at 6:35 PM (i.e., a special event activity)

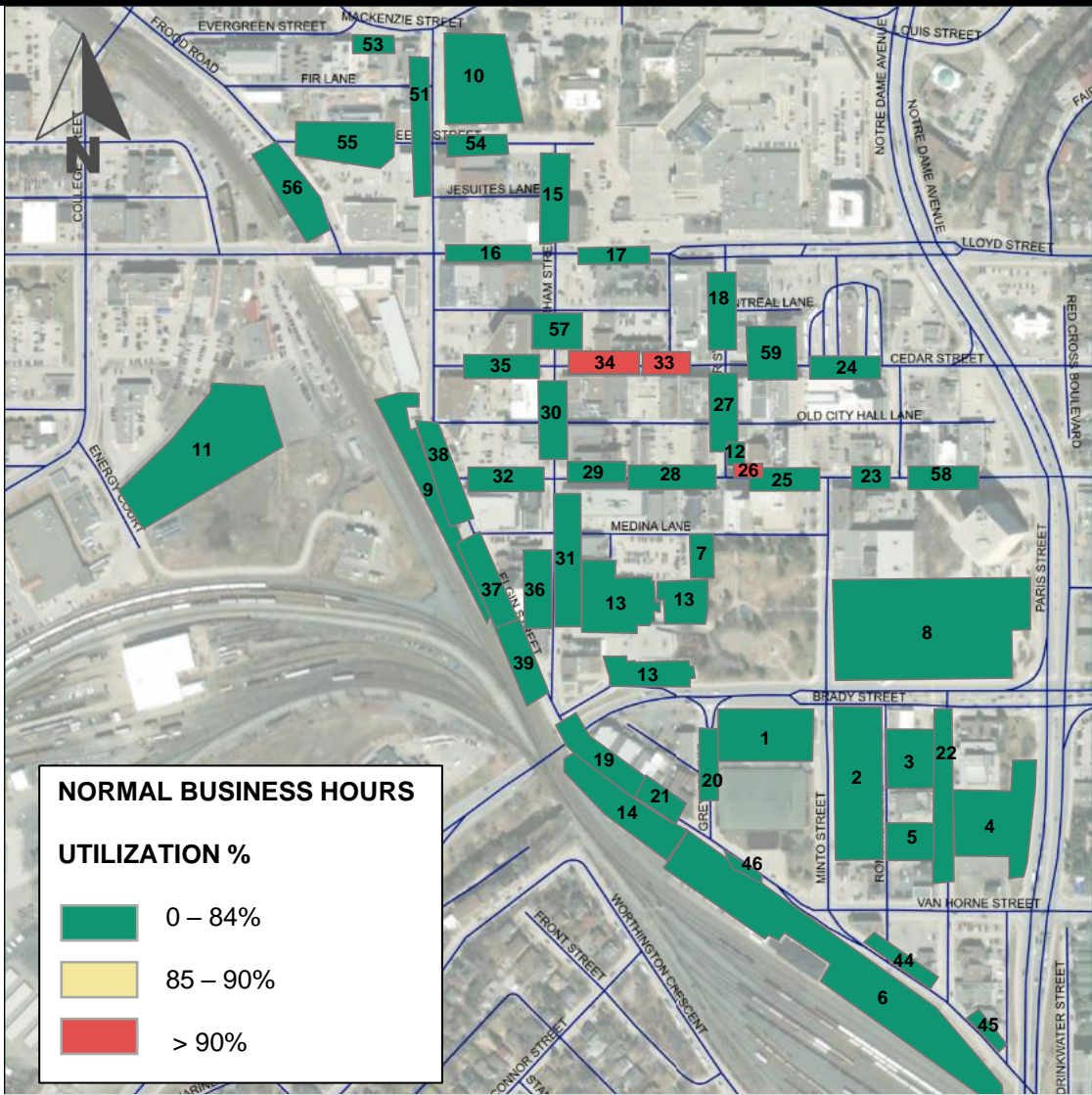
Aerial photos are included as **Appendix B**.

3.3 Existing Parking Utilization

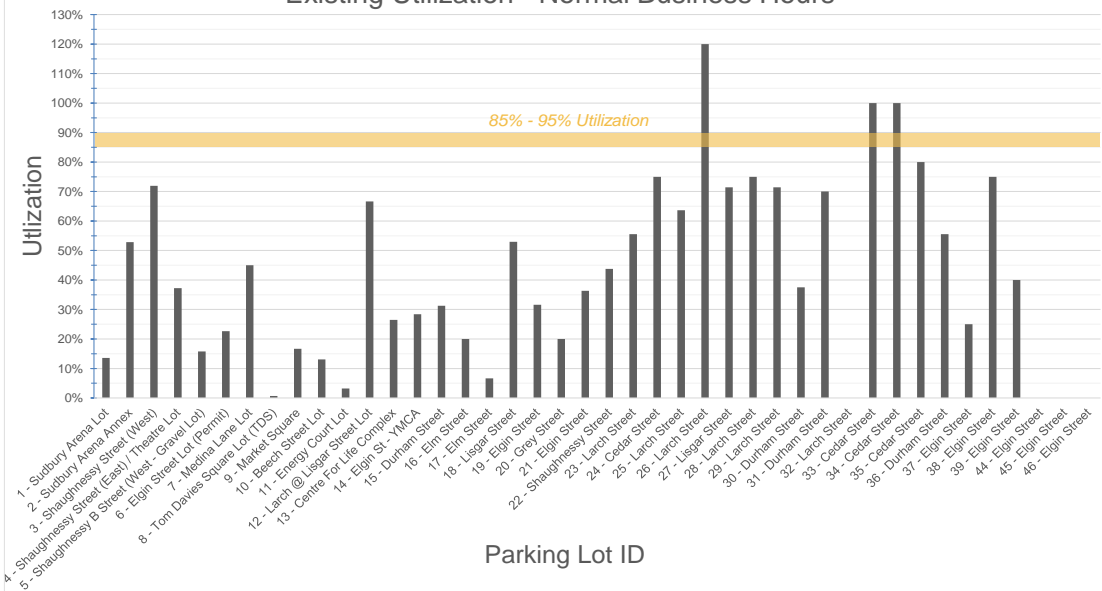
With the aerial photos captured, parking utilization was observed within the study area. Utilization heat maps for normal business hours, Friday evening activity, Saturday afternoon activity and special event activity are depicted in the following **Figure 2**, **Figure 3**, **Figure 4** and **Figure 5**, respectively.

Consistent with the previous Phase A Parking Study, the ideal parking utilization threshold is understood to be between 85% to 90% for a parking lot. As a parking lot becomes full (e.g., a parking utilization greater than 90%), it is more difficult for drivers to maneuver in lots that do not have parking stalls delineated (e.g., instances of double parking and drive-aisle narrowing), and the amount of circulation required to find an available parking space increases exponentially.

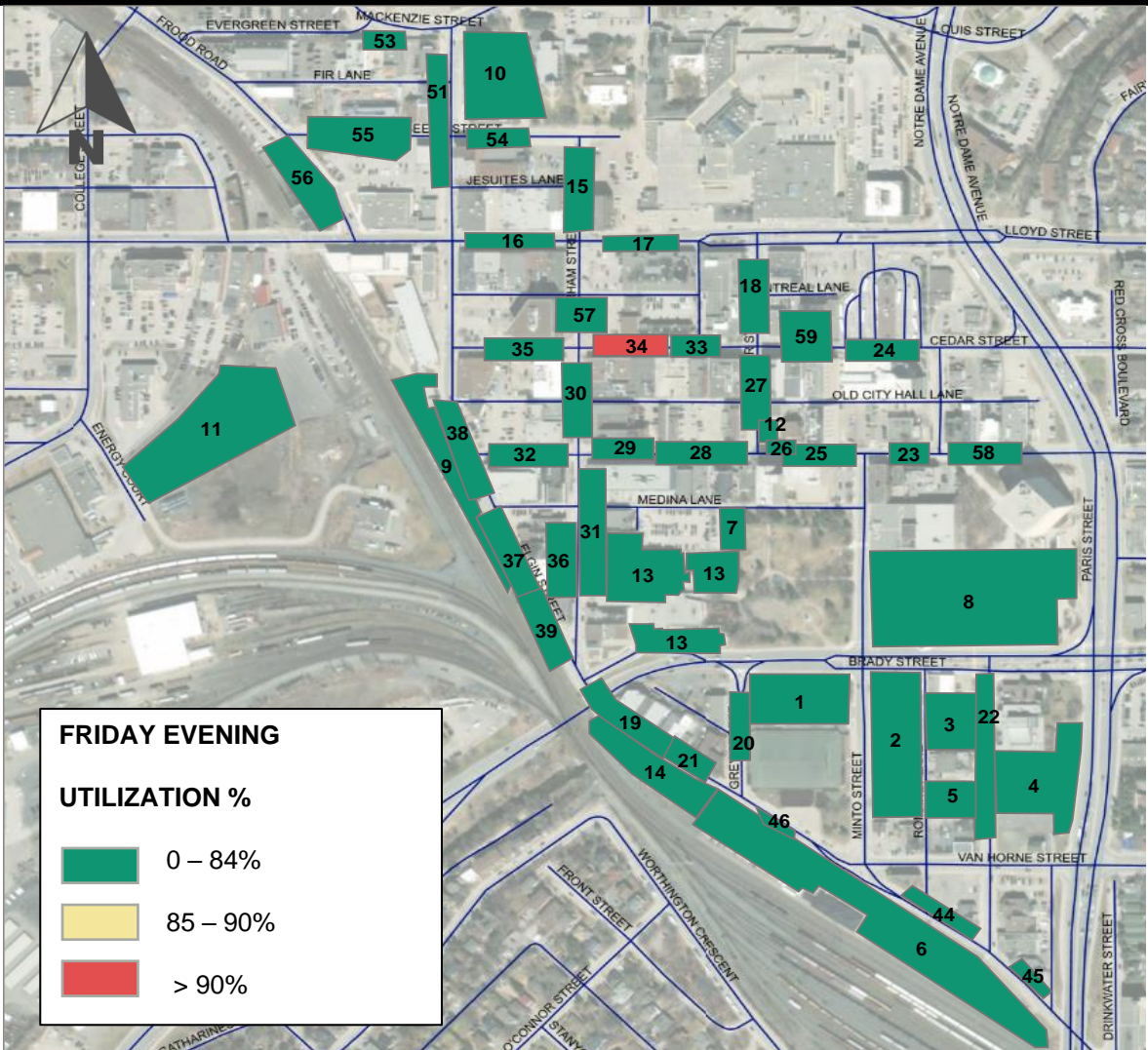
It should be noted that where utilization exceeded 100%, these include locations where parking spaces are not formalized (e.g., gravel lots and on-street parking). Visitors are more likely to park wherever they can find a space which can result in exceeding the estimated parking capacity. Additionally, it is worth noting that with aerial photos, it is difficult to distinguish between “parked” versus “stopped” vehicles. Furthermore, these aerial photos do not capture underground parking spaces, significantly impacting utilization data during special events. These factors may all contribute to the utilization rate exceeding 100% for parking spaces downtown.



