REVISED PUBLIC AGENDA
STANDING POLICY COMMITTEE
ON TRANSPORTATION

Monday, March 9, 2015, 9:00 a.m.
Council Chamber, City Hall
Committee Members:

Councillor C. Clark, Chair, Councillor R. Donauer, Vice-Chair, Councillor T. Davies, Councillor D. Hill, Councillor M. Loewen, His Worship the Mayor (Ex-Officio)

Pages

1. CALL TO ORDER

*2. CONFIRMATION OF AGENDA*

- Submitting Comments - Brent Penner, Executive Director, The Partnership - Item 7.2.1 under Reports from Administration.
- Request to Speak - Cathy Watts/Hilary Gough, Saskatoon Cycles - Item 7.2.1 under Reports from Administration.
- Submitting Comments - Everett J. Kearley, President, Waldegrave Properties Limited - Item 7.2.1 under Reports from Administration.
- Submitting Comments - Mike Possberg - Item 7.2.7 under Reports from Administration.

*Recommendation*

1. That the communication from Brent Penner, The Partnership be added to Item 7.2.1 and the information be received;
2. That the Request to Speak from Saskatoon Cycles be added to Item 7.2.1 and that Cathy Watts/Hilary Gough be heard;
3. That the communication from Everett J. Kearley, Waldegrave Properties Limited be added to Item 7.2.1 and the information be received;
4. That the communication from Mike Possberg be added to Item 7.2.7 and the information be received; and
5. That the agenda be confirmed as amended.

3. DECLARATION OF PECUNIARY INTEREST

## 4. ADOPTION OF MINUTES

### 4.1 Minutes of regular meeting of Standing Policy Committee on Transportation held on February 10, 2015

**Recommendation**

That the minutes of regular meeting of the Standing Policy Committee on Transportation held on February 10, 2015 be adopted.

## 5. UNFINISHED BUSINESS

## 6. COMMUNICATIONS (requiring the direction of the Committee)

### 6.1 Delegated Authority Matters

### 6.2 Matters Requiring Direction

#### 6.2.1 2014 Annual Report - Traffic Safety Committee [File No. CK. 430-59] 7 - 9

The Traffic Safety Committee has approved submission of the 2014 Annual Report.

Ms. Cora Janzen, A/Chair, will be available to answer questions.

**Recommendation**

That the information be received and forwarded to City Council for information.

### 6.3 Requests to Speak (new matters)

## 7. REPORTS FROM ADMINISTRATION

### 7.1 Delegated Authority Matters

#### 7.1.1 Request for Encroachment Agreement - 309 and 319 22nd Street East [Files CK. 4090-2 and PL. 4090] 10 - 13

Recommendation

1. That the proposed encroachment at 309 and 319 22nd Street East (Lot 21 to 32 inclusive, Block 157, Plan Q2) be recognized;
2. That the City Solicitor be requested to prepare the appropriate encroachment agreement, making provision to collect the applicable fees; and
3. That His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal and in a form that is satisfactory to the City Solicitor.

### 7.2 Matters Requiring Direction

#### *7.2.1 Bicycle Program Update - Feasibility of Protected Bike Lanes [Files CK. 6000-5 and PL. 6330-4]* *14 - 50*

A communication has been added to this item from Brent Penner, Executive Director, The Partnership.

A Request to Speak has been added to this item from Saskatoon Cycles.

A communication has been added to this item from Everett J. Kearley, Waldegrave Properties Limited.

*Recommendation*

That the Standing Policy Committee on Transportation recommend to City Council:

1. That protected bike lanes be installed on 23rd Street (from Spadina Crescent to Idylwyld Drive) and 4th Avenue (from 19th Street to 24th Street) as a demonstration project;
2. That implementation be phased over two years with 23rd Street installed in 2015, and 4th Avenue in 2016; and
3. That curb parking be installed on the north side of 24th Street between Ontario Avenue and Idylwyld Drive.

7.2.2 New Pilot Programs Improve Ice Management Results [Files CK. 6290-1 and PW. 6291-1] 51 - 54

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated March 9, 2015, be forwarded to City Council for information.

7.2.3 Extension of Street Sweeping Contractor Assistance Contract [Files CK. 6315-3 and PW. 6315-3] 55 - 58

Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:

1. That the contract with Virtay Street Sweepers Ltd. for a cost of $727,650 per year (including taxes) be extended for two years; and
2. That the City Solicitor be requested to amend the contract agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

7.2.4 **2014 Traffic Control, Parking Restrictions and Parking Prohibitions Signage [File No. CK. 6280-1]** 59 - 65

**Recommendation**

That the report of the General Manager, Transportation & Utilities Department, dated March 9, 2015, be forwarded to City Council for information.

7.2.5 **Amendments to Policy C07-010, Parking Restrictions and Parking Prohibitions [File No. CK. 6120-2]** 66 - 74

**Recommendation**

That the Standing Policy Committee on Transportation recommend to City Council:

1. That the revisions to Policy C07-010, Parking Restrictions and Parking Prohibitions be adopted; and
2. That the City Clerk be requested to update the policy as reflected in this report.

7.2.6 **Caswell Hill Neighbourhood Traffic Review [File No. CK. 6330-1]** 75 - 123

**Recommendation**

That the Standing Policy Committee on Transportation recommend to City Council:

That the Neighbourhood Traffic Review for the Caswell Hill neighbourhood be adopted as the framework for future traffic improvements in the area, to be undertaken as funding is made available through the annual budget process.

*7.2.7 College Drive Classification [Files CK. 6000-1 and TS. 6330-1]* *124 - 131*

A communication has been added to this item from Mike Possberg.

*Recommendation*

That the Standing Policy Committee on Transportation recommend to City Council:

That the classification of College Drive, between the Canadian Pacific Railway tracks and the city limits, be modified to an Urban Expressway in order to improve connectivity into the Holmwood Sector.

8. URGENT BUSINESS

9. MOTIONS (Notice Previously Given)

10. GIVING NOTICE

11. ADJOURNMENT

## ADVISORY COMMITTEE REPORT

**TO:** **Standing Policy Committee on Transportation**
**FROM:** **Chair, Traffic Safety Committee**
**DATE:** **February 10, 2015**
**SUBJECT:** **2014 Annual Report – Traffic Safety Committee**
**FILE NO.** **CK. 430-59**

**RECOMMENDATION:** that the information be received and forwarded to City Council for information.

## BACKGROUND

The mandate of the Traffic Safety Committee is to provide advice to City Council on policy matters relating to traffic safety. The Committee reports to City Council through the Standing Policy Committee on Transportation. The Committee also provides education and awareness programs relating to traffic safety.

The Traffic Safety Committee membership for 2014 was as follows:

Councillor Zach Jeffries
Ms. Shel Bater, representing the Board of Education for Saskatoon Public Schools – School Community Council Assembly
Sergeant Dan Bryden, representing the Saskatoon Police Service – Traffic Division
Mr. Joseph Chan, representing SGI – Traffic Safety Promotion Division (May – December 2014)
Mr. Ken Claffey, representing the Board of Education for Saskatoon Public Schools – Driver Education
Mr. Brock Girling, representing the Saskatchewan Trucking Association
Mr. Doug Hingston, representing the general public
Mr. Brady Ives, representing SGI – Traffic Safety Promotion Division (January – April 2014)
Ms. Cora Janzen, representing the Saskatoon Health Region
Mr. Raymond Lennark, representing the general public (January – April 2014)
Mr. Rod Meier, representing the general public
Mr. Al Reichert, representing the Saskatoon and District Safety Council
Ms. Deb Taylor, representing the general public

## REPORT

### Summary of Activities for 2014

1. Traffic Safety Education and Awareness

As part of the Committee's initiative to promote traffic safety, funding of $500 was provided to Saskatoon Cycles in support of the "Light Up Your Life" campaign – an

initiative to increase awareness about cycling safety and having appropriate lights and reflectors on bikes at night.

The Committee also provided funding of $1,000 to the Saskatoon Police Service in support of "Operation Baby Blitz" child car seat/booster seat initiative. With new legislation in effect commencing end of June, 2014 making booster seats mandatory for children under seven years of age and under 80 pounds in weight, this initiative made it possible for those unable to obtain or afford a car seat to be provided one at no cost.

In the Fall of 2014 the Committee's transit tailboard advertisement, produced by Rawlco Transit in 2013, was displayed on six buses with an image of an aggressive-looking driver and the slogan: "Are you THAT driver? It's up to you."

2. Reports/Presentations from Administration

The Committee received a presentation from the Administration on Traffic Calming Guidelines and Tools – a new process for addressing neighbourhood traffic concerns by way of community engagement to develop joint solutions.

The Committee also received a presentation from the Administration on street sweeping operations which included details of the Spring Street Sweeping Blitz and the Residential Sweep Program.

The Administration provided updates on matters raised during the year by Committee members.

3. Issues Identified by Committee Members

Throughout the year, the Committee identified a number of traffic safety concerns that the Administration reviewed and took appropriate action if required, as well as responding to the Committee. The following traffic issues were raised by Committee members and reviewed by the Administration:

- Height of snow piled on center medians
- Ice buildup on bridges
- Hazards with lack of snow removal in front of schools
- Obstruction of view due to swale located near Flying J and Marquis Drive
- Snow removal and jersey barrier misalignment at Warman Road/Circle Drive overpass
- Visibility of left turn bays on 1st, 2nd, and 3rd Avenues during winter season
- Lane designations southbound on Warman Road, south of 51st Street/Lenore Drive intersection—bottleneck created due to left through-lane terminating at Primrose Drive
- Unlawful exit of intersection at Faithfull Avenue and Circle Drive southbound into Scotiabank parking lot
- Speed limit on the Circle Drive North Bridge
- Signage off 11th Street and Fletcher Road when accessing industrial area

- Private commercial signs obstructing visibility at junctions
- Potholes along Faithfull Avenue
- Parking issues outside of schools and enforcement of 30 km speed limit
- Deer in greenspace between the freeway and train tracks (on southwest side driving east on Circle Drive South Bridge)
- Visibility of pavement markings for two turning lanes at Marquis Road and Idylwyld Drive
- Street sweeping
- Mall speeds
- Merging traffic signage required at Idylwyld Drive/Highway 11 (southeast corner)
- Proposed bike lane on 24th Street and related delivery truck issues
- Window tint on vehicles
- Signage required at 51st Street/Lenore Drive by Bishop James Mahoney High School indicating right lane ends
- Size and intensity of flashing school zone lights
- Lane markings
- Signage in work zones
- Overhanging tree branches
- Slow moving equipment
- Barriers for traffic restrictions when no workers present
- Traffic congestion

**Plans for 2015**

The Traffic Safety Committee, in consultation with the Administration, will pursue opportunities for further traffic safety education.

"Joyce Fast" for
Mr. Ken Claffey, Chair
Traffic Safety Committee
Dated: February 10, 2015

# Request for Encroachment Agreement – 309 and 319 22nd Street East

**Recommendation**

1. That the proposed encroachment at 309 and 319 22nd Street East (Lot 21 to 32 inclusive, Block 157, Plan Q2) be recognized;
2. That the City Solicitor be requested to prepare the appropriate encroachment agreement, making provision to collect the applicable fees; and
3. That His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal and in a form that is satisfactory to the City Solicitor.

## Topic and Purpose

The purpose of this report is to seek permission for a future encroachment for the portions of the building canopy and overhead passage located at 309 and 319 22nd Street East.

## Report Highlights

1. The proposed encroachment area is 314 square metres.
2. The building canopy will extend onto 4th Avenue North sidewalk by up to 3.40 metres, 22nd Street East sidewalk by up to 1.60 metres, 3rd Avenue North sidewalk by up to 1.60 metres, and south adjacent lane by up to 1.655 metres.
3. The building overhead passage will extend over the south adjacent lane by 6.00 metres and will be 8.40 metres above ground level to its lowest point.

## Strategic Goals

This report supports the City of Saskatoon's (City) Strategic Goals of Sustainable Growth and Quality of Life by ensuring that designs of proposed developments are consistent with planning and development criteria and that these designs do not pose a hazard for public safety.

## Background

Building Bylaw No. 7306 states, in part, that:

> "The General Manager of the Community Services Department shall not issue a permit for the erection or alteration of any building or structure the plans of which show construction of any kind on, under or over the surface of any public place until permission for such construction has been granted by Council."

## Report

The owner of the property located at 309 and 319 22nd Street East has requested permission to allow an encroachment (see Attachment 1). As shown on the Site Plan, the proposed new building canopy will encroach onto 4th Avenue North sidewalk by up to 3.40 metres, 22nd Street East sidewalk by up to 1.60 metres, 3rd Avenue North sidewalk by up to 1.60 metres, and south adjacent lane by up to 1.655 metres (see Attachment 2). The building overhead passage will extend over the south adjacent lane by 6.00 metres and will be 8.40 metres above ground level to its lowest point. The total area of the proposed encroachment is approximately 314 square metres; therefore, will be subject to an annual charge of $509.60.

In terms of the passage over the lane, it should be noted this approval is for the encroachment only and is not permission to build. A separate building permit is required for construction to take place.

## Public and/or Stakeholder Involvement

All necessary utility approvals have been received respecting the passage over the lane.

## Other Considerations/Implications

There are no options, policy, financial, environmental, privacy, or CPTED implications or considerations. No communication plan is required.

## Due Date for Follow-up and/or Project Completion

There is no follow-up report planned.

## Public Notice

Public Notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

## Attachments

1. Request for Encroachment Agreement
2. Copy of Site Plan Detailing Proposed Encroachment

## Report Approval

Written by: Tanda Wunder-Buhr, Commercial Permit Supervisor, Building Standards
Reviewed by: Kara Fagnou, Senior Building Code Engineer, Building Standards
Approved by: Randy Grauer, General Manager, Community Services Department

S/Reports/DS/2015/Transportation – Request for Encroachment Agreement – 309 and 319 22nd Street East/ks

City of Saskatoon

**BUILDING STANDARDS**
222-3rd AVE NORTH, SASKATOON, SK S7K 0J5

# REQUEST FOR ENCROACHMENT AGREEMENT

Name of Applicant: aodbt architecture + interior design

Applicant Mailing Address: 235 Ave. D North, Saskatoon, SK S7L 1M7

Applicant Telephone: 306-244-5101

Name of Owner(s): 101211249 Saskatchewan Ltd. and City Centre Tower I Ltd.
*(Official Name That Will Be On Encroachment Agreement)*

Owner's Mailing Address: ~~X~~100-319 Wellman Lane, Saskatoon, SK S7T 0J1

Owner's Telephone: 306-931-2880

Site Address: 300 Block (309 & 319), 22nd Street E.

Legal Description of Site: Lot 21-32 Block 157 Plan (Q2)C 195

Application must include the following documents:

- Existing Encroachments: Current Real Property Report/Surveyor's Certificate that clearly outlines the encroaching areas including detailed dimensions of all areas that encroach onto City of Saskatoon Property.
- Proposed Future Encroachments: Detailed drawings of the proposed encroaching areas including detailed dimensions of all areas that will encroach onto City of Saskatoon Property. (Once construction is complete, an updated Real Property Report/Surveyor's Certificate will be required to confirm the areas of encroachment).
- A cheque for the $100.00 Application Fee, made payable to the City of Saskatoon (Fee is to prepare Encroachment Agreement).

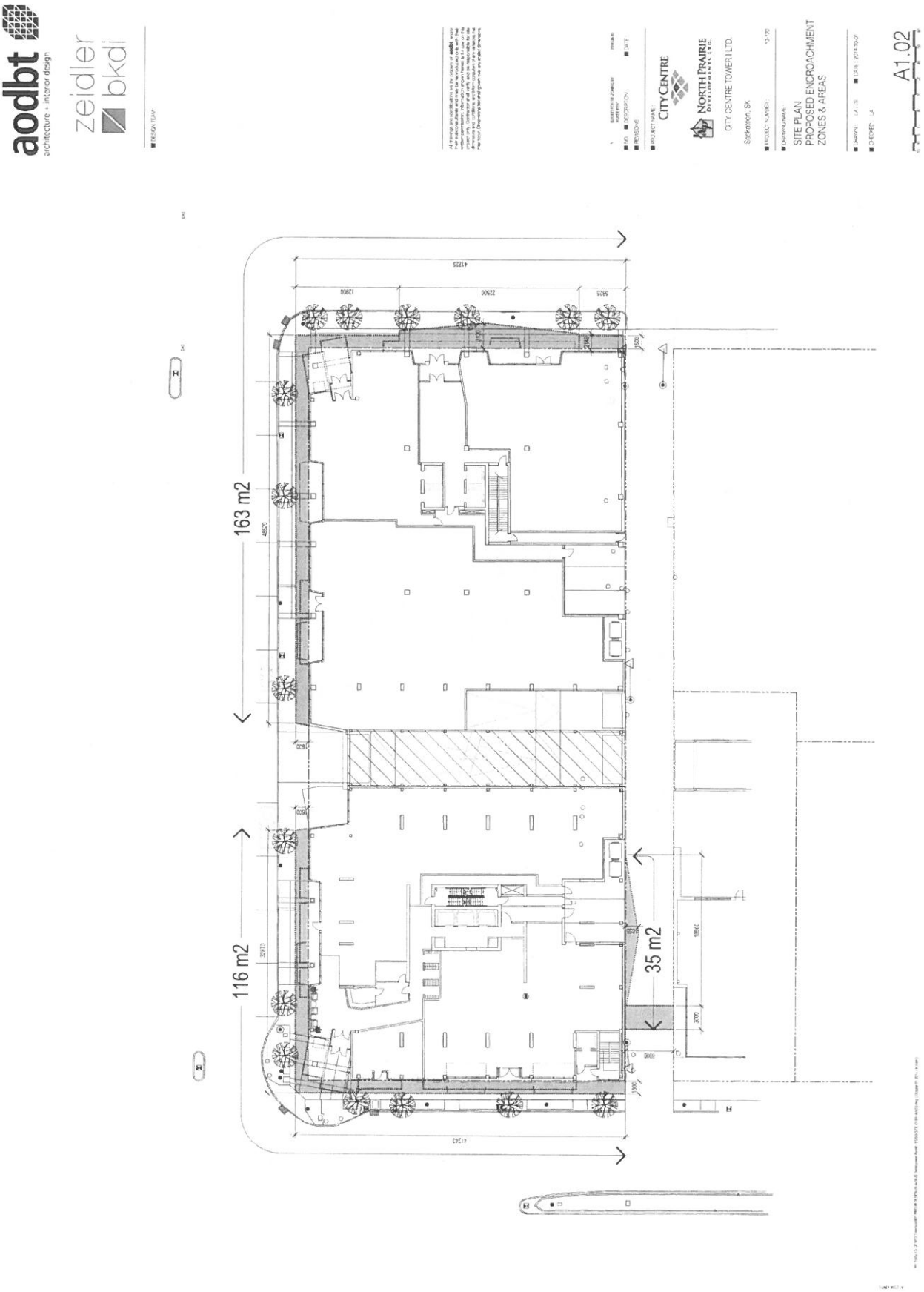
Assuming the encroachment is approved, an annual fee will be applied to the tax notice. This fee is based on the area of encroachment, and is calculated at $3.25 m². The current minimum fee is $50.00.

Upon receipt of the request, the *Building Standards Division* of the *Community Services Department* will request approvals from the necessary Departments and Divisions, including the *Planning and Development, the Transportation and Utilities Department and any other Department or Division as deemed necessary, depending on the type of encroachment.* Upon receipt of the various approvals and that there are no objections to the request the application will be forwarded to next available meeting of City Council for their approval. Once City Council has approved, the City Clerks office will advise the applicant of Council's decision, and will prepare the agreement. Please note that requests encroachment agreements may take 8 to 10 weeks to process.

Applicant Signature _____ Application Date December 3, 2014

**ATTACHMENT 2**

## Copy of Site Plan Detailing Proposed Encroachment



# Bicycle Program Update – Feasibility of Protected Bike Lanes

**Recommendation**

That the Standing Policy Committee on Transportation recommend to City Council:

1) That protected bike lanes be installed on 23rd Street (from Spadina Crescent to Idylwyld Drive) and 4th Avenue (from 19th Street to 24th Street) as a demonstration project;

2) That implementation be phased over two years with 23rd Street installed in 2015, and 4th Avenue in 2016; and

3) That curb parking be installed on the north side of 24th Street between Ontario Avenue and Idylwyld Drive.

## Topic and Purpose

This report provides a description of a proposed demonstration project for the installation of protected bike lanes in the Downtown. The demonstration project is intended to assess the feasibility of installing permanent protected bike lanes in the Downtown as proposed in the City Centre Plan (City Centre Plan) and by Saskatoon Cycles through the Better Bike Lanes initiative.

## Report Highlights

1. The best location for providing a demonstration project within the Downtown would be two segments on 23rd Street and 4th Avenue.
2. With the addition of parking on 24th Street, between Ontario Avenue and Idylwyld Drive, the net street parking impact of this project is a loss of six parking spaces.
3. Traffic flow can be maintained on both 4th Avenue and 23rd Street with the proposed lane reconfigurations that result from the introduction of protected bike lanes.
4. Extensive engagement with stakeholders and the public was undertaken, which resulted in general support for the project and the identification of key issues.
5. The demonstration period should be a minimum of 18 months in duration with the 23rd Street project implemented in 2015, and the 4th Avenue project added in 2016.

## Strategic Goal

Improving the comfort and attractiveness of cycling in the Downtown supports the City of Saskatoon's (City) Strategic Goal of Moving Around by creating a more cycling-friendly Downtown and promoting active transportation. The City Centre Plan identified the need for improved facilities for cycling within the City Centre, which includes the Downtown.

## Background

During its January 20, 2014 City Council meeting, a petition for the installation of separated bike lanes in Downtown Saskatoon (i.e. 4th Avenue and 24th Street) as a demonstration project was presented by Saskatoon Cycles representatives, an organization that advocates for a city in which cycling is a viable, year-round mode of transportation that is safe and convenient for all ages. City Council requested a report outlining the feasibility of installing separated bike lanes as a pilot project for the upcoming cycling season.

At its May 20, 2014 City Council meeting, a feasibility report was presented recommending the use of unidirectional bike lanes on 24th Street (from Spadina Crescent to Idylwyld Drive) and 4th Avenue (from 19th Street to 24th Street) as a demonstration project. The following motions were requested to be addressed:

1. That an open house be held by September 30, 2014, where the detailed design of the pilot project can be taken out to stakeholders;
2. That the Administration report back with options (short-term and long-term) for mitigating on-street parking loss resulting from the pilot project, including:
   - expanding angle parking along 23rd Street between 3rd Avenue and Spadina Crescent;
   - incentives for the construction of parking structures; and
   - the development of an application which identifies available parking capacity Downtown in real time.
3. That the Administration provide further information regarding the traffic flows along 4th Avenue, and the anticipated performance of changing from two lanes, in either direction, to one lane, in either direction, with a turning lane; and
4. That a parking study be conducted at the same time.

## Report

The City's Strategic Plan and the City Centre Plan have identified the need to improve cycling as a strategy to increase the attractiveness of, and access to, the Downtown for businesses, residents, visitors, employers, and their employees. A vibrant and healthy Downtown benefits the entire city and region. The Protected Bike Lane Demonstration Project has been planned to achieve this goal. A background summary of protected bike lanes can be found in Attachment 1.

Protected bike lanes should provide an opportunity for people riding bikes to reach destinations in the heart of downtown in a comfortable and safe manner.

### Project Location

The feasibility study considered all east-west and north-south streets as potential candidate locations for the project. After extensive review and consultation with stakeholders and the community, the Administration's preferred street pair for the

project is recommended to be two segments on 23rd Street between Idylwyld Drive and Spadina Crescent and 4th Avenue between 19th Street and 24th Street.

These streets provide the best opportunity for protected bike lanes within the Downtown; bring people on bikes directly to the centre of Downtown; and connect to existing, well-used cycling routes without detrimentally impacting traffic movement, transit service, or street parking.

Both streets have adequate width to accommodate protected bike lanes, accommodate transit operation, maintain street parking and bring people to the centre of Downtown. 4th Avenue provides a direct connection to the Broadway Bridge. On the north end of 4th Avenue, the project will extend past 23rd Street for one additional block to allow the protected bike lanes to transition back to street cycling. 23rd Street connects well to the Blairmore Bikeway on the west end and to Spadina Crescent and promenade, Meewasin Valley Authority trail, and University Bridge on the east end. The selection criteria and summary of the location review appears in Attachment 2.

Transit Terminal

It is recognized that the downtown transit terminal is located on 23rd Street and this provides an interruption to through bicycle traffic. People riding bicycles will not be allowed to ride through the transit terminal either on the traffic lanes or sidewalk and platform areas as is currently prohibited. Walking bikes on the sidewalks is allowed and available for bicycle traffic. It should be noted that the transit terminal is in the centre of downtown and protected bike lanes that extend all the way to the edges of downtown affords people riding bikes to get to the centre of downtown on their bikes before departing from these bike lanes to their final destinations. Through bike traffic can either walk through the transit terminal or use any of the downtown streets as an alternate route.

As a result of the transit terminal, the 23rd Street route is being recommended as two separate segments. Each segment provides dedicated infrastructure, which is long and safe to help cyclists reach their destinations in the downtown. The City Administration will continue to work on options to assist cyclists who wish to ride around the transit terminal, including the east-west lane between 22nd and 23rd Streets as a potential shortcut.

While each street offered favorable characteristics, the overall combination of 4th Avenue and 23rd Street provides the best opportunity to fully meet the desirable project criteria. The proposed location is illustrated in the figure on Attachment 3.

Street Parking

Street parking availability continues to be a key Downtown and community concern. It was not desirable to reduce the amount of street parking spaces. The following table summarizes the parking space inventory along the project streets and illustrates effects of added parking to 24th Street in order to mitigate the parking space impacts.

| Street Location | Existing Parking Spaces | Proposed Parking Spaces | Change in Parking Spaces | Total Change in Parking Spaces |
|---|---|---|---|---|
| 4th Avenue: 19th Street to 24th Street | 133 | 114 | -19 | **-6** |
| 23rd Street: Idylwyld Drive to Spadina Crescent | 112 | 102 | -10 | |
| 24th Street: Idylwyld Drive to Ontario Avenue (north side only) | 0 | 23 | +23 | |

Protected bike lanes on 4th Avenue and on 23rd Street result in 29 parking spaces lost. In order to mitigate the amount of parking spaces lost, it was identified that 23 parking spaces could be added on the north side of 24th Street between Idylwyld Drive and Ontario Avenue. With these added parking spaces, the net change is a loss of six parking spaces. Although this design results in an overall loss of parking spaces, data from the parking utilization study indicate that unoccupied parking spaces are available in the study area even during the busiest times (see Attachment 4).

In June 2014, an additional 76 public off-street parking spaces were created on the corner of 4th Avenue and 23rd Street on the former Saskatoon Police Service site. These parking spaces are publicly available for hourly to daily use. This use is temporary until such time that the property is redeveloped.

The Comprehensive Downtown Parking Strategy is currently underway. This project includes the mandate of incorporating information technologies to improve the customer parking experience.

Traffic Flow

Traffic conditions for the proposed design were assessed and compared to the existing traffic conditions. The proposed traffic conditions resulted in an overall intersection level of service (LOS) B* (or better) on 4th Avenue and an overall LOS B* [1](or better) on 23rd Street in the a.m. and p.m. peak hours. An increase in travel time of 14 seconds in the a.m. peak hour and 10 seconds in the p.m. peak hours were identified on 4th Avenue. These average travel time increases are relatively minor given that the average trip length during peak periods is 10 to 15 minutes. There was no difference in travel time on 23rd Street. A more detailed summary of traffic flow analysis by intersection appears in Attachment 5.