Existing Utilization - Normal Business Hours



Parking Lot ID



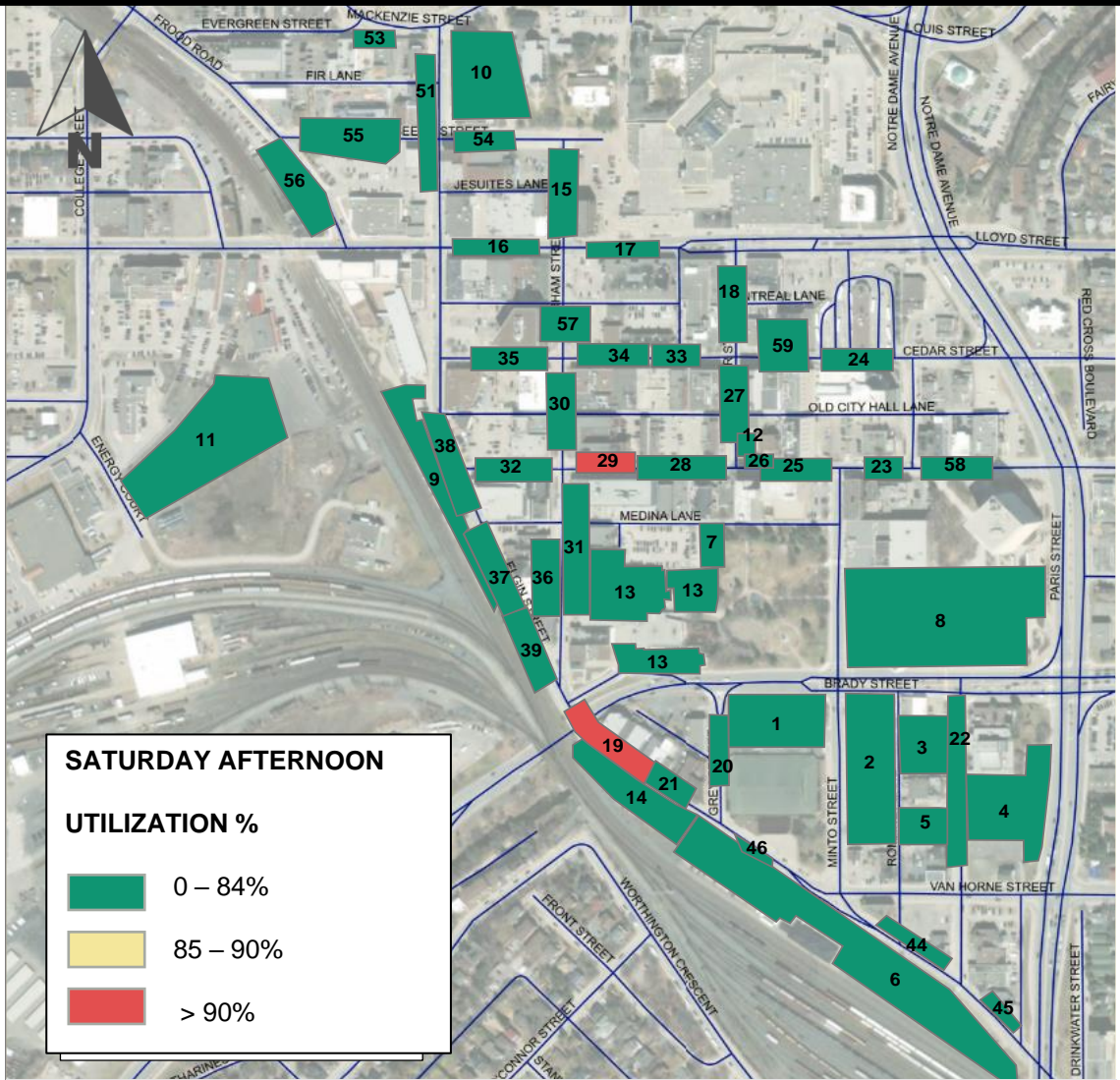
**FRIDAY EVENING
UTILIZATION %**

- 0 – 84%
- 85 – 90%
- > 90%

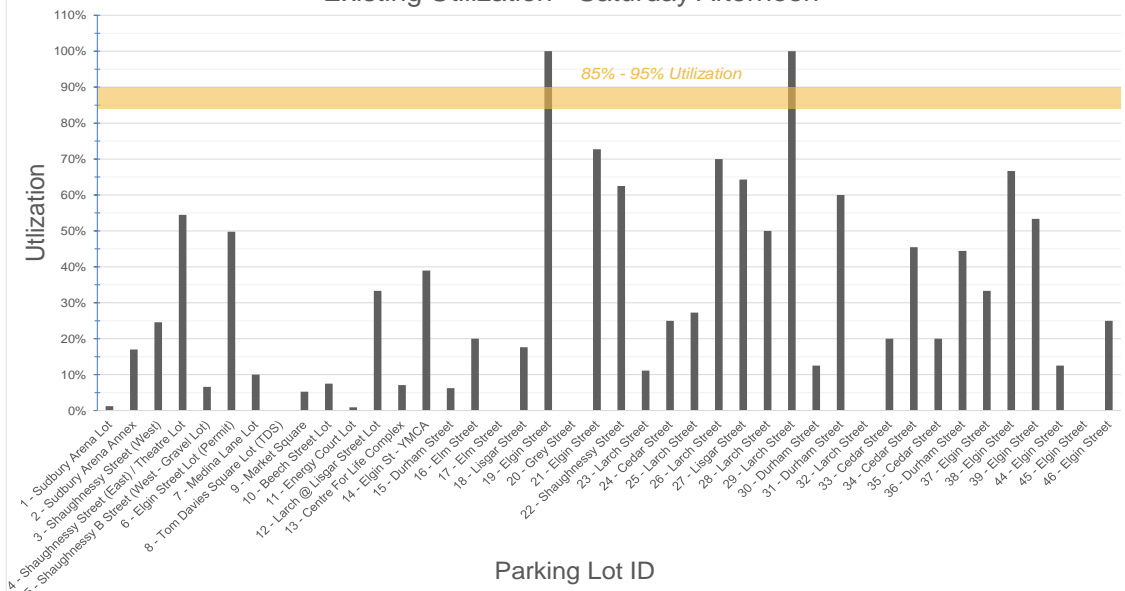
Existing Utilization - Friday Evening

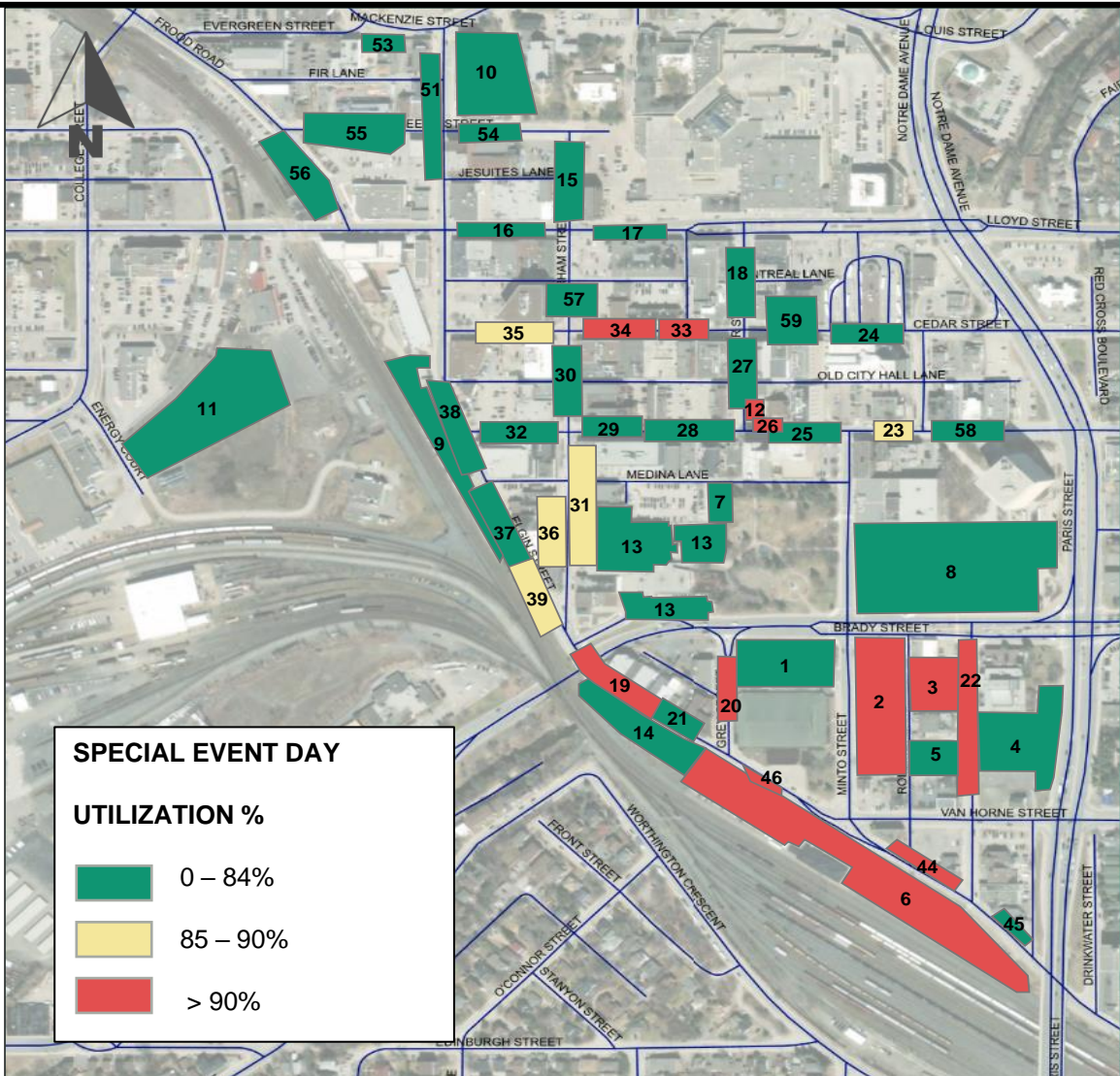


Figure 3: Existing Parking Utilization by Lot - Friday Evening Activity



Existing Utilization - Saturday Afternoon



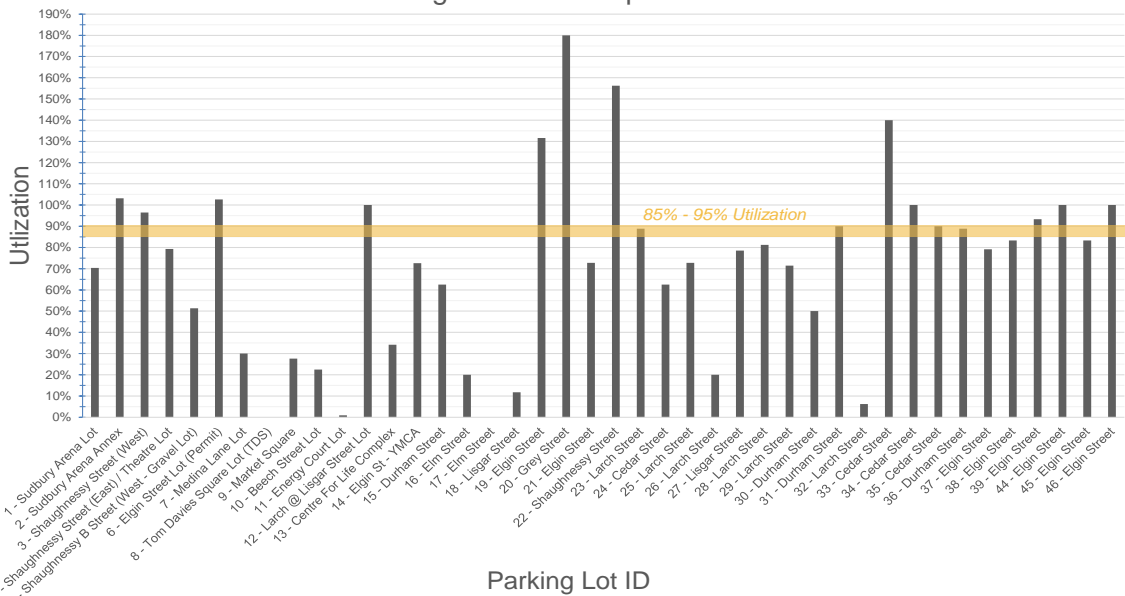


SPECIAL EVENT DAY

UTILIZATION %

- 0 – 84%
- 85 – 90%
- > 90%

Existing Utilization - Special Event



Parking Lot ID

Figure 5: Existing Parking Utilization by Lot - Special Event Day

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

As shown in **Figure 2**, during normal business hours, majority of the parking lots are below the ideal 85% - 90% threshold with the exception of the parking lots on Larch Street (Map ID-26,) and Cedar Street (Map ID-33 and Map ID-34) which are noted to exceed capacity. It should be noted that at the time of this study, the Larch Street – 6 Lot (Map ID-32) was still under construction when aerial imagery was captured. While 16 parking spaces were counted, there are actually 18 on-street parking spots from Elgin to Durham Street.

As shown in **Figure 3**, during Friday evening activity, all parking lots are below the ideal 85% - 90% threshold with the exception of the Cedar Street (Map ID-34).

As shown in **Figure 4**, during Saturday afternoon activity, all parking lots are below or within the ideal 85% - 90% threshold with the exception of the Elgin Street (Map ID-19) and the Larch Street (Map ID-29) on-street lots.

As shown in **Figure 5**, during special event activity, the majority of parking lots are below the ideal the ideal 85%-90% threshold. However, there are several lots that are within or exceed available capacity. These lots include:

- Sudbury Arena Annex (103%)
- Shaughnessy Street West Lot (Map ID-3, 96%)
- Shaughnessy Street West Lot (Map ID-3, 104%)
- Elgin Street Lot (Map ID-6, 103%)
- Larch/Lisgar Street Lot (Map ID-12, 100%)
- Grey Street (Map ID-20, 180%)
- Elgin Street (Map ID-19, 132%)
- Shaughnessy Street (Map ID-22, 156%)
- Cedar Street (Map ID-33, 140%)
- Cedar Street (Map ID-34, 100%)
- Elgin Street (Map ID-39, 93%)
- Elgin Street (Map ID-45, 100%)

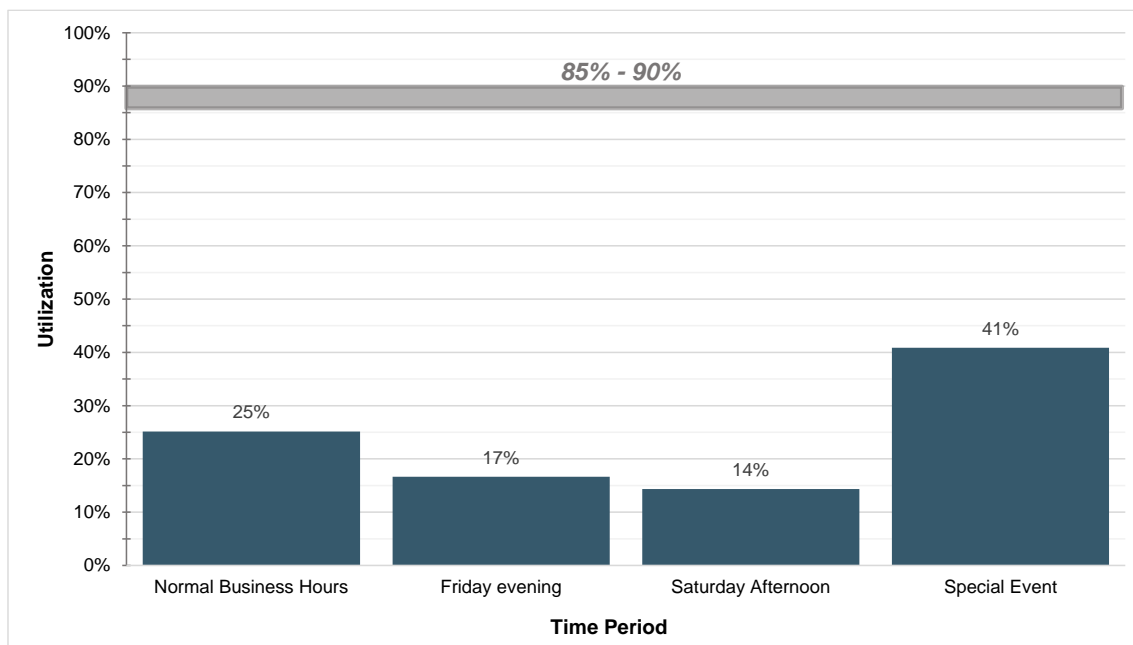
A detailed summary of the existing parking utilization for all parking lots observed in the study area is included in **Appendix C**.

Based on the foregoing, the following graphs in **Figure 6** presents the overall existing parking utilization within the study area during all analysis time periods.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Figure 6: Existing Parking Utilization by Time Period



As shown in **Figure 6**, within the study area, only 25% of parking spaces are utilized during normal business hours, 17% of parking spaces are utilized during Friday evening activities, 14% of parking spaces are utilized during Saturday afternoon activities, and 41% of parking spaces are utilized on special event days. This shows that overall parking utilization within the downtown does not reach the 85% – 90% threshold, indicating that the downtown Sudbury parking system is sufficient to accommodate the existing parking demand.

4.0 Future Conditions and Parking Demand Projection

In 2012, Greater Sudbury Council approved the Downtown Master Plan. Since that time, successive Councils have taken steps to implement the Downtown Master Plan. In more recent years, City Council has approved public realm revitalization projects such as the Tom Davies Square Redesign, Minto Street Civic Corridor (north phase), Brady Green Stair and Brady Street Underpass projects. Council has also approved historic investments in the Downtown Community Improvement Plan to stimulate private sector investment in the building stock downtown.

The intention of this section is to determine future changes in parking demands based on anticipated growth and development plans. Once existing parking capacity is identified and future demands established, appropriate parking strategies can be generated that support the guiding principles. This analysis takes into account existing parking demand and the estimated future parking supply and demand. The following future developments within the downtown were considered:

- The Elgin Greenway
- Downtown Major Mobility Hub
- Sudbury Community Arena/Event Centre
- Cultural Hub at Tom Davies Square

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

4.1 Proposed Developments within the Downtown Core

Elgin Greenway Project

The City has approved the Elgin Greenway, a short-term Vision project identified in the Downtown Master Plan. The greenway extends along Elgin Street from Larch Street in the north to Nelson Street in the south and is intended as a new park and multi-use pathway (MUP) through the Downtown. This project will be constructed in three phases and is currently securing funding for Phase 1, Nelson Street to Shaughnessy Street.

The Elgin Greenway project will reduce the amount of municipal off-street and on-street parking supply in Downtown Sudbury and generate additional demand for parking during weekdays, evenings, and weekends. The off-street parking lots and on-street parking on Elgin Street from Drinkwater Street to Larch Street (i.e., Map IDs 6, 9, 14, 19, 21, 37, 38, 39, 44, 45, and 46 depicted in **Figure 1**) will be affected by the construction of this project.

The following **Table 1** provided by the CGS summarizes the change in parking supply, as a result of the Elgin Greenway project. This table is based on the City Council report dated May 9th, 2017. The resulting loss in the Downtown’s parking capacity is 270 spaces due to the Elgin Greenway, leaving a total number of 266 parking spaces remaining within the project limits.

Table 1: Elgin Greenway – Change in Parking Supply

Lot Name	Current	Proposed	Net Parking Impact (#)	Net Parking Impact (%)
YMCA Lot	95	42	-53	-56%
VIA Rail ¹	15	16	1	7%
CP Lot ¹	285 ²	137 ²	-148	-52%
On-Street	81	45	-36	-44%
Total	536	266	-270	-50%
Notes: 1. The VIA Rail Lot and CP Lot are included as the <i>Elgin Street Lot (Permit)</i> , Map ID-6. 2. This represents the number of parking permits sold for this lot and not the number of parking spaces available.				

Downtown Major Mobility Hub

The CGS is currently conducting a feasibility study in support of the new major mobility hubs (MMH) within the Downtown, New Sudbury (north end), and South End regions of the city. These MMHs would support the future growth and GOVA and overarching multimodal goals of the CGS.

The Downtown MMH is currently located at 9 Elm Street in the Downtown Core with three right-in/right-out accesses, one on Elm Street and two on Cedar Street. As part of the Feasibility process, a high-level screening analysis was completed to identify potential new MMH locations for each MMH site. The new location for the Downtown MMH may have an impact on the current off-street and on-street parking downtown. Changes in parking supply due to the MMH relocation is unknown at this moment and would need to be considered in future parking studies.

Sudbury Community Arena/Event Centre

The Sudbury Community Arena (SCA) was originally built in 1951 and has been serving the community continuously since then. Over the past 70 years, like most public facilities, the SCA faced inconsistent investment in asset renewal and repair/maintenance. This lack of alignment

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

with expenditure timing and levels affected the facility’s state of repair. In recent times, the County has embarked on plans to renovate the SCA.

The renovated SCA has the potential to remove approximately 271 parking spaces from the Sudbury Arena Annex Lot, Shaughnessy Street (West) Lot, and Shaughnessy B Street (West) Lot (i.e., Map-IDs 2, 3, and 5). It should be noted that the impact of the reduced parking supply from the proposed event centre has not been included in the subsequent analysis and would need to be considered in future parking studies.

Table 2: Sudbury Community Arena/Event Centre – Change in Parking Supply

Lot Name	Current	Net Parking Impact (#)	Net Parking Impact (%)
Sudbury Arena Annex	159	-	-
Shaughnessy Street (West)	57	-	-
Shaughnessy B Street (West)	76	-	-
Total	292	- 271	- 93%

Resulting Parking Loss

As shown in **Table 1** and **Table 2**, the resulting parking capacity loss is 541 spaces, leaving a total number of 1,641 municipal parking spaces in the downtown district.

Cultural Hub at Tom Davies Square

The City has approved the Cultural Hub at Tom Davies Square (TDS) Project. This project would serve as a significant hub in Greater Sudbury’s historic downtown and be home to a central library, an art gallery, and a multicultural facility. Initially, this Cultural Hub was part of the Junction East Cultural Campus project, but the City Council has since made the decision to permanently close out that project and move forward with the Cultural Hub at TDS.

Outlined in Exhibit 3-1 of the previous 2018 Downtown Parking Study Update, the Junction East development is projected to generate a new parking demand of approximately 75 vehicles during the morning and afternoon weekday peak hours (i.e., 75 additional vehicles looking to park near the planned Junction East development during peak hours). This demand was provided by CGS staff for the 2018 IBI Report, noting that the provided estimates are applicable for morning and afternoon peak hours. It was assumed in the previous report that the parking demand would be higher during weekday evenings and weekends, however this report did not assess those time periods.

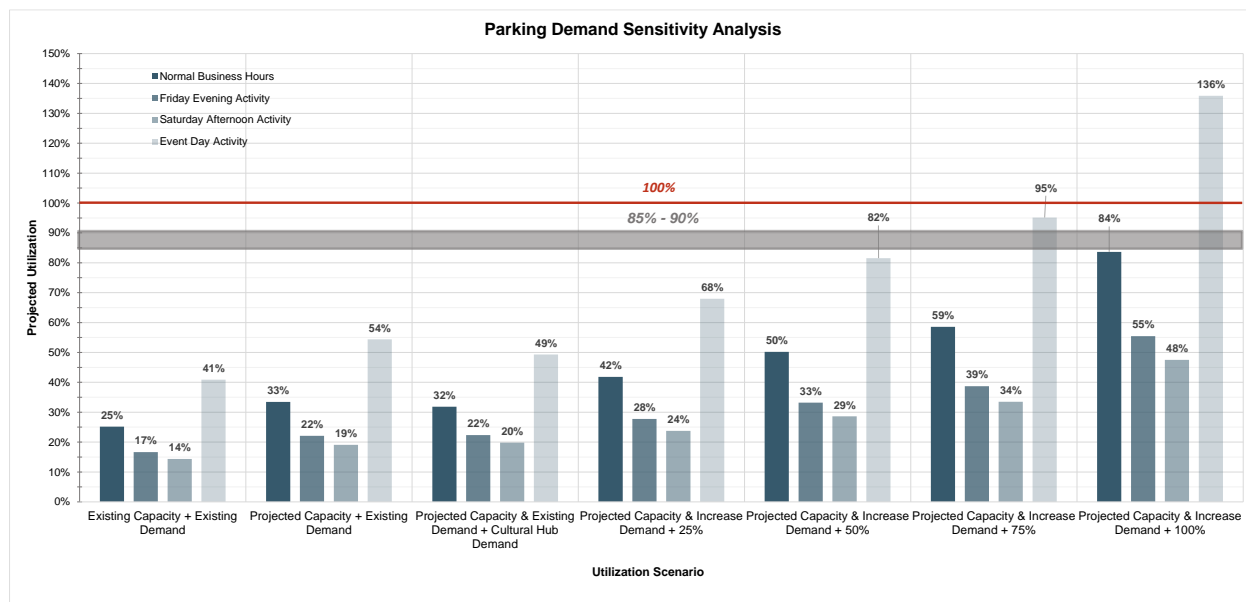
4.2 Future Parking Capacity Analysis

To better determine the effects of a reduced parking supply, a sensitivity analysis was completed for the peak times identified in **Section 3.2**. This was completed by increasing the time-period demand by 75 vehicles (i.e., the added parking demand of the Cultural Hub at TDS), a 25% increase in observed demand, +50%, +75%, and +100% to show projected parking utilization with a reduced parking supply (i.e. based on the loss of 270 parking spaces from the Elgin Greenway project and 271 parking spaces from the SCA). The result of this analysis is summarized in **Figure 7** for normal business hours, Friday evening activity, Saturday afternoon activity, and special event activity time periods, respectively.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Figure 7: Parking Demand Sensitivity Analysis for all Analysis Periods



As shown in **Figure 7**, during normal business hours, the parking system can accommodate a 100% increase in demand with 1% to 6% of spare capacity available. On Friday evenings, the parking system can accommodate a 100% increase in demand with 30% to 35% of spare capacity available. On Saturday afternoons, the parking system can accommodate a 100% increase in demand with 37% to 42% of spare capacity available. During event day activity, the parking system can accommodate up to a 50% increase in demand with 3% to 8% of spare capacity available.

It should be noted that the existing and projected parking supply is sufficient during all time periods and does not exceed the ideal 85% to 90% utilization threshold. However, should demand increase by 75%, there is insufficient parking within the Downtown for special events. In this case, visitors will need to travel to/from the downtown using an alternative mode (e.g., transit, bike, walk, etc.), should the parking capacity decrease due to the construction of major future developments.

As such, there is no need to implement a new formalized parking structure within the downtown area, based on projected parking demand and supply. Future growth within Downtown Sudbury can be accommodated with deliberate parking management strategies as discussed in **Section 5.0**.

5.0 Mission and Strategic Goals

5.1 Mission

The City of Greater Sudbury desires to effectively manage the downtown parking system such that it is sustainable, easy, and convenient for all users and supports the long and short-term parking needs of residents, visitors, and local businesses.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

5.2 Guiding Principles

From the mission of the future downtown parking landscape, five guiding principles were established to inform the strategic direction and action from this strategic plan. The guiding principles are intended to assist the City in decision-making around parking policy, management, enforcement, and sustainable transportation planning, illustrated in **Figure 8**.

Figure 8: Guiding Principles



Based on this understanding, a set of recommended priority areas were developed aligning with the guiding principles and industry-standard best practices. These distinct priority areas are:

- Existing Parking Lots
- Parking Availability
- Parking Demand
- Sustainable Parking

5.3 Priority Areas

Priority Area 1: Existing Parking Lots

Enhancing the efficiency of parking facilities is a strategic approach aimed at optimizing the use of existing parking spaces. This priority area seeks to streamline parking operations, reduce congestion within parking lots, and improve overall access.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Goal 1A: Maximize the use of existing parking lots through formalization of existing gravel parking lots.

Some on-street and off-street parking spaces in the study area are not formalized (i.e., delineated or “marked”). As a result, when the lot is approaching capacity, drivers may not park their vehicles properly, leading to challenges in inefficient parking and other potential issues like safety, pedestrian access, etc.

Formalizing parking lots with asphalt and demarked parking stalls will make it easier and safer for drivers to navigate and ultimately provide a more organized lot. This will reduce the occurrence of converged lanes and eliminate the potential of double and/or triple parking. Formalized lots will also ensure the capacity is optimized for the greatest number of spaces available.

Costs of this measure include paving existing gravel lots and implementing paint markings with the additional cost of continued maintenance to ensure the lots are up to City standards. Note that while this may be welcomed by patrons/visitors, this measure does not encourage sustainable transportation to/from the downtown.

The following are the key impacts the formalization of existing parking lots will have:

- Delineating the parking lots improves overall road safety and pedestrian access for on-street parking spaces. Vehicles will remain within the parking lane, which reduces instances of vehicles parking in pedestrians’ right-of-way or encroaching on the travel lane.
- Delineating the parking lots will increase the overall efficiency and capacity of the existing parking lots. It was observed from the parking lot data that there were several instances of large gaps between two vehicles parked in lots that had no markings. Delineating these parking spaces would allow for more vehicles to park in those lots and thereby increase the efficiency of the parking facility.
- Lastly, the formalization of existing parking lots will provide the CGS with a more accurate parking inventory that could be used to accurately track the parking conditions of each parking lot. This would help in parking management, estimating utilization and administering parking pricing strategies.

Goal 1B: Aim for a utilization rate of 85% to 90% for all parking lots.

As outlined in **Section 3.0** and **Section 4.0**, the existing and future parking system has spare capacity to accommodate the overall parking demand during the peak analysis periods. However, it is also noted that some parking lots had a utilization rate above the desired threshold of 85% to 90%, (e.g., the Arena Annex Lot, Elgin Street Lot (Permit)) during special events. To ensure a more balanced distribution of the parking space utilization, measures can be implemented to maximize parking lot use throughout the downtown.

This can be done through variable wayfinding message signs integrated with parking monitoring and optimization systems which can be used to guide visitors and patrons to parking lots with available spaces. This would minimize the need for drivers searching around for parking and increase efficiency by directing drivers to unused spots.

Costs associated with this recommendation would primarily involve investments in monitoring technology or personnel to track and manage parking utilization. The maintenance required would

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

involve continuous monitoring and adjustments to parking rates or policies to maintain the desired utilization rate.

The following are the key impacts of aiming for a utilization rate of 85% to 90%:

- Achieving a utilization rate of 85% to 90% ensures that available parking facilities are used effectively, reducing the need for additional parking infrastructure and its associated costs.
- By maximizing utilization throughout the entire Downtown core, this can contribute to smoother traffic flow within parking facilities and reduce traffic congestion in popular lots, making it easier for people to move around more easily.

Priority Area 2: Parking Demand

This priority area aims to alleviate the burden on parking infrastructure by actively decreasing the need for excessive parking. Through the promotion of alternative transportation modes, such as public transit, biking, and carpooling, this strategy seeks to minimize the overall demand for parking spaces.

Goal 2: Manage parking demand throughout the Downtown by improving parking connectivity to transit and active mode facilities.

As noted from the TDM plan, the City of Greater Sudbury is an automobile-dependent city as there is a high percentage of those driving compared to other travel mode choices. The Greater Sudbury 2021 Census of Population provides the percentage of trips for each commuting mode choice:

- Car, truck or van (as a driver) – 83.6%
- Car, truck or van (as a passenger) – 6.3%
- Public transit – 4.0%
- Active transportation – 3.9%
- Other methods – 2.2%

In addition, a survey analysis completed in the TDM plan outlines the percentage of trips for each mode choice as follows:

- Single occupancy vehicles – 65%
- Carpooling – 13%
- Transit – 13%
- Cycling – 6%
- Walking – 3%

Both sources of data conclude that driving alone is the preferred mode choice of travel due to convenience and flexibility, travel time, and lack of other options. As a result of the high percentage of single occupancy vehicle trips, this creates a higher demand for parking downtown than there would be if there are more convenient and attractive options for other modes of travel. In order to encourage travel using transit and other active modes, and in effect, reduce the parking demand Downtown, infrastructure that improves parking connectivity to transit and active mode facilities has to be installed.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Costs would involve infrastructure development, such as constructing bike lanes, pedestrian walkways, or shuttle services connecting parking lots to transit hubs. Maintenance would require regular upkeep of these facilities, including snow clearance, signage maintenance, and ensuring safety measures. The long-term benefit would encourage sustainable transportation choices, but initial costs and ongoing maintenance might be substantial.

The CGS's 2024-2025 Budget Overview mentions an increase in transit revenue due to recent ridership trends. Effective January 15, 2024, an increased rate will apply to GOVA transit fares. This is a positive outlook as funds can be allocated towards improving transit connectivity. However, with the parking fees still at a lower cost to transit fares, commuters may prefer travelling by private vehicles.

The key impacts of improving this connectivity are as follows:

- Better parking connectivity encourages more individuals to use public transportation due to the convenience of parking near transit hubs.
- As commuters are encouraged to use public transportation, parking demand is reduced downtown and the existing parking facilities can be utilized efficiently.

Priority Area 3: Parking Availability

This priority area focuses on implementing policies and programs like shared parking agreements and alternative transportation incentive programs to expand the existing parking capacity. The goal is to increasing parking availability without constructing new lots.

Goal 3A: Implement policies for shared parking lots for multiple land uses.

One of the most practical solutions for accommodating any increase in parking demand, without building additional parking supply is shared parking. Policies can be implemented to encourage shared parking agreements to be made for an area with multiple land uses. For example, commercial uses tend to peak during the weekday mornings/afternoons whereas residential uses tend to peak during the weekday evenings. An area with a combination of commercial and residential land uses may benefit from a shared parking agreement as residents would leave their homes in the morning leaving the parking space available for employees in that area. These policies can be implemented at both the site level and throughout the downtown area to maximize opportunities for shared parking lots.

Sections 39 and 40 in Part VI of the Traffic and Parking By-Law outline the restrictions for parking on public and private property without proper authorization. Any shared parking policy must consider these restrictions and incorporate well-defined procedures for obtaining the necessary permissions as part of its implementation.

Costs for this recommendation include administrative efforts to establish agreements among different entities for shared parking, potentially involving legal consultations and negotiations. Maintenance would involve ensuring compliance with the shared parking policies and ongoing monitoring to prevent conflicts or misuse of shared spaces. The benefits would include optimized space utilization and reduced need for new parking construction. However, it might require ongoing coordination and management efforts.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

The key impacts of implementing policies for shared parking lots include:

- With shared parking spaces, the overall parking footprint within the Downtown region can be minimized. This leads to a more compact urban environment, preserving space for other land uses.
- Shared parking policies can aid costs savings for businesses, property developers and the City by reducing the need for each establishment to provide dedicated parking for new developments.
- By implementing shared parking policies, this would also allow visitors and patrons in the Downtown region to access multiple destinations more conveniently.
- Shared parking policies encourage mixed-use developments which promote vibrant and diverse neighborhoods that make communities walkable.

Goal 3B: Implement incentive programs for patrons parking Downtown, during both everyday use and special events.

For everyday parking, providing incentives during off-peak hours for on-street parking spaces can help distribute parking demand throughout the day and reduce congestion during peak hours. In addition, during special events, incentivizing alternative transportation methods such as transit, park and ride options, carpooling, etc. could alleviate strain on the parking system downtown.

Costs would include the financial incentives provided, such as discounts or vouchers, impacting revenue initially. Maintenance would involve managing and adjusting the incentive programs to ensure effectiveness and sustainability. This recommendation could attract more visitors to the Downtown region increasing overall City revenue but might require careful financial planning to balance the incentives' costs and benefits.

The key impacts of implementing such parking incentive programs include:

- Offering incentives for using public transit, carpooling or parking during off-peak hours would promote a behavioral shift towards sustainable transport. This shift reduces reliance on single-occupancy vehicles and hence, would reduce the parking demand in the Downtown region.
- During special events, incentive programs can attract more visitors which would increase foot traffic downtown and benefit local businesses.

Priority Area 4: Sustainable Parking

The Sustainable Parking strategy advocates for eco-friendly solutions in parking management. By promoting sustainability within parking facilities, this strategy aligns with broader environmental goals for the City while addressing the evolving parking needs in the City.

Goal 4A: Determine the feasibility of public infrastructure for electric vehicle (EV) charging stations within municipal parking lots.

The Community Energy and Emissions Plan (CEEP) has identified the need to modify the parking infrastructure within the City to encourage the adoption of EVs and in effect, reduce vehicle emissions. The municipal policy initiatives that have been outlined in the CEEP. As mentioned in **Section 2.2**, the CEEP has outlined municipal policy initiatives for EV adoption. One of these initiatives includes retrofitting 10% of parking spaces and the City plans to do that through the

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

provision of funding via incentives or rebates. To achieve this, the City is recommended to take the following approaches:

- Conduct a comprehensive study to assess the technical, financial, and logistical feasibility of installing EV charging infrastructure in municipal parking lots.
- Encourage property owners to participate in the retrofitting process by providing incentives or rebates which can include:
 - Financial incentives such as grants or subsidies to property owners who opt to retrofit their parking spaces.
 - Tax credits or deductions for expenses incurred in installing EV charging infrastructure in existing buildings.
 - Waiving or reducing permit fees for the installation of EV charging stations
 - Partnering with utility companies to offer reduced rates for electricity used in EV parking facilities.

By considering EV adoption, the City can mitigate parking demand by optimizing existing spaces and fostering a more diverse and sustainable transportation network. This would gradually reduce dependence on gas-powered automobiles and in turn, reduce vehicle emissions.

The costs for installing EV charging infrastructure include conducting studies, surveys, and engineering assessments to determine optimal locations and required resources. Initial investments would include the purchase and installation of charging stations, electrical infrastructure upgrades in the City, and retrofitting parking lots. Regular maintenance would be necessary to ensure the functionality and safety of the charging stations. Ongoing costs could include electricity consumption, periodic maintenance, and updates to keep up with evolving EV technology. While the initial costs may be substantial, the long-term benefits are significant in supporting sustainable transportation choices and contributing to the overall environmental goals of the City.

Given the recent announcements by the Federal Government regarding EV production and usage, the CGS has a unique opportunity to leverage federal and provincial incentives to support the installation of EV charging infrastructure.

The key impacts of retrofitting public infrastructure for EV adoption are as follows:

- Integrating EV charging stations within existing parking infrastructure allows for the utilization of the same space for both gas-powered vehicles and electric vehicles. This eliminates the need for additional parking areas,
- EV owners may adjust their parking behaviors, choosing specific locations or times for charging, thereby reducing peak parking demands during high-traffic periods.
- EV charging sessions can occur during longer-duration stays (e.g., work hours), optimizing parking spots that might otherwise remain underutilized during these periods.
- While EVs are still automobiles that require parking spaces, their adoption aligns with a broader shift towards sustainable transportation. By encouraging EV usage, the City can promote a shift towards a more diverse and sustainable transportation system, reducing vehicle emissions.
- Lastly, retrofitting allows for integration with smart parking technologies, enabling real-time monitoring of charging stations, availability, and reservation systems.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

The feasibility of installing public infrastructure for EV charging stations within municipal parking lots can be assessed in the short term. Upon completion of the feasibility study, an implementation plan can be developed for installation of the charging stations.

Goal 4B: Increase the occupancy of parked vehicles.

As noted under Goal 2, the CGS TDM plan identifies approximately 65% of vehicles are single occupancy and on 13% of vehicle are carpooling. To increase the occupancy of parked vehicles (i.e., increasing the percentage of carpooling vehicles), incentive programs can be implemented to encourage patrons of the Downtown core to carpool. Example incentive programs for carpooling vehicles are as follows:

- Allocating designated parking spaces for carpooling vehicles.
- Offering discounted or reduced parking fees exclusively for carpooling vehicles.
- Implementing programs that match prospective rideshare participants together.
- Providing parking benefits, such as free or subsidized parking, for rideshare drivers who actively participate in carpooling initiatives.

Implementing rideshare programs often encounters challenges, potentially stemming from a lack of interest among commuters. Nevertheless, the substantial benefits these programs offer justify the efforts required for implementation. Encouraging commuter participation can be achieved through various strategies. These include enhanced marketing campaigns, improved access, more appealing incentives, streamlined user experience in rideshare apps, and fostering partnerships with local businesses or transportation providers. These proactive measures will help to overcome initial hurdles and promote wider adoption of rideshare programs.

The key impacts of increasing the occupancy of parked vehicles are as follows:

- Increasing the percentage of carpooling vehicles means more efficient use of available parking spaces, potentially reducing the need for additional parking infrastructure.
- Carpooling leads to fewer vehicles on the road, which can result in reduced emissions and environmental impact.
- Programs that match rideshare participants or provide benefits to rideshare drivers foster a sense of community among commuters which contributes to a more vibrant and community-oriented downtown.

6.0 Transportation Demand Management Toolbox

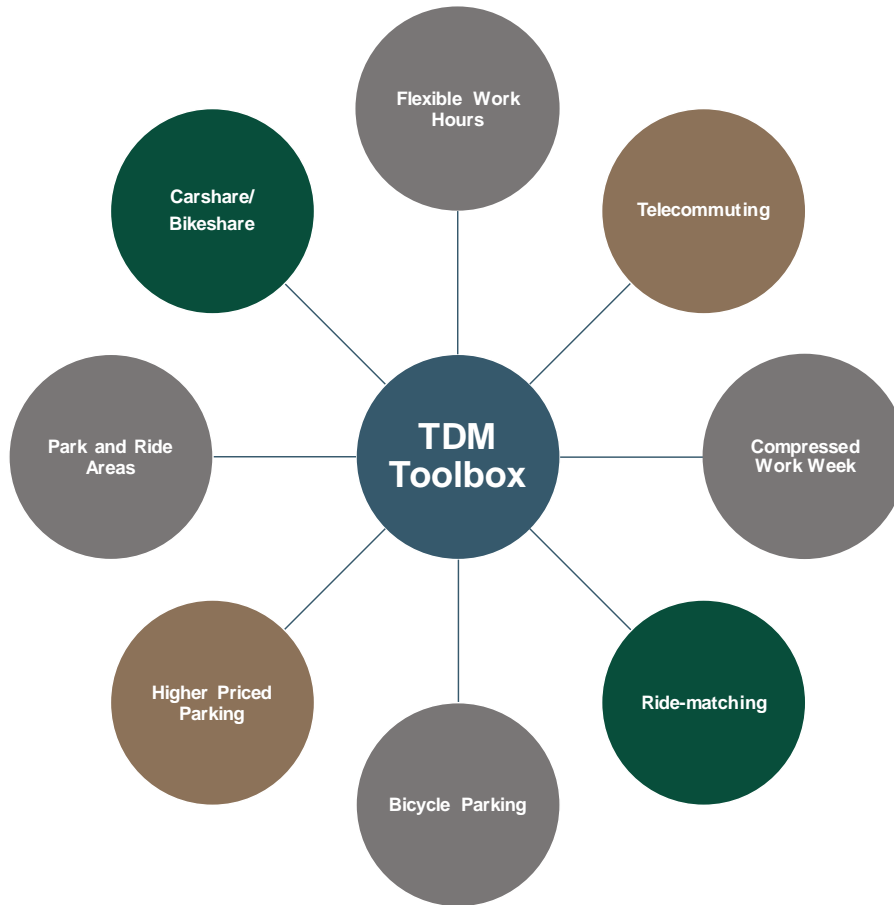
Transportation Demand Management (TDM) measures are typically implemented to help balance travel modal shares within an area by providing more attractive non-auto options for travel. As mentioned in **Section 2.2**, the City completed a TDM Plan in April 2018 outlining potential measures to be considered for implementation in Greater Sudbury.

To ensure the parking supply within the Downtown remains sufficient during all time periods, the following measures selected from the TDM plan, can be considered to reduce overall parking demand. These suggested measures below form the Parking Strategy Plan TDM Toolbox that will help alleviate potential stress experienced by the parking system within the Downtown, depicted in **Figure 9**.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Figure 9: Parking Strategy TDM Toolbox



Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Flexible Work Hours

Implementing flexible work hours allows employees to stagger their work schedules, reducing the peak demand for parking during rush hours. This strategy encourages individuals to commute during off-peak times, easing congestion in downtown parking areas. Employers can offer varied start and end times, enabling employees to avoid the typical rush, thereby reducing the strain on parking facilities during peak hours. The success and feasibility of this measure depend on the willingness of employers to embrace flexible scheduling and the adaptability of the workforce.