Overall, traffic flow can be maintained on both 4th Avenue and 23rd Street with the proposed lane reconfigurations that result from the introduction of protected bike lanes.

A similar traffic flow analysis was undertaken for 24th Street between Idylwyld Drive and Ontario Avenue to understand the impact of converting a travel lane to a parking lane.

[1] *LOS is a term used to qualitatively describe the operating conditions of a roadway based on factors, such as speed, travel time, manoeuvrability, delay, and safety. The level of service of a facility is designated with a letter A to F, with A representing the best operating conditions and F the worst.

An overall intersection LOS B was able to be maintained at Idylwyld Drive with the proposed addition of on-street parking.

Given the relatively modest impacts on traffic movement, it is not anticipated that existing traffic will seek alternate routes in the Downtown; and therefore, it is not anticipated that the project will affect traffic conditions on other Downtown streets.

Identification of Key Issues

1. Winter Use and Maintenance

   Concern has been expressed that the protected bike lanes would not be cleared well in the winter and that cycling usage would be low because of winter conditions.

   It is expected that following a snow fall, sidewalk snow would be cleared into the bike lanes. This snow would be plowed (using the pathway plows) towards the centre of the road into the parking lane. Graders would pull all the snow towards the roadway centre to form a windrow to be removed. Some of the plastic delineation posts along the edge of the bike lane would be removed prior to the first snow fall to allow for improved snow clearing efficiency; however, some would remain in order to provide guidance to motorists parking their vehicles.

   This project would represent a new challenge for snow and ice operations, and the precise effort and procedure is not known. The Public Works Division, along with the Transportation Division, has committed to clearing the bike lanes and taking a collaborative approach to problem solving.

2. Conflict with Buses and Transit Customers

   For the duration of this demonstration project, the transit terminal will be in place; and therefore, people riding bikes will need to abide by the current restrictions that are in place:

   a) only transit and emergency vehicles are allowed through the transit terminal; and
   b) cycling is not allowed on the sidewalks or platforms through the terminal.

   These rules exist today for the safety of pedestrians, transit customers, and people riding bikes. While it is not an ideal situation for either people riding bicycles or transit service to lead the protected bicycle lanes to the transit terminal, using 23rd Street as demonstration location is preferred over all other east-west options. The Growing Forward project calls for the removal of the transit terminal. Discussions are underway with regards to timing and logistics around its removal.

Transit stops will be designed to allow buses to stop at the curb (as they do today), effectively blocking the bike lane. Buses do not dwell at any of the stops within the project. This design is required to ensure that transit passengers can easily and safely board and exit the transit vehicle without conflict with people riding bikes.

The Administration will work with Transit and Cyclists throughout the demonstration on ways to minimize buses stopping within the bikelane, including the construction of temporary ramps to allow transit customers to board busses conveniently and safely

This project has been discussed with Saskatoon Transit, who stress that the safety and convenience of their customers and the general public is of paramount importance during this demonstration project.

3. Economic Impact

Previous discussion of this matter included some concern about the economic impact that the bike lanes might have on the Downtown, and the economic impact that a loss of street parking might have.

The studies and research that has been undertaken has indicated a range of values depending on the type of street and adjacent property uses, and the changes made to accommodate bike lanes. A brief summary of four studies appears in Attachment 6. Generally, the studies found a positive relationship between bike lanes and economic activity if the introduction of bike lanes increased the number of people accessing the street. Where the introduction of bike lanes eliminated a large number of parking spaces or dramatically reduced mobility for motor vehicle traffic or pedestrians, economic activity decreased.

Overall, protected bike lanes on 4$^{th}$ Avenue and 23$^{rd}$ Street consist of a design that will fully protect bicyclists, result in only six parking spaces lost, result in a minimal increase in travel times on 4$^{th}$ Avenue and 23$^{rd}$ Street, and provide a facility for people riding bikes to get to and destinations within the Downtown.

Demonstration Duration and Implementation Timing

It is recommended that a minimum trial period of 18 months be considered in order to evaluate the operation of the street during all seasons, especially winter. Community Services and Transportation & Utilities staff have been assigned to work with property owners, businesses, Saskatoon Transit, Public Works, and emergency service providers to identify and resolve conflicts, hazards, and operational issues in an expedient manner during implementation and throughout the duration of the demonstration project.

It is further recommended that two protected bike lane segments be installed on 23rd Street in 2015, with 4th Avenue added in 2016 as a result of the University Bridge closure/restriction in 2015.

## Options to the Recommendation

An extensive consideration of a variety of streets and bike lane styles was undertaken as a part of this project. The resultant recommendation is the product of this review and engagement process.

City Council may wish to consider 24th Street as the east-west connection. Two options have been explored utilizing 24th Street for the protected bike lanes.

A continuous protected bike lane for the entire length of 24th Street would require the loss of 47 on-street parking spaces including all street parking from 4th Avenue to Spadina Crescent. This option was presented in the original feasibility report to City Council in May 2014.

A revised design for 24th Street was presented at the October 21st, 2014, open house event. This design provided for a protected bike lane through the centre of downtown (1st Avenue to 4th Avenue) with "Green Lane" connections beyond that to connect the project to the larger cycling network. These "Green Lanes" required people riding bikes to ride in the centre of the traffic lane with motor vehicle traffic in the same way that traffic lanes marked with sharrows reinforce that bicycle riding is allowed on streets. This option was not received well by the community as it was seen to severely limit the ability of people riding bikes to comfortably get to the demonstration project on their bikes.

Both of these options were considered by the Administration as being inferior solutions to the recommendation.

## Public and/or Stakeholder Involvement

A combination of meetings with key stakeholders, interest groups, and an open house event formed the basis of engagement for this project. From this engagement, the following themes emerged:

i. **General Support from Stakeholders and the Public**
   There was general support that protected bike lanes would make the Downtown more attractive and accessible to people riding bikes, which would positively contribute to the continued success of the Downtown.

ii. **Separation Preferred**
   Most participants favour protected bike lanes over green lanes or sharrows. Safety was the key reason given for this preference. It was generally expressed that requiring cyclists to share the road with motor vehicles would not attract the target group who say that they would like to bike to the Downtown if they could feel safe doing so.

**iii. Connectivity and Access**

A key concern among public and stakeholder participants is how bikes will connect to and access the Broadway Bridge from 4th Avenue. Providing improved access to the Broadway Bridge was examined as a part of this project. Improvements are being included in the design.

**iv. Parking/Business Access**

There was no appetite at all for any proposals that resulted in any loss of street parking spaces. This was a key consideration in choosing 23rd Street for the project as it resulted in only a few spaces to be removed and allowed for parking to be reintroduced on portions of 24th Street.

A summary of all of the engagement activities is shown in Attachment 7.

To conclude the consultation and community engagement for this project, a comprehensive meeting of community stakeholder groups and civic divisions was held on February 24, 2015. This meeting facilitated the discussion of the overall project goals, project process, technical considerations, and recommendation for implementation. It provided an opportunity for stakeholders and civic divisions to openly discuss the benefits and challenges that the project had for the community and their respective organizations. It was broadly recognized that this project had strong potential to benefit the vitality of downtown and to improve access to the downtown for people riding bikes without compromising current accessibility.

It was also recognized that the existence of the transit terminal on 23rd Street prevents a less-than-perfect continuous bike lane demonstration; however, it was still better than the options that were considered for 24th Street. It was also recognized that much inter-division/agency collaboration will be required prior to and during implementation for the safety benefit of all street users during the demonstration period

## Communication Plan

As protected bike lanes move toward implementation, stakeholders will continue to be involved in the demonstration project. Communication activities to inform the public will include print media, information on the City's website, and social media. Direct mailing and notice delivery to property owners and business along 23rd Street and 4th Avenue would be undertaken prior to physical work being undertaken along the streets. A static display of information panels will be on display in the lobby of City Hall for four weeks. Strong, effective signage will be installed at key locations at the onset of the project to aid cyclists, pedestrians, transit and motorists in understanding the bikeway.

## Financial Implications

It is estimated that the cost of undertaking this trial project will be $225,000. This would include the costs for materials and installation of road painting, flexible posts, and signage. The cost estimate also includes a public awareness/educational campaign to help motorists, cyclists, and pedestrians to use the facilities appropriately and safely.

This project will be accommodated within the $375,000 budget available for cycling infrastructure construction in the 2014 Capital Budget.

Snow removal and street sweeping operations will be evaluated during the demonstration project. These streets are currently swept and cleared but the operation with protected bike lanes will be different, and therefore, there will be an incremental cost. That incremental cost has not been calculated as a part of this feasibility study.

Durable markings were installed on three blocks of 4th Avenue in 2013 during street resurfacing. Those markings would need to be removed in order to reallocate street space for protected bike lanes. The removal of those markings has been included in the implementation cost; however, the "lost investment" of the durable markings has not.

**Environmental Implications**
Cycling has been recognized to have a positive impact towards reducing energy consumption and greenhouse gas production. The initiatives proposed contribute to increasing the ability of people to use their bicycles for practical purposes, thereby substituting automobile trips for bicycle trips. Although not quantified for this report, the net benefit to the environment would be positive.

**Other Considerations/Implications**
There are no policy, privacy, or CPTED implications or considerations.

**Due Date for Follow-up and/or Project Completion**
The evaluation period will conclude at the end of 2016. At that time, a report will be prepared to recommend next steps.

**Public Notice**
Public Notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

**Attachments**
1. Protected Bike Lane Basics
2. Project Location Summary
3. Protected Bike Lane Demonstration Project
4. Parking Utilization Study
5. Traffic Flow Analysis
6. Economic Impact Studies
7. Engagement Study

**Report Approval**

| | |
|---|---|
| Written by: | Don Cook, Manager, Long Range Planning |
| Reviewed by: | Alan Wallace, Director of Planning and Development |
| Reviewed by: | Angela Gardiner, Director of Transportation |
| Approved by: | Lynne Lacroix, Acting General Manager, Community Services Department |
| Approved by: | Jeff Jorgenson, Acting City Manager |

S/Reports/CP/2015/TRANSPORTATION – Bicycle Program Update – Feasibility of Protected Bike Lanes/ks

## Protected Bike Lane Basics

Protected bike lanes provide a dedicated marked lane, 1.5 meters wide (minimum) for bicyclists, that is to the right of the traffic lane or street parking (if provided) and is "protected" from moving traffic by street parking and a 1.0 meter wide (minimum) painted buffer or physical barrier. This places the bicyclists directly adjacent to the boulevard and sidewalk. Protected bike lanes require more street space than conventional bike lanes and may impact the amount of parking and/or number of traffic lanes.

### What are Protected Bike Lanes?

Protected bike lanes physically separate people riding bikes from drivers. Protected bike lanes make this transportation option more attractive by increasing the comfort level and feeling of safety by "protecting" cyclists from traffic and opening of car doors. The lanes also benefit drivers, as separate space for cyclists increases the predictability and comfort of driving. It also reduces "sidewalk riding", which is beneficial for pedestrians.

### Photo Examples from Other Cities

*Photo Credit: Cycle Toronto & ActiveTrans*

### Who Would Use Protected Bike Lanes?

Protected bike lanes are intended to be used by all people riding bikes; however, they are most attractive to cyclists who self-identify as "Interested but Concerned". Based on studies in other North American cities, this group makes up the largest proportion of residents and holds the greatest opportunity for increasing cycling in the Downtown.

| Cyclist Type | Description | Typical Proportion of Residents |
|---|---|---|
| Strong and Fearless | Very comfortable without bike lanes | 3% |
| Enthused and Confident | Very comfortable with bike lanes | 7% |
| Interested But Concerned | Not very comfortable but interested in biking more | 60% |
| No Way - No How | Physically unable, very uncomfortable, or not interested | 30% |

**Why Are Protected Bike Lanes Important for the Downtown?**
The City of Saskatoon Strategic Plan and the City Centre Plan have identified the need to improve cycling as a strategy to increase the attractiveness of, and access to, the Downtown for businesses, residents, visitors, employers, and their employees. A vibrant and healthy Downtown benefits the entire city and region. The Protected Bike Lane Demonstration Project has been planned to achieve this goal.

**Have Similar Bike Lanes Been Successful in Other Cities?**
The use of protected bike lanes began 25 years ago in cities in North America and within the last ten years has become a successful method of creating cycling facilities for all ages in strategically important locations. Permanent protected bike lanes have been built in Canada's largest cities, including Toronto, Montreal, Vancouver, Ottawa, and Calgary. Demonstration projects are currently underway in Edmonton and Winnipeg.

The most recent research throughout the United States from the National Institute for Transportation and Communities indicate that protected bike lanes have increased ridership and do not have a negative impact on retail sales.

## Project Location Summary

Each street within the Downtown was reviewed on selection criteria developed based on the overall project objectives:

1) a continuous protected bike lane route through the Downtown;
2) good connections at either end to existing well-used cycling facilities,
3) leads cyclists to the centre of the Downtown; and
4) adequate street width to allow traffic movement, transit, parking, and bike lanes.

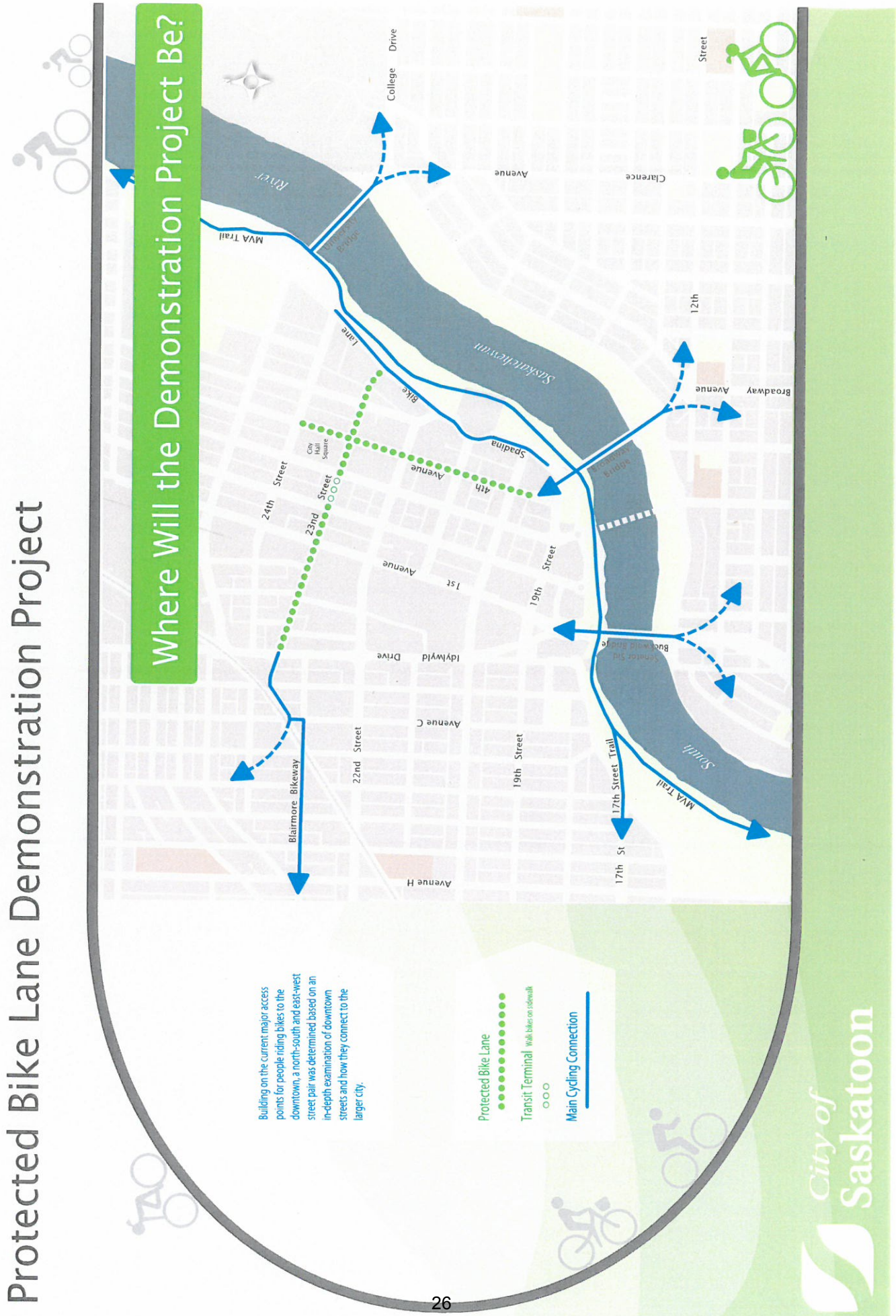
**East-West Streets**

| Street | Favorable Characteristics | Unsuitable Characteristics |
|---|---|---|
| 19th Street | Could provide a continuous route; connects directly to Broadway Bridge; adequate street width. | Does not connect to a cycling facility to the west of Downtown, along the edge of Downtown. |
| 20th Street | Could provide a continuous route; connect indirectly to Broadway Bridge; connect to Spadina bike lanes and Meewasin Valley Authority (MVA) Trail; close to the centre of Downtown; adequate street width. | Does not connect to a cycling facility to the west of Downtown. |
| 21st Street | Connects to Spadina bike lanes; located in the centre of Downtown; adequate street width. | Does not span the Downtown, does not connect to other cycling facilities. |
| 22nd Street | Could provide a continuous route; connects to Spadina bike lanes and MVA Trail; located in the centre of Downtown. | Does not connect to a cycling facility to the west of Downtown; inadequate street width. |
| 23rd Street | Could provide a continuous route (with the exception of the transit terminal); connects to the Blairmore Bikeway; Spadina bike lanes and MVA Trail; located in the centre of Downtown; adequate street width. | Cyclist must walk bikes through transit terminal. |
| 24th Street | Could provide a continuous route; connects to Spadina bike lanes and MVA Trail; located close to the centre of Downtown. | Does not connect to a cycling facility to the west of Downtown; inadequate street width. |

**North-South Streets**

| Street | Favorable Characteristics | Unsuitable Characteristics |
|---|---|---|
| 1st Avenue | Could provide a continuous route; located close to the centre of Downtown; adequate street width. | Does not connect to a cycling facility at either end. |
| 2nd Avenue | Could provide a continuous route; connects to Riverlanding; located in the centre of Downtown. | Does not connect to a cycling facility to the north of Downtown; inadequate street width with angle parking. |
| 3rd Avenue | Could provide a continuous route; connects to Riverlanding and MVA Trail; located in the centre of Downtown. | Does not connect to a cycling facility to the north of Downtown; inadequate street width to support traffic, bike lanes, parking, and transit. |
| 4th Avenue | Could provide a continuous route; connects directly to Broadway Bridge; adequate street width; located in the centre of Downtown. | Does not connect to a cycling facility to the north of Downtown. |
| Spadina Crescent | Could provide a continuous route; connects directly to University Bridge. | Does not connect to a cycling facility to the south of Downtown; located on the edge of Downtown; inadequate street width to retain parking lane. |

# Protected Bike Lane Demonstration Project



## Parking Utilization Study

A parking utilization study was conducted by ME2 Transportation Data Corp. in July 2014 to determine the street parking supply and utilization on, and around, 4th Avenue and 24th Street. Figure 1 presents the weekday percentage of occupied and unoccupied parking spaces in the study area from 7 a.m. to 5 p.m. The data indicated that at peak daytime parking demand, 50% of the existing parking spaces provided are unoccupied. Noon to 1 p.m. was identified as the peak hour with the highest percentage of occupied parking spaces.

**Figure 1: Weekday Parking Occupancy**

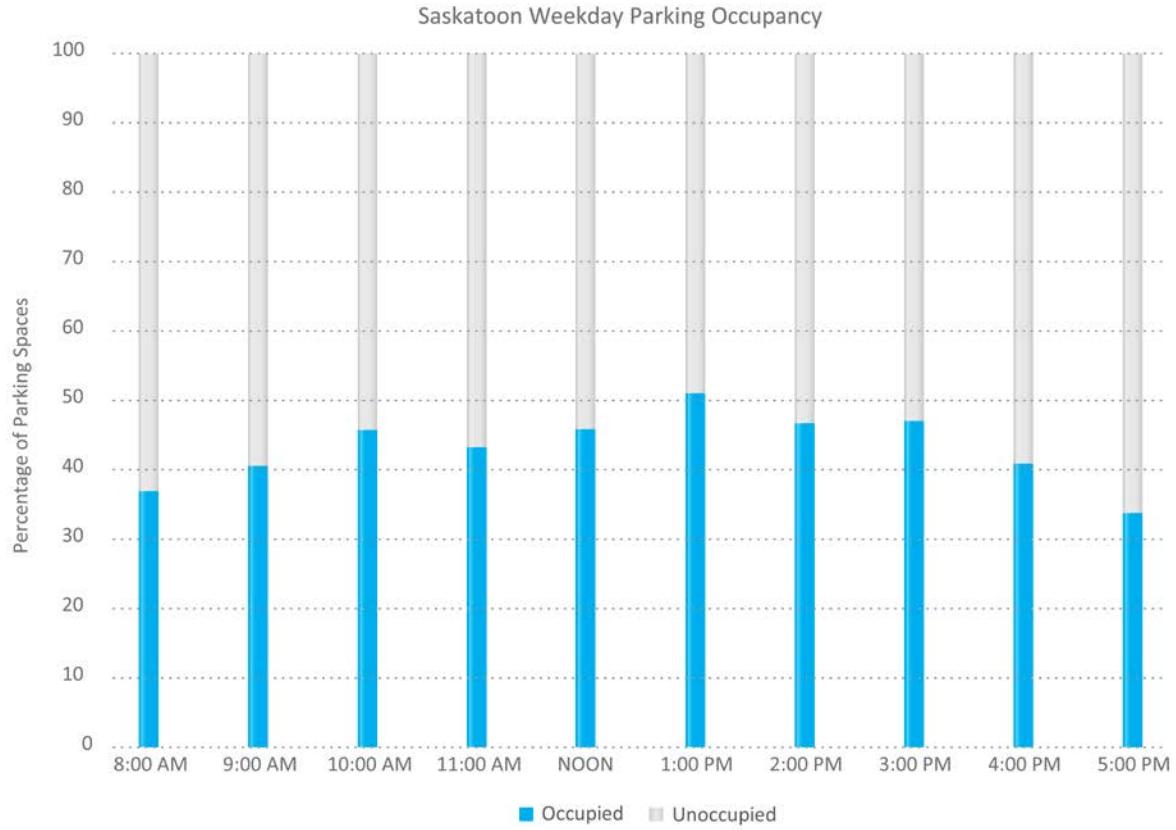
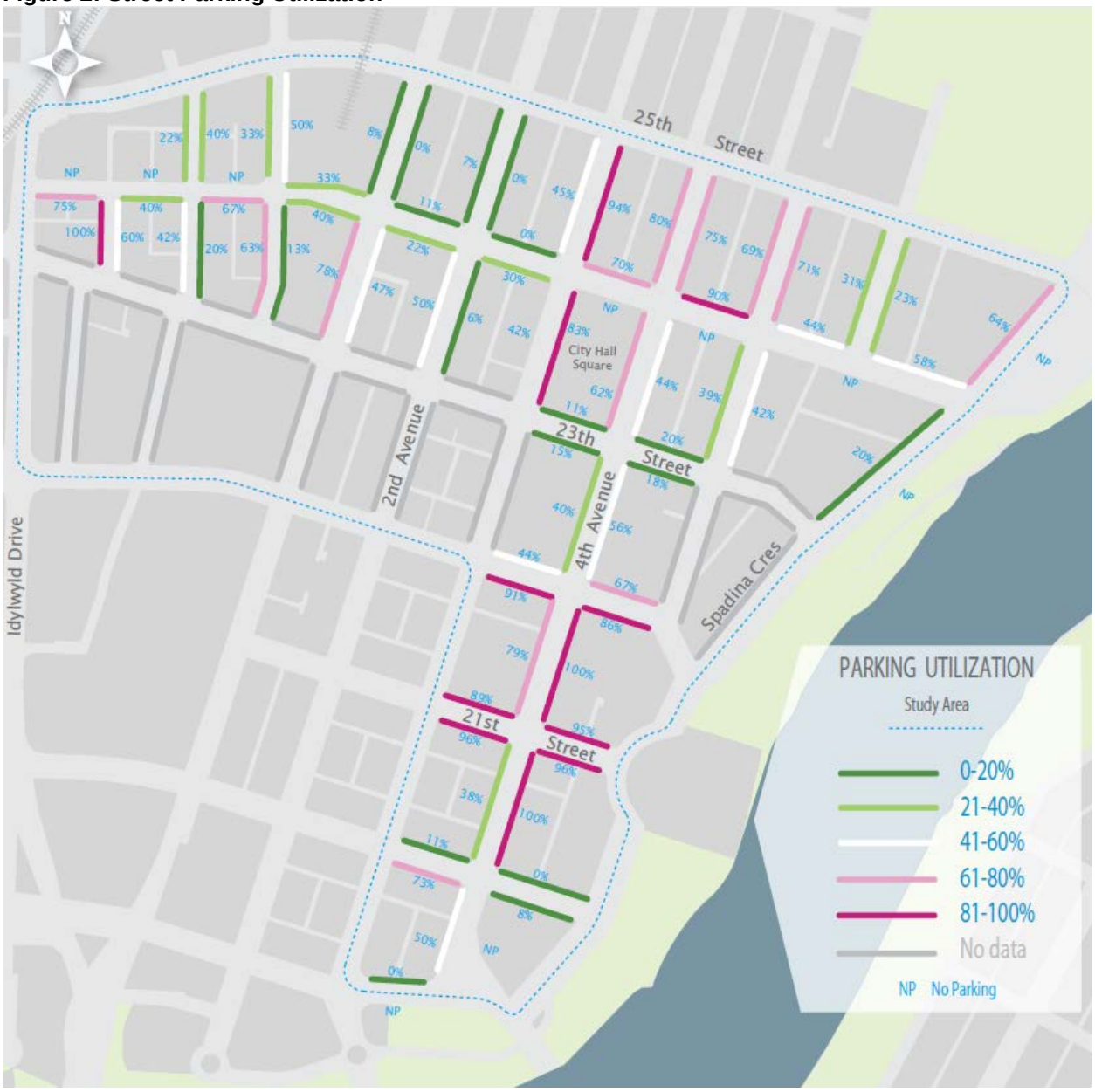


Figure 2 presents the parking utilization during the 12 p.m. to 1 p.m. peak hour in the study area. Overall, there are several block faces with low utilization percentages. However, there are areas with highly utilized parking spaces. The area around the intersection of 4th Avenue and 21st Street, and the intersection of 4th Avenue and 24th Street show a parking utilization percentage that range from 61% to 100%.

**Figure 2: Street Parking Utilization**




Although there are highly utilized blocks that are almost at or have reached capacity, the data shows vehicles will be able to find an unoccupied parking space in the study area during the busiest time of the weekday.

# Traffic Flow Analysis

The existing and proposed level of services for the designs on 4th Avenue, 24th Street, and 23rd Street are outlined in Table 1. Protected bike lanes on 4th Avenue result in an overall LOS C (or better) in the a.m. and p.m. peak hours. The design on 23rd Street results in an overall LOS D (or better) in the a.m. and p.m. peak hours.

**Table 1: Intersection Level of Service Summary**

| Street | Existing LOS | | LOS with Protected Bike Lanes | |
|---|---|---|---|---|
| | a.m. Peak Hour | p.m. Peak Hour | a.m. Peak Hour | p.m. Peak Hour |
| 4th Avenue | B or better | B or better | B or better | B or better |
| 23rd Street | B or better | B or better | B or better | B or better |

Table 2 presents the existing and proposed travel times for the designs on 4th Avenue, and 23rd Street. Protected bike lanes on 4th Avenue result in an additional 14 second and 10 second travel time in the a.m. and p.m. peak hours, respectively. There is a minimal difference in travel time for either designs on 24th Street and for the 23rd Street design.

**Table 2: Peak Hour Travel Times Summary**

| Street | Existing Travel Time (s) | | Travel Time with Bike Lanes (s) | | Change in Travel Time (s) | |
|---|---|---|---|---|---|---|
| | a.m. | p.m. | a.m. | p.m. | a.m. | p.m. |
| 4th Avenue | 49 | 58 | 63 | 68 | +14 | +10 |
| 23rd Street | 64 | 76 | 66 | 77 | +3 | +1 |

Tables 3 and 4 provide a listing of all intersections along 4th Avenue and 23rd Street and indicated the operating conditions for each traffic movement at each intersection. As well, an overall intersection LOS is provided.

**Table 3: Traffic Conditions on 4th Avenue with Protected Bike Lanes**

| Intersection with 4th Avenue | Movement | | Operating Conditions | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | a.m. Peak Hour | | | | p.m. Peak Hour | | | |
| | | | v/c ratio | Delay(s) | LOS | Queue (m) | v/c ratio | Delay(s) | LOS | Queue (m) |
| **20th Street** | EB | Left/Thru/Right | 0.47 | 7.2 | A | 14.7 | 0.47 | 7.6 | A | 15.8 |
| | WB | Left/Thru | 0.24 | 13.0 | B | 19.1 | 0.59 | 20.5 | C | 41.3 |
| | | Right | 0.06 | 3.8 | A | 3.5 | 0.04 | 2.3 | A | 2.1 |
| | NB | Left | 0.40 | 14.2 | B | 25.9 | 0.49 | 21.3 | C | 21.4 |
| | | Thru/Right | 0.81 | 23.6 | C | 113.7† | 0.57 | 14.9 | B | 57.9 |
| | SB | Left/Thru/Right | 0.27 | 8.4 | A | 15.7 | 0.58 | 13.7 | B | 47.6 |
| | **Intersection Summary** | | **0.81 (max)** | **14.3** | **B** | | **0.59 (max)** | **13.5** | **B** | |
| **21st Street** | EB | Left/Thru/Right | 0.17 | 10.2 | B | 11.7 | 0.27 | 9.9 | A | 15.7 |
| | WB | Left/Thru/Right | 0.30 | 13.1 | B | 20.4 | 0.43 | 16.3 | B | 30.0 |
| | NB | Left | 0.09 | 8.4 | A | 6.4 | 0.20 | 11.8 | B | 7.4 |
| | | Thru/Right | 0.78 | 20.5 | C | 116.0† | 0.51 | 12.5 | B | 57.1 |
| | SB | Left | 0.13 | 11.2 | B | 5.2* | 0.12 | 9.9 | A | 6.2* |
| | | Thru/Right | 0.43 | 11.8 | B | 46.1 | 0.88 | 25.2 | C | 151.0† |
| | **Intersection Summary** | | **0.78 (max)** | **16.2** | **B** | | **0.88 (max)** | **18.7** | **B** | |
| **22nd Street** | EB | Left | 0.35 | 20.4 | C | 23.9 | 0.36 | 21.0 | C | 23.3 |
| | | Thru | 0.36 | 18.7 | B | 36.5 | 0.29 | 17.8 | B | 30.2 |
| | | Right | 0.51 | 7.6 | A | 15.4 | 0.34 | 5.4 | A | 11.5 |
| | WB | Left | 0.12 | 16.6 | B | 8.5 | 0.16 | 16.9 | B | 12.6 |
| | | Thru/Right | 0.23 | 15.0 | B | 21.6 | 0.39 | 17.6 | B | 35.2 |
| | NB | Left | 0.42 | 8.7 | A | 11.4* | 0.57 | 14.4 | B | 16.8 |
| | | Thru/Right | 0.60 | 8.4 | A | 29.7* | 0.48 | 8.7 | A | 28.7 |
| | SB | Left | 0.08 | 7.3 | A | 2.9* | 0.03 | 6.5 | A | 1.0* |
| | | Thru/Right | 0.41 | 7.5 | A | 25.8 | 0.57 | 8.3 | A | 30.8 |
| | **Intersection Summary** | | **0.60 (max)** | **10.7** | **B** | | **0.58 (max)** | **11.7** | **B** | |
| **23rd Street** | EB | Left/Thru | 0.06 | 13.8 | B | 6.4 | 0.06 | 13.8 | B | 6.1 |
| | | Right | 0.13 | 4.8 | A | 6.8 | 0.05 | 3.6 | A | 2.8 |
| | WB | Left/Thru/Right | 0.14 | 11.0 | B | 8.3 | 0.12 | 10.4 | B | 7.5 |
| | NB | Left | 0.14 | 12.0 | B | 7.0* | 0.15 | 12.0 | B | 8.9* |
| | | Thru/Right | 0.61 | 15.5 | B | 53.1 | 0.56 | 14.8 | B | 56.1 |
| | SB | Left | 0.11 | 10.5 | B | 6.9 | 0.07 | 9.9 | A | 5.1 |
| | | Thru/Right | 0.50 | 13.8 | B | 54.5 | 0.59 | 15.7 | B | 68.6 |
| | **Intersection Summary** | | **0.61 (max)** | **13.4** | **B** | | **0.59 (max)** | **14.1** | **B** | |

* Note: Volume for 95th percentile queue is metered by upstream signal

† Note: 95th percentile volume exceeds capacity, queue may be longer

## Table 4: Traffic Conditions on 23rd Street with Protected Bike Lanes

| Intersection with 23rd Street | Movement | | Operating Conditions | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | | | PM Peak Hour | | | |
| | | | v/c ratio | Delay (s) | LOS | Queue (m) | v/c ratio | Delay (s) | LOS | Queue (m) |
| Idylwyld Drive | EB | Left/Thru/Right | 0.58 | 38.3 | D | 31.4 | 0.70 | 39.7 | D | 35.8 |
| | WB | Left/Thru/Right | 0.24 | 21.5 | C | 11.0 | 0.73 | 28.9 | C | 35.5 |
| | NB | Left/Thru/Right | 0.48 | 6.5 | A | 48.0 | 0.42 | 7.6 | A | 43.0 |
| | SB | Left/Thru | 0.35 | 5.6 | A | 24.9 | 0.52 | 8.5 | A | 52.5 |
| | | Right | 0.08 | 1.4 | A | 4.3 | 0.13 | 1.6 | A | 6.6 |
| | **Intersection Summary** | | **0.58 (max)** | **9.4** | **A** | | **0.73 (max)** | **13.0** | **B** | |
| Pacific Avenue | EB | Left/Thru/Right | 0.34 | 11.7 | B | 16.3 | 0.41 | 13.4 | B | 20.4 |
| | WB | Left/Thru/Right | 0.25 | 11.6 | B | 11.8 | 0.45 | 14.6 | B | 21.3 |
| | NB | Left/Thru/Right | 0.10 | 4.5 | A | 6.5 | 0.41 | 7.5 | A | 22.3 |
| | SB | Left/Thru/Right | 0.07 | 5.5 | A | 6.1 | 0.18 | 5.0 | A | 10.1 |
| | **Intersection Summary** | | **0.34 (max)** | **10.2** | **B** | | **0.45 (max)** | **11.3** | **B** | |
| 1st Avenue | EB | Left/Thru/Right | 0.29 | 10.0 | A | 13.7 | 0.59 | 13.5 | B | 28.3 |
| | WB | Left/Thru/Right | 0.17 | 10.7 | B | 11.0 | 0.33 | 12.5 | B | 18.5 |
| | NB | Left | 0.16 | 10.7 | B | 9.1 | 0.22 | 12.5 | B | 9.1 |
| | | Thru/Right | 0.47 | 10.7 | B | 28.8 | 0.47 | 11.1 | B | 29.7 |
| | SB | Left | 0.09 | 10.1 | B | 5.1 | 0.05 | 9.5 | A | 3.4 |
| | | Thru/Right | 0.28 | 8.1 | A | 15.4 | 0.55 | 12.4 | B | 36.3 |
| | **Intersection Summary** | | **0.47 (max)** | **9.9** | **A** | | **0.59 (max)** | **12.3** | **B** | |

* Note: Volume for 95th percentile queue is metered by upstream signal

**Table 4 Continued**

| Intersection with 23rdStreet | Movement | | Operating Conditions | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | | | PM Peak Hour | | | |
| | | | v/c ratio | Delay (s) | LOS | Queue (m) | v/c ratio | Delay (s) | LOS | Queue (m) |
| **2nd Avenue** | EB | Left | 0.31 | 12.5 | B | 17.5 | 0.66 | 19.6 | B | 47.9† |
| | | Thru/Right | 0.14 | 6.0 | A | 6.0* | 0.29 | 4.4 | A | 7.5* |
| | WB | Left/Thru/Right | 0.11 | 12.3 | B | 8.7 | 0.09 | 10.4 | B | 6.3* |
| | NB | Left | 0.07 | 9.8 | A | 4.8 | 0.14 | 11.7 | B | 7.4 |
| | | Thru/Right | 0.51 | 14.7 | B | 41.8 | 0.61 | 17.5 | B | 50.7 |
| | SB | Left | 0.02 | 9.5 | A | 1.7 | 0.03 | 10.5 | B | 1.8 |
| | | Through | 0.37 | 12.5 | B | 28.6 | 0.59 | 17.1 | B | 47.9 |
| | | Right | 0.20 | 3.6 | A | 7.2 | 0.28 | 3.9 | A | 9.0 |
| | **Intersection Summary** | | **0.51 (max)** | **11.7** | **B** | | **0.66 (max)** | **14.6** | **B** | |
| **3rd Avenue** | EB | Left/Thru/Right | 0.08 | 2.0 | A | 0.0 | 0.10 | 13.2 | B | 4.5* |
| | WB | Left/Thru | 0.10 | 11.2 | B | 7.1 | 0.16 | 12.0 | B | 9.4 |
| | | Right | 0.09 | 3.8 | A | 3.8 | 0.20 | 4.8 | A | 6.6 |
| | NB | Left | 0.03 | 9.4 | A | 1.8 | 0.03 | 9.5 | A | 1.7 |
| | | Thru/Right | 0.24 | 8.4 | A | 13.4 | 0.36 | 10.0 | B | 21 |
| | SB | Left | 0.07 | 9.6 | A | 5.0 | 0.16 | 11.0 | B | 8.3 |
| | | Thru/Right | 0.24 | 9.4 | A | 14.3 | 0.40 | 11.3 | B | 24.9 |
| | **Intersection Summary** | | **0.24 (max)** | **8.6** | **A** | | **0.40 (max)** | **10.4** | **B** | |
| **4th Avenue** | EB | Left/Thru | 0.10 | 15.3 | B | 11.4 | 0.13 | 18.1 | B | 14.8 |
| | | Right | 0.00 | 0.0 | A | 0.0 | 0.06 | 4.8 | A | 3.5 |
| | WB | Left/Thru/Right | 0.07 | 11.6 | B | 5.7 | 0.21 | 13.6 | B | 13.5 |
| | NB | Left | 0.09 | 10.9 | B | 7.2 | 0.15 | 11.1 | B | 9.8 |
| | | Thru/Right | 0.68 | 19.0 | B | 83.2 | 0.58 | 15.9 | B | 74.4 |
| | SB | Left | 0.17 | 12.6 | B | 9.6 | 0.08 | 10.1 | B | 5.5 |
| | | Thru/Right | 0.53 | 15.4 | B | 60.7 | 0.59 | 16.1 | B | 76.1 |
| | **Intersection Summary** | | **0.68 (max)** | **16.6** | **B** | | **0.59 (max)** | **15.3** | **B** | |

* Note: Volume for 95th percentile queue is metered by upstream signal

† Note: 95th percentile volume exceeds capacity, queue may be longer

## Economic Impact Studies

***Reference #1: "Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto's Annex Neighbourhood" (Clean Air Partnership, 2009)***

Summary-
The purpose of the study was to understand and estimate the importance of on-street parking to business.

This study concluded that, the spending habits of cyclists and pedestrians, their relatively high travel mode share, and the minimal impact on parking all demonstrate that merchants in this area are unlikely to be negatively affected by reallocating on-street parking space to a bike lane. Rather, this change will likely increase commercial activity.

***Reference #2: "Lessons From The Green Lanes: Evaluating Protected Bike Lanes In The U.S." (Monsere et al., 2014)***

Summary
The report examines protected bike lanes in five cities (i.e., Austin, Texas; Chicago, Illinois; Portland, Oregon; San Francisco, California; and, Washington, District of Columbia).

Overall, nearly three times as many residents felt that the protected bike lanes had led to an increase in the desirability of living in their neighbourhood (42%), as opposed to a decrease in desirability (14%). The remainder stated there had been no change in desirability.

Approximately 19% of intercepted bicyclists and 20% of residents who bicycled on the street stated that how often they stop at shops and businesses increased after the installation of the protected bike lanes. Few respondents indicated their frequency decreased (1% of bicyclists and 6% of residents). Most indicated no change.

Similarly, approximately 12% of the residents stated that they are more likely to visit a business on the corridor since the protected bike lanes were built. 9% indicated they were less likely. Most self-reported no change.

***Reference #3: "The Economic Benefits of Sustainable Streets" (New York City DOT)***

Summary
New York City Department of Transportation (DOT) determined the economic impacts of the installation of protected bike lanes at two project locations in Manhattan – on Columbus Avenue and on 9$^{th}$ Avenue.

The change in sales for locally-based businesses within the improvement sites before and after project implementation was compared to changes in the same period for the comparison sites as well as the respective borough as a whole.

The first project location was Columbia Avenue. After the construction of a protected bike lane on Columbus Avenue, local businesses saw a 20% increase in retail sales compared to the 9% increase on the section of Columbus Avenue where no changes were made. The results show that Columbus Avenue did grow substantially compared to similar nearby sites in each quarter. However, it did not outperform sales growth in Manhattan as a whole.

The second project location was 9th Avenue. The results showed that protected bike lanes had a significant positive impact on local business strength. After the construction of a protected bike lane on 9th Avenue, local businesses saw a 49% increase in retail sales. In comparison, local businesses throughout Manhattan only saw a 3% increase in retail sales.

***Reference #4: "Vancouver Separated Bike Lane Business Impact Study" (Stantec, 2011)***

Summary

Two separated two-way bike lane trial projects were constructed in Vancouver's downtown in 2010. To construct the separated bike lanes, road space was reallocated and a total of 172 parking spaces were removed (156 from Hornby St. and 16 from Dunsmuir St.). Some loading zones were moved and turn restrictions were introduced in five locations to reduce the risk of bicycle collisions, some parking was removed, the illegal use of some loading areas was eliminated, and pedestrians at some locations had to cross the bike lanes.

The study collected basic business economic data on rents, sales, vacancy and lease rates that would indicate the impact of the separated bike lanes, as well as data on the frequency of shopping visits by downtown or Metro Vancouver customers after the implementation of the separated bike lanes.

Based on a grade-level business survey, the financial impact of the bike lanes had been a loss of sales and a loss of profit. The total loss in sales is estimated at $2.4 million over a year and the total loss in profit is estimated at $480,000 over a year (assuming profit is approximately 20% of sales). These impacts were primarily attributed to the decrease in the number of on-street parking spacts, increase in traffic congestion and decrease in accessibility for motor vehicle and pedestrian traffic that the project introduced.

***References***

1. Clean Air Partnership. Bike Lanes, On-Street Parking, and Business: A Study of Bloor Street in Toronto's Annex Neighbourhood. February 2009. Available at bit.ly/1kjDfC0. Accessed February 19, 2015.

2. Monsere, C., J. Dill, N. McNeil, K. Clifton, N. Foster, T. Goddard, M. Berkow, J. Gilpin, K. Voros, D. van Hengel, and J. Parks. Lessons From The Green Lanes: Evaluating Protected Bike Lanes In The U.S. Final Report, June 2014. Available

at http://ppms.otrec.us/media/project_files/NITC-RR583_ProtectedLanes_FinalReport.pdf. Accessed February 19, 2015.

3. New York City DOT. The Economic Benefits of Sustainable Streets. Available at http://www.nyc.gov/html/dot/downloads/pdf/dot-economic-benefits-of-sustainable-streets.pdf. Accessed February 19, 2015.

4. Stantec Consulting Ltd, Site Economics, and Mustel Group Market Research. Vancouver Separated Bike Lane Business Impact Study. Prepared for the Vancouver Economic Development Commission, City of Vancouver, Downtown Vancouver Association, Downtown Vancouver Business Improvement Association, The Vancouver Board of Trade, 2011.

## Engagement Summary

The Administration has undertaken extensive and thorough engagement with stakeholder groups, internal civic divisions, and the general public. The following is a listing of all the formal engagement efforts for the project (does not include communications by telephone and email) since June 2014.

Stakeholder: The Partnership (Downtown Business Improvement District)
Meeting Dates: August 28, September 16, January 16.

Stakeholder: Saskatoon Cycles
Meeting Dates: August 29, September 16, January 16.

Stakeholder: Cycling Advisory Group
Monthly (six in total)

Interest Group: Tourism Saskatoon
Meeting: October 7

Interest Group: Combined Business Group
Meeting: November 20

Business and Property Owners: 4th Avenue and 24th Street
Open House: October 21

Business and Property Owners: 23rd Street
Meeting: January 23

General Public:
Open House: October 21
Shaping Saskatoon Online Engagement Tool – Fall 2014

<u>October 21st -- Open House Event Summary</u>
On October 21, 2014, the City hosted two open houses, inviting people to learn more about the protected bike lane concept and to provide feedback about the proposed 18-month demonstration project. Protected bike lanes on 4th Avenue and a combination of protected bike lanes and green lanes on 24th Street was presented. The open houses were facilitated by Doug Fast of Fast Consulting.

Approximately 70 people attended each of the open houses, which were held on the route of the proposed bike lane at Le Relais in Downtown Saskatoon. Twelve comment forms were received from stakeholders or businesses attending the stakeholder open house in the afternoon, and 43 participants at the public open house in the evening. The *Shaping Saskatoon* online forum generated another 15 comments, and a survey posted on the website was completed by 482 respondents.

It was found that the public and stakeholders are generally supportive of the Protected Bike Lane Project – 95% believe it will increase comfort for people riding bikes, 85%

believe it will improve the accessibility of Downtown, and 84% believe it will improve the attractiveness of Downtown.

February 24, 2015 – Comprehensive Stakeholder Meeting

On February 24, 2015, the City hosted a comprehensive meeting of community stakeholder groups and civic divisions. This meeting was facilitated by civic staff and attended by the following agencies and civic divisions:

- Cycling Advisory Group
- Saskatoon Tourism
- Partnership
- Riversdale BID
- Broadway BID
- Saskatoon Cycles
- Meewasin Valley Authority
- Saskatoon Chamber of Commerce
- North Saskatoon Business Association

- Fire Department
- Public Works Division
- Transportation Division
- Saskatoon Transit Services
- Saskatoon Police Service
- Community Services Department

This meeting provided an opportunity for stakeholders to and civic divisions to openly discuss the benefits and challenges that the project had for the community and their respective organizations. It was broadly recognized that this project had strong potential to benefit the vitality of downtown and to improve access to the downtown for people riding bikes without compromising current accessibility.

# Protected Bike Lane Demonstration Project
## Stakeholder & Community Champion Meeting Summary
## February 24, 2015

## Project Description

The Protected Bike Lane Demonstration Project is intended to demonstrate to the general public and stakeholders how protected bike lanes would look and feel for cyclists, pedestrians, and drivers in the downtown area.

Protected Bike Lanes physically separate people riding bikes from drivers, making this transportation option more attractive by increasing the comfort level and feeling of safety by 'protecting' cyclists from traffic. The lanes benefit drivers, as separate space for cyclists increases the predictability and comfort of driving. Protected lanes also reduce 'sidewalk riding' which is beneficial for pedestrian safety.

## Engagement Strategy and Outcomes

The Protected Bike Lane Demonstration began as a community-initiated project to introduce protected bike lanes, to improve cycling as a strategy, and to create a vibrant and healthy downtown. A Stakeholder and Community Champion Meeting was held on February 24, 2015, to provide an opportunity for continued involvement of stakeholders and community champions throughout the process. This meeting is in addition to the previous two Open Houses held in October 2014; online engagement; a survey; and ongoing meetings with stakeholder groups.

The meeting began with a brief overview of the process to date; technical and design considerations; route options; and the meeting purpose. Attendees participated in a facilitated discussion about issues, possible solutions, and areas of shared agreement. City staff were in attendance to hear concerns, answer questions, provide input for possible solutions, and record the discussion.

Attendees were made aware that a summary of the discussion would be included as part of a report to be presented at the Standing Policy Committee on Transportation on March 9, 2015 and the March 23rd, 2015 Council Meeting. In addition to the discussion, attendees were welcomed to provide written feedback after the meeting.

Participants discussed concerns with the project, primarily the issue of a proposed route adjoining the Transit mall. As the conversation continued, the participants identified potential solutions to manage the Transit mall issue in the short-term, for the long-term benefit of demonstrating protected bike lanes. It was identified that joining bike lanes to a transit hub could also be seen as a beneficial connection. The meeting concluded with participants discussing how to show support for the project through the next steps in the process.

## Stakeholder Engagement Summary

Representatives from organizations with an interest in Saskatoon's city centre and/or the cycling strategy were identified as stakeholders and potential community champions. These groups were sent email invitations with follow-up phone calls to ensure the invitation was received and to clarify the purpose of meeting.

Representatives from the following organizations were in attendance:
- Saskatoon Cycles
- Cycling Advisory Group
- The Partnership
- Riversdale Business Improvement District
- Broadway Business Improvement District
- Meewasin Valley Authority
- Saskatoon Tourism
- North Saskatoon Business Association

The following internal stakeholders were also in attendance:
- Transportation
- Roadways
- Fire
- Transit
- Police
- Active Transportation Plan
- Parking

The discussion began with addressing concerns, identifying potential solutions, and identifying points of shared agreement and support for the project. The following themes arose throughout the discussion:

1. Route Locations
2. Transit Mall
3. Infrastructure and Facilities
4. Success Factors

## 1. Route Locations

Route options previously proposed along 4th Avenue and 24th Street were reviewed in the presentation, with an explanation of the new proposal for 23rd Street and postponing 4th Avenue due to the University Bridge construction and closure.

A concern was raised among some participants that because of the Transit mall, cyclists might choose to use 24th or other routes to bike through downtown, limiting the number of cyclists using the protected lane during the demonstration. It was suggested that a combination of quantitative and qualitative measures could be used as indicators of success.

It was pointed out that 23rd Street would be a better route for people wanting to bike to the downtown as a destination point. A link to the Meewasin trails would also serve recreational cyclists who would be more comfortable cycling on paths and separated bike lanes. There was understanding among participants that although in the short-term 23rd Street has limitations as a through-way for those cycling through the downtown along this route; it would be in the best interest to support this location choice in order to move forward with the demonstration and cycling strategy in the long-term.

## 2. Transit Mall

The Transit mall was identified as a potential barrier to cyclists using the protected lane. However, it was also pointed out that for those biking downtown as a destination it may not be an issue compared to those cycling through downtown.

Participants discussed issues and solutions for managing the pedestrian/cyclist/vehicle interactions when transitioning from a protected bike lane to a transit mall. Suggested solutions included adding signage and related infrastructure to ensure bikes would be walked through the mall, and education and monitoring to ensure rules were followed. It was generally agreed that, while the Transit mall poses potential issues in the short-term, these can be overcome.

## 3. Infrastructure and Facilities

Addressing infrastructure needs, especially at the Transit mall location, was of importance to the group. Suggestions were made for adequate signage, use of fencing, and ongoing maintenance of the new infrastructure. It was recommended that more facilities would need to be provided for parking bikes if we expected more people to be biking downtown. Consideration for accessibility needs and safety was discussed. There was discussion about maintenance of the lanes, especially clearing of snow, with the recommendation that maintenance be contracted for the duration of the pilot.

### 4. Success Factors

Questions arose about what indicators would be used to measure project success. There was some discussion about possible indicators, including number of users, increase in number of bikes downtown, perception of safety while using the protected lanes, and increased perception of visiting downtown as a destination.

Participants identified the need for raising awareness and education for pedestrians, cyclists, and drivers as an important element. As well, participants asked if there would be monitoring and response to issues throughout the demonstration. A link between the demonstration project and the Active Transportation Plan was identified as a potential benefit.

## Next Steps

Stakeholders at the meeting voiced their overall support for the project and asked how they could demonstrate their support beyond this meeting. They were informed of the committee and council process and dates that the project report would be presented.

If the project is approved, an engagement and communications plan will be prepared, for implementation throughout the demonstration period. Administration will continue to work with stakeholders and community champions, ensuring that there is flexibility and responsiveness to issues that may arise during the pilot.

Administration will invite stakeholders to participate in determining the key measures and success indicators. Stakeholders offered to share information to raise awareness, educate users, and promote the demonstration of protected bike lanes. Regular updates to Council, stakeholder groups, and the general public will be provided.

Prepared by:
Arin Jorgenson, Community Engagement Consultant
Communications Division
March 2, 2015

6000-5

experience downtown
THE PARTNERSHIP
Saskatoon Downtown Business Improvement District



March 3, 2015

His Worship the Mayor and Members of City Council
Office of the City Clerk
City of Saskatoon
2nd Floor, City Hall
222 3rd Avenue North
Saskatoon, SK S7K 0J5

His Worship the Mayor and Members of Council:

Re: Proposed Bike Demonstration Project on 23rd Street

The Board of Management for the Downtown Business Improvement District has endorsed a set of principles for bike lanes:

1. Urban Connectivity - Bike Lanes are a great opportunity to build links between urban districts.
2. Suburban Connectivity - Bike lanes must connect the urban centre to the suburbs and encourage visits to the urban centre.
3. Car Convenience – Cars remain an important mode of transportation. Bike lane design should minimize any negative effect on parking and congestion.
4. Safety – Design must focus on creating safe environments for riders to attract new cyclists and also ensure the safety of non-cyclists.
5. Destination Driven – Bike lanes should take riders past major destination businesses within a district to encourage people to stop and enjoy the area. Bike racks and other amenities must be in place to support cyclists and encourage them to visit businesses.

The Board is interested to watch the demonstration project and learn what impact it may have on businesses along the actual route in terms of overall sales and visits to businesses.

In addition, information from the City in terms of overall monitoring of the project will be important to consider. We would ask that the City study the following items when looking at

242 Third Avenue South
Saskatoon, SK S7K 1L9
Telephone: (306) 665-7201 Fax: (306) 664-2245

the overall project and its impact on downtown: bike counts, traffic counts, pedestrian counts, traffic pattern shifts, travel times and speeds, business satisfaction and benefits, community satisfaction, winter and summer maintenance efficiency, transit, overall safety, intersection interaction, and laneway interaction.

The Downtown BID believes data collection and measurement tools are fundamental to the evaluation of the bike lane demonstration project. We will assist the City of Saskatoon as required during the demonstration project.

Sincerely,

Brent Penner
Executive Director

cc: Mr. Dave Denny, Chair

6000-5

**From:** Saskatoon Cycles <info@saskatooncycles.org>
**Sent:** March 05, 2015 10:06 AM
**To:** Web E-mail - City Clerks
**Subject:** Request to Speak - CK. 6000-5



Hello,

SaskatoonCycles would like to speak towards the Bicycle Program Update – Feasibility of Protected Bike Lanes (File No. CK. 6000-5) coming to the Transportation Committee on Monday, March 9th.