Telecommuting

Encouraging telecommuting allows employees to work from home or from a remote office, thereby eliminating the need for commuting to downtown offices altogether. By leveraging technology, individuals can perform their duties from home or remote offices, significantly reducing the demand for parking spaces downtown. This strategy not only alleviates parking congestion but also contributes to a decrease in traffic congestion, air pollution, and commuter stress. However, the successful implementation of telecommuting relies on the nature of jobs and the willingness of employers to adopt remote work policies. Following the COVID-19 pandemic, the CGS has established a Remote Work Program that allows employees to work from a remote office within a CGS work location. This policy can be implemented by employers for eligible job positions, allowing either full-time or part-time remote work.

Compressed Work Week

Offering a compressed work week, such as a four-day workweek with longer daily hours, provides employees with an extra day off, reducing the number of commuting days. This measure can alleviate parking demands by reducing the frequency of commuters driving into downtown. By condensing the work schedule, employees can avoid commuting on one day, thereby reducing the strain on parking facilities. The feasibility of this strategy depends on the adaptability of businesses and the compatibility of job roles with compressed schedules.

Ride-matching

Facilitating ride-matching services encourages commuters to share rides, reducing the number of individual vehicles entering downtown. This measure not only reduces parking demand but also promotes a more sustainable and environmentally friendly mode of transportation. Ride-matching platforms or programs connect individuals with similar commuting routes, enabling them to share rides and split commuting costs. The success of this measure depends on the access and user-friendliness of the ride-matching platform and the willingness of commuters to embrace carpooling.

Bicycle Parking

Providing ample and secure bicycle parking facilities incentivizes residents and commuters to opt for cycling as a mode of transportation. Access to secure bike storage at destinations encourages more individuals to choose cycling, reducing reliance on cars and subsequently easing parking demand downtown. The associated costs and effectiveness of this measure vary depending on the type of facilities offered, with permanent indoor facilities being more costly compared to outdoor or temporary options. Implementing secure bicycle parking requires consideration of space, security measures, and maintenance.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

Higher Priced Parking

Implementing higher parking fees during peak hours incentivizes drivers to consider alternative transportation options or adjust their schedules to avoid peak times. By using price as a mechanism to regulate parking demand, this measure encourages more efficient use of parking spaces and discourages long-term parking, thus freeing up spaces for short-term visitors. However, the success of this strategy depends on a delicate balance, as excessively high prices might deter visitors or commuters from utilizing downtown parking altogether.

Park and Ride Facilities

Establishing parking areas outside the downtown core, such as Park and Ride facilities, encourages commuters to park their vehicles in designated areas and use alternative modes of transportation to reach downtown. This strategy reduces congestion in the downtown area by minimizing the number of vehicles seeking parking within the central business district. The success of Park and Ride facilities depends on factors like access, convenience, and the availability of efficient transportation options from these remote parking areas to the downtown center.

Carshare/Bikeshare

Introducing carshare and bikeshare programs provides convenient alternatives to private vehicle ownership, thereby reducing the overall demand for parking spaces. Carshare programs allow individuals to use vehicles on a short-term basis when needed, reducing the need for personal vehicle ownership and parking spaces. Similarly, bikeshare programs offer convenient access to bicycles for short trips, promoting sustainable transportation and reducing reliance on cars. The success of these programs depends on access, affordability, and the ease of use of the shared transportation services.

By implementing the above strategies, more people will opt for sustainable travel, reducing traffic to Downtown and lessening the need for increased parking capacity. Many of these measures offer added convenience and flexibility for commuters while prioritizing sustainability as envisioned in the CGS's CEEP and TDM Plan.

6.1 Implementation of Strategic Parking Plan

An implementation plan has been prepared to guide the CGS with each of the recommended mission strategies provided in **Section 5.2**.

The implementation plan identifies when the action could be implemented, the priority of each item and relative cost for implementation and is included in **Table 3** below.

Table 3: Recommended Implementation Plan

Goal		Action	Priority	Relative Cost	Challenges	Key Impact
1 Existing Parking Lots						
1A	Formalization of existing gravel parking lots	<ul style="list-style-type: none"> → Pave existing gravel lots → Apply paint markings on parking stalls 	Short Term	\$\$	Businesses operating in the vicinity of the gravel lots may be adversely affected during the construction and formalization process. Paved lots would also require ongoing maintenance.	<ul style="list-style-type: none"> • Improves road safety and pedestrian accessibility • Increases lot efficiency and capacity • Provides accurate parking inventory for management and pricing strategies
1B	Aim for a utilization rate of 85% to 90% for all parking lots	<ul style="list-style-type: none"> → Install wayfinding signage → Integrate variable message signs with monitoring systems 	Long Term	\$	High utilization may lead to traffic congestion and safety issues.	<ul style="list-style-type: none"> • Efficient parking utilization • Smoother traffic flow • Minimized search time for drivers
2 Parking Demand						
2A	Improve parking connectivity to transit and active mode facilities	<ul style="list-style-type: none"> → Construct bike lanes and pedestrian and pedestrian walkways → Establish shuttle services connecting lots to transit hubs 	Medium Term	\$\$\$	<p>May require significant infrastructure changes, such as adding bike lanes or pedestrian walkways.</p> <p>Encouraging people to shift from private vehicles to public transit or active modes may face resistance and require behavior change campaigns.</p>	<ul style="list-style-type: none"> • Encourages public transit use • Reduces downtown parking demand • Enhances efficiency in parking facilities
3 Parking Availability						
3A	Implement policies for shared parking lots for multiple land uses	<ul style="list-style-type: none"> → Identify possible land uses where shared parking policies could be implemented → Establish agreements for shared parking 	Medium Term	\$	Implementing shared parking policies may face opposition from different land use stakeholders, especially if it affects their existing parking arrangements	<ul style="list-style-type: none"> • Minimizes parking footprint • Promotes mixed-use developments and walkability
3B	Implement incentive programs for patrons parking Downtown, during both everyday use and special events	<ul style="list-style-type: none"> → Provide off-peak parking incentives → Offer rewards for alternative transportation during special events 	Short Term	\$\$	Funding incentive programs for patrons could be a challenge, especially during special events when costs may increase significantly.	<ul style="list-style-type: none"> • Eases congestion during events • Boosts downtown foot traffic and business
4 Sustainable Parking						
4A	Determine feasibility of public infrastructure for electric vehicle charging stations within municipal parking lots	<ul style="list-style-type: none"> → Conduct a feasibility study for electric vehicle charging infrastructure → Encourage property owners via incentives → Partner with utilities for reduced rates 	Long Term	\$\$	Installing and managing electric vehicle charging stations requires technological integration	<ul style="list-style-type: none"> • Maximizes existing parking space • Encourages electric vehicle adoption • Optimizes parking during peak time • Supports sustainable transportation
4B	Implement carpool incentive programs to increase the occupancy of parked vehicles.	<ul style="list-style-type: none"> → Implement priority parking spaces for carpooling vehicles. → Implement programs to match prospective rideshare participants together. 	Medium Term	\$	Determining if occupants of the parked vehicles are actually carpooling.	<ul style="list-style-type: none"> • Increased carpooling vehicles decreases congestion throughout the City. • Decreases emissions with as patrons downtown are using less vehicles to travel.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

7.0 Conclusion and Recommendations

The Downtown Sudbury Strategic Parking Plan provides a comprehensive framework for optimizing parking management within the downtown. This plan prioritizes the allocation of resources towards achievable goals, ensuring efficient utilization of the existing parking infrastructure.

As the City of Greater Sudbury and its Downtown is experiencing growth with the rise of new developments, it may seem that the city needs a robust and major change in its existing parking system, at first glance. However, the analysis of the existing and future municipal parking supply/demand suggest that the current parking system is sufficient to meet both existing and future parking demands. Private parking supply is also available to accommodate projected demand. These private parking spaces contribute to the parking supply downtown and can serve various office, retail, and residential uses. As such, future growth within Downtown Sudbury can be accommodated with deliberate parking management and TDM strategies implemented in the short-term, medium-term, and long-term. However, the City should continually assess the adequacy of the parking supply as steps are taken regarding future developments.

Key strategic recommendations to efficiently manage the parking demand in Downtown Sudbury were identified and are highlighted below:

- Formalize existing gravel parking lots with delineated spaces to enhance capacity, organization, and safety.
- Integrate variable wayfinding message signs to balance parking lot usage and reduce congestion in popular parking areas.
- Increase parking connectivity to transit and active mode facilities to decrease dependence on automobiles.
- Implement shared parking policies and incentive programs for off-peak periods and special events.
- Implement studies to determine the feasibility of public electric vehicle charging infrastructure in select parking lots.
- Implement carpool incentive programs to increase the occupancy of parked vehicles.

The success and vibrancy of Downtown Sudbury relies on the effectiveness of its parking management system. By implementing the outlined recommendations, there is an opportunity to develop a sustainable and accessible parking system. This system will not only foster economic growth but also improve the overall quality of life for residents and visitors alike, ensuring the continued vibrancy of the downtown core.

Downtown Sudbury Strategic Parking Plan

Phase B – Strategic Parking Plan Update

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J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:

Reviewed by:

Bomo Dambo, EIT
Transportation Engineer-in-Training

Lee Jablonski, P.Eng. LEED AP
Senior Transportation Engineer

Appendix A

Existing Parking Inventory

Table A-1: Existing Parking Inventory – Municipal Parking Lots

Map ID	Description	Type	Parking Supply	Fees and Restrictions
1	Sudbury Arena Lot	Off-Street	81	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$82
2	Sudbury Arena Annex (Minto Street Lot)	Off-Street	159	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$82
3	Shaughnessy Street (West)	Off-Street	56	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$82
4	Shaughnessy Street (East) / Theatre Lot	Off-Street	110	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$82
5	Shaughnessy B Street (West)	Off-Street	56	Mon to Fri 8AM to 6PM Monthly pass: \$82 <i>Monthly parking only, except after 6PM, weekends, and special events</i>
6	Elgin Street /CP Rail Lot	Off-Street	225	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$51 <i>Parking in front of the VIA Rail Station is reserved for rail customers</i>
7	Medina Lane Lot	Off-Street	20	Pay & Display only Per hour: \$1.30
8	Tom Davies Square Lot (TDS)	Off-Street	295	Per hour: \$1.30 Daily Maximum: \$15 Monthly Pass: \$51
9	Market Square	Off-Street	210	Pay & Display only Per hour: \$1.30
10	Beech Street Lot	Off-Street	107	Per hour: \$1.30 Daily maximum: \$8.25 Monthly: \$93
11	Energy Court Lot	Off-Street	218	Per hour: \$1.30 Daily Maximum: \$8.25
12	Larch @ Lisgar Street Lot	Off-Street	9	Metered Spaces Per hour: \$1.30
13	Centre for Life Complex	Off-Street	155	Pay & Display only Per hour: \$1.40
14	Elgin St – YMCA (Elgin Street / CP Rail Lot)	Off-Street	95	Mon to Fri 8AM to 6PM Per hour: \$1.30 Daily Maximum: \$8.25 Monthly Pass: \$51 <i>Parking in front of the VIA Rail Station is reserved for rail customers</i>

Map ID	Description	Type	Parking Supply	Fees and Restrictions
15	Durham Street	On-Street	16	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
16	Elm Street	On-Street	10	Per hour: \$2 One hour time limit No Parking between 7:30 to 9 AM and 3:30 to 6 PM from Mon to Fri
17	Elm Street	On-Street	15	Per hour: \$2 One hour time limit No Parking between 7:30 to 9 AM and 3:30 to 6 PM from Mon to Fri
18	Lisgar Street	On-Street	17	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
19	Elgin Street	On-Street	20	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
20	Grey Street	On-Street	5	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
21	Elgin Street	On-Street	12	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
22	Shaughnessy Street	On-Street	16	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
23	Larch Street	Street	9	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
24	Cedar Street	Street	8	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
25	Larch Street	Street	11	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
26	Larch Street	Street	10	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
27	Lisgar Street	Street	14	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends

Map ID	Description	Type	Parking Supply	Fees and Restrictions
28	Larch Street	Street	16	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
29	Larch Street	Street	7	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
30	Durham Street	Street	16	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
31	Durham Street	Street	10	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
32	Larch Street	Street	16	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
33	Cedar Street	Street	5	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
34	Cedar Street	Street	11	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
35	Cedar Street	Street	10	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
36	Durham Street	Street	9	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
37	Elgin Street	Street	24	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
38	Elgin Street	Street	12	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
39	Elgin Street	Street	15	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
38	Elgin Street	Street	12	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends

Map ID	Description	Type	Parking Supply	Fees and Restrictions
44	Elgin Street	On-Street	20	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
45	Elgin Street	On-Street	12	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends
46	Elgin Street	On-Street	4	Mon to Fri 9AM to 5PM Per hour: \$1.30 Two hour maximum Free After 5 PM and on weekends

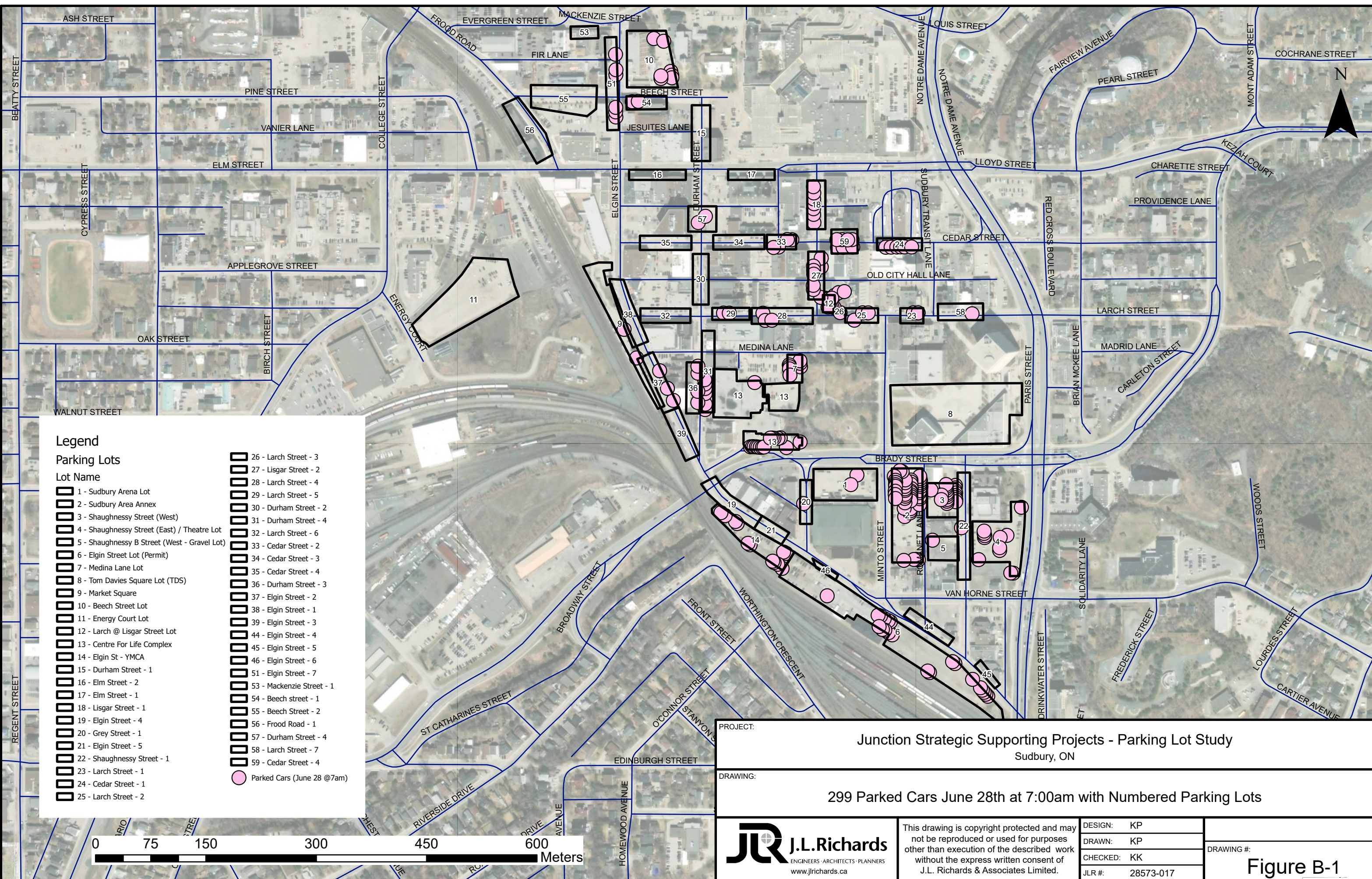
<https://www.greatersudbury.ca/live/transportation-parking-and-roads/parking/downtown-municipal-parking/>

Table A-2: Existing Parking Inventory – Private Parking Lots

Map ID	Description	Parking Supply
P2	Ledo Hotel Lot	50
P3	Shaughnessy Street (W) Lot	20
P4	Shaughnessy Street (E) Lot	35
P7	Rainbow Mall Garage	500
P10	Citipark – Elm Street	60
P16	Medina Lane Medical Centre	70
P17	Brady and Grey Street Lot	21
P20	Frood Road Lot	50
P21	Ste. Anne's Church Lot	60
P23	Rainbow Mall – West Side	200
P30	Permit Lot South of TD Lot	50
P33	Mackenzie Lot	150
P35	Beech Street (N) Lot	50
P36	Larch Street Private Lots	66
P37	Advanced Dealers Lot	20
P38	Larch Street Lot	50
P39	Beech and Durham Street Lot	14

Appendix B

Aerial Photos



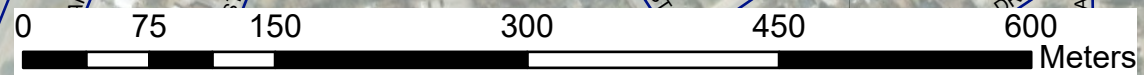
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Parking Lots