We will have two representatives in attendance to provide comment on the proposed demonstration project.

Thanks in advance,

Sean Shaw, Member
Saskatoon Cycles
Board of Directors
306-370-7429

--

---

**Saskatoon Cycles**
**www.saskatooncycles.org**

Saskatoon Cycles advocates for a city in which cycling is a viable, year-round, mode of transportation that is safe and convenient for all ages.

6000 - 5

**From:** Cathy Watts <ctwatts@sasktel.net>
**Sent:** March 06, 2015 11:34 AM
**To:** Web E-mail - City Clerks
**Subject:** Fwd: presentation to Transportation committee meeting



Begin forwarded message:

**From:** Cathy Watts <ctwatts@sasktel.net>
**Subject: presentation to Transportation committee meeting**
**Date:** March 6, 2015 at 11:31:17 AM CST
**To:** city.clerks@sasaktoon.ca

Hello,
I would like to be sure that Saskatoon Cycles is in the line up to make a short presentation to the Transportation committee meeting at 9 am on March 9. I believe that Sean Shaw was going to register us. Hilary Gough or myself will be making the presentation.
Please confirm that we are registered.
Thanks very much.
Take care.
Cathy Watts
Co-Chair Saskatoon Cycles

1136 Temperance Street
Saskatoon, Sk.
S7N 0N8

6000-5

# Waldegrave Properties Limited

**A Member of the Millennium III Group of Companies**



March 5, 2015

Standing Policy Committee on Transportation
c/o City Clerk's Office
222 3rd Avenue N
Saskatoon SK S7K 0J5

Dear Sirs and Mesdames:

**Re: Agenda Item 7.2.1**
**Bicycle Program Update – Feasibility of Protected Bike Lanes**

We have become aware as of today's date that the agenda for your Standing Policy Committee on Transportation includes consideration of and referral to Council for direction of a proposal to institute a bike lane demonstration project in the downtown area of Saskatoon. In particular, this project includes an allowance for a bike lane on 23rd Street East, immediately adjacent to our property, the Midtown Medical Centre, located at 39, 23rd Street East, with a legal description of Lots 7-12, Block 2, Plan F4570.

Waldegrave Properties Limited is a member of the Millennium III Group of Companies which has ownership interest in a number of commercial properties throughout the City of Saskatoon, some of which we have been involved with for over 30 years. During those years, through various property holding companies, the Millennium III Group of Companies has had many dealings with the City of Saskatoon in matters of development, zoning, municipal services including roadways, parking, etc., and other matters that come under municipal jurisdiction. We have always found City Council, administration and staff to be very considerate and cooperative in resolving issues that arise from time to time and that they take our interests into consideration along with the general good of the City of Saskatoon.

We are pleased that Council has undertaken many new planning initiatives to make the City more habitable, functional and enjoyable and has vastly improved many aspects of City life. The undersigned has been a resident here since 1978 and has seen the remarkable growth and expansion of our City through the stewardship of many wise Councils. On occasion, however, there have been instances where, in our role as a promoter and developer of commercial business in the City, we have felt that Council's policies may not be in accord with what we see as being beneficial to the interests of the City as a whole. In the above referenced matter, then, the proposed bike lane demonstration project, several issues come to mind.

**2612 Koyl Avenue Saskatoon SK S7L 5X9 Telephone (306) 955-4174 Fax (306) 955-4175**
**sales@millennium3.ca www.millennium3.ca Toll Free (888) 622-8885**

1. **Climate**

   Biking is a very enjoyable and utilitarian activity from both an exercise and transportation point of view. All of us have used our bikes to get around on many occasions and enjoy the exercise and mobility that these provide. In our opinion, however, as a regular means of transportation in heavy motorized traffic areas, biking at temperatures below freezing is not a comfortable, convenient or safe means of travel. In icy or snowy conditions, bikes with only two wheels are largely uncontrollable and present a hazard to the cyclist, surrounding traffic and pedestrians. Snow removal in these bike lanes has not yet been addressed in the public sphere as well. Is the City planning on purchasing specialized equipment and adding more labour costs to our already overtaxed infrastructure services in order to clear these lanes and provide a safe travel path?

   A look at the attached temperature graph for the City of Saskatoon shows that average monthly temperatures for this City are below 0°C for a full five months of the year. We also know that sporadic winter-like conditions can be experienced on either side of these five months. A summer demonstration bike lane project might be appropriate, with temporary control devices for bike traffic. Disruption of the City's main automotive traffic patterns by installing bike lanes in months when cycling is used as a means of transportation for only an extremely small fraction of the population, however, hardly seems like a worthwhile project for City resources. With the convenience and comfort of the automobile or public transit in cold weather, it is unlikely that the group dedicated to cycling all winter long is likely to grow significantly.

2. **Inconvenience to business**

   Parking is already limited in the downtown area and no matter how you cut it, these proposed bike lanes will interfere with and diminish this resource. This can have a very negative effect on downtown businesses, which, incidentally, pay a very large portion of the property taxes that support the operations of the City.

3. **Medical Issues**

   In the case of our property, the Midtown Medical Centre, which is most affected by the proposed demonstration bike lane, the majority of the tenants therein are medical specialists or associated services that draw patients from throughout the City and much of the surrounding area in the northern half of the province. Many of these patients are seniors and/or have mobility challenges and the parking spots on the streets around our building are vitally important for these people to ambulate with supporting devices (canes, wheelchairs and walkers) or be transported safely into our building. The bike lane project as presently proposed will take away two of these parking spaces that these physically challenged people now use for egress from and access to motor vehicles.

   As well, many people arrive from northern or rural areas at the Bus Depot across the street from our property in order to attend on their medical specialists and, again, many have mobility issues or are otherwise physically challenged. Installation of a further barrier ie., a bike lane, in the area where they cross 23rd Street to access our building will certainly not enhance or make convenient that transit. There is, in fact, the potential for

bike/pedestrian collisions at the proposed bike lane where visibility is inhibited by vehicles parked along the street. This is especially so where bikers feel they have "free passage" along the bike lane even where it intersects with crossing points for these mobility challenged people.

**4. Alternatives**

a. Onsite Parking

Under then existing City bylaws, the original developers of the Midtown Medical Centre received a permit to develop the property with the amount of parking that still exists today. This parking frequently becomes occupied early in the day, leaving little room for visiting patients. There also are only a limited number of "handicapped" stalls. Hence, closing 2 parking stalls parallel to this building, will remove a large portion of our convenient access for autoborne, physically challenged patients.

b. Midtown Plaza Parking Lot

A casual observer would conclude that there is lots of parking in the area of the Midtown Medical Centre provided by this parking facility. The following, however, must be taken into consideration:

i. We do not own that parking lot. It can be, and frequently is, fully utilized by others, especially by patrons of the Mall and other significant entertainment venues in the area. We cannot guarantee our medical tenants parking there for their patients.

ii. We have attempted to obtain a dedicated, month to month, block of parking spaces in the area of our building from Midtown Mall management without success. We, of course, offered to pay going rates for this.

iii. As well as being across busy Pacific Avenue from our building, this parking facility also is surrounded by a 300mm high concrete curb which is inimical to the easy transit of wheelchairs or walkers. Breaks in this curb are either remote from the area closest to our building or can be rendered inaccessible by vehicles parked in dedicated parking stalls. In actual practice, very few of the regular patients at Midtown Medical Centre make use of the Midtown Mall parking lot because of the uncertainty as to its availability or the barriers to mobility which its use entails.

**5. Conclusion and Recommendations**

a. While provision for biking certainly is a desirable addition to Saskatoon's amenities, its seasonality is questionable, the cost benefit to taxpayers suspect and weight must be given to the interests of motor vehicle traffic, parking and the effect on businesses and their patrons adjacent to biking facilities.

b. In the case of Midtown Medical Centre, if the City is determined to proceed with a bike lane along 23rd Street, provision should be made in the design thereof not to require, or interfere with, the limited parking facilities that exist along the curb line on the street sides of the building, which are vital to the transit of the many patients with impaired mobility and other physically disabilities that access our building daily.

Yours truly,

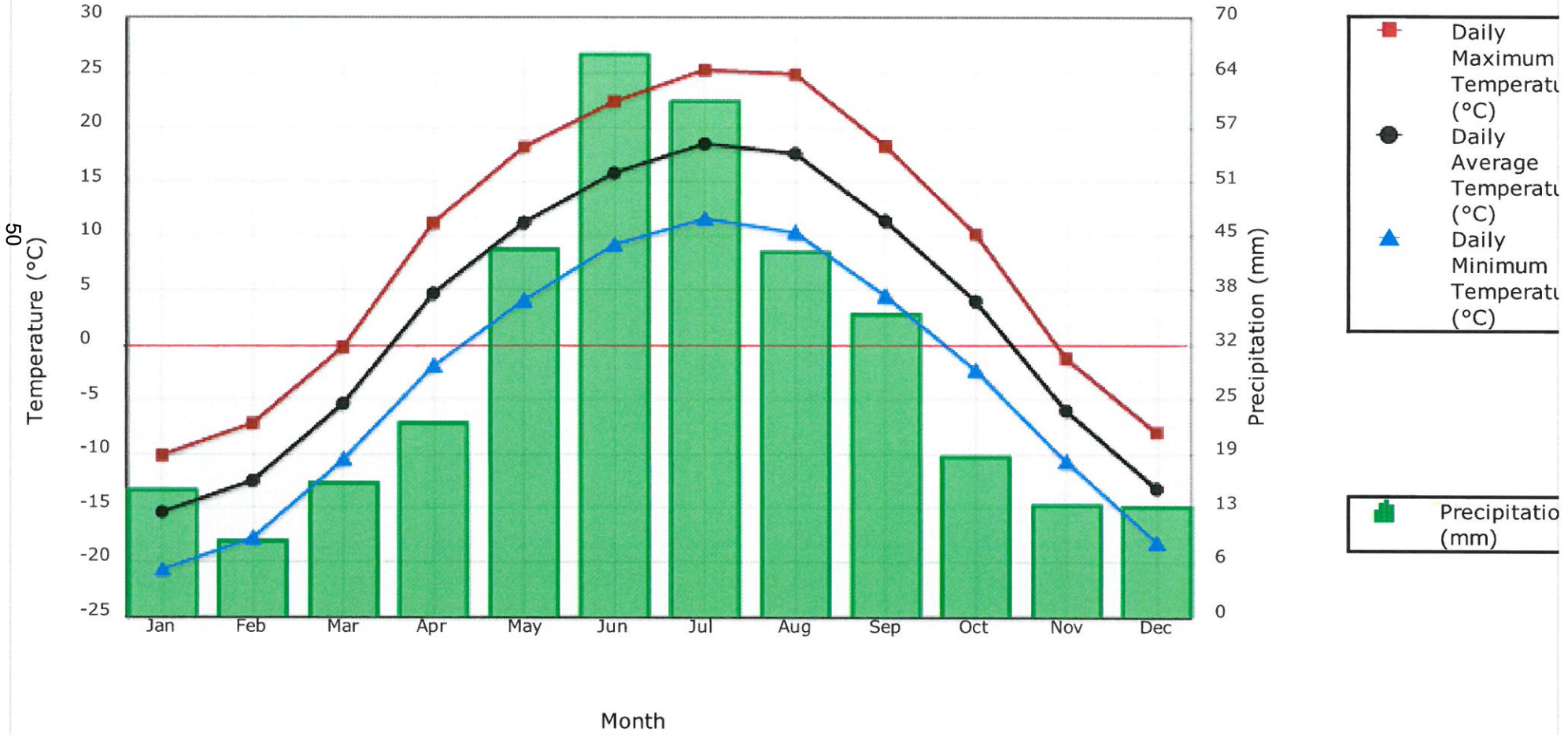
Everett J. Kearley, P. Eng.
President of Waldegrave Properties Limited
Chairman of the Millennium III Group of Companies

Encl.

# Canadian Climate Normals 1981-2010 Station Data



## Temperature and Precipitation Chart for 1981 to 2010 Canadian Climate Normals
## SASKATOON DIEFENBAKER INT'L A



# New Pilot Programs Improve Ice Management Results

**Recommendation**
That the report of the General Manager, Transportation & Utilities Department dated March 9, 2015, be forwarded to City Council for information.

## Topic and Purpose
New pilot programs were introduced this winter for ice management products and processes. They have been, and continue to be, applied to test for effectiveness and efficiencies for maintaining good road conditions in colder temperatures on priority streets this winter. This report summarizes the success of the pilot tests.

## Report Highlights
1. A new de-icing product called Caliber M1000 was tested this winter to soften ice build-up on priority streets at temperatures below -14$^{o}$C, when salting is no longer effective.
2. Sand volumes were reduced by 45% on roads treated with the Caliber M1000/sand mixture compared to the previous de-icing product. Administration observed a significant improvement of sand adherence to roadways and traction.
3. Material savings should be achieved with this new product because of the lower amounts of sand required. Preliminary estimates indicate $131,464 was saved over a two-month test period.
4. For the upcoming winter season, prior to the first snow fall, Public Works intends to test an anti-icing technique called Direct Liquid Application to prevent ice from bonding to the roadway, making it easier to clear.

## Strategic Goals
Improving winter road conditions, through the use of new products and processes, supports the Strategic Goals of Moving Around and Continuous Improvement. The reduction in sand and salt applied to the road supports the long-term strategy under Environmental Leadership.

## Background
Due to the Public Works division's on-going commitment to continuous improvement, the ice management program was evaluated for Winter 2014/15. Public Works explored industry standards for sanding specifications, anti-icing, and de-icing techniques.

## Report
<u>Caliber M1000 De-icing Additive</u>
A new de-icing chemical additive for the sand/salt mixture was tested this winter to improve winter driving conditions at cold temperatures. Caliber M1000 is a combined product of liquid Magnesium-Chloride ($MgCl_2$) and a corn derivative that:

- Lowers the eutectic (effective working) temperature of salt (to -65˚C) and
- Helps sand stick to the roadway – even in extreme cold temperatures when it tends to bounce to the side of the road.

Beginning in November 2014, a pre-mixed blend of Caliber M1000 and sand/salt was used on Circle Drive, Priority 1 and Priority 2 (primarily intersections) streets when temperatures were below -14$^{o}$C and salt was ineffective on its own. The chemical is activated with the moisture in the air and the friction from vehicles and works as a de-icing agent for snowpack and/or ice build-up. The product was found to be very successful in maintaining good driving conditions and works well at providing adhesion for the sand to the snowpack.

The second new de-icing application technique implemented, called Pre-Wetting, was tested beginning in January 2015 along Priority 1 streets at temperatures below -14$^{o}$C. A liquid spray application of Caliber M1000 is applied directly to the sand/salt mixture as it is dispensed onto the road, allowing it to activate immediately. One speed plow/sander was upgraded with pre-wetting equipment in January 2015 and three more vehicles will be equipped for the winter of 2015/2016.

Sand Applied to Roads Reduced by 45%

Because of the effectiveness of Caliber M1000, the treated sand becomes tackier and heavier allowing it to adhere more quickly to the icy surface upon application, therefore reducing the frequency of additional sanding. The pre-wetting application applies the treated aggregate directly to the affected area where it adheres, further reducing waste caused by sand scattering across the road or being blown to the side.

A comprehensive operator and management training program helped improve efficiencies in the overall sanding program by identifying the right ratio of Caliber M1000 to sand and the ideal conditions for pre-wetting for peak performance. A control module in the truck allows for governing of the application rate for the dispensed sand. This allows for improved targeting for the conditions of the roadway, reduction of waste, and increased effectiveness.

The conditions and characteristics of each winter season vary, which makes it difficult for a true comparison. Although the current winter season is not yet complete, it is anticipated that there will be a reduction in the overall sand applied to the targeted priority streets to be cleaned up with the Spring Sweeping Blitz. Less sand on the road reduces the dust in the air which improves air quality and may help to reduce allergens and/or respiratory issues. Less sand on the road also improves the overall appearance of roads during the spring melt.

Aggregate Cost Savings

While this doesn't account for the up-front costs of the equipment and modifications to the sanding units, preliminary estimates indicate $131,464 was saved in aggregate over a two-month test period.

This winter, approximately 8,465 tonnes of sand (45% less) was used in November and December, 2014. The average amount of salt/sand mixture used in 2012 and 2013, during the same period, was 15,535 tonnes. At 2014/15 rates, this equates to a cost reduction of $200,690 and an overall 45% reduction in sand.

While less sand was used this winter, higher ratios of de-icing product was required compared with the two previous winters. Approximately 3,960 tonnes of de-icer was used in November and December, 2014, compared to the average amount of 1,990 tonnes in the previous two years. At 2014/15 rates, this equates to an additional $69,226, as a result of nearly twice as much product, but at a lower cost per unit of the new product.

Final realized cost reductions will be reinvested in the snow & ice programs. The anti-icing program described below, for example, will have costs associated with implementation.

Anti-icing Pilot Program for Late Fall 2015

The Caliber M1000 can also be used to prevent ice from bonding to the road surface. Using a Direct Liquid Application, a layer of Caliber M1000 is sprayed on the road prior to snow or freezing rain. Direct Liquid Application prevents ice from bonding to the roadway, making it easier to clear during plowing, comparable to using a non-stick spray for cooking to prevent food from sticking to the pan. Public Works will do further investigation prior to the coming winter season with the intention of piloting this treatment program.

## Public and/or Stakeholder Involvement

The Request for Tender for the de-icing and anti-icing products was open for new suppliers to submit applications for consideration.

## Communication Plan

An extensive communications plan branded ‘Better Winter Roads’ was developed and includes tools such as, updates to the City’s website, billboards, radio and print advertisements, frequent communication with the news media and community associations. Public Service Announcements and Snow & Ice Service Alerts are regularly provided to local media, posted to the City’s social media channels and available on the City’s website when temperatures or weather changes affect driving conditions.

Public education messages remind drivers to remain a safe distance behind sanding equipment. The sanders must reduce their speed to 40-60 km/h depending on the type of application for effectiveness.

## Financial Implications

Cost savings from reduced aggregate are preliminary and do not include initial investment required for retrofitting sanding fleet, storing and dispensing, liquid de-icer,

and development and implementation of the ongoing training program. Final program reporting at season end will be required to determine an estimate of net savings.

## Environmental Implications

The reduction in sand and salt applied to the road lessens the environmental impact.

Caliber M1000 is an approved qualified product by the Pacific Northwest Snow Fighters Association and is classified as 'Not Hazardous' to the environment and 80% less corrosive than rock salt.

## Other Considerations/Implications

There are no policy, privacy, or CPTED implications or considerations.

## Due Date for Follow-up and/or Project Completion

A 2014/15 Snow & Ice summary report will be presented in the spring to highlight the success of the program.

## Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

## Report Approval

| | |
|---|---|
| Written by: | Karen Grant, Communications Consultant |
| Reviewed by: | Pat Hyde, Director of Public Works |
| Approved by: | Jeff Jorgenson, General Manager, Transportation & Utilities Department |

TRANS KG – New Pilot Programs Improve Ice Management Results

# Extension of Street Sweeping Contractor Assistance Contract

**Recommendation**

That the Standing Policy Committee on Transportation recommend to City Council:

1. That the contract with Virtay Street Sweepers Ltd. for a cost of $727,650 per year (including taxes) be extended for two years; and
2. That the City Solicitor be requested to amend the contract agreement and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

## Topic and Purpose

The purpose of this report is to request that City Council approve extending the contract with Virtay Street Sweepers Ltd. for the 2015 and 2016 Roadways Summer Street Sweeping Programs.

## Report Highlights

1. In 2014, there was an approximate $1M over expenditure in the street sweeping cost centre (01-720). Public Works is actively enacting measures to reduce a similar cost overrun for 2015 and bring the program in line with available funding.
2. Contract street sweeping is required to complete the accelerated city-wide sweep in 2015 and 2016 and maintain the current level of service.
3. The Administration is recommending a two-year extension. This maintains a 19.5% savings on contract costs than if the contract was awarded in a one-year term.
4. If the contract extension is not approved, the City is responsible to pay the contractor the one-year rate for the 2014 sweep, which is an additional $178,077 (excluding taxes) to payments already made.

## Strategic Goals

The recommendations in this report support the City of Saskatoon's Strategic Goal of Environmental Leadership by improving air quality and reducing the potential for health issues related to airborne dust debris within the City and reducing the amount of sediment that reaches the South Saskatchewan River through the storm sewer network. It also supports the Strategic Goal of Moving Around by maintaining the established and desired level of service for clean summer streets in a timely manner.

## Background

The City changed the service level for the 2014 Street Sweeping Program by accelerating the city-wide sweeping program. A request for proposals was issued for a contractor to assist Public Works in achieving this new level of service.

The proposal submitted by Virtay Street Sweepers Ltd. (Virtay) was selected as providing the best value to the City of Saskatoon. The proposal outlined a one-year program with costs associated, but also had a three-year alternative that would reduce the annual cost to the City in return for a guaranteed number of hours over the next three years. This reduced the annual contractor cost by 19.5% over Virtay's one-year proposal.

The Street Sweeping Award of Contract was adopted by City Council at its meeting held on March 31, 2014. The report indicated upon conclusion of the first year of the Contract, the Administration would bring a report through Council with a recommendation on whether or not to renew for 2015.

## Report

Projected Budget Shortfall and Measures Taken

In 2015, Public Works will be implementing changes to the sweeping program to realize improved efficiencies and bring the program costs as close to the budget as possible. Some examples of such are:

- Altering of the crew personnel/shifts will provide for a reduction in overtime while ensuring seven day coverage for the program.
- Redistribution of the heavy debris pickup program from a separate contractor to Virtay saving $150,000.
- Exploring alternate approaches to the spring blitz and regular sweep program. In 2014, Public Works engaged in a significant and comprehensive sweeping program to collect heavy debris from areas that had not received the same attention in previous years. That same level of 'deep cleaning' should not be necessary this year as a result and thereby saving on costs.

This leaves a projected shortfall comprised of:

- $350,000 for sign management practices to provide for parking enforcement and a full curb-to-curb sweep of streets. The Administration will continue to pursue program changes in an attempt to make up this shortfall.

Maintaining the Accelerated Sweep

In 2014, the first year of the contract, Virtay performed 424 hours of crew time during spring sweeping operations (their allotment from the contract was 420 hours). This was instrumental in Public Works achieving the required level of service by completing the 2014 Spring Sweeping Program two weeks sooner than previous years and allowing civic forces to start other spring & summer seasonal programs sooner.

Contract Savings

Public Works recommends that extending this contract to 2015 and 2016 represents good value to the citizens of Saskatoon as there are limited civic forces and equipment in spring combined with urgency to complete the work as soon as possible.

One-Year Rate payout

The City of Saskatoon is required to pay Virtay $178,077 in a fee increase for 2014 work completed should the contract not be extended.

## Options to the Recommendation

1. Cancel the award of the contract, pay the contractor increased work rates for 2014, and decrease level of service provided or re-tender the work. This is not recommended, as City Council has made it a priority to continue with the new level of service for sweeping.
2. Cancel the award of the contract; pay the contractor increased work rates; and maintain current level of service by hiring new FTE's and procuring equipment. This option is not recommended, as the Administration believes it is more cost-effective to utilize private sector resources to help with the peak spring period.

## Communication Plan

This contract work will be performed on an integrated schedule with work being completed by city forces. The communications launch will not distinguish who is doing the work on behalf of the City, but will detail locations, schedules and delays/impacts due to weather and other events.

## Financial Implications

2014 was not a typical year, as both Public Works and Virtay staff picked up excessive material from multiple years of buildup in some areas of the City. This, in combination with the reduced volume of street stand placed this past winter, will help offset other areas of the sweeping progam where higher costs will be incurred. Administration will actively manage the 2015 sweeping program and provide update reports to City Council through the quarterly reporting process.

## Environmental Implications

The accelerated sweeping program is expected to enhance air quality as well as help reduce the amount of sediment entering the storm sewer system and ultimately entering the South Saskatchewan River.

## Other Considerations/Implications

There are no public and/or stakeholder involvement, policy, privacy or CPTED implications or considerations.

## Due Date for Follow-up and/or Project Completion

The programs that the contractor is involved with typically complete in mid-July. Actual costs and variances can be calculated in August.

## Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

## Report Approval

| | |
|---|---|
| Written by: | Barrett Froc, Operations Engineer, Logistics and Procurement |
| Reviewed by: | Eric Quail, Manager, Roadways Section |
| Approved by: | Pat Hyde, Director, Public Works |
| | Jeff Jorgenson, General Manager, Transportation and Utilities |

TRANS BF – Extension of Street Sweeping Assistance Contract

# 2014 Traffic Control, Parking Restrictions and Parking Prohibitions Signage

**Recommendation**
That the report of the General Manager, Transportation & Utilities Department, dated March 9, 2015, be forwarded to City Council for information.

## Topic and Purpose
This report provides City Council with information regarding the installation of signage in 2014.

## Report Highlights
1. The Administration is required to provide City Council with a report annually, outlining completed signage throughout the year.
2. In 2014, there were 193 sign installation projects to support parking restrictions (loading zones), parking prohibitions (no parking, no stopping), traffic control (stop and/or yield signs) and school zones (new zones).

## Strategic Goal
This report supports the Strategic Goal of Moving Around by providing safe movement for all modes of transportation.

## Background
City Council at its meeting held on January 26, 2009, delegated authority to the General Manager, Infrastructure Services Department, to proceed with the placement of traffic controls (stop and/or yield signs); the installation of all parking restrictions including general loading zones; church loading zones; hotel loading zones; school loading zones and disability parking zones and parking prohibitions, without City Council approval. Prior to being given delegated authority, the Administration required City Council approval for all requests for new or modified signage.

## Report
All signage requests received from the public, City Council, property owners, schools and other civic departments require a thorough review to ensure it meets policies approved by City Council or guidelines to control the placement of signage.

The Traffic Control Retrofit Program was initiated in 2013, after successfully completing a pilot project that involved the installation of stop and/or yield signs in the City Park neighbourhood in 2008. The program also works in conjunction with the Neighbourhood Traffic Management Program to address traffic issues in residential neighbourhoods. The five neighbourhoods reviewed in 2014, including Sutherland, Holiday Park, Mount

Royal, Exhibition, and Queen Elizabeth, were retrofitted with stop and/or yield signs at all uncontrolled intersections.

The table below summarizes the 193 sign installation projects installed in 2014. Numerous requests were denied as they did not meet policy guidelines.

| Type | Number of Locations |
|---|---|
| Parking Restrictions: | |
| General Loading Zone | 6 |
| Disabled Person Parking Zone | 29 |
| Church Loading Zone | 1 |
| School Bus Loading Zone | 4 |
| 5 Minute Parking | 4 |
| 2 Hour Parking | 2 |
| Saturday & Sunday Parking | 1 |
| Parking Prohibitions: | |
| No Parking | 38 |
| No Stopping | 5 |
| Traffic Control: | |
| Two-Way Stop | 2 |
| Single Stop | 2 |
| Two-Way Yield | 56 |
| Single Yield | 42 |
| School Zones: | |
| New School Zone | 1 |
| | |
| Total Number of Requests Resulting in Signage | 193 |

The detailed list as illustrated in Attachment 1 provides the ward, location and type of traffic sign installations completed in 2014.

## Other Considerations/Implications

There are no options, policy, public and/or stakeholder involvement, communication, policy, financial, environmental, privacy, or CPTED considerations or implications

## Due Date for Follow-up and/or Project Completion

An annual report will be provided to City Council regarding the completed installation of traffic signage. The next report will be submitted in early 2016.

## Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

## Attachment

1. Detailed List of All 2014 Sign Installations

## Report Approval

| | |
|---|---|
| Written by: | Mariniel Flores, Traffic Engineer, Transportation |
| Reviewed by: | Jay Magus, Engineering Manager, Transportation |
| | Angela Gardiner, Director of Transportation |
| Approved by: | Jeff Jorgenson, General Manager, Transportation & Utilities Department |

TRANS MF – 2014 Traffic Control Parking Restrictions Parking Prohibitions Signage.docx

**ATTACHMENT 1**

## Detailed List of All 2014 Sign Installations

| Ward | Councillor | Location | Type of Sign Installation | Date Approved |
|---|---|---|---|---|
| 1 | Hill | Along 33rd Street and along 2nd Avenue | 2 Hour Parking | 15-Aug |
| 1 | Hill | 402/420 Queen Street (Near the Mennonite Church) | 2 Hour Parking | 19-Aug |
| 1 | Hill | 1627 Avenue B North | Disabled Persons Parking Zone | 21-Jan |
| 1 | Hill | 1305 Avenue F North | Disabled Persons Parking Zone | 23-Apr |
| 1 | Hill | 1210 Avenue P North | Disabled Persons Parking Zone | 19-Jun |
| 1 | Hill | 1658 Edward Avenue | Disabled Persons Parking Zone | 10-Nov |
| 1 | Hill | 1529 Avenue C North | General Loading Zone | 24-Aug |
| 1 | Hill | 450 2nd Avenue North | General Loading Zone | 5-Nov |
| 1 | Hill | 1301 Quebec Avenue | No Parking | 11-Feb |
| 1 | Hill | 1405 Faulkner Crescent | No Parking | 21-Feb |
| 1 | Hill | 402/420 Queen Street (Near the Mennonite Church) | No Parking | 19-Aug |
| 1 | Hill | Affinity Credit Union (Along Duke Street) | No Parking | 5-Nov |
| 1 | Hill | Affinity Credit Union (Along 7th Avenue) | No Parking | 5-Nov |
| 1 | Hill | 610 2nd Avenue North | No Parking | 12-Dec |
| 1 | Hill | 109th Street & Bryans Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 109th Street & Rita Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 110th Street & Bryans Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 111th Street & Bryans Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 111th Street & Rita Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 111th Street & Violet Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 112th Street & Bryans Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 112th Street & Rita Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 113th Street & Bryans Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 113th Street & Rita Crescent (East) | Two-Way Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 105th Street & Gardiner Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 105th Street & O'Neill Crescent | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | O'Neill Crescent & O'Neill Crescent | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | O'Neill Crescent & O'Neill Crescent | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 105th Street & Moran Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 110th Street & Rita Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 110th Street & Violet Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 113th Street & Rutherford Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 113th Street & Rita Crescent (West) | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | Rita Crescent & Bryans Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | Rutherford Crescent & Rutherford Crescent | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 116th Street & Thompson Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | Adolph Crescent & Adolph Way | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 117th Street & Greig Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | 117th Street & Thompson Avenue | Yield (Retrofit Program) | 31-Jul |
| 1 | Hill | Red Road & Adolph Way | Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | W.P. Bate School (2515 18th Street West) | 5 Minute Parking | 31-Jan |
| 2 | Lorje | W.P. Bate School (2515 18th Street West) | Disabled Persons Parking Zone | 31-Jan |
| 2 | Lorje | 207 27th Street | Disabled Persons Parking Zone | 11-Feb |
| 2 | Lorje | 202 Avenue P South | Disabled Persons Parking Zone | 24-Feb |
| 2 | Lorje | 1117 Avenue L South | Disabled Persons Parking Zone | 15-May |
| 2 | Lorje | 118 Avenue S South | Disabled Persons Parking Zone | 15-May |
| 2 | Lorje | 217 Witney Avenue South | Disabled Persons Parking Zone | 19-Jun |
| 2 | Lorje | 416 Avenue V South | Disabled Persons Parking Zone | 10-Sep |
| 2 | Lorje | 236 Avenue E North | Disabled Persons Parking Zone | 24-Nov |
| 2 | Lorje | 201 Avenue M South | General Loading Zone | 29-Sep |
| 2 | Lorje | 30th Street West & Idylwyld Drive | No Parking | 23-Sep |
| 2 | Lorje | 11th Street & Avenue W | No Parking | 24-Sep |
| 2 | Lorje | W.P. Bate School (2515 18th Street West) | No Stopping | 31-Jan |
| 2 | Lorje | Ashworth Holmes Park (South side) | Saturday & Sunday Parking | 24-Dec |

| Ward | Councillor | Location | Type of Sign Installation | Date Approved |
|---|---|---|---|---|
| 2 | Lorje | W.P. Bate School (2515 18th Street West) | School Bus Loading Zone | 31-Jan |
| 2 | Lorje | Dudley Street & Avenue O South | Two-Way Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue N South | Two-Way Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue M South | Two-Way Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue L South | Two-Way Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue J South | Two-Way Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue Q South | Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Dudley Street & Avenue I South | Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Wellington Street & Avenue N South | Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Wellington Street & Avenue M South | Yield (Retrofit Program) | 31-Jul |
| 2 | Lorje | Wellington Street & Embassy Drive | Yield (Retrofit Program) | 31-Jul |
| 3 | Iwanchuk | Henigman Place (Next to Pendygrasse Road) | No Parking | 6-Oct |
| 4 | Davies | Bedford Road & Avenue M | 2-Way Stop | 3-Mar |
| 4 | Davies | Bedford Road & Avenue L | 2-Way Stop | 3-Mar |
| 4 | Davies | 407 Coad Manor | Disabled Persons Parking Zone | 23-Apr |
| 4 | Davies | 915 Avenue V North | Disabled Persons Parking Zone | 15-May |
| 4 | Davies | 30 Matheson Place | Disabled Persons Parking Zone | 24-Nov |
| 4 | Davies | 324 Avenue J North | Disabled Persons Parking Zone | 24-Nov |
| 4 | Davies | 901 Rusholme Road | Disabled Persons Parking Zone | 11-Dec |
| 4 | Davies | 819 29th Street West | General Loading Zone | 28-Feb |
| 4 | Davies | Ryleston Road & Avenue X | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Ryleston Road & Avenue S | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Ryleston Road & Avenue R | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Ryleston Road & Avenue Q | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Ottawa Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Montreal Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue Y | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue X | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue V | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue U | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue T | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue R | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue Q | Two-Way Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Tomlinson Crescent & Hamilton Place | Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Tomlinson Crescent & Avenue X | Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Ryleston Road & Avenue T | Yield (Retrofit Program) | 31-Jul |
| 4 | Davies | Bedford Road & Avenue S | Yield (Retrofit Program) | 31-Jul |
| 5 | Donauer | 855-857 Coppermine Crescent | Disabled Persons Parking Zone | 28-Feb |
| 5 | Donauer | 810 57th Street | No Parking | 14-Feb |
| 5 | Donauer | 820 60th Street | No Parking | 21-Feb |
| 5 | Donauer | 57th Street & Miners Avenue | No Parking | 10-Mar |
| 5 | Donauer | 602 50th Street East | No Parking | 15-Aug |
| 5 | Donauer | 618 50th Street East | No Parking | 15-Aug |
| 5 | Donauer | 330 La Ronge Road | No Parking | 12-Dec |
| 5 | Donauer | Cynthia Street & Avenue C North | No Parking | 12-Dec |
| 5 | Donauer | 855 60th Street East | No Parking | 24-Dec |
| 5 | Donauer | 800 Block of 59th Street | No Parking | 24-Dec |
| 5 | Donauer | 800 Block of 58th Street | No Parking | 24-Dec |
| 6 | Clark | Brunskill School (101 Wiggins Avenue South) | 5 Minute Parking | 11-Dec |
| 6 | Clark | 314 Edmund Park | Disabled Persons Parking Zone | 31-Jan |
| 6 | Clark | 433 5th Street East | Disabled Persons Parking Zone | 13-Feb |
| 6 | Clark | 1040 University Drive | Disabled Persons Parking Zone | 26-Aug |
| 6 | Clark | 411 10th Street West | Disabled Persons Parking Zone | 10-Sep |
| 6 | Clark | 10 Grosvenor Crescent | Disabled Persons Parking Zone | 15-Dec |

| Ward | Councillor | Location | Type of Sign Installation | Date Approved |
|---|---|---|---|---|
| 6 | Clark | 922 Broadway Avenue | General Loading Zone | 20-Feb |
| 6 | Clark | 922 Broadway Avenue | No Parking | 20-Feb |
| 6 | Clark | 14th Street (West of McEown Place) | No Parking | 24-Feb |
| 6 | Clark | 2010 8th Street East | No Parking | 23-Jun |
| 6 | Clark | 2nd Street & Lorne Avenue (Next to Tastebuds Café) | No Parking | 19-Aug |
| 6 | Clark | Brunskill School (101 Wiggins Avenue South) | School Bus Loading Zone | 11-Dec |
| 7 | Loewen | Holy Cross High School (2115 McEown Avenue) | 5 Minute Parking | 11-Dec |
| 7 | Loewen | 2617 Clarence Avenue South | Church Loading Zone | 15-Dec |
| 7 | Loewen | 2125 Ste. Cecilia Avenue | Disabled Persons Parking Zone | 12-Feb |
| 7 | Loewen | 2 Clare Crescent | Disabled Persons Parking Zone | 11-Apr |
| 7 | Loewen | Alvin Buckwold School (715 East Drive) | Disabled Persons Parking Zone | 20-Oct |
| 7 | Loewen | Holy Cross High School (2115 McEown Avenue) | Disabled Persons Parking Zone | 11-Dec |
| 7 | Loewen | 2617 Clarence Avenue South | Disabled Persons Parking Zone | 15-Dec |
| 7 | Loewen | 100 Block of Ruth Street East | No Parking | 12-Feb |
| 7 | Loewen | Preston Avenue U-Turn Bay at Dumont Crescent | No Parking | 13-Feb |
| 7 | Loewen | Isabella Street & Clarence Avenue (Next to Aden Bowman High School) | No Parking | 19-Aug |
| 7 | Loewen | 2900 Block of Cumberland Avenue South | No Parking | 20-Oct |
| 7 | Loewen | 3102 Clarence Avenue South | No Parking | 5-Nov |
| 7 | Loewen | St. Henry Avenue | No Parking | 12-Dec |
| 7 | Loewen | Walter Murray School (Preston Avenue South & Taylor Street East) | No Stopping | 29-May |
| 7 | Loewen | Alvin Buckwold School (715 East Drive) | No Stopping | 20-Oct |
| 7 | Loewen | Alvin Buckwold School (715 East Drive) | School Bus Loading Zone | 20-Oct |
| 7 | Loewen | Rempel Lane & Rempel Crescent (West) | Two-Way Yield | 5-Nov |
| 7 | Loewen | Adelaide Street & St. Andrews Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Adelaide Street & St. Patrick Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Adelaide Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Adelaide Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Ash Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Ash Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Elm Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Elm Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Hilliard Street & Coy Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Hilliard Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Hilliard Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Willow Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Willow Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Isabella Street & St. George Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Isabella Street & Coy Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Isabella Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Isabella Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Maple Street & McPherson Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Maple Street & Melrose Avenue | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Isabella Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Hilliard Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | William Avenue & Maple Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | William Avenue & Isabella Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | William Avenue & Adelaide Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Dufferin Avenue & Maple Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Lansdowne Avenue & Maple Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | York Avenue & Isabella Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | York Avenue & Hilliard Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | York Avenue & Adelaide Street | Two-Way Yield (Retrofit Program) | 31-Jul |

| Ward | Councillor | Location | Type of Sign Installation | Date Approved |
|---|---|---|---|---|
| 7 | Loewen | Albert Avenue & Hilliard Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Albert Avenue & Adelaide Street | Two-Way Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | 700 Block of Dickson Crescent & Dickson Crescent | Yield | 28-Feb |
| 7 | Loewen | Trident Crescent & Trident Crescent | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Ste. Cecilia Avenue & Isabella Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Maple Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Elm Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Adelaide Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Eastlake Avenue & Ash Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | William Avenue & Hilliard Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Dufferin Avenue & Isabella Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Lansdowne Avenue & Hilliard Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Hanover Avenue & Adelaide Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | York Avenue & Maple Street | Yield (Retrofit Program) | 31-Jul |
| 7 | Loewen | Albert Avenue & Isabella Street | Yield (Retrofit Program) | 31-Jul |
| 8 | Olauson | 810 Arlington Avenue | Disabled Persons Parking Zone | 11-Dec |
| 8 | Olauson | 2917 Early Drive | No Parking | 11-Feb |
| 9 | Paulsen | 928 Heritage View | No Parking | 25-Jul |
| 9 | Paulsen | North of the Kingsmere Boulevard & Delaronde Road (Adjacent to 103 Kingsmere Boulevard) | No Parking | 25-Jul |
| 9 | Paulsen | Herold Road & Herold Terrace/Pawlychenko Lane | No Parking | 25-Jul |
| 9 | Paulsen | Slimmon Road & Slimmon Place | No Parking | 20-Oct |
| 9 | Paulsen | 834 Swan Crescent | No Stopping | 11-Dec |
| 9 | Paulsen | 8th Street East & Wildwood Golf Course Access | Stop | 2-Jul |
| 10 | Jeffries | Willowgrove School/Holy Family School | 5 Minute Parking | 26-Nov |
| 10 | Jeffries | 407 Nelson Road | General Loading Zone | 24-Nov |
| 10 | Jeffries | Willowgrove School/Holy Family School | New School Zone | 26-Nov |
| 10 | Jeffries | 303 and 331 Lowe Road | No Parking | 28-Jan |
| 10 | Jeffries | 419 Nelson Road | No Parking | 23-Jun |
| 10 | Jeffries | Stensrud Road & Shepherd Crescent | No Parking | 19-Aug |
| 10 | Jeffries | 407 Nelson Road | No Parking | 24-Nov |
| 10 | Jeffries | Willowgrove School/Holy Family School | No Stopping | 26-Nov |
| 10 | Jeffries | Willowgrove School/Holy Family School | School Bus Loading Zone | 26-Nov |
| 10 | Jeffries | Muzyka Road & Patrick Crescent (South) | Stop | 7-Jan |

# Amendments to Policy C07-010, Parking Restrictions and Parking Prohibitions

**Recommendation**
That the Standing Policy Committee on Transportation recommend to City Council:
1. That the revisions to Policy C07-010, Parking Restrictions and Parking Prohibitions be adopted; and
2. That the City Clerk be requested to update the policy as reflected in this report.

## Topic and Purpose
The purpose of this report is to amend Policy C07-010, Parking Restrictions and Parking Prohibitions.

## Report Highlights
Changes to sections of the existing policy are recommended, which the Administration believes will strengthen the City's traffic safety approach and clarify the policy.

## Strategic Goal
This report supports the Strategic Goal of Moving Around to provide the movement of people and goods around the city quickly and safely.

## Background
Parking restrictions and/or prohibitions are typically installed to address traffic safety concerns by improving sight restrictions and turning radii, while maintaining reasonable access to, and use of on-street parking. Policy C07-010 outlines the criteria for warranting the installation of parking restrictions and prohibitions.

Components of the existing policy (Attachment 1) are outdated and require updating.

## Report
The Purpose statement of the Policy has been modified to clarify the intent, which is to define the criteria for the installation of parking restrictions and prohibitions to ensure that traffic safety is paramount, yet still allowing reasonable access to, and use of on-street parking by residents.

Previously, the policy also focused on larger scale parking restrictions in areas near high traffic generators. The Policy will still indicate that parking restrictions may be warranted if there is an influx of parking that is impacting residential properties. If properties owners are interested in implementing timed parking restrictions, they still have the ability to request parking restrictions. However, in recent years, Policy C07-014, Residential Parking Permit Policy has been modified to provide options for addressing parking concerns in residential areas due to large traffic generators.

Policy – Section 3.2.1
The Administration is recommending the removal of conditions (a) and (b), as these are no longer used to determine the need for parking restrictions. Whether there is one vehicle parked periodically in a certain location or numerous vehicles, improving visibility and ensuring adequate room for vehicle movement is paramount and needs to be maintained at all times. The conditions to remove include:

"a) An average on street stall occupancy of 80% or greater combined with an average turnover of 4.0 or less during the time that the proposed parking restriction would be in effect.

b) The area under consideration is within 450 meters of a large traffic generator."

Influx of parking near large traffic generators is typically addressed through Policy C07-014, Residential Parking Permit Policy, which includes similar criteria to measure the demand for parking.

Policy – Section 3.2.1
Near intersections where there are no dedicated left turn bays, parked vehicles often block the flow of traffic, resulting in increased congestion or unsafe vehicle manoeuvers. One solution is to restrict parking during certain hours or at all times (depending on the specific location). The Administration is recommending the below additional condition:

"(d) On Arterial streets where increased traffic capacity has been deemed as necessary to improve traffic flow and congestion."

Policy – Section 3.2.2
This section addresses several safety concerns as conditions that may warrant the installation of parking prohibitions; however, it is extremely broad in its interpretation. Under this section, the Administration is recommending the inclusion of the following conditions to provide more clarity, one of which will need to be satisfied to warrant the installation of parking prohibitions:

- The five year collision history of the area will be analysed. Three or more collisions have been reported in the last twelve month period and are of a type that is susceptible to correction by a parking prohibition.
- If an area is identified where enforcement is an ongoing issue (i.e. vehicles continually are parking within 1 metre from a driveway access or 10 metres from an intersection).
- If Emergency responders (Fire, Police, Ambulance) are having difficulty manoeuvring around a driveway access.
- In areas (i.e. specifically industrial areas) where semi-trucks and trailers are having difficulty manoeuvring out of a private driveway.
- If the roadway geometrics cause issues with visibility such as a curve in the road or if there is an obstruction within city right-of-way causing visibility issues.

Concerns must be submitted in writing to the Transportation division where they will be reviewed according to the updated policy.

## Public and/or Stakeholder Involvement

The Parking Services Section is in agreement with the recommended changes.

When reviewing the need for significant parking restrictions or prohibitions in a specific location, the adjacent property owner is consulted during the review process.

## Communication Plan

If approved, the policy update will be communicated to all internal City departments. The City's website will provide updates to inform the public of these conditions, as well as instructions on how to request an inquiry. This subject may be considered as the topic of a Building Better Roads news conference or a parking "Did You Know" campaign.

## Policy Implications

If approved, Policy C07-010, Parking Restrictions and Parking Prohibitions will need to be updated to reflect the changes.

## Other Considerations/Implications

There are no options, financial, environmental, privacy or CPTED considerations or implications.

## Due Date for Follow-up and/or Project Completion

A follow-up report is not required.

## Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

## Attachment

1. Council Policy C07-010, Parking Restrictions and Parking Prohibitions (Updated to February 8, 2010).

## Report Approval

| | |
|---|---|
| Written by: | Shirley Matt, Traffic Management Engineer, Transportation |
| Reviewed by: | Jay Magus, Engineering Manager, Transportation |
| | Angela Gardiner, Director of Transportation |
| Approved by: | Jeff Jorgenson, General Manager, Transportation & Utilities Department |

TRANS SM - Amendments to Policy C07-010 - Parking Restrictions and Parking Prohibitions.docx

# CITY OF SASKATOON COUNCIL POLICY

| NUMBER |
|---|
| *C07-010* |

| POLICY TITLE | ADOPTED BY: | EFFECTIVE DATE |
|---|---|---|
| *Parking Restrictions and Parking Prohibitions* | *City Council* | *July 18, 1983* |
| | | **UPDATED TO** *February 8, 2010* |
| **ORIGIN/AUTHORITY** *Clause 2, Report No. 14-1983 of the Works and Utilities Committee; Clause D5, Administrative Report No. 2-2009 and Clause E2, Administrative Report No. 2-2010* | **CITY FILE NO.** *CK. 6120-1* | **PAGE NUMBER** *1 of 6* |

1. PURPOSE

To define criteria for the installation of parking restrictions~~, in residential areas close to large traffic generators, such as: hospitals, colleges, university, high schools, etc., to prevent excessive on-street parking by patrons of the large traffic generators, yet allow reasonable access to and use of on-street parking by residents and to define criteria for the installation of parking prohibitions in all areas of the City of Saskatoon.~~ **and prohibitions to ensure traffic safety is paramount, yet allow reasonable access to, and use of on-street parking.**

2. DEFINITIONS

2.1 Parking Restriction - a time limitation on the use of a parking facility to increase the turnover of parking stalls.

2.2 Parking Supply - the number of legal parking spaces in a given area.

2.3 Parking Inventory - the number of parking spaces available in a given area categorized by on-street or off-street spaces, public or private use, or by other classifications.

2.4 Private Parking Supply - parking spaces provided for employees or customers of a business or habitants of a residence and not available to the general public.

2.5 Public Parking Supply - parking spaces available to the general public either free of charge or for a fee.

2.6 Parking Demand - the number of drivers desiring to park in a given area during a specified time period.

2.7 Short-Term Demand - parking demand with a duration of less than three to four hours.

2.8 Long-Term Demand - parking demand with a duration exceeding three to four hours.

2.9 Parking Surplus - the extent to which the parking supply exceeds the demand of spaces.

2.10 Parking Deficiency - the extent to which the parking demand exceeds the supply of spaces.

2.11 Parking Accumulation - the total number of cars parked in a given area at a given time.

2.12 Parking Duration - the length of time a given vehicle remains in a specific space.

2.13 Turnover - the number of different vehicles that park in a given space during a specified time period.

2.14 Occupancy - the portion of time a vehicle is parked in a given space during a specified time period.

2.15 Walking Distance - the distance on a normal walking path with crossings at intersections from the driver's parking space to the nearest door of his destination.

2.16 Parking Prohibitions – prohibiting vehicles from parking in a designated area.

**2.17 Private Driveway – allows habitants of a residence to gain access to a private parking supply.**

3. POLICY

3.1 General

a) The City will employ the least restrictive parking restrictions and parking prohibitions possible to achieve the desired results.

b) Parking restrictions and parking prohibitions shall be used in a manner that will encourage obedience and respect.

c) Parking restrictions and parking prohibitions are not to be applied without regard for the existing and potential land use and street system.

d) Parking restrictions and parking prohibitions should meet the following elementary requirements:

i) Be capable of fulfilling an important need.
ii) Command respect of the road user.
iii) Be sanctioned by law.
iv) Be enforceable.

e) The following data is required before recommendations for parking restrictions will be made:

i) Private parking supply.
ii) Public Parking supply.
iii) Short term demand.
iv) Long term demand.
v) Parking surplus or deficiency.
vi) Parking accumulation
vii) Parking duration.
viii) Turnover.
ix) Occupancy.
x) Walking distance.

3.2 Warrants

3.2.1 The following conditions MAY warrant the installation of parking restrictions:

~~a) An average on-street stall occupancy of 80% or greater combined with an average turnover of 4.0 or less during the time that the proposed parking restriction would be in effect.~~

~~b) The area under consideration is within 450 meters of a large traffic generator.~~

a) A high utilization of the area's private parking supply during the time that the proposed parking restriction would be in effect.

b) Installation of the parking restriction would not transfer the parking problem to another area.

c) A petition requesting a parking restriction on a block face signed by 90% of the residences of that block face.

**d) On Arterial streets where increased traffic capacity has been deemed as necessary to improve traffic flow and congestion.**

3.2.2 The following conditions MAY warrant the installation of parking prohibitions:

a) Where a safety concern **~~has been identified as indicated by one of the following:~~ regarding parked vehicles or obstructions restricting the sight lines for motorist exiting an alley, driveway or intersections and one of the following conditions are met:**

i) ~~Parked vehicles or obstructions restricting the sight lines for motorists exiting an alley, private driveway or intersection.~~ At a location where three or more collisions are reported in the last twelve month period and are a type that is susceptible to correction by a parking prohibition;

ii) ~~To provide adequate lane widths where necessary and to improve traffic flow at locations where parking causes safety concerns such as congestion and delay.~~ At a location where Parking Enforcement have continued issues with violations of the Traffic Bylaw;

iii) ~~At a mid-block crosswalk location to allow appropriate visibility for pedestrians.~~ Emergency Service vehicles having trouble manoeuvring out of a driveway accesses;

iv) ~~To provide adequate space for transit stops.~~ In an area where semi-trucks and trailers have difficulty manoeuvring out of their driveway;

v) ~~To provide sufficient sight lines between two driveways that are too close together.~~ If the geometrics of the road alignment, such as curve in the roadway or any obstructions on city right-of-way restrict visibility.

b) ~~To identify specific time limits for allowance of roadway maintenance work including snow removal, street sweeping, and roadway work such as patching, paving and repairing potholes.~~ To provide adequate lane widths where necessary and to improve traffic flow at locations where parking causes safety concerns such as congestion and delay.

c) At a mid-block or signed and marked crosswalk location to allow appropriate visibility for pedestrians.

d) To provide adequate space for transit stops.

**e) To provide sufficient sight lines between two driveways that is too close together.**

**f) To identify specific time limits for allowance of roadway maintenance work including snow removal, street sweeping, and roadway work such as patching, paving and repairing potholes.**

3.3 Traffic Control Devices

Parking control signs manufactured and installed as specified in the Uniform Traffic Control Device Manual for Canada shall be used to effect all parking restrictions and parking prohibitions.

4. RESPONSIBILITIES

4.1 ~~The Infrastructure Services Department~~ **Transportation & Utilities** Department shall be responsible for:

a) Administering, reviewing and recommending updates to the policy.

b) Installing all parking restrictions and parking prohibitions.

4.2 ~~The General Manager, Infrastructure Services Department~~ **Director of Transportation, Transportation division** shall be responsible for approving all parking restrictions and parking prohibitions.

4.3 City Council shall be responsible for approving any updates to this policy as recommended by the ~~Infrastructure Services Department~~ **Transportation & Utilities Department.**

# Caswell Hill Neighbourhood Traffic Review

**Recommendation**
That the Standing Policy Committee on Transportation recommend to City Council:

That the Neighbourhood Traffic Review for the Caswell Hill neighbourhood be adopted as the framework for future traffic improvements in the area, to be undertaken as funding is made available through the annual budget process.

## Topic and Purpose
The purpose of this report is to provide information on the Neighbourhood Traffic Review for the Caswell Hill neighbourhood.

## Report Highlights
A traffic plan for the Caswell Hill neighbourhood was developed, in consultation with the community, in response to concerns such as speeding, traffic shortcutting, and pedestrian safety. The plan will be implemented over time as funding for the improvements is available.

## Strategic Goal
This report supports the Strategic Goal of Moving Around by providing a plan to guide the installation of traffic calming devices and pedestrian safety enhancements to improve the safety of pedestrians, motorists, and cyclists.

## Background
A public meeting was held in April 2014 to identify traffic concerns and potential solutions within the Caswell Hill neighbourhood. Representatives from the Saskatoon Police Service were in attendance to address traffic enforcement issues. Based on the residents' input provided at the initial public meeting and the analysis of the traffic data collected, a Traffic Management Plan was developed and presented to the community at a second public meeting held in October 2014.

## Report
The development and implementation of the Traffic Management Plan includes four stages:

1. Identifying existing problems, concerns and possible solutions through the initial neighbourhood consultation and the Shaping Saskatoon.ca website;
2. Developing a draft traffic plan based on residents' input and traffic assessments;
3. Presenting the draft traffic plan to the neighbourhood at a follow-up meeting; circulating the plan to other civic divisions for feedback; making adjustments as needed and presenting the plan to City Council for adoption; and
4. Implementing the proposed measures in a specific time frame, short-term (1 to 2 years), medium-term (3 to 5 years), or long-term (more than 5 years).