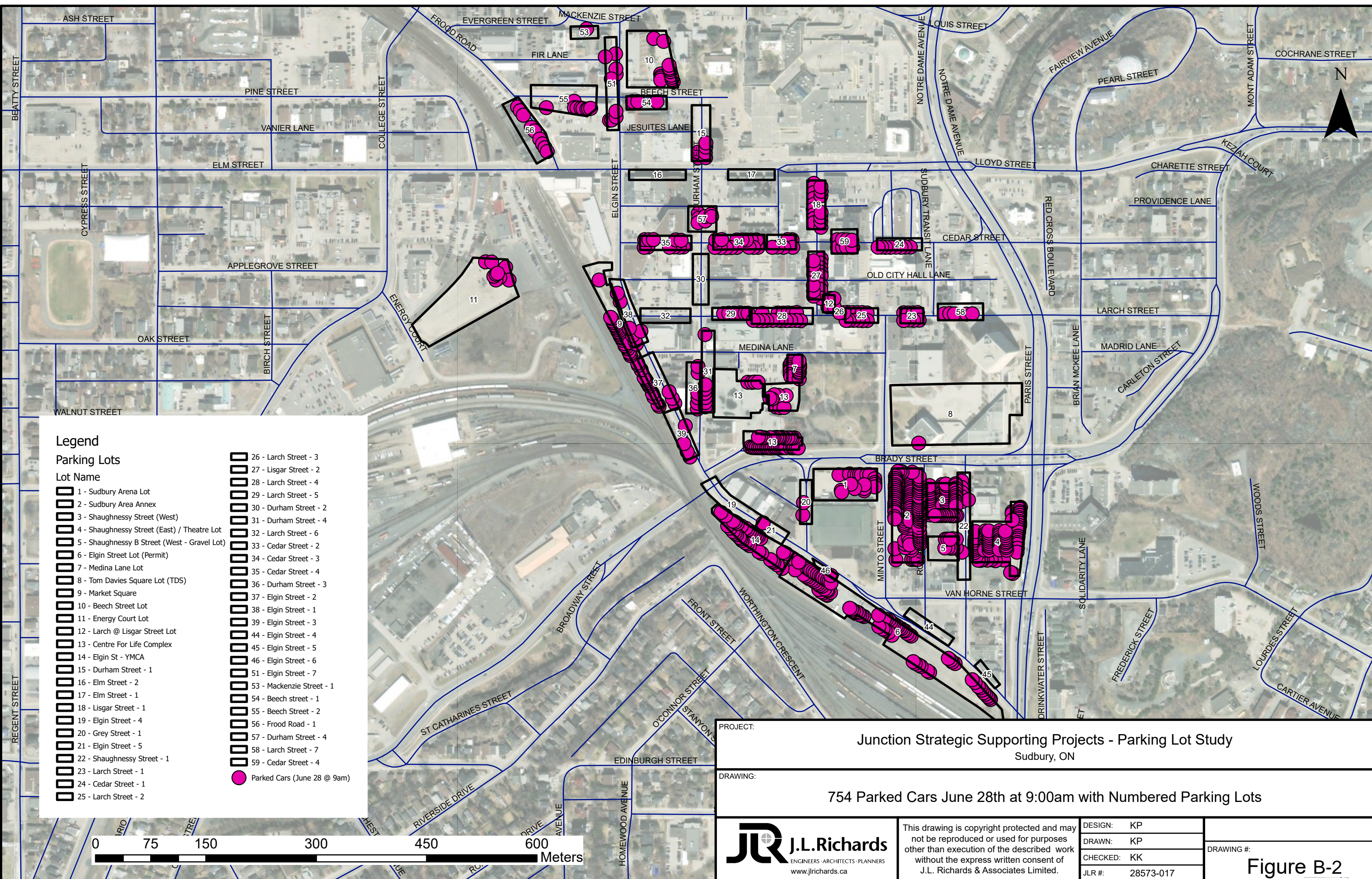
Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 3
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech Street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

Parked Cars (June 28 @ 7am)



PROJECT:		Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON	
DRAWING:		299 Parked Cars June 28th at 7:00am with Numbered Parking Lots	
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	DRAWN: KP		
CHECKED: KK	JLR #:	28573-017	

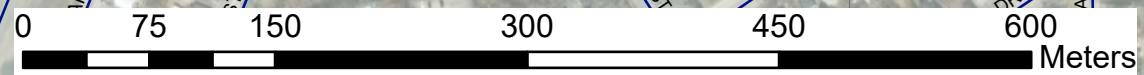


Legend

Parking Lots

- | | | | |
|--|--|--|---------------------------|
| | 1 - Sudbury Arena Lot | | 26 - Larch Street - 3 |
| | 2 - Sudbury Area Annex | | 27 - Lisgar Street - 2 |
| | 3 - Shaughnessy Street (West) | | 28 - Larch Street - 4 |
| | 4 - Shaughnessy Street (East) / Theatre Lot | | 29 - Larch Street - 5 |
| | 5 - Shaughnessy B Street (West - Gravel Lot) | | 30 - Durham Street - 2 |
| | 6 - Elgin Street Lot (Permit) | | 31 - Durham Street - 4 |
| | 7 - Medina Lane Lot | | 32 - Larch Street - 6 |
| | 8 - Tom Davies Square Lot (TDS) | | 33 - Cedar Street - 2 |
| | 9 - Market Square | | 34 - Cedar Street - 3 |
| | 10 - Beech Street Lot | | 35 - Cedar Street - 4 |
| | 11 - Energy Court Lot | | 36 - Durham Street - 3 |
| | 12 - Larch @ Lisgar Street Lot | | 37 - Elgin Street - 2 |
| | 13 - Centre For Life Complex | | 38 - Elgin Street - 1 |
| | 14 - Elgin St - YMCA | | 39 - Elgin Street - 3 |
| | 15 - Durham Street - 1 | | 44 - Elgin Street - 4 |
| | 16 - Elm Street - 2 | | 45 - Elgin Street - 5 |
| | 17 - Elm Street - 1 | | 46 - Elgin Street - 6 |
| | 18 - Lisgar Street - 1 | | 51 - Elgin Street - 7 |
| | 19 - Elgin Street - 4 | | 53 - Mackenzie Street - 1 |
| | 20 - Grey Street - 1 | | 54 - Beech street - 1 |
| | 21 - Elgin Street - 5 | | 55 - Beech Street - 2 |
| | 22 - Shaughnessy Street - 1 | | 56 - Frood Road - 1 |
| | 23 - Larch Street - 1 | | 57 - Durham Street - 4 |
| | 24 - Cedar Street - 1 | | 58 - Larch Street - 7 |
| | 25 - Larch Street - 2 | | 59 - Cedar Street - 4 |

Parked Cars (June 28 @ 9am)



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

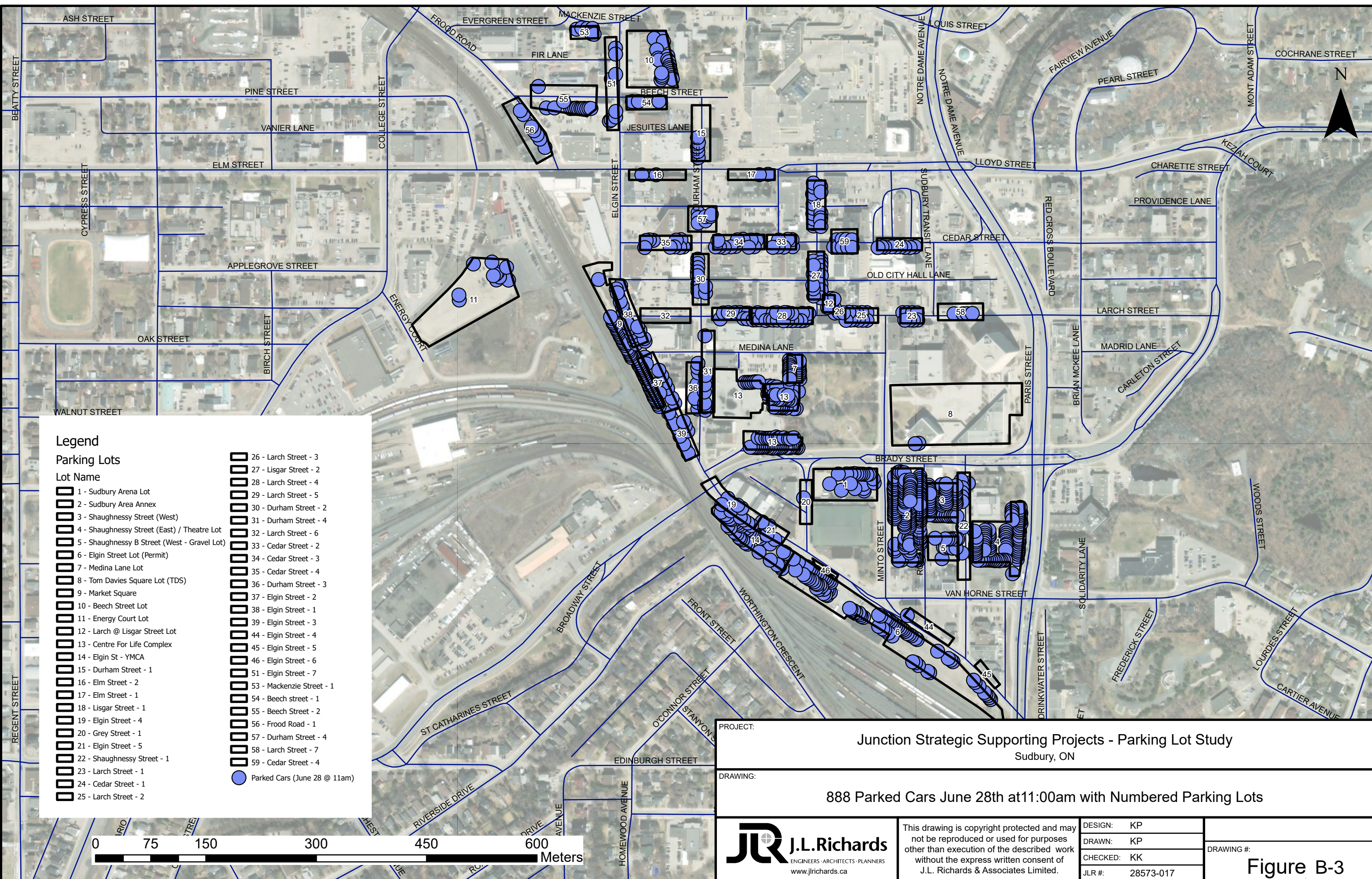
DRAWING: 754 Parked Cars June 28th at 9:00am with Numbered Parking Lots



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JLR #: 28573-017

DRAWING #: **Figure B-2**



Legend

Parking Lots

Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 2
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech Street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

Parked Cars (June 28 @ 11am)

PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

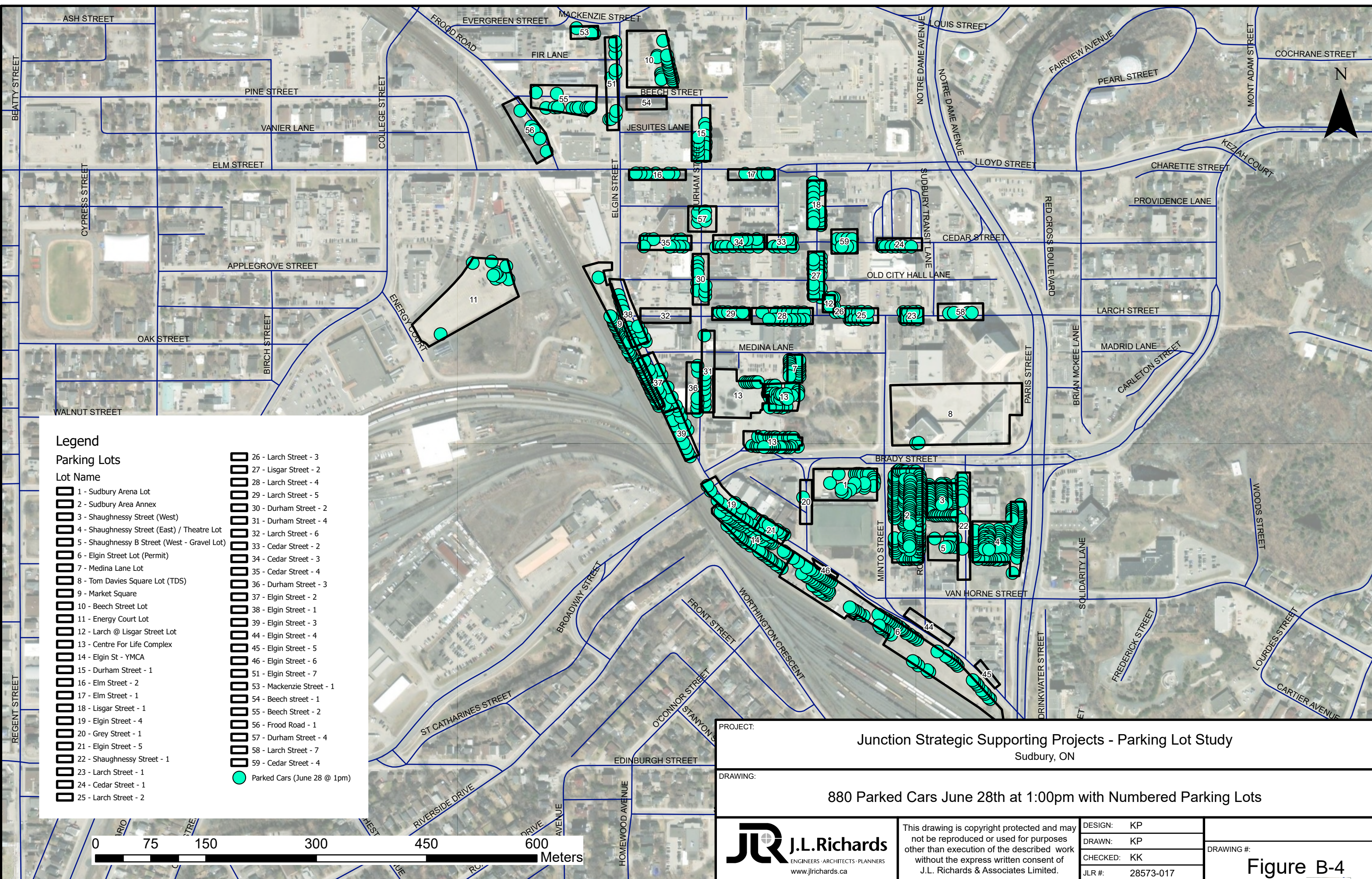
DRAWING: 888 Parked Cars June 28th at 11:00am with Numbered Parking Lots

J.R. J.L.Richards
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JLR #:	28573-017

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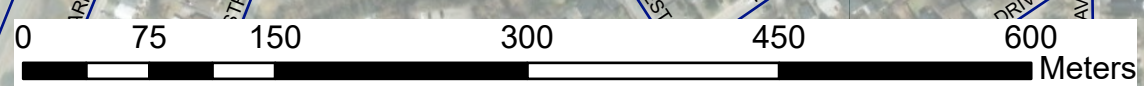
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Parking Lots

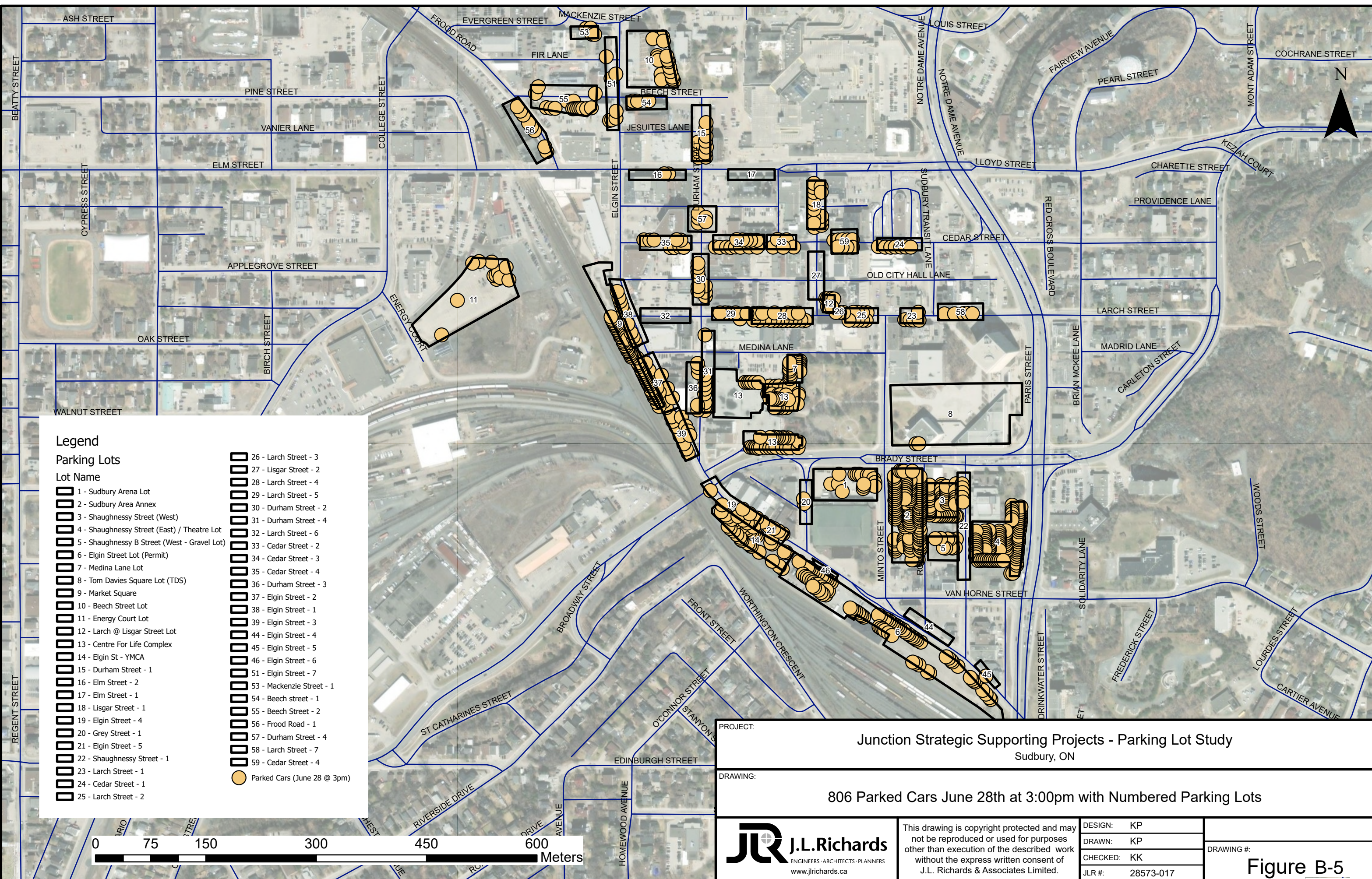
Lot Name

- 1 - Sudbury Arena Lot
- 2 - Sudbury Area Annex
- 3 - Shaughnessy Street (West)
- 4 - Shaughnessy Street (East) / Theatre Lot
- 5 - Shaughnessy B Street (West - Gravel Lot)
- 6 - Elgin Street Lot (Permit)
- 7 - Medina Lane Lot
- 8 - Tom Davies Square Lot (TDS)
- 9 - Market Square
- 10 - Beech Street Lot
- 11 - Energy Court Lot
- 12 - Larch @ Lisgar Street Lot
- 13 - Centre For Life Complex
- 14 - Elgin St - YMCA
- 15 - Durham Street - 1
- 16 - Elm Street - 2
- 17 - Elm Street - 1
- 18 - Lisgar Street - 1
- 19 - Elgin Street - 4
- 20 - Grey Street - 1
- 21 - Elgin Street - 5
- 22 - Shaughnessy Street - 1
- 23 - Larch Street - 1
- 24 - Cedar Street - 1
- 25 - Larch Street - 2
- 26 - Larch Street - 3
- 27 - Lisgar Street - 2
- 28 - Larch Street - 4
- 29 - Larch Street - 5
- 30 - Durham Street - 2
- 31 - Durham Street - 4
- 32 - Larch Street - 6
- 33 - Cedar Street - 2
- 34 - Cedar Street - 3
- 35 - Cedar Street - 4
- 36 - Durham Street - 3
- 37 - Elgin Street - 2
- 38 - Elgin Street - 1
- 39 - Elgin Street - 3
- 44 - Elgin Street - 4
- 45 - Elgin Street - 5
- 46 - Elgin Street - 6
- 51 - Elgin Street - 7
- 53 - Mackenzie Street - 1
- 54 - Beech street - 1
- 55 - Beech Street - 2
- 56 - Frood Road - 1
- 57 - Durham Street - 4
- 58 - Larch Street - 7
- 59 - Cedar Street - 4

● Parked Cars (June 28 @ 1pm)



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON						
DRAWING: 880 Parked Cars June 28th at 1:00pm with Numbered Parking Lots						
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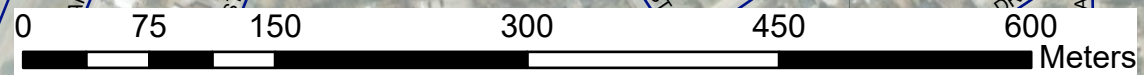
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Parking Lots

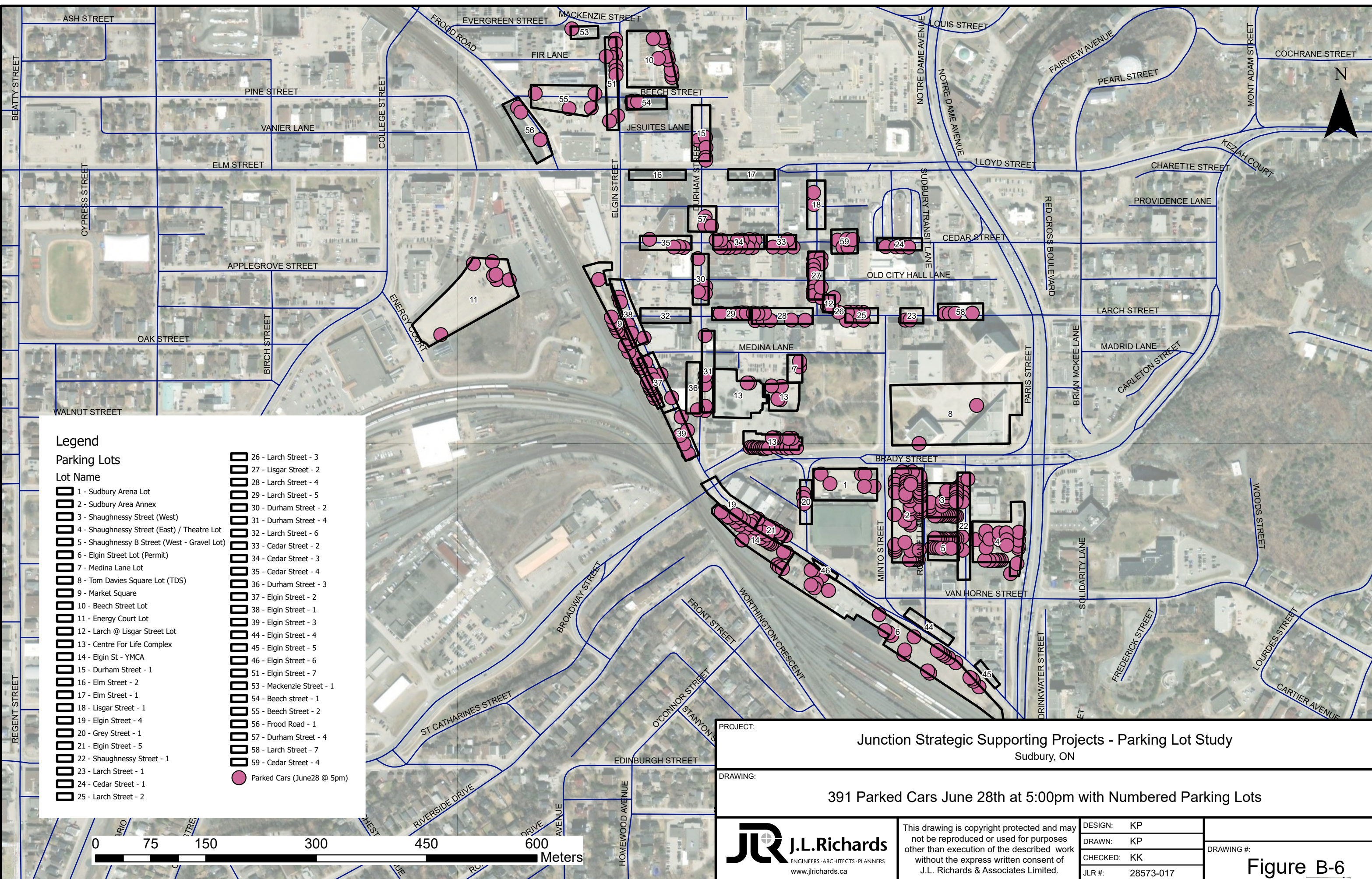
Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 3
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech Street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

Parked Cars (June 28 @ 3pm)



PROJECT:		Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON	
DRAWING:		806 Parked Cars June 28th at 3:00pm with Numbered Parking Lots	
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JLR #: 28573-017			



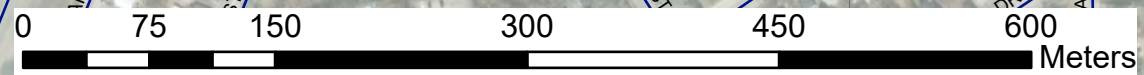
Legend

Parking Lots

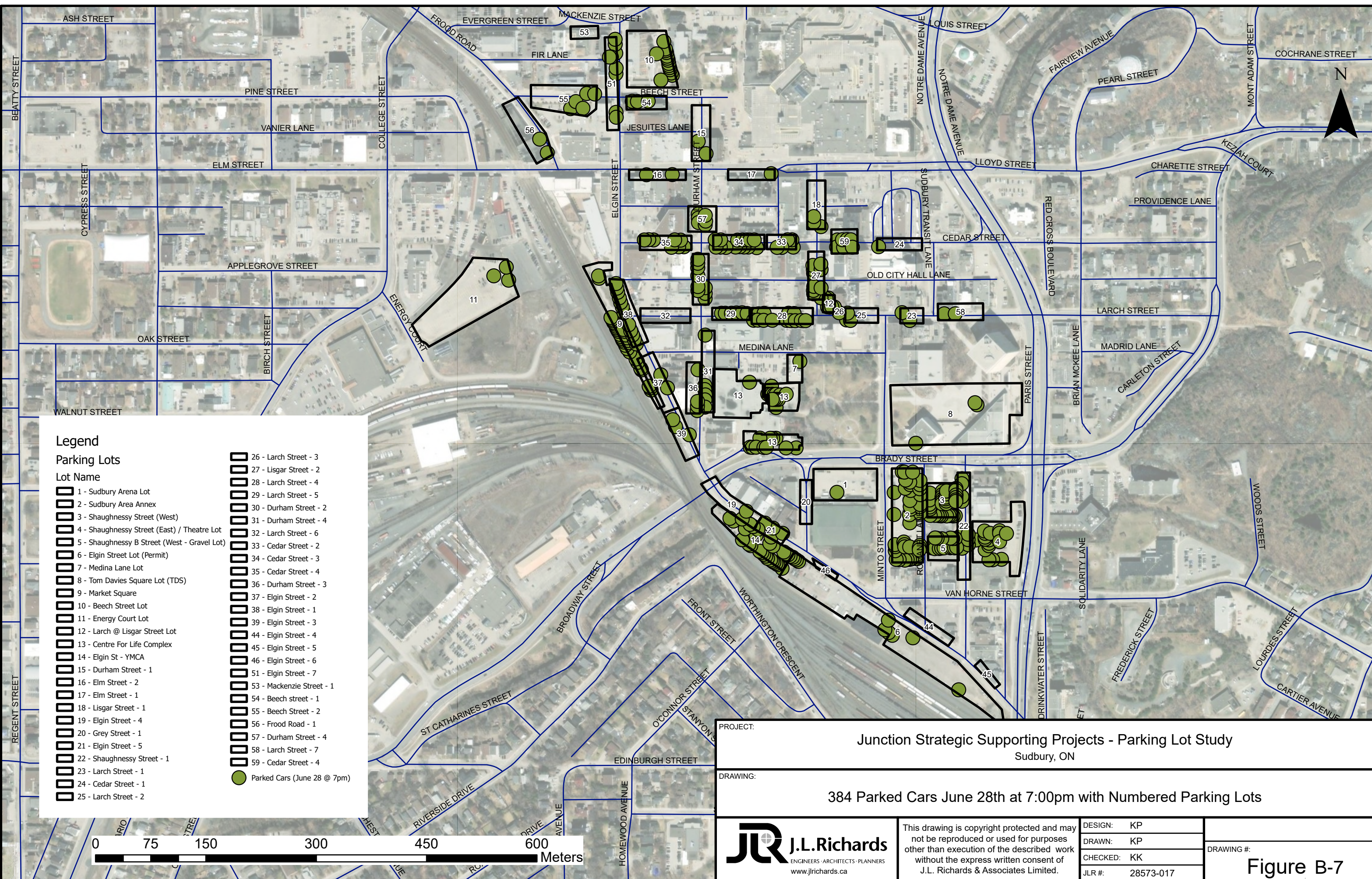
Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 3
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

Parked Cars (June 28 @ 5pm)



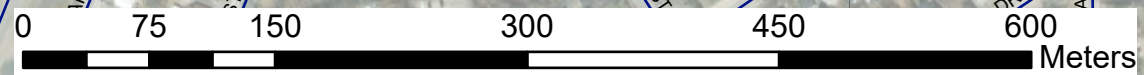
PROJECT:		Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON	
DRAWING:		391 Parked Cars June 28th at 5:00pm with Numbered Parking Lots	
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	DESIGN: KP	DRAWING #:	
	DRAWN: KP	Figure B-6	
CHECKED: KK	JLR #: 28573-017		



Legend

Parking Lots

- | | | | |
|--|--|--|---------------------------|
| | 1 - Sudbury Arena Lot | | 26 - Larch Street - 3 |
| | 2 - Sudbury Area Annex | | 27 - Lisgar Street - 2 |
| | 3 - Shaughnessy Street (West) | | 28 - Larch Street - 4 |
| | 4 - Shaughnessy Street (East) / Theatre Lot | | 29 - Larch Street - 5 |
| | 5 - Shaughnessy B Street (West - Gravel Lot) | | 30 - Durham Street - 2 |
| | 6 - Elgin Street Lot (Permit) | | 31 - Durham Street - 4 |
| | 7 - Medina Lane Lot | | 32 - Larch Street - 6 |
| | 8 - Tom Davies Square Lot (TDS) | | 33 - Cedar Street - 2 |
| | 9 - Market Square | | 34 - Cedar Street - 3 |
| | 10 - Beech Street Lot | | 35 - Cedar Street - 4 |
| | 11 - Energy Court Lot | | 36 - Durham Street - 2 |
| | 12 - Larch @ Lisgar Street Lot | | 37 - Elgin Street - 2 |
| | 13 - Centre For Life Complex | | 38 - Elgin Street - 1 |
| | 14 - Elgin St - YMCA | | 39 - Elgin Street - 3 |
| | 15 - Durham Street - 1 | | 44 - Elgin Street - 4 |
| | 16 - Elm Street - 2 | | 45 - Elgin Street - 5 |
| | 17 - Elm Street - 1 | | 46 - Elgin Street - 6 |
| | 18 - Lisgar Street - 1 | | 51 - Elgin Street - 7 |
| | 19 - Elgin Street - 4 | | 53 - Mackenzie Street - 1 |
| | 20 - Grey Street - 1 | | 54 - Beech street - 1 |
| | 21 - Elgin Street - 5 | | 55 - Beech Street - 2 |
| | 22 - Shaughnessy Street - 1 | | 56 - Frood Road - 1 |
| | 23 - Larch Street - 1 | | 57 - Durham Street - 4 |
| | 24 - Cedar Street - 1 | | 58 - Larch Street - 7 |
| | 25 - Larch Street - 2 | | 59 - Cedar Street - 4 |
| | Parked Cars (June 28 @ 7pm) | | |



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

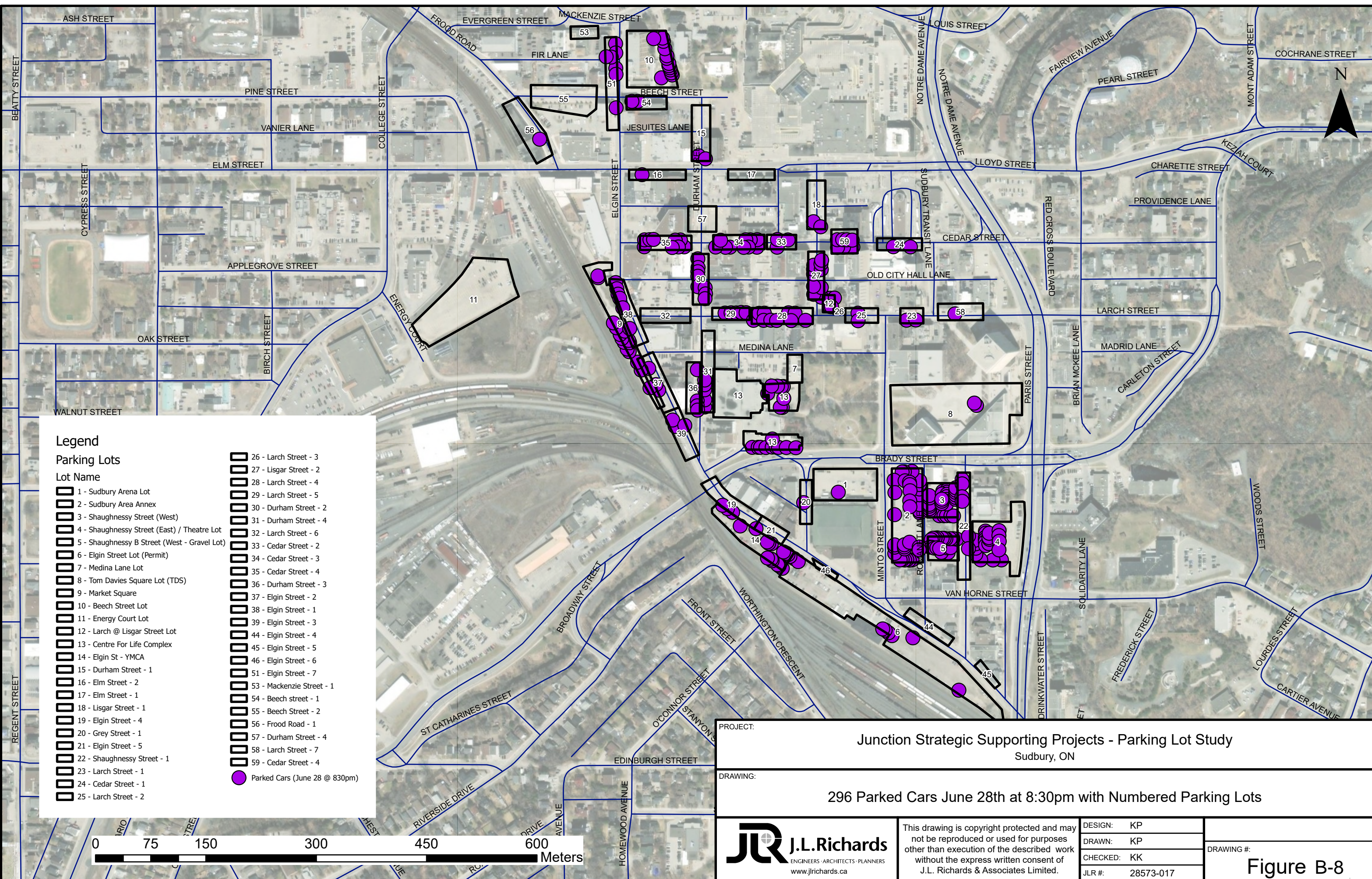
DRAWING: 384 Parked Cars June 28th at 7:00pm with Numbered Parking Lots



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DESIGN:	KP
DRAWN:	KP
CHECKED:	KK
JLR #:	28573-017