The majority of concerns received during the consultation included: shortcutting, speeding, pedestrian safety (specifically near the Caswell Hill School and Ashworth Holmes Park) and parking.

The Administration is recommending the following modifications to improve safety in the Caswell Hill neighbourhood:

- One directional closure (upgrades at Avenue D & 23rd Street)
- Three traffic calming locations
- Five stop sign locations
- Three zebra crosswalks
- One pedestrian corridor
- One parking restriction
- One advanced warning sign location
- Two pedestrian accessibility ramps
- Asphalt path connection into Ashworth Holmes Park
- Various sidewalk locations

Installation of each proposed improvement will be implemented in three specific time frames as follows:

| | |
|---|---|
| Short-term (1 to 2 years) | Temporary traffic calming measures, signage, pavement markings, accessible pedestrian ramps |
| Medium-term (3 to 5 years) | Permanent traffic calming devices, roadway realignment, sidewalks (in some cases), major intersection reviews |
| Long-term (5 years plus) | Permanent traffic calming devices, roadway realignment, sidewalks |

The Caswell Hill Neighbourhood Traffic Review is included in Attachment 1.

## Public and/or Stakeholder Involvement

In April 2014, a public meeting was held to discuss traffic concerns and identify potential solutions. The feedback was used to develop the neighbourhood traffic plan which was presented at a follow up public meeting in October 2014. Additional feedback received at the follow-up public meeting was also incorporated into the Neighbourhood Traffic Review.

Feedback was provided by internal civic stakeholders of various divisions and departments: Public Works, Saskatoon Transit, Saskatoon Police Service, and the Saskatoon Fire Department on the proposed improvements, which was incorporated into the proposed Traffic Management Plan.

## Communication Plan

The final neighbourhood traffic plan will be shared with the residents of the impacted neighbourhood using several methods: City website, Community Association communication forums (i.e. website, newsletter), and by a direct mail-out.

## Environmental Implications

The overall impact of the recommendations on traffic characteristics including the impacts on greenhouse gas emissions is not known at this time.

## Financial Implications

The implementation of the neighbourhood traffic calming plan will have significant financial implications. The costs are summarized in the following table:

| Item | 2015 | Beyond 2015 |
|---|---|---|
| Traffic Calming | $ 3,000 | $108,000 |
| Marked Pedestrian Crosswalks | 3,700 | 30,000 |
| Stop and Yield Signs | 1,500 | - |
| Miscellaneous Signs | 1,000 | - |
| Avenue D & 23rd Street upgrades | 4,250 | 45,000 |
| Sidewalks & Accessibility Ramps | - | 179,400 |
| TOTAL | $13,450 | $362,400 |

There is sufficient funding within Capital Project #1512 – Neighbourhood Traffic Management to undertake the work in 2015.

The remainder of the work, beyond 2015, will be considered alongside all other improvements identified through the Neighbourhood Traffic Management Program. The Administration's annual budget submission package will include the list of projects recommended to be funded, and the rationale used to prioritize the projects.

## Other Considerations/Implications

There are no options, policy, privacy or CPTED considerations or implications.

## Due Date for Follow-up and/or Project Completion

If adopted by City Council, temporary traffic calming devices and signage will be implemented during the 2015 construction season.

## Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

## Attachment

1. Caswell Hill Neighbourhood Traffic Review, February 9, 2015

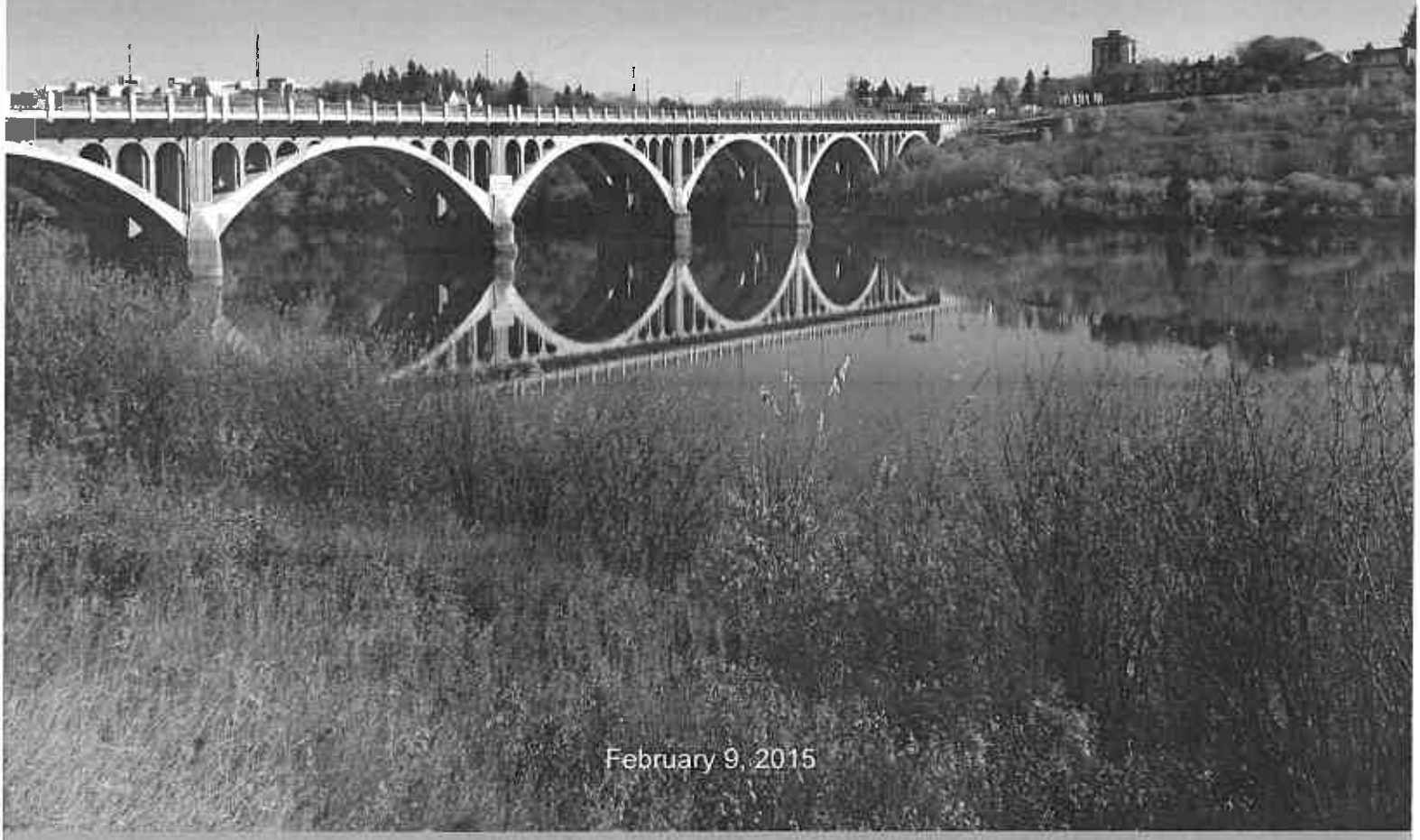
## Report Approval

Written by: Justine Nyen, Traffic Safety Engineer, Transportation
Reviewed by: Jay Magus, Engineering Manager, Transportation
Reviewed by: Angela Gardiner, Director of Transportation
Approved by: Jeff Jorgenson, General Manager, Transportation & Utilities Department

ATTACHMENT 1

City of Saskatoon

# Caswell Hill Neighbourhood Traffic Review



February 9, 2015

Transportation & Utilities Department

## Acknowledgements

The completion of this review would not be possible without the contribution of the following organizations and individuals:

- Caswell Hill residents
- Caswell Hill Community Association
- Saskatoon Police Service
- Saskatoon Light & Power
- Saskatoon Fire Department
- City of Saskatoon Environmental Services
- City of Saskatoon Transit
- City of Saskatoon Transportation
- Great Works Consulting
- Councillor Pat Lorje

## Executive Summary

The objective of the Neighbourhood Traffic Management Program is to address traffic concerns within neighbourhoods such as speeding, shortcutting, and pedestrian safety. The program was revised in August 2013 to address traffic concerns on a neighbourhood-wide basis. The revised program involves additional community and stakeholder consultation that provides the environment for neighbourhood residents and City staff to work together in developing solutions that address traffic concerns. The process is outlined in the *Traffic Calming Guidelines and Tools*, City of Saskatoon, 2013.

A public meeting was held in April of 2014 to identify traffic concerns and potential solutions within the Caswell Hill neighbourhood. As a result of the meeting a number of traffic assessments were completed to confirm and quantify the concerns raised by the residents. Based on the residents input and the completed traffic assessments, a Traffic Management Plan was developed and presented to the community at a follow-up meeting held in October 2014.

A summary of recommended improvements for the Caswell Hill neighbourhood are included in **Table ES-1.** The summary identifies the locations, the recommended improvement, and a schedule for implementation. The schedule to implement the Traffic Management Plan can vary depending on the complexity of the proposed improvement. According to the *Traffic Calming Guidelines and Tools* document, the time frame may range from short-term (1 to 2 year); medium-term (3 to 5 years) and long-term (5 years plus). Accordingly, the specific time frame to implement the improvements for these neighbourhoods ranges from 1 to 5 years.

The resulting proposed Caswell Hill Traffic Management Plan is illustrated in **Exhibit ES-1.**

## Table ES-1: Caswell Hill Neighbourhood Recommended Improvements

| Location | Proposed Measure | Time Frame |
|---|---|---|
| Avenue B & 27th Street | Stop signs | 1 to 2 years |
| 32nd Street & Avenue D | Alternate direction of stop signs | |
| Avenue C & 30th Street | Change yield signs to stop signs | |
| Jamieson Street & Avenue C | Change yield sign to stop sign | |
| Avenue F & 30th Street | Change yield sign to stop sign; install closer to intersection | |
| Avenue H & 31st Street | Zebra crosswalks | |
| Avenue F - north of 30th Street (at curve) | 30kph advisory speed sign & curve ahead sign | |
| Avenue D & 30th Street | "No parking" signs | |
| 29th Street & Avenue C | Zebra crosswalk | |
| 29th Street & Avenue B | Pedestrian corridor & zebra crosswalk | 3 to 5 years (traffic calming devices will be installed temporarily until proven effective) |
| Avenue E & 30th Street | Raised median islands; accessibility ramps; pathway connection into park; add reflectors to park posts | |
| Avenue D & 23rd Street | Directional Closure, signage, & pavement markings to restrict northbound through movement (Subject to CP approval) | |
| Avenue F & 31st Street | Curb extensions & raised median island | |
| Avenue D & 31st Street | Curb extension | |
| 30th Street between Idylwyld Drive & Avenue C (south side);<br>Avenue F between parking lot south of pool & 31st Street (west side);<br>Avenue D (portions on east side, north & south of 23rd Street to connect to existing);<br>Avenue E between 28th Street & 29th Street (east side) | Sidewalk | 5 years plus |

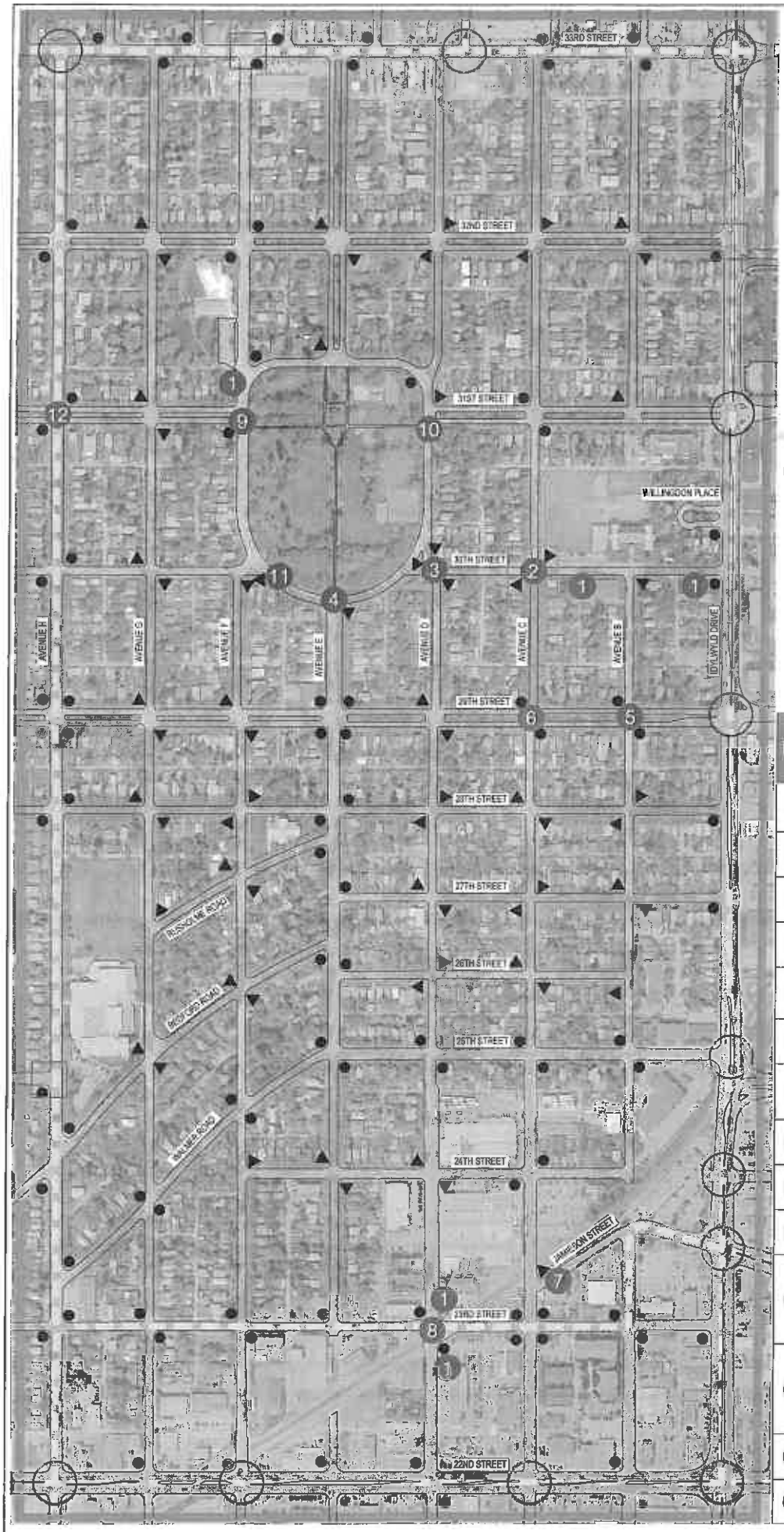



EXHIBIT ES-1

## LEGEND

- STOP SIGN
- YIELD SIGN
- BUS ROUTE
- TRAFFIC SIGNAL LOCATION
- PEDESTRIAN ACTUATED SIGNAL LOCATION
- ACTIVE PEDESTRIAN CORRIDOR LOCATION

| ITEM | LOCATION | PROPOSED MEASURE |
|---|---|---|
| 1 | Avenue B & 27th Street | Stop Sign |
| 2 | 32nd Street & Avenue D | North-South facing stop signs |
| 3 | Avenue C & 30th Street | Change yields sign to stop sign |
| 4 | Jamieson St & Avenue C | Change yield sign to stop sign |
| 5 | Avenue F & 30th Street | Change yield sign to stop sign; install closer to intersection |
| 6 | Avenue H & 31st Street | Zebra crosswalks |
| 7 | Avenue F north of 30th St (at curve) | 30kph advisory speed sign & curve ahead sign |
| 8 | Avenue D & 30th Street | "no parking" signs |
| 9 | 29th Street & Avenue C | Zebra crosswalk |
| 10 | 29th Street & Avenue B | Pedestrian corridor & zebra crosswalk |
| 11 | Avenue E & 30th Street | Median islands; accessibility ramps; pathway connection into park; add reflectors to park posts |
| 12 | Avenue D & 23rd Street | Median island, signage & pavement markings to restrict northbound through movement (subject to CP approval) |
| 13 | Avenue F & 31st Street | Curb extensions & median island |
| 14 | Avenue D & 31st Street | Curb extension |

# CASWELL HILL TRAFFIC PLAN

City of Saskatoon

## TABLE OF CONTENTS



## APPENDICES

## LIST OF TABLES



## LIST OF EXHIBITS

## 1. Introduction

The purpose of this project was to develop a Traffic Management Plan for the Caswell Hill neighbourhood following the implementation procedure outlined in the *City of Saskatoon Traffic Calming Guidelines and Tools* adopted by City Council in August 2013.

The Caswell Hill neighbourhood is located on the west side of the South Saskatchewan River and is bound by 22nd Street to the south, Idwylwyld Drive to the east, 33rd Street to the north, and Avenue H to the west. The area use is mostly residential, with an elementary school on 30th Street (Caswell Hill School) and a high school on Avenue H & Bedford Road (Bedford Road Collegiate), and some commercial land use adjacent to 22nd Street and 33rd Street.

The development and implementation of the traffic management plan includes four stages:

- **Stage 1** - Identify existing problems, concerns and possible solutions through the initial neighbourhood consultation and the Shaping Saskatoon Website.
- **Stage 2** - Develop a draft traffic plan based on resident's input and traffic assessments.
- **Stage 3** - Present the draft traffic plan to the neighbourhood at a follow-up meeting; circulate the plan to other civic divisions for feedback; make adjustments as needed; and present the plan to City Council for approval.
- **Stage 4** - Implement the proposed measures in specific time frame, short-term (1 to 2 years), medium-term (3 to 5 years) or long-term (5 years plus).

## 2. Identifying Issues, Concerns, & Possible Solutions

A public meeting was held in April of 2014 to identify traffic concerns within the neighbourhood. At the meeting, residents were given the opportunity to express their concerns and suggest possible solutions.

The following pages summarize the concerns and suggested solutions identified during the initial consultation with the neighbourhood residents.

## CONCERN 1 – SPEEDING AND SHORTCUTTING

Shortcutting occurs when non-local traffic passes through the neighbourhood on local streets which are designed and intended for low volumes of traffic. In the case of Caswell Hill, the bordering arterial streets (33rd Street, Idylwyld Drive, 22nd Street, and Avenue H) are designated to accommodate larger traffic volumes.

As speeding often accompanies shortcutting, these concerns have been grouped into one category.

**Neighbourhood concerns for speeding and shortcutting were at the following locations:**

- 30th Street between Avenue E & Avenue F
- 29th Street (including high volumes of heavy trucks)
- Avenue D between 29th Street & 33rd Street
- Avenue I
- 23rd Street near Avenue D
- Avenue B between 31st Street & 33rd Street
- Avenue F near Mayfair Pool, Ashworth Holmes Park, and Walmer Road
- Near Ashworth Holmes Park (Avenue F, Avenue D, 30th Street, & 31st Street)
- Jamieson Street

**Proposed solutions identified by residents:**

- Install speed humps
- Install raised crosswalks
- Install curb extensions
- Alternate direction of yield or stop signs

## CONCERN 2 - PEDESTRIAN SAFETY

A majority of the residents were concerned about pedestrian safety near the Ashworth Holmes Park and the school sites within Caswell Hill (Caswell Hill School on 30th Street; and Bedford Road Collegiate on Avenue H).

Pedestrian crosswalks need to adhere to the City of Saskatoon Council Policy C07-018 *Traffic Control at Pedestrian Crossings*, November 15, 2004 which states the following:

> "The installation of appropriate traffic controls at pedestrian crossings shall be based on warrants listed in the document entitled "Traffic Control at Pedestrian Crossings – 2004" approved by City Council in 2004."

**Neighbourhood concerns regarding pedestrian safety were at the following locations:**

- Ashworth Holmes Park (Avenue F, Avenue D, 30th Street, Avenue E, & 31st Street)
- 29th Street (particularly Avenue B & Avenue C)
- Jamieson Street – pedestrians walking on street; pedestrian safety concerns at Avenue C
- Avenue H – no safe crossings between 29th Street & 33rd Street
- Idylwyld Drive & 32nd Street – pedestrian device takes too long to activate; light turning red when no pedestrians are present
- Idylwyld Drive & 30th Street – install pedestrian-activated signal
- Enforcement for winter maintenance/sidewalk clearing in front of private property
- Missing sidewalks:
  - 30th Street on the south side between Idylwyld Drive & Avenue C
  - Gap on west side of Avenue F just south of pool
  - Avenue E between 25th Street & 29th Street
  - Avenue C between 25th Street & 29th Street
  - Avenue D near 23rd Street

**Proposed solutions identified by residents:**

- Install pedestrian-activated light
- Install raised median islands or curb extensions
- Install zebra crossing
- Install raised pedestrian crosswalk
- Pedestrian accessibility ramps needed into Ashworth Holmes Park
- Trim hedges around Ashworth Holmes Park to improve visibility of pedestrians

## CONCERN 3 - TRAFFIC CONTROL

Traffic control signs are used in order to assign the right-of-way and must meet guidelines in City of Saskatoon Council Policy C07-007 *Traffic Control – Use of Stop and Yield Signs*, April 26, 2009 which states that stop and yield signs are not to be used as speed control devices, to stop priority traffic over minor traffic, on the same approach to an intersection where traffic signals are operational, or as a pedestrian crossing device.

An all-way stop must meet the conditions for traffic volume, collision history, and must have a balanced volume from each leg to operate sufficiently.

**Neighbourhood concerns regarding traffic control improvements were are at the following intersections:**

- 25th Street & Avenue C – drivers ignoring stop sign
- 29th Street – drivers disobeying 4-way stops at Avenue H and Avenue E
- Jamieson Street & Avenue C – drivers disobeying yield sign
- 23rd Street & Avenue C – 4-way stop isn't working
- Avenue D & 30th Street – right-or-way is confusing
- Avenue B & 27th Street – dangerous
- 25th Street eastbound – difficult to get onto Idylwyld Drive
- Idylwyld Drive & 32nd Street – install motion detector for vehicles waiting on 32nd Street; truck traffic going through intersection; drivers going through on Idylwyld Drive on red

**Proposed solutions identified by residents:**

- 30th Street & Avenue C – yield signs should be stop signs
- Avenue B & 27th Street – install stop signs

## CONCERN 4 – PARKING

Parking is allowed on all city streets unless signage is posted. According to City of Saskatoon Bylaw 7200, *The Traffic Bylaw*, December 16, 2013, vehicles are restricted from parking within 10 metres of an intersection and one metre of a driveway crossing.

**Neighbourhood concerns regarding parking were at the following locations:**

- 30th Street & Avenue D
- 31st Street & Avenue D
- 29th Street
- Jamieson Street & Avenue C
- Ashworth Holmes Park
- Avenue B & 27th Street
- Trucks parking on Avenue B between 24th Street & 25th Street

**Proposed solutions identified by residents:**

- Install "no parking" signs to indicate 10 metre distance from intersection.

## CONCERN 5 - CYCLING

Cycling is a practical mode of transportation in Caswell Hill, as the neighbourhood is in close proximity to the downtown and other nearby amenities.

The Blairmore Bikeway is a designated pathway connecting the downtown area to the Blairmore Suburban Centre. Jamieson Street and a portion of 23rd Street from Idylwyld Drive to Vancouver Avenue (Circle Drive) were selected as part of the route due to low traffic volumes. A number of traffic calming devices were installed along the route to further decrease traffic volumes and vehicular speeds and increase safety for cyclists. The portion of 23rd Street that intersects the Caswell Hill neighbourhood, from Idylwyld Drive to Avenue H, includes a "pinch point" at between Avenue E and Avenue F, and curb extensions/raised median island at Avenue H.

**Neighbourhood concerns regarding cycling were at the following locations:**

- Sharrows on Jamieson Street go into parked cars
- 23rd Street & Avenue E pinch point is dangerous and increases frustration; cyclists have no place to go
- Not in favour of the temporary traffic calming used for the cycling route improvements on 23rd Street. The curbing is ugly and collects garbage. Graders frequently hit the curb leaving bolts sticking out.

**Proposed solutions identified by residents:**

- Remove the bulbing at 23rd Street & Avenue E and paint bike lanes
- Curb extensions force cyclist into the middle of the road. Install path through curb extensions for cyclists to go through
- Prioritize cycling routes in terms of spring maintenance (i.e. potholes, debris, gravel)

## 3. Assessment

Stage 2 of the plan development included developing a draft traffic management plan. This was completed through the following actions:

- Create a detailed list of all the issues provided by the residents.
- Collect historical traffic data and information the City has on file for the neighbourhood.
- Prepare a data collection program that will provide the appropriate information needed to undertake the assessments.
- Complete the data collection, which may include:
  - Intersection turning moving counts
  - Pedestrian counts
  - Daily and weekly traffic counts
  - Average speed measurements
- Assess the issues by using the information in reference with City policies, bylaws, and guidelines, transportation engineering design guidelines and technical documents, and professional engineering judgement.

The following sections provide details on the data collected for traffic volumes (peak hours, daily, and weekly), travel speed, and pedestrian movements.

### 1. Traffic Volumes and Travel Speeds

Traffic volumes and travel speeds were measured to assist in determining the need for traffic calming devices. In Saskatoon the neighbourhood streets are classified typically as either local or collector streets. Traffic volumes (referred to as Average Daily Traffic) on these streets should meet the City of Saskatoon guidelines shown in **Table 3-1**.

**Table 3-1: City of Saskatoon Street Classifications and Characteristics**

| Characteristics | Classifications | | | | | |
|---|---|---|---|---|---|---|
| | Back Lanes | | Locals | | Collectors | |
| | Residential | Commercial | Residential | Commercial | Residential | Commercial |
| Traffic function | Access function only (traffic movement not a consideration) | | Access primary function (traffic movement secondary consideration) | | Traffic movement and land access of equal importance | |
| Average Daily Traffic (vehicles per day) | <500 | <1,000 | <1,000 | <5,000 | <5,000 | 8,000-10,000 |
| Typical Speed Limits (kph) | 20 | | 50 | | 50 | |
| Transit Service | Not permitted | | Generally avoided | | Permitted | |
| Cyclist | No restrictions or special facilities | | No restrictions or special facilities | | No restrictions or special facilities | |
| Pedestrians | Permitted, no special facilities | | Sidewalks on one or both sides | Sidewalks provided where required | Typically sidewalks provided both sides | Sidewalks provided where required |
| Parking | Some restrictions | | No restrictions or restriction on one side only | | Few restrictions other than peak hour | |

Travel speeds were measured to determine the 85$^{th}$ percentile speed, which is the speed at which 85 percent of vehicles are travelling at or below. The speed limit in the Caswell Hill area is 50kph, except for school zones where the speed limit is 30kph from September and June, 8:00am to 5:00pm, excluding weekends.

The speed studies and Average Daily Traffic (ADT) on streets where speeding was identified as an issue are summarized in **Table 3-2**.

**Table 3-2: Speed Studies and Average Daily Traffic Counts (2014)**

| Street | Between | Class | Average Daily Traffic (vpd) | Speed (kph) |
|---|---|---|---|---|
| 25th Street | Avenue B & Idylwyld Drive | Local | 933 | N/A |
| Avenue D | 28th Street & 29th Street | | 415 | 37.8 |
| 30th Street | Avenue E & Avenue F | | 342 | 41.3 |
| Avenue D | 29th Street & 30th Street | | 228 | 40.9 |
| Avenue F | 31st Street & 32nd Street | | 352 | 40.9 |
| Avenue F | 30th Street & 31st Street | | 977 | 47.5 |
| Avenue B | 31st Street & 32nd Street | | 143 | 46.5 |
| Avenue B | 31st Street & 32nd Street | | 512 | 39.4 |
| Jamieson Street | Avenue B & Avenue C | Local-Commercial | 4,100 | N/A |
| Avenue C | 22nd Street & 23rd Street | | 3,603 | N/A |
| 29th Street | Avenue F & Avenue G | Collector | 3,400 | 44.6 |
| 29th Street | Idylwyld Drive & Avenue B | | 5,345 | N/A |
| 29th Street | Avenue B & Avenue C | | 4,680 | N/A |
| 29th Street | Idylwyld Drive & Avenue B | | 4,390 | N/A |

## 2. Turning Movement Counts

Turning movement counts were completed to determine the need for an all-way (i.e. three-way or four-way) stop control. All-way stop controls need to the meet City of Saskatoon Council Policy C07-007 *Traffic Control – Use of Stop and Yield Signs*, January 26, 2009. Criteria outlined in the policy that may warrant an all-way stop include a peak hour count greater than 600 vehicles or an ADT greater than 6,000 vehicles per day. Further conditions that must be met for an all-way stop to be warranted are:

1. Traffic entering the intersection from the minor street must be at least 35% for a 4-way stop and 25% for a 3-way stop.
2. No other all-way stop or traffic signals within 200m.

Results of the studies are shown in **Table 3-3**.

**Table 3-3: All-Way Stop Assessments**

| Location | Peak Hour Traffic Count (veh) | Average Daily Traffic (vpd) | % of Traffic from minor street (%) | Traffic signals or all-way stop within 200m | Results |
|---|---|---|---|---|---|
| Avenue F & 31st Street (south) | 114 | 1,230 | 11 | no | All-Way Stop Not Warranted |
| Avenue F & 31st Street (north) | 122 | 1,270 | 20 | no | |
| Avenue C & 29th Street | 617 | 6,650 | 21 | no | |
| Avenue H & 28th Street | 572 | 5,740 | 3 | yes (90m from 4-way stop at 29th Street) | |
| Avenue H & 31st Street | 596 | 5,960 | 6 | No | |
| Avenue D & 23rd Street | 504 | 5,360 | 31 | yes (100m from 4-way stop at Avenue C) | |

As a result of the assessment there are no all-way stop controls recommended. Details of the all-way stop assessments are provided in **Appendix A**.

## 3. Pedestrian Assessments

Pedestrian assessments are conducted to determine the need for pedestrian actuated signalized crosswalks which, in adherence to the City of Saskatoon Council Policy C07-018 *Traffic Control at Pedestrian Crossings*, November 15, 2004, are typically active pedestrian corridor (flashing yellow lights) or pedestrian-actuated signals. A warrant system assigns points for a variety of conditions that exist at the crossing location, including:

- The number of traffic lanes to be crossed;
- the presence of a physical median;
- the posted speed limit of the street;
- the distance the crossing point is to the nearest protected crosswalk point; and
- the number of pedestrian and vehicles at the location.

Pedestrian and traffic data is collected during the five peak hours of: 8:00am-9:00am, 11:30am-1:30pm, and 3:00pm-5:00pm.

In addition, if a pedestrian actuated crosswalk is not warranted, a standard marked pedestrian crosswalk, or a zebra crosswalk (i.e. striped) may be considered. A summary of the pedestrian studies are provided in **Table 3-4.**

**Table 3-4: Pedestrian Assessment**

| Location | Number of Pedestrians Crossing | Results |
|---|---|---|
| Avenue C & 29th Street | 63 | Pedestrian Devices Not Warranted |
| Avenue H & 28th Street | 14 | |
| 31st Street & Avenue H | 27 | |
| Avenue F & 31st Street (south) | 51 | |
| Avenue F & 31st Street (north) | 39 | |

As a result of the assessment, no pedestrian devices are recommended. Details of the pedestrian device assessments are provided in **Appendix B.**

# 4. Plan Development

Stage 3 of the review included finalizing the recommended plan. This was achieved by completing the following steps:

- Based on the assessments, prepare a plan that illustrates the appropriate recommended improvement
- Present the draft plan to the residents at a follow-up public meeting
- Circulate the draft plan to the Civic Divisions for comment
- Revise the draft plan based on feedback from the stakeholders
- Prepare a technical document summarizing the recommended plan and project process

The tables in the following sections provide the details of the recommended traffic management plan, including the location, recommended improvement, and the justification of the recommended improvement.

1. Pedestrian Safety

Caswell Hill residents identified pedestrian safety near Caswell Hill School and Ashworth Holmes Park as a concern. The safety of the pedestrian environment near schools is important to encourage people to walk to school, as opposed to being dropped off. Accordingly, the recommended improvements to increase pedestrian safety are detailed in **Table 4-1**.

## Table 4-1: Recommended Pedestrian Safety Improvements – School Sites

| Location | Recommended Improvement[1] | Purpose |
|---|---|---|
| Avenue H & 31st Street | Zebra crosswalks | Improve pedestrian safety crossing Avenue H (currently no enhanced crossings between 29th Street & 33rd Street) |
| 29th Street & Avenue C | Zebra crosswalk | Improve pedestrian safety on school route |
| 29th Street & Avenue B | Pedestrian corridor & zebra crosswalk | Improve pedestrian safety on school route |
| Avenue E & 30th Street | Raised median islands; accessibility ramps; pathway connection into park; add reflectors to park posts | Reduce speed & improve pedestrian safety near park |
| Avenue F & 31st Street | Curb extensions & raised median island | Reduce speed & improve pedestrian safety near park |
| Avenue D & 31st Street | Curb extension | Reduce speed & improve pedestrian safety near park |
| Avenue F - north of 30th Street (at curve) | 30kph advisory speed sign & curve ahead sign | Reduce speed around curve near park |
| 30th Street between Idylwyld Drive & Avenue C (south side);<br>Avenue F between parking lot south of pool & 31st Street (west side);<br>Avenue D (portions on east side, north & south of 23rd Street to connect to existing);<br>Avenue E between 28th Street & 29th Street (east side) | Sidewalk | Improve pedestrian safety and connectivity near parks/schools |

[1] For details on these devices refer to the *City of Saskatoon Traffic Calming Guidelines and Tools*

## 2. Traffic Control

The recommended improvements to intersections that will improve the level of safety by clearly identifying the right-of-way through traffic controls are provided in **Table 4-2.**

**Table 4-2: Recommended Traffic Control Improvements**

| Location | Recommended Improvement | Purpose |
|---|---|---|
| 32nd Street & Avenue D | Alternate direction of stop signs | As part of the Stop & Yield Retrofit Program, signs are to be installed in an alternating pattern so a thoroughfare isn't created |
| Avenue C & 30th Street | Change yield signs to stop signs | Enhance compliance near Caswell School |
| Jamieson Street & Avenue C | Change yield sign to stop sign | Enhance compliance (Policy C07-007 – warranted based on roadway geometry / alignment) |
| Avenue F & 30th Street | Change yield sign to stop sign; install closer to intersection | Enhance compliance near Ashworth Holmes Park (Policy C07-007 – warranted based on roadway geometry / alignment) |
| 32nd Street & Avenue D | North-south facing stop signs | As part of the Stop & Yield Retrofit Program, signs are to be installed in an alternating pattern so a thoroughfare isn't created |
| Avenue B & 27th Street | Stop Signs | Enhance compliance |

## 3. Parking Improvements

The recommended improvements to parking that will improve the level of safety at specific intersections is detailed in **Table 4-3.**

**Table 4-3: Recommended Parking Improvements**

| Location | Recommended Improvement | Purpose |
|---|---|---|
| Avenue D & 30th Street | "No parking" signs | Improve sightlines |
| Avenue D & 30th Street | Add "no parking" signs around island. | Parked cars obstruct sight lines |

4. Cycling Improvements

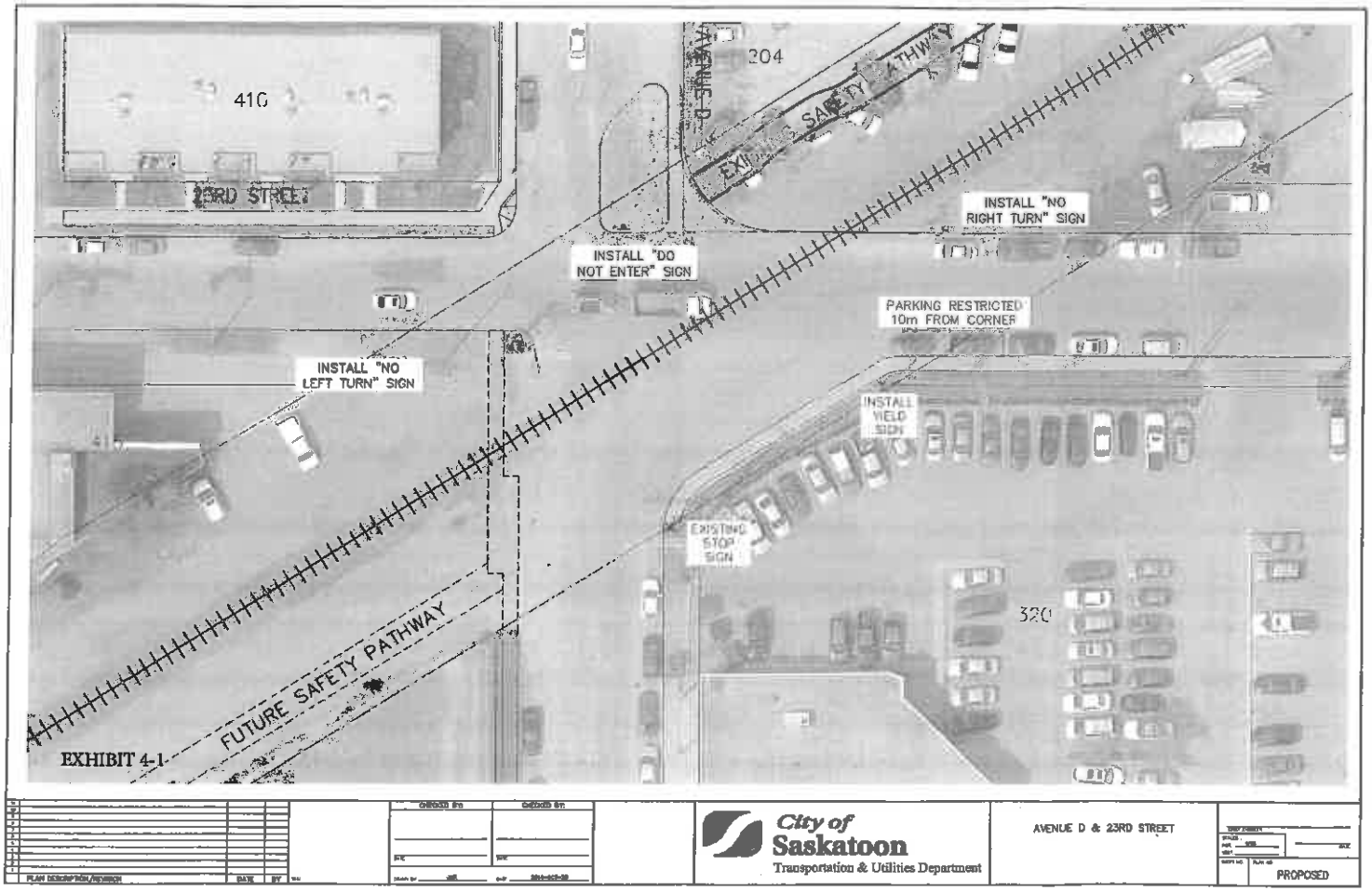
An assessment is currently being conducted for the Blairmore Bikeway (i.e. 23rd Street cycling route). All comments received during the public consultation were forwarded to the project leader for further consideration.

5. 23rd Street & Avenue D

Safety concerns were an identified concern at the intersection of Avenue D & 23rd Street including high traffic volumes and visibility issues.

An all-way stop assessment was conducted and is not warranted due to low traffic volumes and the proximity of the existing all-way stop at Avenue C & 23rd Street.

A review of the most recent 5-year collision data (2009 – 2013) indicated 20 collisions occurred, and 80% of all collisions involved the northbound through movement. A directional closure to restrict the northbound through movement is recommended to reduce the number of collisions and improve overall safety at the intersection. In addition, a yield sign will be added for the northbound right turn and parking restrictions will be installed on 23rd Street on the southeast corner to improve sight lines. Refer to **Exhibit 4-1**.


410
23RD STREET
AVENUE D
204
SAFETY PATHWAY
INSTALL "NO RIGHT TURN" SIGN
INSTALL "DO NOT ENTER" SIGN
PARKING RESTRICTED 10m FROM CORNER
INSTALL "NO LEFT TURN" SIGN
INSTALL YIELD SIGN
EXISTING STOP SIGN
320
FUTURE SAFETY PATHWAY
EXHIBIT 4-1
City of Saskatoon
Transportation & Utilities Department
AVENUE D & 23RD STREET
PROPOSED

The peak hour traffic volumes were reviewed to assess the impact of the directional closure. During the morning peak hour (7:45am-8:45am), there were 18 northbound-through vehicles, 10 westbound-right vehicles, and 2 eastbound-left vehicles resulting in a total of 40 vehicles during the afternoon peak hour effected. During the afternoon peak hour (4:30pm-5:30pm), there were 38 northbound-through vehicles, 20 westbound-right vehicles, and 7 eastbound-left vehicles resulting in a total of 65 vehicles during the afternoon peak hour effected. Based on the peak hour assessment the directional closure will have minimal impact on the level of service of the intersection. For full details of the peak hour assessment refer to **Appendix D**.

Follow up Consultation – Presentation of Traffic Management Plan

The initial recommended improvements were presented at a follow-up public meeting in October 2014. Recommended improvements that were not supported by the residents were eliminated or altered accordingly. A decision matrix detailing the list of recommended improvements presented at the follow-up meeting are included in **Appendix E.** A decision matrix for additional comments received after the draft traffic plan is also included in **Appendix E.**

The following table displays a list of the improvements that were adjusted based on the feedback received at the October 2014 follow up meeting.

The recommendations were circulated to all Civic Divisions to gather comments and concerns. General support was received along with the following comments:

- Saskatoon Fire Department requested that emergency vehicles be able to proceed northbound on Avenue D at 23rd Street. They would simply ignore the left/right turn only and go against traffic in the southbound lane.
- Saskatoon Light & Power requested that Transportation Division contact them when the sidewalk location is determined to see if it required relocation of lighting.

## 5. Recommended Plan and Cost Estimates

Stage 4, the last stage of the process, is to install the recommended improvements for the Caswell Hill neighbourhood within the specified timeframe. The timeframe depends upon the complexity and cost of the solution. A short-term time frame is defined by implementing the improvements within 1 to 2 years; medium-term is 3 to 5 years; and long-term is 5 years plus.

The placement of pedestrian and traffic control signage will be completed short-term (1 to 2 years).

All traffic calming measures will be installed temporarily using rubber curbing until proven effective, and will be implemented short-term (1 to 2 years).

Permanent traffic calming often includes removing the temporary barriers and reconstructing with concrete. The timeline for permanent traffic calming may depend on the complexity of the device and the availability of funding; therefore the timeline is medium-term (3 to 5 years).

Major intersection reviews are based on the number of other locations to be reviewed city-wide and the availability of funding. The timeline for review will be medium-term (3 to 5 years).

The estimated costs of the improvements included in the Neighbourhood Traffic Management Plan are outlined in the following tables:

- Table 5-1: Traffic Calming Cost Estimate
- Table 5-2: Marked Pedestrian Crosswalks Cost Estimate
- Table 5-3: Traffic Control Signage – Stop & Yield Cost Estimate
- Table 5-4: Miscellaneous Signage Cost Estimate
- Table 5-5: Sidewalk & Pedestrian Accessibility Cost Estimate
- Table 5-6: Avenue D & 23rd Street Improvements Cost Estimate
- Table 5-7: Total Cost Estimate

**Table 5-1: Traffic Calming Cost Estimate**

| Location | Device (s) | Cost Estimate | | Time Frame |
|---|---|---|---|---|
| | | Temporary | Permanent | |
| Avenue E & 30th Street | 2 raised median islands | $1,000 | $12,000 | 1 to 5 years |
| Avenue F & 31st Street | 2 curb extensions & 1 raised median island | $1,500 | $66,000 | |
| Avenue D & 31st Street | 1 curb extension | $500 | $30,000 | |
| Total | | $3,000 | $108,000 | |

Temporary traffic calming will be installed in 2015 and will be monitored to determine its effectiveness. If proven effective, the devices will be made permanent. Until they are made permanent, the devices will remain temporary and maintained on a yearly basis. An estimated cost for maintenance is about $5,000 per year. The maintenance typically involves the replacement of damage curbs as result of snow removal, damage from vehicle impact, etc.

**Table 5-2: Marked Pedestrian Crosswalks Cost Estimate**

| Location | Device (s) | Cost Estimate | Time Frame |
|---|---|---|---|
| Avenue H & 31st Street | 4 signs & zebra markings | $1,200 | 1 to 2 years |
| 29th Street & Avenue C | 4 signs & zebra markings | $1,200 | |
| 29th Street & Avenue B | 4 signs & zebra markings | $1,200 | |
| Avenue E & 30th Street | Post reflectors | $100 | |
| 29th Street & Avenue B | Pedestrian corridor | $30,000 | 1 to 5 years |
| Total | | $33,700 | |

The operating cost on an annual basis to maintain a crosswalk is approximately $60 each.

### Table 5-3: Traffic Control Signage – Stop & Yield Cost Estimate

| Location | Device (s) | Number of Signs | Cost Estimate | Time Frame |
|---|---|---|---|---|
| Avenue B & 27th Street; Avenue C & 30th Street; Avenue F & 30th Street; and Jamieson Street & Avenue C | Stop Sign | 6 | $1,500 | 1 to 2 years |
| 32nd Street & Avenue D | Alternate stop signs | 2 | $0 | |
| Total | | | $1,500 | |

### Table 5-4: Miscellaneous Signage Cost Estimate

| Location | Device (s) | Cost Estimate | Time Frame |
|---|---|---|---|
| Avenue F - north of 30th Street (at curve) | 30kph speed sign | $250 | 1 to 2 years |
| Avenue D & 30th Street | "No parking" signs | $750 | |
| Total | | $1,000 | |

### Table 5-5: Sidewalk & Pedestrian Accessibility Cost Estimate

| Location | Device | Distance (m) | Cost Estimate | Time Frame |
|---|---|---|---|---|
| 30th Street between Idylwyld Drive & Avenue C (south side) | Sidewalk | 170 | $74,800 | 5 years plus |
| Avenue F between parking lot south of pool & 31st Street (west side) | Sidewalk | 40 | $17,600 | |
| Avenue D (portions on east side, north & south of 23rd Street to connect to existing) | Sidewalk | 55 | $24,200 | |
| Avenue E between 28th Street & 29th Street (east side) | Sidewalk | 60 | $26,400 | |
| Avenue E & 30th Street | Asphalt pathway connection | 20 | $30,000 | |
| Avenue E & 30th Street | 2 accessibility ramps | NA | $6,400 | |
| Total | | | $179,400 | |

**Table 5-6: Avenue D & 23rd Street Improvements Cost Estimate**

| Device | Cost Estimate | | Time Frame |
|---|---|---|---|
| | Temporary | Permanent | |
| Pavement markings (lane designation, stop bar) | NA | $2,000 | 1 to 2 years |
| 5 Signs (1 yield sign, 1 No Entry, 2 No Right/Left Turns, 1 "No Parking") | NA | $1,250 | |
| Directional Closure | $1,000 | $45,000 | 1 to 5 years |
| Total | $1,000 | $48,250 | |

**Table 5-7: Total Cost Estimate**

| Category | Signage & Temporary Traffic Calming | Permanent |
|---|---|---|
| Traffic Calming | $3,000 | $108,000 |
| Marked Pedestrian Crosswalks | $3,700 | $30,000 |
| Traffic Control Signage | $1,500 | NA |
| Miscellaneous Signage | $1,000 | NA |
| Sidewalks & Pedestrian Accessibility Ramps | NA | $179,400 |
| Avenue D & 23rd Street Improvements | $4,250 | $45,000 |
| Total | $13,450 | $362,400 |

The total cost estimate for the signage and temporary traffic calming devices to be installed in 2015 is **$13,450**. The total cost estimate for the installation of future permanent devices, including the pedestrian corridor, sidewalks, pedestrian accessibility ramps, asphalt pathway, and permanent traffic calming is **$362,400**.

Resulting from the plan development process, the recommended improvements, including the location, type of improvement, and schedule for implementation are summarized in **Exhibit 5-1**. The resulting recommended Caswell Hill neighbourhood Traffic Management Plan is illustrated in **Table 5-8**.

## Table 5-8: Caswell Hill Neighbourhood Recommended Improvements

| Location | Proposed Measure | Time Frame |
|---|---|---|
| Avenue B & 27th Street | Stop signs | 1 to 2 years |
| 32nd Street & Avenue D | Alternate direction of stop signs | |
| Avenue C & 30th Street | Change yield signs to stop signs | |
| Jamieson Street & Avenue C | Change yield sign to stop sign | |
| Avenue F & 30th Street | Change yield sign to stop sign; install closer to intersection | |
| Avenue H & 31st Street | Zebra crosswalks | |
| Avenue F - north of 30th Street (at curve) | 30kph advisory speed sign & curve ahead sign | |
| Avenue D & 30th Street | "No parking" signs | |
| 29th Street & Avenue C | Zebra crosswalk | |
| 29th Street & Avenue B | Pedestrian corridor & zebra crosswalk | 3 to 5 years (traffic calming devices will be installed temporarily until proven effective) |
| Avenue E & 30th Street | Raised median islands; accessibility ramps; pathway connection into park; add reflectors to park posts | |
| Avenue D & 23rd Street | Directional Closure, signage, & pavement markings to restrict northbound through movement (Subject to CP approval) | |
| Avenue F & 31st Street | Curb extensions & raised median island | |
| Avenue D & 31st Street | Curb extension | |
| 30th Street between Idylwyld Drive & Avenue C (south side); Avenue F between parking lot south of pool & 31st Street (west side); Avenue D (portions on east side, north & south of 23rd Street to connect to existing); Avenue E between 28th Street & 29th Street (east side) | Sidewalk | 5 years plus |

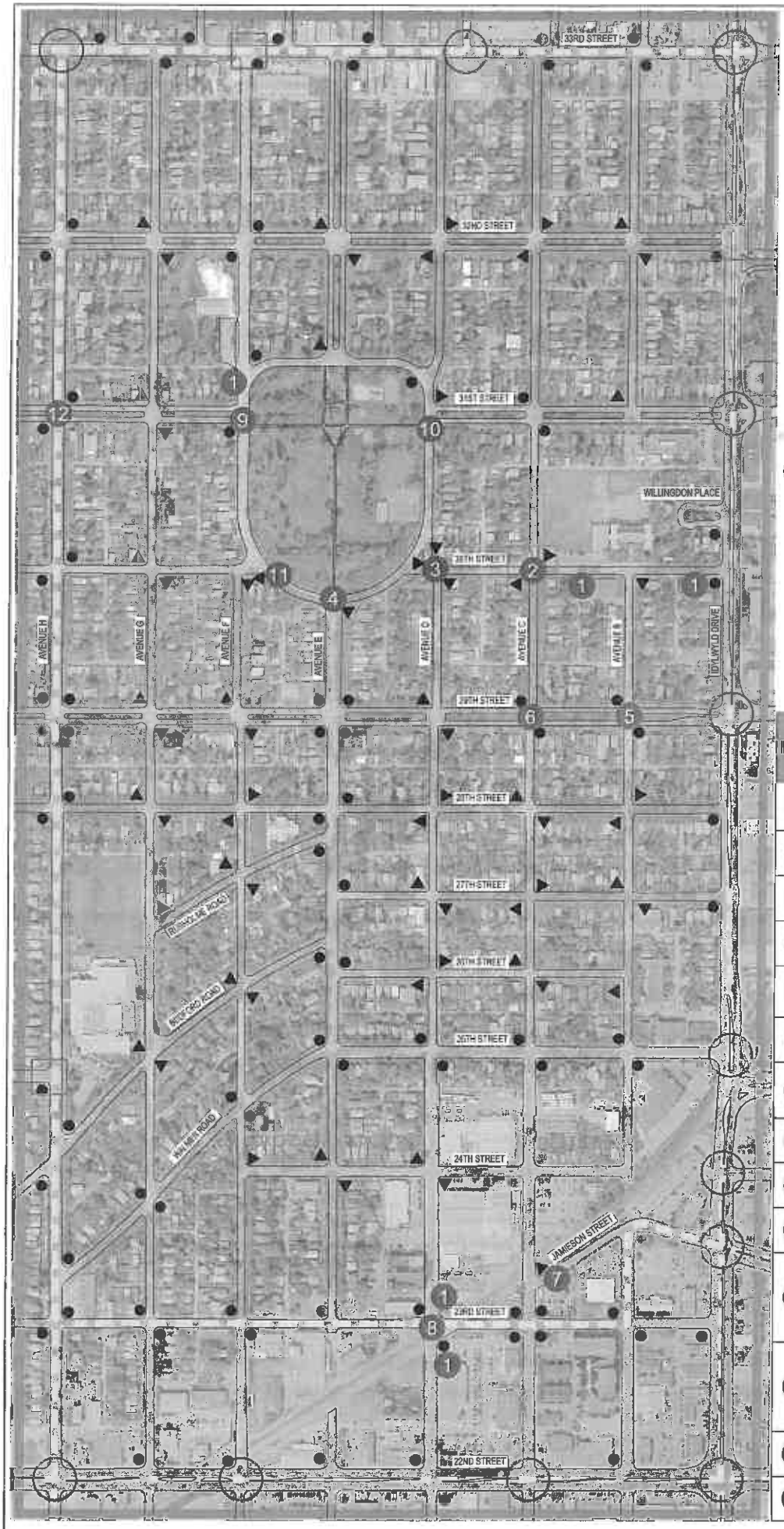



EXHIBIT 5-1

## LEGEND

- STOP SIGN
- YIELD SIGN
- BUS ROUTE
- TRAFFIC SIGNAL LOCATION
- PEDESTRIAN ACTUATED SIGNAL LOCATION
- ACTIVE PEDESTRIAN CORRIDOR LOCATION

| ITEM | LOCATION | PROPOSED MEASURE |
|---|---|---|
| 1 | Avenue B & 27th Street | Stop Sign |
| 2 | 32nd Street & Avenue D | North-South facing stop signs |
| 3 | Avenue C & 30th Street | Change yields sign to stop sign |
| 4 | Jamieson St & Avenue C | Change yield sign to stop sign |
| 5 | Avenue F & 30th Street | Change yield sign to stop sign; install closer to intersection |
| 6 | Avenue H & 31st Street | Zebra crosswalks |
| 7 | Avenue F north of 30th St (at curve) | 30kph advisory speed sign & curve ahead sign |
| 8 | Avenue D & 30th Street | "no parking" signs |
| 9 | 29th Street & Avenue C | Zebra crosswalk |
| 10 | 29th Street & Avenue B | Pedestrian corridor & zebra crosswalk |
| 11 | Avenue E & 30th Street | Median islands; accessibility ramps; pathway connection into park; add reflectors to park posts |
| 12 | Avenue D & 23rd Street | Median island, signage & pavement markings to restrict northbound through movement (subject to CP approval) |
| 13 | Avenue F & 31st Street | Curb extensions & median island |
| 14 | Avenue D & 31st Street | Curb extension |

# CASWELL HILL TRAFFIC PLAN

City of Saskatoon

# Appendix A

## All Way Stop Assessments

## All-way Stop Assessment (Policy C07-007 – Traffic Control – Use of Stop & Yield Signs)

The following conditions must be met for all-way stop control to be considered:

i) The combined volume of traffic entering the intersection over the five peak hour periods from the minor street must be at least 25% of the total volume for a three-way stop control, and at least 35% of the total volume for a four-way stop control.

ii) There can be no all-way stop control and traffic signal within 200 metres of the proposed intersection being considered for all-way stop control on either of the intersecting streets.

| Location | Condition 1: Combined volume of traffic entering intersection from minor street is at least 25% for 3-way stop or 35% for 4-way stop | Condition 2: There can be no all-way stop or traffic signal within 200m | Results |
|---|---|---|---|
| Avenue F & 31st Street (south) | 11% - Condition NOT met | No all-way stop or traffic signals within 200m – Condition met | Conditions NOT met therefore all-way stop not warranted |
| Avenue F & 31st Street (north) | 20% - Condition NOT met | No all-way stop or traffic signals within 200m – Condition met | |
| Avenue C & 29th Street | 21% - Condition NOT met | No all-way stop or traffic signals within 200m – Condition met | |
| Avenue H & 28th Street | 3% - Condition NOT met | 90m from 4-way stop at 29th Street - condition NOT met | |
| Avenue H & 31st Street | 6% - Condition NOT met | No all-way stop or traffic signals within 200m – Condition met | |
| Avenue D & 23rd Street | 31% - Condition NOT met | 100m from 4-way stop at Avenue C - condition NOT met | |

Provided the above criteria are met, the following conditions, singly or in combination, may warrant the installation of all-way stop signs:

i) When five or more collisions are reported in the last twelve month period and are of a type susceptible to correction by an all-way stop control.

ii) When the total number of vehicles entering the intersection from all approaches averages at least 600 per hour for the peak hour or the total intersection entering volume exceeds 6,000 vehicles per day.

iii) The average delay per vehicle to the minor street traffic must be 30 seconds or greater during the peak hour.

iv) As an interim measure to control traffic while arrangements are being made for the installation of traffic signals.