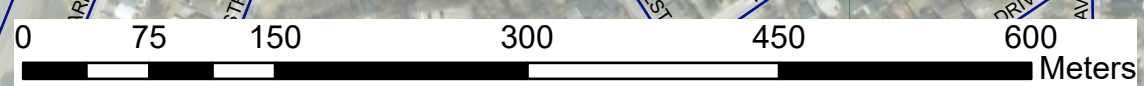
DRAWING #: **Figure B-7**



Legend

Parking Lots

- | | | | |
|--|--|--|---------------------------|
| | 1 - Sudbury Arena Lot | | 26 - Larch Street - 3 |
| | 2 - Sudbury Area Annex | | 27 - Lisgar Street - 2 |
| | 3 - Shaughnessy Street (West) | | 28 - Larch Street - 4 |
| | 4 - Shaughnessy Street (East) / Theatre Lot | | 29 - Larch Street - 5 |
| | 5 - Shaughnessy B Street (West - Gravel Lot) | | 30 - Durham Street - 2 |
| | 6 - Elgin Street Lot (Permit) | | 31 - Durham Street - 4 |
| | 7 - Medina Lane Lot | | 32 - Larch Street - 6 |
| | 8 - Tom Davies Square Lot (TDS) | | 33 - Cedar Street - 2 |
| | 9 - Market Square | | 34 - Cedar Street - 3 |
| | 10 - Beech Street Lot | | 35 - Cedar Street - 4 |
| | 11 - Energy Court Lot | | 36 - Durham Street - 3 |
| | 12 - Larch @ Lisgar Street Lot | | 37 - Elgin Street - 2 |
| | 13 - Centre For Life Complex | | 38 - Elgin Street - 1 |
| | 14 - Elgin St - YMCA | | 39 - Elgin Street - 3 |
| | 15 - Durham Street - 1 | | 44 - Elgin Street - 4 |
| | 16 - Elm Street - 2 | | 45 - Elgin Street - 5 |
| | 17 - Elm Street - 1 | | 46 - Elgin Street - 6 |
| | 18 - Lisgar Street - 1 | | 51 - Elgin Street - 7 |
| | 19 - Elgin Street - 4 | | 53 - Mackenzie Street - 1 |
| | 20 - Grey Street - 1 | | 54 - Beech street - 1 |
| | 21 - Elgin Street - 5 | | 55 - Beech Street - 2 |
| | 22 - Shaughnessy Street - 1 | | 56 - Frood Road - 1 |
| | 23 - Larch Street - 1 | | 57 - Durham Street - 4 |
| | 24 - Cedar Street - 1 | | 58 - Larch Street - 7 |
| | 25 - Larch Street - 2 | | 59 - Cedar Street - 4 |
| | Parked Cars (June 28 @ 830pm) | | |



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

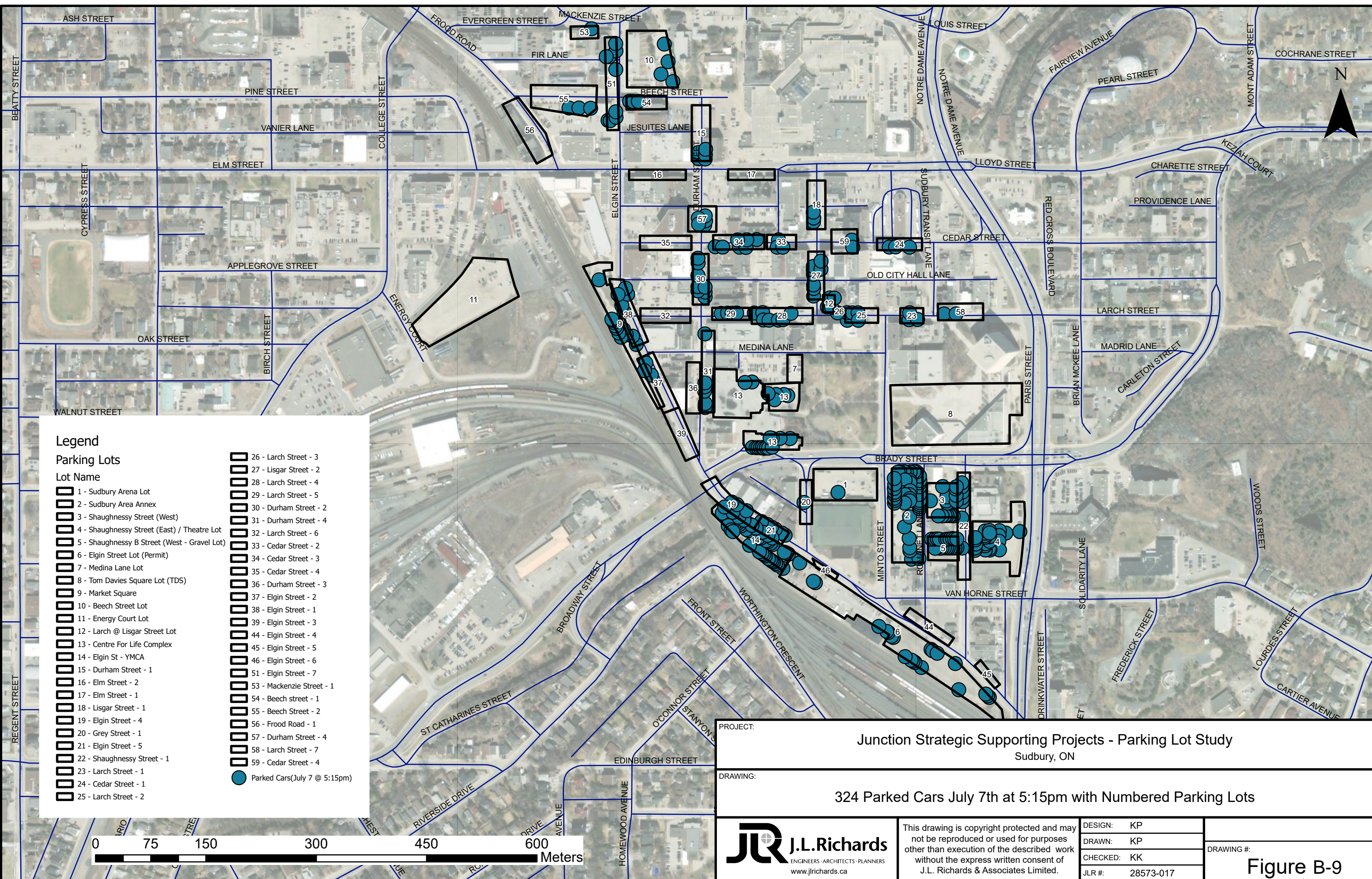
DRAWING: 296 Parked Cars June 28th at 8:30pm with Numbered Parking Lots



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DESIGN: KP
DRAWN: KP
CHECKED: KK
JLR #: 28573-017

DRAWING #: Figure B-8



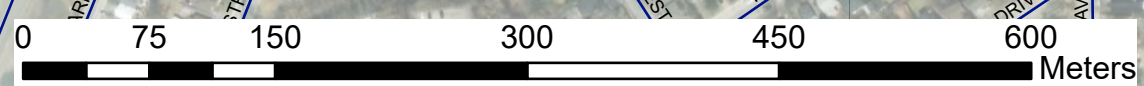
Legend

Parking Lots

Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 3
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

Parked Cars (July 7 @ 5:15pm)



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

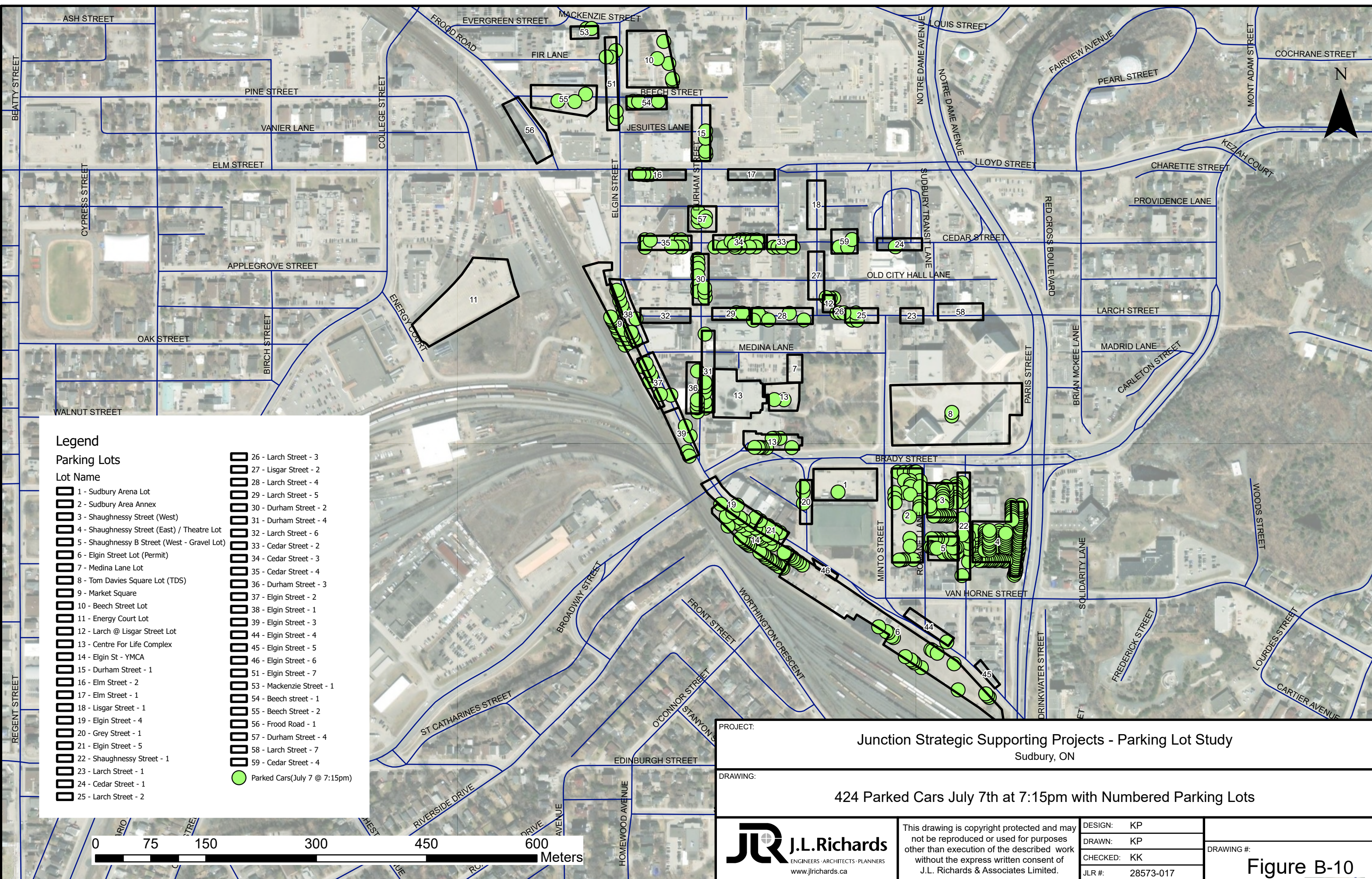
DRAWING: 324 Parked Cars July 7th at 5:15pm with Numbered Parking Lots

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DRAWN:	KP
CHECKED:	KK
JLR #:	28573-017

DRAWING #:
Figure B-9



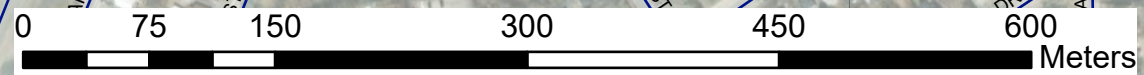
Legend

Parking Lots

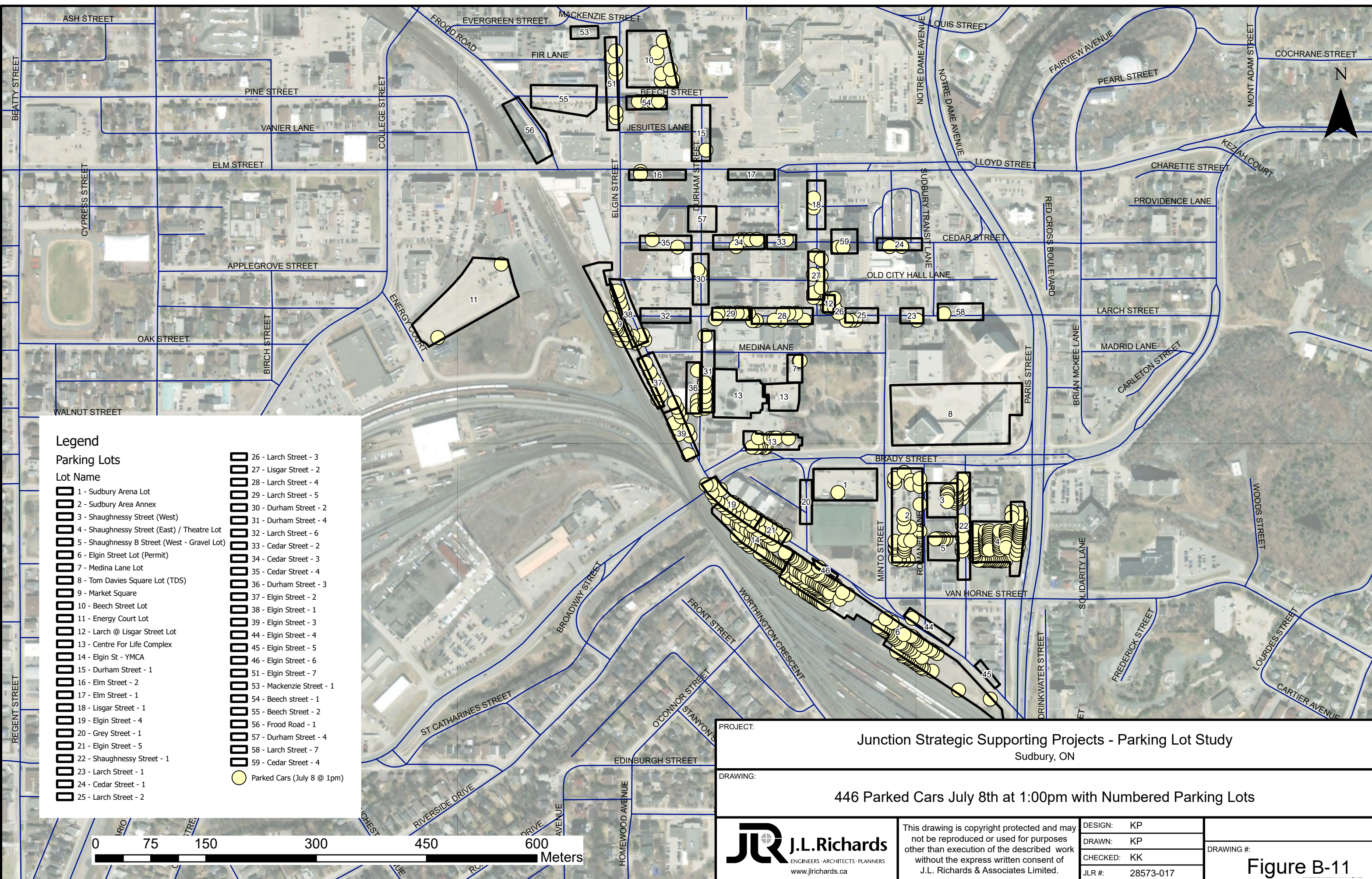
Lot Name

	1 - Sudbury Arena Lot		26 - Larch Street - 3
	2 - Sudbury Area Annex		27 - Lisgar Street - 2
	3 - Shaughnessy Street (West)		28 - Larch Street - 4
	4 - Shaughnessy Street (East) / Theatre Lot		29 - Larch Street - 5
	5 - Shaughnessy B Street (West - Gravel Lot)		30 - Durham Street - 2
	6 - Elgin Street Lot (Permit)		31 - Durham Street - 4
	7 - Medina Lane Lot		32 - Larch Street - 6
	8 - Tom Davies Square Lot (TDS)		33 - Cedar Street - 2
	9 - Market Square		34 - Cedar Street - 3
	10 - Beech Street Lot		35 - Cedar Street - 4
	11 - Energy Court Lot		36 - Durham Street - 3
	12 - Larch @ Lisgar Street Lot		37 - Elgin Street - 2
	13 - Centre For Life Complex		38 - Elgin Street - 1
	14 - Elgin St - YMCA		39 - Elgin Street - 3
	15 - Durham Street - 1		44 - Elgin Street - 4
	16 - Elm Street - 2		45 - Elgin Street - 5
	17 - Elm Street - 1		46 - Elgin Street - 6
	18 - Lisgar Street - 1		51 - Elgin Street - 7
	19 - Elgin Street - 4		53 - Mackenzie Street - 1
	20 - Grey Street - 1		54 - Beech Street - 1
	21 - Elgin Street - 5		55 - Beech Street - 2
	22 - Shaughnessy Street - 1		56 - Frood Road - 1
	23 - Larch Street - 1		57 - Durham Street - 4
	24 - Cedar Street - 1		58 - Larch Street - 7
	25 - Larch Street - 2		59 - Cedar Street - 4

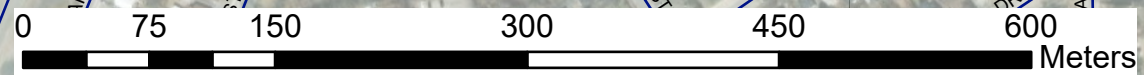
Parked Cars (July 7 @ 7:15pm)



PROJECT:		Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON	
DRAWING:		424 Parked Cars July 7th at 7:15pm with Numbered Parking Lots	
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	DESIGN:	KP	DRAWING #: Figure B-10
	DRAWN:	KP	
	CHECKED:	KK	
JLR #:	28573-017		



Legend	
Parking Lots	
Lot Name	
	1 - Sudbury Arena Lot
	2 - Sudbury Area Annex
	3 - Shaughnessy Street (West)
	4 - Shaughnessy Street (East) / Theatre Lot
	5 - Shaughnessy B Street (West - Gravel Lot)
	6 - Elgin Street Lot (Permit)
	7 - Medina Lane Lot
	8 - Tom Davies Square Lot (TDS)
	9 - Market Square
	10 - Beech Street Lot
	11 - Energy Court Lot
	12 - Larch @ Lisgar Street Lot
	13 - Centre For Life Complex
	14 - Elgin St - YMCA
	15 - Durham Street - 1
	16 - Elm Street - 2
	17 - Elm Street - 1
	18 - Lisgar Street - 1
	19 - Elgin Street - 4
	20 - Grey Street - 1
	21 - Elgin Street - 5
	22 - Shaughnessy Street - 1
	23 - Larch Street - 1
	24 - Cedar Street - 1
	25 - Larch Street - 2
	26 - Larch Street - 3
	27 - Lisgar Street - 2
	28 - Larch Street - 4
	29 - Larch Street - 5
	30 - Durham Street - 2
	31 - Durham Street - 4
	32 - Larch Street - 6
	33 - Cedar Street - 2
	34 - Cedar Street - 3
	35 - Cedar Street - 4
	36 - Durham Street - 3
	37 - Elgin Street - 2
	38 - Elgin Street - 1
	39 - Elgin Street - 3
	44 - Elgin Street - 4
	45 - Elgin Street - 5
	46 - Elgin Street - 6
	51 - Elgin Street - 7
	53 - Mackenzie Street - 1
	54 - Beech Street - 1
	55 - Beech Street - 2
	56 - Frood Road - 1
	57 - Durham Street - 4
	58 - Larch Street - 7
	59 - Cedar Street - 4
	Parked Cars (July 8 @ 1pm)



PROJECT: Junction Strategic Supporting Projects - Parking Lot Study
Sudbury, ON

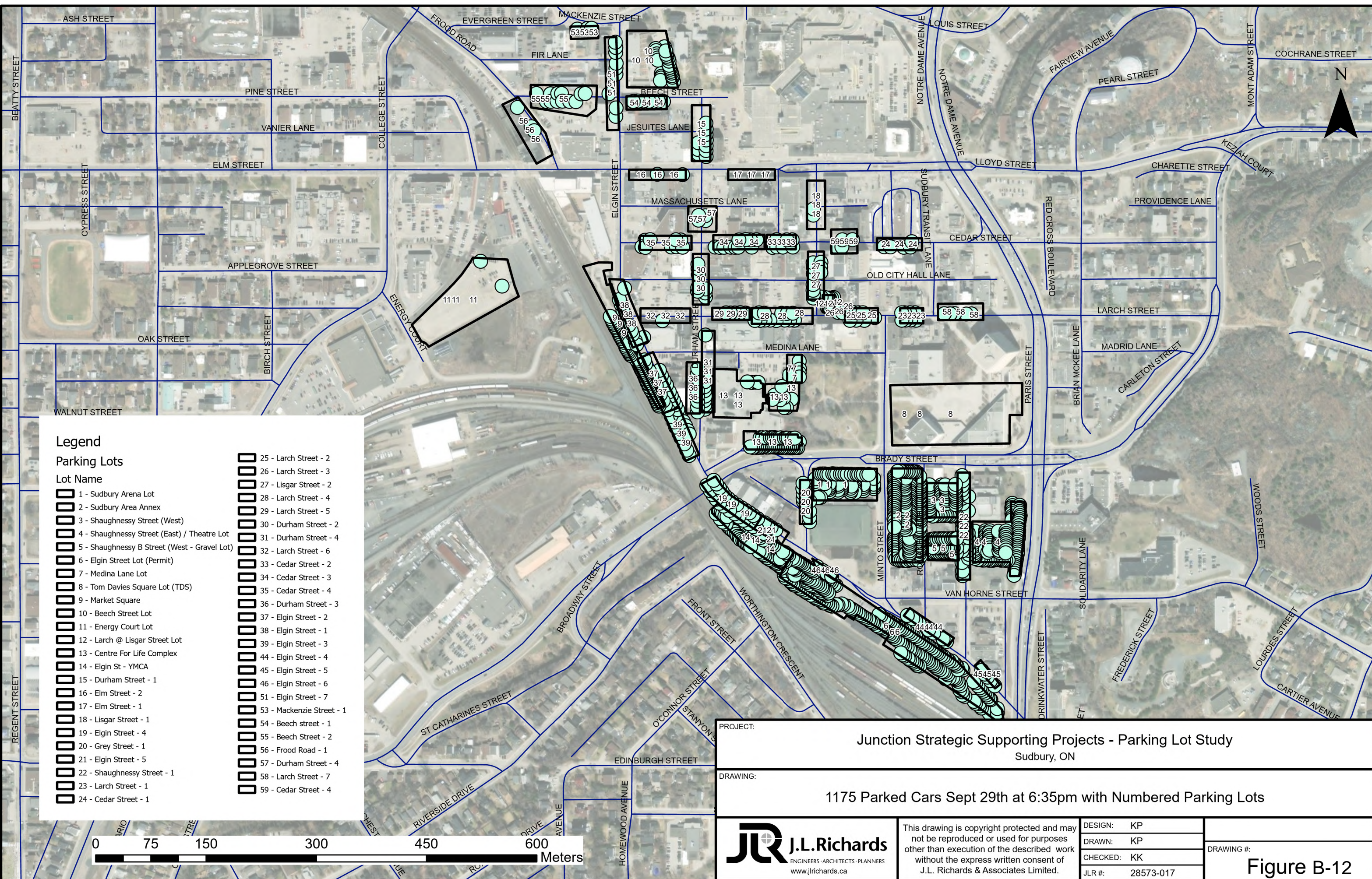
DRAWING: 446 Parked Cars July 8th at 1:00pm with Numbered Parking Lots



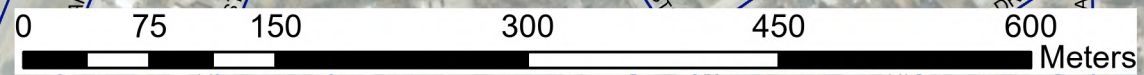
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DESIGN:	KP
DRAWN:	KP
CHECKED:	KK
JLR #:	28573-017

DRAWING #: **Figure B-11**



Legend	
Parking Lots	
Lot Name	
	1 - Sudbury Arena Lot
	2 - Sudbury Area Annex
	3 - Shaughnessy Street (West)
	4 - Shaughnessy Street (East) / Theatre Lot
	5 - Shaughnessy B Street (West - Gravel Lot)
	6 - Elgin Street Lot (Permit)
	7 - Medina Lane Lot
	8 - Tom Davies Square Lot (TDS)
	9 - Market Square
	10 - Beech Street Lot
	11 - Energy Court Lot
	12 - Larch @ Lisgar Street Lot
	13 - Centre For Life Complex
	14 - Elgin St - YMCA
	15 - Durham Street - 1
	16 - Elm Street - 2
	17 - Elm Street - 1
	18 - Lisgar Street - 1
	19 - Elgin Street - 4
	20 - Grey Street - 1
	21 - Elgin Street - 5
	22 - Shaughnessy Street - 1
	23 - Larch Street - 1
	24 - Cedar Street - 1
	25 - Larch Street - 2
	26 - Larch Street - 3
	27 - Lisgar Street - 2
	28 - Larch Street - 4
	29 - Larch Street - 5
	30 - Durham Street - 2
	31 - Durham Street - 4
	32 - Larch Street - 6
	33 - Cedar Street - 2
	34 - Cedar Street - 3
	35 - Cedar Street - 4
	36 - Durham Street - 3
	37 - Elgin Street - 2
	38 - Elgin Street - 1
	39 - Elgin Street - 3
	44 - Elgin Street - 4
	45 - Elgin Street - 5
	46 - Elgin Street - 6
	51 - Elgin Street - 7
	53 - Mackenzie Street - 1
	54 - Beech street - 1
	55 - Beech Street - 2
	56 - Frood Road - 1
	57 - Durham Street - 4
	58 - Larch Street - 7
	59 - Cedar Street - 4



PROJECT:		Junction Strategic Supporting Projects - Parking Lot Study Sudbury, ON	
DRAWING:		1175 Parked Cars Sept 29th at 6:35pm with Numbered Parking Lots	
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	DESIGN: KP	DRAWING #: Figure B-12	
	DRAWN: KP		
CHECKED: KK	JLR #: 28573-017		

Appendix C

Existing Parking Utilization

Table C-1: Existing Parking Utilization – Normal Business Hours

JLR ID	Lot Name	Type	Capacity	Normal Business Hours	
				Occupied	Utilization
1	Sudbury Arena Lot	Municipal	81	11	14%
2	Sudbury Arena Annex	Municipal	159	84	53%
3	Shaughnessy Street (West)	Municipal	57	41	72%
4	Shaughnessy Street (East) / Theatre Lot	Municipal	145	54	37%
5	Shaughnessy B Street (West - Gravel Lot)	Municipal	76	12	16%
6	Elgin Street Lot (Permit)	Municipal	225	51	23%
7	Medina Lane Lot	Municipal	20	9	45%
8	Tom Davies Square Lot (TDS)	Municipal	295	2	1%
9	Market Square	Municipal	210	35	17%
10	Beech Street Lot	Municipal	107	14	13%
11	Energy Court Lot	Municipal	218	7	3%
12	Larch @ Lisgar Street Lot	Municipal	9	6	67%
13	Centre For Life Complex	Municipal	155	41	26%
14	Elgin St - YMCA	Municipal	95	27	28%
15	Durham Street - 1	Street	16	5	31%
16	Elm Street - 2	Street	10	2	20%
17	Elm Street - 1	Street	15	1	7%
18	Lisgar Street - 1	Street	17	9	53%
19	Elgin Street - 4	Street	19	6	32%
20	Grey Street - 1	Street	5	1	20%
21	Elgin Street - 5	Street	11	4	36%
22	Shaughnessy Street - 1	Street	16	7	44%
23	Larch Street - 1	Street	9	5	56%
24	Cedar Street - 1	Street	8	6	75%
25	Larch Street - 2	Street	11	7	64%
26	Larch Street - 3	Street	10	12	120%
27	Lisgar Street - 2	Street	14	10	71%
28	Larch Street - 4	Street	16	12	75%
29	Larch Street - 5	Street	7	5	71%
30	Durham Street - 2	Street	16	6	38%
31	Durham Street - 4	Street	10	7	70%
32	Larch Street - 6	Street	16	0	0%
33	Cedar Street - 2	Street	5	5	100%
34	Cedar Street - 3	Street	11	11	100%
35	Cedar Street - 4	Street	10	8	80%
36	Durham Street - 3	Street	9	5	56%
37	Elgin Street - 2	Street	24	6	25%
38	Elgin Street - 1	Street	12	9	75%
39	Elgin Street - 3	Street	15	6	40%
44	Elgin Street - 44	Street	8	0	0%
45	Elgin Street - 45	Street	6	0	0%
46	Elgin Street - 46	Street	4	0	0%
Total			2182	549	25%

Table C-2: Existing Parking Utilization – Friday Evening Activity

JLR ID	Lot Name	Type	Capacity	Friday Evening	
				Occupied	Utilization
1	Sudbury Arena Lot	Municipal	81	1	1%
2	Sudbury Arena Annex	Municipal	159	34	21%
3	Shaughnessy Street (West)	Municipal	57	25	44%
4	Shaughnessy Street (East) / Theatre Lot	Municipal	145	67	46%
5	Shaughnessy B Street (West - Gravel Lot)	Municipal	76	20	26%
6	Elgin Street Lot (Permit)	Municipal	225	22	10%
7	Medina Lane Lot	Municipal	20	0	0%
8	Tom Davies Square Lot (TDS)	Municipal	295	1	0%
9	Market Square	Municipal	210	14	7%
10	Beech Street Lot	Municipal	107	5	5%
11	Energy Court Lot	Municipal	218	0	0%
12	Larch @ Lisgar Street Lot	Municipal	9	3	33%
13	Centre For Life Complex	Municipal	155	16	10%
14	Elgin St - YMCA	Municipal	95	37	39%
15	Durham Street - 1	Street	16	5	31%
16	Elm Street - 2	Street	10	2	20%
17	Elm Street - 1	Street	15	0	0%
18	Lisgar Street - 1	Street	17	2	12%
19	Elgin Street - 4	Street	19	8	42%
20	Grey Street - 1	Street	5	2	40%
21	Elgin Street - 5	Street	11	9	82%
22	Shaughnessy Street - 1	Street	16	10	63%
23	Larch Street - 1	Street	9	2	22%
24	Cedar Street - 1	Street	8	2	25%
25	Larch Street - 2	Street	11	4	36%
26	Larch Street - 3	Street	10	6	60%
27	Lisgar Street - 2	Street	14	4	29%
28	Larch Street - 4	Street	16	7	44%
29	Larch Street - 5	Street	7	3	43%
30	Durham Street - 2	Street	16	9	56%
31	Durham Street - 4	Street	10	6	60%
32	Larch Street - 6	Street	16	0	0%
33	Cedar Street - 2	Street	5	4	80%
34	Cedar Street - 3	Street	11	10	91%
35	Cedar Street - 4	Street	10	4	40%
36	Durham Street - 3	Street	9	3	33%
37	Elgin Street - 2	Street	24	5	21%
38	Elgin Street - 1	Street	12	8	67%
39	Elgin Street - 3	Street	15	2	13%
44	Elgin Street - 44	Street	8	1	13%
45	Elgin Street - 45	Street	6	0	0%
46	Elgin Street - 46	Street	4	0	0%
Total			2182	363	17%

Table C-3: Existing Parking Utilization – Saturday Afternoon Activity

JLR ID	Lot Name	Type	Capacity	Saturday Afternoon	
				Occupied	Utilization
1	Sudbury Arena Lot	Municipal	81	1	1%
2	Sudbury Arena Annex	Municipal	159	27	17%
3	Shaughnessy Street (West)	Municipal	57	14	25%
4	Shaughnessy Street (East) / Theatre Lot	Municipal	145	79	54%
5	Shaughnessy B Street (West - Gravel Lot)	Municipal	76	5	7%
6	Elgin Street Lot (Permit)	Municipal	225	112	50%
7	Medina Lane Lot	Municipal	20	2	10%
8	Tom Davies Square Lot (TDS)	Municipal	295	0	0%
9	Market Square	Municipal	210	11	5%
10	Beech Street Lot	Municipal	107	8	7%
11	Energy Court Lot	Municipal	218	2	1%
12	Larch @ Lisgar Street Lot	Municipal	9	3	33%
13	Centre For Life Complex	Municipal	155	11	7%
14	Elgin St - YMCA	Municipal	95	37	39%
15	Durham Street - 1	Street	16	1	6%
16	Elm Street - 2	Street	10	2	20%
17	Elm Street - 1	Street	15	0	0%
18	Lisgar Street - 1	Street	17	3	18%
19	Elgin Street - 4	Street	19	19	100%
20	Grey Street - 1	Street	5	0	0%
21	Elgin Street - 5	Street	11	8	73%
22	Shaughnessy Street - 1	Street	16	10	63%
23	Larch Street - 1	Street	9	1	11%
24	Cedar Street - 1	Street	8	2	25%
25	Larch Street - 2	Street	11	3	27%
26	Larch Street - 3	Street	10	7	70%
27	Lisgar Street - 2	Street	14	9	64%
28	Larch Street - 4	Street	16	8	50%
29	Larch Street - 5	Street	7	7	100%
30	Durham Street - 2	Street	16	2	13%
31	Durham Street - 4	Street	10	6	60%
32	Larch Street - 6	Street	16	0	0%
33	Cedar Street - 2	Street	5	1	20%
34	Cedar Street - 3	Street	11	5	45%
35	Cedar Street - 4	Street	10	2	20%
36	Durham Street - 3	Street	9	4	44%
37	Elgin Street - 2	Street	24	8	33%
38	Elgin Street - 1	Street	12	8	67%
39	Elgin Street - 3	Street	15	8	53%
44	Elgin Street - 44	Street	8	1	13%
45	Elgin Street - 45	Street	6	0	0%
46	Elgin Street - 46	Street	4	1	25%
Total			2182	313	14%

Table C-4: Existing Parking Utilization – Special Event Day

JLR ID	Lot Name	Type	Capacity	Event Day	
				Occupied	Utilization
1	Sudbury Arena Lot	Municipal	81	57	70%
2	Sudbury Arena Annex	Municipal	159	164	103%
3	Shaughnessy Street (West)	Municipal	57	55	96%
4	Shaughnessy Street (East) / Theatre Lot	Municipal	145	115	79%
5	Shaughnessy B Street (West - Gravel Lot)	Municipal	76	39	51%
6	Elgin Street Lot (Permit)	Municipal	225	231	103%
7	Medina Lane Lot	Municipal	20	6	30%
8	Tom Davies Square Lot (TDS)	Municipal	295	0	0%
9	Market Square	Municipal	210	58	28%
10	Beech Street Lot	Municipal	107	24	22%
11	Energy Court Lot	Municipal	218	2	1%
12	Larch @ Lisgar Street Lot	Municipal	9	9	100%
13	Centre For Life Complex	Municipal	155	53	34%
14	Elgin St - YMCA	Municipal	95	69	73%
15	Durham Street - 1	Street	16	10	63%
16	Elm Street - 2	Street	10	2	20%
17	Elm Street - 1	Street	15	0	0%
18	Lisgar Street - 1	Street	17	2	12%
19	Elgin Street - 4	Street	19	25	132%
20	Grey Street - 1	Street	5	9	180%
21	Elgin Street - 5	Street	11	8	73%
22	Shaughnessy Street - 1	Street	16	25	156%
23	Larch Street - 1	Street	9	8	89%
24	Cedar Street - 1	Street	8	5	63%
25	Larch Street - 2	Street	11	8	73%
26	Larch Street - 3	Street	10	2	20%
27	Lisgar Street - 2	Street	14	11	79%
28	Larch Street - 4	Street	16	13	81%
29	Larch Street - 5	Street	7	5	71%
30	Durham Street - 2	Street	16	8	50%
31	Durham Street - 4	Street	10	9	90%
32	Larch Street - 6	Street	16	1	6%
33	Cedar Street - 2	Street	5	7	140%
34	Cedar Street - 3	Street	11	11	100%
35	Cedar Street - 4	Street	10	9	90%
36	Durham Street - 3	Street	9	8	89%
37	Elgin Street - 2	Street	24	19	79%
38	Elgin Street - 1	Street	12	10	83%
39	Elgin Street - 3	Street	15	14	93%
44	Elgin Street - 44	Street	8	8	100%
45	Elgin Street - 45	Street	6	5	83%
46	Elgin Street - 46	Street	4	4	100%
Total			2182	892	41%

www.jlrichards.ca

Ottawa

343 Preston Street
Tower II, Suite 1000
Ottawa ON Canada
K1S 1N4
Tel: 613 728-3571
ottawa@jlrichards.ca

Kingston

203-863 Princess Street
Kingston ON Canada
K7L 5N4
Tel: 613 544-1424
kingston@jlrichards.ca

Sudbury

314 Countryside Drive
Sudbury ON Canada
P3E 6G2
Tel: 705 522-8174
sudbury@jlrichards.ca

Timmins

834 Mountjoy Street S
Timmins ON Canada
P4N 7C5
Tel: 705 360-1899
timmins@jlrichards.ca

North Bay

501-555 Oak Street E
North Bay ON Canada
P1B 8L3
Tel: 705 495-7597
northbay@jlrichards.ca

Hawkesbury

326 Bertha Street
Hawkesbury ON Canada
K6A 2A8
Tel: 613 632-0287
hawkesbury@jlrichards.ca

Guelph

107-450 Speedvale Ave. West
Guelph ON Canada
N1H 7Y6
Tel: 519 763-0713
guelph@jlrichards.ca