# Appendix B

Pedestrian Device Assessments

## Pedestrian device assessment (Traffic Controls at Pedestrian Crossing, 2004)

29th Street & Avenue C:

**1. Lanes Priority Points:**

| | | | |
|---|---|---|---|
| L = | 2 | lanes | = number of lanes. |
| LANF = | 0.0 | points | = (L-2) x 3.6 to a max of 15 points, urban x-section only. |

**2. Median Priority Points:**

| | | | |
|---|---|---|---|
| MEDF = | 6.0 | points | = indicating there is no physical median here. |

**3. Speed Priority Points:**

| | | | |
|---|---|---|---|
| S = | 50 | kph | = speed limit or 85th percentile speed. |
| SPDF = | 6.7 | points | = (S-30) / 3 to a maximum of 10 points. |

**4. Pedestrian Protection Location:**

| | | | |
|---|---|---|---|
| D = | 210 | m | = distance from study location to nearest protected crosswalk. |
| LOCF = | 0.8 | points | = (D-200) / 13.3 to a maximum of 15 points. |

**5. Pedestrian/Vehicle Volume Priority Points:**

| | | |
|---|---|---|
| H = | 5.0 | = ( hours ) duration of counting period. |
| Ps = | 63.0 | = total number of children, teenagers, seniors and/or impaired counted. |
| Pa = | 0.0 | = total number of adults counted. |
| Pw = | 94.5 | = weighted average of pedestrians crossing the main street. |
| Pcm = | 18.9 | = weighted average hourly pedestrian volume crossing the main street. |
| V = | 2245.0 | = volume of traffic passing through the crossing(s). |
| Vam = | 449.0 | = average hourly volume of traffic passing through the crossing(s). |

VOLF = 17.0 points = Vam x Pcm / 500

**6. Satisfaction of Installation Criteria:**

SUMF = ( LANF + MEDF + SPDF + LOCF + VOLF )

| | | |
|---|---|---|
| SUMF = | 30 | points |

(P.A. Signal Warrant Points)

The total of the warrant points is less than 100 indicating that a pedestrian actuated signal is NOT warranted.

Avenue H & 28th Street:

**1. Lanes Priority Points:**

| | | | |
|---|---|---|---|
| L = | 2 | lanes | = number of lanes. |
| LANF = | 0.0 | points | = (L-2) x 3.6 to a max of 15 points, urban x-section only. |

**2. Median Priority Points:**

| | | | |
|---|---|---|---|
| MEDF = | 6.0 | points | = indicating there is no physical median here. |

**3. Speed Priority Points:**

| | | | |
|---|---|---|---|
| S = | 50 | kph | = speed limit or 85th percentile speed. |
| SPDF = | 6.7 | points | = (S-30) / 3 to a maximum of 10 points. |

**4. Pedestrian Protection Location:**

| | | | |
|---|---|---|---|
| D = | 95 | m | = distance from study location to nearest protected crosswalk. |
| LOCF = | 0.0 | points | = (D-200) / 13.3 to a maximum of 15 points. |

**5. Pedestrian/Vehicle Volume Priority Points:**

| | | |
|---|---|---|
| H = | 5.0 | = ( hours ) duration of counting period. |
| Ps = | 14.0 | = total number of children, teenagers, seniors and/or impaired counted. |
| Pa = | 0.0 | = total number of adults counted. |
| Pw = | 21.0 | = weighted average of pedestrians crossing the main street. |
| Pcm = | 4.2 | = weighted average hourly pedestrian volume crossing the main street. |
| V = | 2263.0 | = volume of traffic passing through the crossing(s). |
| Vam = | 452.6 | = average hourly volume of traffic passing through the crossing(s). |
| VOLF = | 3.8 points | = Vam x Pcm / 500 |

**6. Satisfaction of Installation Criteria:**

SUMF = ( LANF + MEDF + SPDF + LOCF + VOLF )

| | | |
|---|---|---|
| SUMF = | 16 | points |

(P.A. Signal Warrant Points)

The total of the warrant points is less than 100 indicating that a pedestrian actuated signal is NOT warranted.

Avenue H & 31st Street:

**1. Lanes Priority Points:**

| | | | |
|---|---|---|---|
| L = | 2 | lanes | = number of lanes. |
| LANF = | 0.0 | points | = (L-2) x 3.6 to a max of 15 points, urban x-section only. |

**2. Median Priority Points:**

| | | | |
|---|---|---|---|
| MEDF = | 6.0 | points | = indicating there is no physical median here. |

**3. Speed Priority Points:**

| | | | |
|---|---|---|---|
| S = | 50 | kph | = speed limit or 85th percentile speed. |
| SPDF = | 6.7 | points | = (S-30) / 3 to a maximum of 10 points. |

**4. Pedestrian Protection Location:**

| | | | |
|---|---|---|---|
| D = | 400 | m | = distance from study location to nearest protected crosswalk. |
| LOCF = | 15.0 | points | = (D-200) / 13.3 to a maximum of 15 points. |
| Actual value = | | 15.03759 | points. |

**5. Pedestrian/Vehicle Volume Priority Points:**

| | | | |
|---|---|---|---|
| H = | 5.0 | | = ( hours ) duration of counting period. |
| Ps = | 27.0 | | = total number of children, teenagers, seniors and/or impaired counted. |
| Pa = | 0.0 | | = total number of adults counted. |
| Pw = | 40.5 | | = weighted average of pedestrians crossing the main street. |
| Pcm = | 8.1 | | = weighted average hourly pedestrian volume crossing the main street. |
| V = | 2008.0 | | = volume of traffic passing through the crossing(s). |
| Vam = | 401.6 | | = average hourly volume of traffic passing through the crossing(s). |
| VOLF = | 6.5 | points | = Vam x Pcm / 500 |

**6. Satisfaction of Installation Criteria:**

SUMF = ( LANF + MEDF + SPDF + LOCF + VOLF )

| | | |
|---|---|---|
| SUMF = | **34** | points |

(P.A. Signal Warrant Points)

The total of the warrant points is less than 100 indicating that a pedestrian actuated signal is NOT warranted.

Avenue F & 31st Street (south):

**1. Lanes Priority Points:**

| | | | |
|---|---|---|---|
| L = | 2 | lanes | = number of lanes. |
| LANF = | 0.0 | points | = (L-2) x 3.6 to a max of 15 points, urban x-section only. |

**2. Median Priority Points:**

| | | | |
|---|---|---|---|
| MEDF = | 6.0 | points | = indicating there is no physical median here. |

**3. Speed Priority Points:**

| | | | |
|---|---|---|---|
| S = | 50 | kph | = speed limit or 85th percentile speed. |
| SPDF = | 6.7 | points | = (S-30) / 3 to a maximum of 10 points. |

**4. Pedestrian Protection Location:**

| | | | |
|---|---|---|---|
| D = | 1,000 | m | = distance from study location to nearest protected crosswalk. |
| LOCF = | 15.0 | points | = (D-200) / 13.3 to a maximum of 15 points. |
| Actual value = | | 60.15038 | points. |

**5. Pedestrian/Vehicle Volume Priority Points:**

| | | | |
|---|---|---|---|
| H = | 5.0 | | = ( hours ) duration of counting period. |
| Ps = | 51.0 | | = total number of children, teenagers, seniors and/or impaired counted. |
| Pa = | 0.0 | | = total number of adults counted. |
| Pw = | 76.5 | | = weighted average of pedestrians crossing the main street. |
| Pcm = | 15.3 | | = weighted average hourly pedestrian volume crossing the main street. |
| V = | 398.0 | | = volume of traffic passing through the crossing(s). |
| Vam = | 79.6 | | = average hourly volume of traffic passing through the crossing(s). |
| VOLF = | 2.4 | points | = Vam x Pcm / 500 |

**6. Satisfaction of Installation Criteria:**

SUMF = ( LANF + MEDF + SPDF + LOCF + VOLF )

| | | |
|---|---|---|
| SUMF = | 30 | points |

(P.A. Signal Warrant Points)

The total of the warrant points is less than 100 indicating that a pedestrian actuated signal is NOT warranted.

Avenue F & 31st Street (north):

**1. Lanes Priority Points:**

| | | | |
|---|---|---|---|
| L = | 2 | lanes | = number of lanes. |
| LANF = | 0.0 | points | = (L-2) x 3.6 to a max of 15 points, urban x-section only. |

**2. Median Priority Points:**

| | | | |
|---|---|---|---|
| MEDF = | 6.0 | points | = indicating there is no physical median here. |

**3. Speed Priority Points:**

| | | | |
|---|---|---|---|
| S = | 50 | kph | = speed limit or 85th percentile speed. |
| SPDF = | 6.7 | points | = (S-30) / 3 to a maximum of 10 points. |

**4. Pedestrian Protection Location:**

| | | | |
|---|---|---|---|
| D = | 1,000 | m | = distance from study location to nearest protected crosswalk. |
| LOCF = | 15.0 | points | = (D-200) / 13.3 to a maximum of 15 points. |
| Actual value = | | 60.15038 | points. |

**5. Pedestrian/Vehicle Volume Priority Points:**

| | | | |
|---|---|---|---|
| H = | 5.0 | | = ( hours ) duration of counting period. |
| Ps = | 39.0 | | = total number of children, teenagers, seniors and/or impaired counted. |
| Pa = | 0.0 | | = total number of adults counted. |
| Pw = | 58.5 | | = weighted average of pedestrians crossing the main street. |
| Pcm = | 11.7 | | = weighted average hourly pedestrian volume crossing the main street. |
| V = | 423.0 | | = volume of traffic passing through the crossing(s). |
| Vam = | 84.6 | | = average hourly volume of traffic passing through the crossing(s). |
| VOLF = | 2.0 | points | = Vam x Pcm / 500 |

**6. Satisfaction of Installation Criteria:**

SUMF = ( LANF + MEDF + SPDF + LOCF + VOLF )

| | | |
|---|---|---|
| SUMF = | **30** | points |

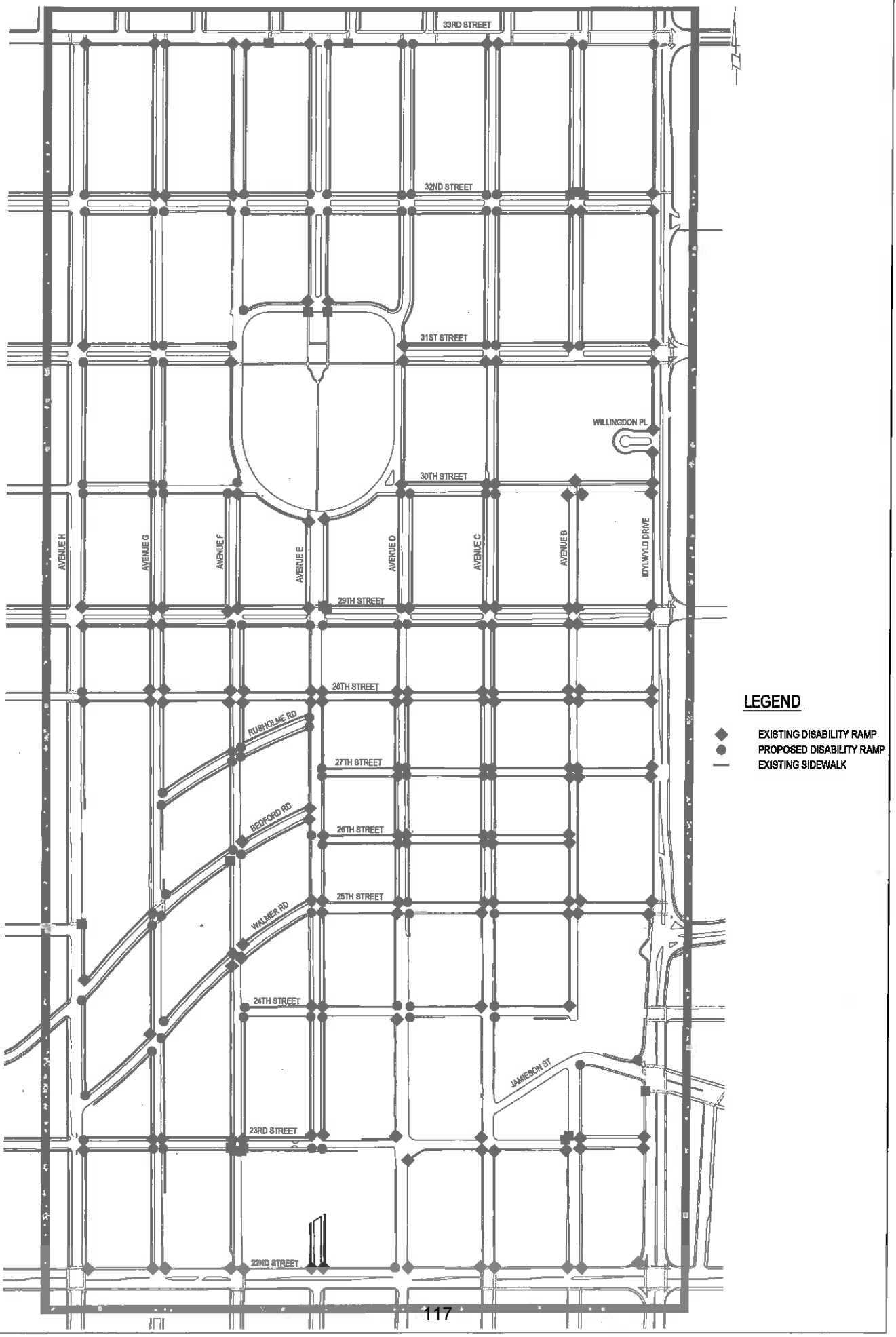
(P.A. Signal Warrant Points)

The total of the warrant points is less than 100 indicating that a pedestrian actuated signal is NOT warranted.

## Appendix C

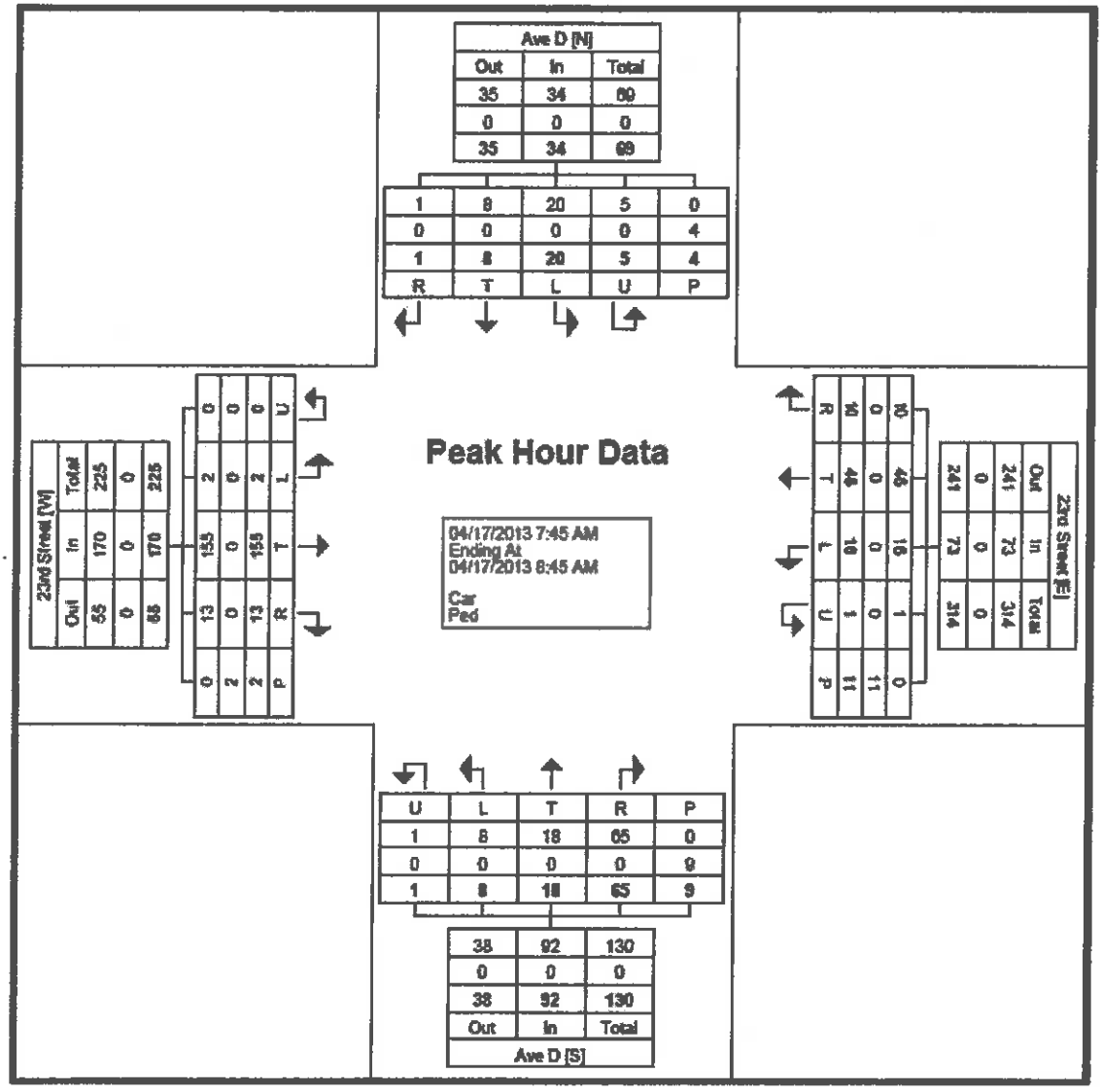
Pedestrian Facilities Map

# CASWELL HILL PEDESTRIAN FACILITIES

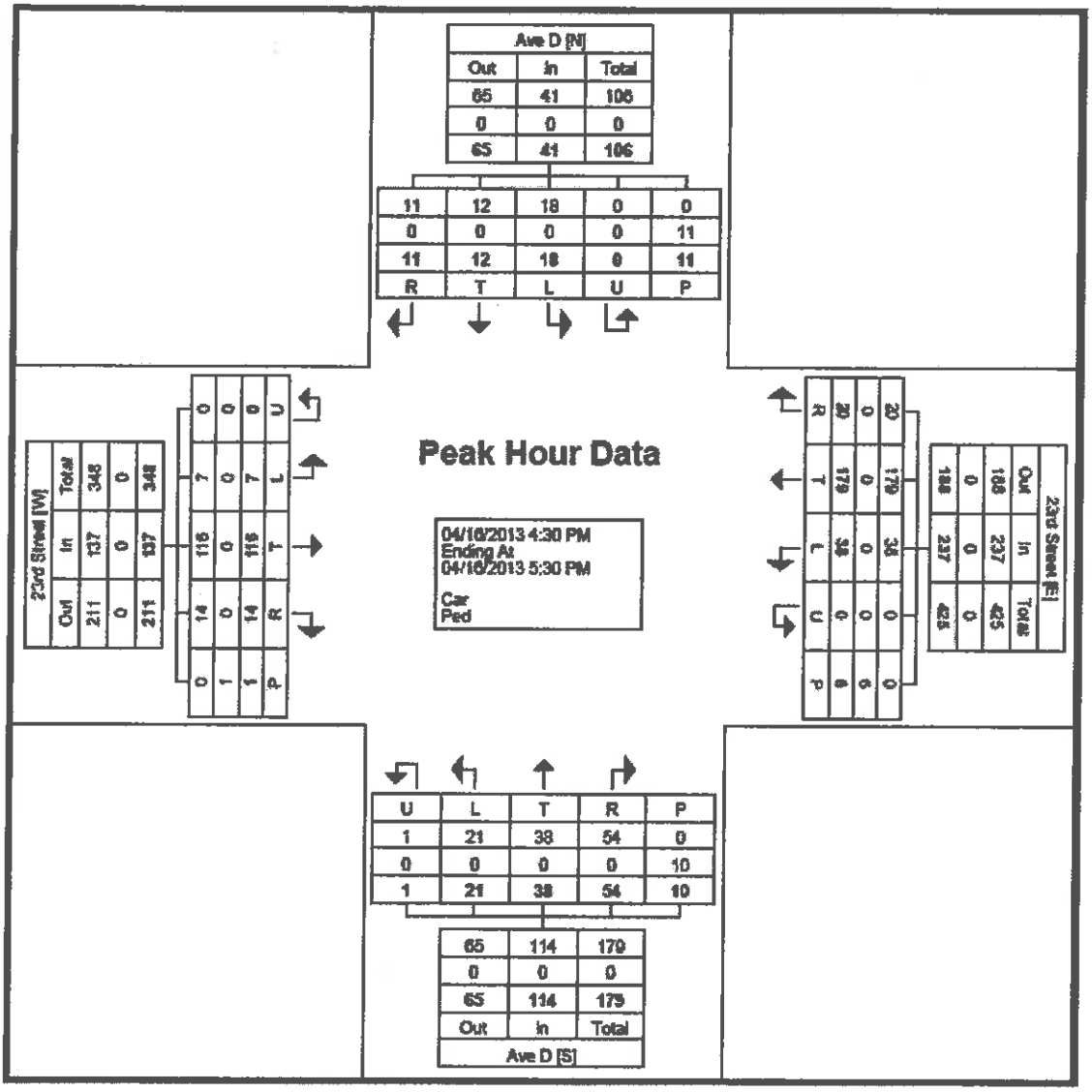


## Appendix D

Peak Hour Assessment – Avenue D & 23rd Street




Turning Movement Peak Hour Data Plot (7:45 AM)




Turning Movement Peak Hour Data Plot (4:30 PM)

## Appendix E

Recommendation Review Matrix

**Decision Matrix – Recommendations proposed at initial meeting**

| Item | Location | Recommendation | Group 1 | Group 2 | Group 3 | Additional Responses | Decision |
|---|---|---|---|---|---|---|---|
| 1 | 30th St between Idylwyld Dr & Ave C (south side between Idylwyld Dr & Ave C); Ave F between parking lot south of pool & 31st St (west side); Ave D (portions on east side, north & south of 23rd St to connect to existing) | Install Sidewalk | | Ave B - 27th St to 29th St; around park | | SL&P - has street light poles on the south side of 30th Street between Avenue B and Avenue C. Please have your engineering team contact SL&P when the sidewalk location is determined to see if it requires the relocation of the lighting. | Carried. |
| 2 | Ave C 30th St St | Change yield signs to stop signs | agree, consider 4-way stop | | | | Carried. |
| 3 | Ave D & 30th St | Install "no parking" sign on 30th St (southeast corner) 10m | | Speeding near Ave D & 30th St; confusion | southeast corner not problem; needed around island/park on west side | | Carried. Add "no parking" signs around island. |
| 4a | Ave E & 30th St | Install median islands (west & south legs); install accessibility ramps & pathway connection on north side (Refer to picture #4a) | 30kph signs on both sides; visibility is fine | Reflectors on posts into park to restrict vehicle access at path | curb extension pose a safety concern for cyclists; 50/50 support for islands | | Carried. Add reflectors to posts. Add "30kph (yellow) & curve ahead" signs at Avenue F & 30th Street. |
| 4b | Ave E & 30th St | Install curb extension on 30th St (southwest corner) & median island on Ave E; install accessibility ramps & pathway connection on north side (Refer to picture #4b) | More in favour of curb extensions; install stop signs instead of yield heading into circle around park | | not in agreement | | Rejected. |
| 5 | 29th St & Ave B | Install pedestrian corridor & zebra crosswalk | | | | | Carried. |
| 6 | 29th St & Ave C | Install zebra crosswalk | agree, consider 10m "no parking" signs | | consider 4-way stop | | Carried. 4-way stop not warranted. |
| 7 | Jamieson St & Ave C | Change yield sign to stop sign | | | | | Carried. |
| 8 | Avenue D & 23rd St | Install median island, signage, & pavement markings to restrict northbound through movement; "no parking" signs 10m (Refer to picture #8) (Subject to CP approval) | agree but see how it works; pedestrian-activated light; roundabout; 4-way stop | | consider pedestrians | | Carried. |
| 9 | Ave F & 31st St | Install curb extensions & median island on Ave F (south side) | | | visibility is an issue for peds coming out of park; depressed/hedge; curb extension is concern for cyclist, especially younger (pushes cyclist into traffic lane) | | Carried. |
| 10 | Ave D & 31st St | Install curb extension on Ave D (southeast corner) | | | No, parking is an issue (visibility) on both park & residential side | | Carried. |
| 11 | Ave F & 30th St | Change yield sign to stop sign; install closer to intersection | | | | | Carried. |
| 12 | Ave H & 31st St | Install zebra crosswalks on 31st St (north & south legs) | | | | | Carried. |

**Decision Matrix – Additional comments**

| Item | Location | Concern | Decision |
|---|---|---|---|
| 1 | Back lane south of 33rd St facing westbound onto Ave E | Add "Right Turn only" worded tab under existing "Right Turn Only" pictured tab | Rejected. Will be included in 33rd Street Review. |
| 2 | Ave E and Ave C between 25th St & 29th St | Sidewalks needed on east side | Site check confirmed existing sidewalk in mentioned locations except Ave E between 26th St & 29th St. Connects to park one block north. Add to recommendations. |
| 3 | 32nd St & Ave D | Signs not visible; speeding on Ave D between 31st St & 33rd St; switch yield signs | Yield signs were installed throughout Caswell Hill as part of the Stop & Yield Retrofit Program. As such they are to be installed in an alternating pattern so a thoroughfare isn't created. The yields at 32nd St at Ave D and Ave C were installed prior to the retrofit, each facing east-west. To continue in alternating pattern one of these may be switched to face north-south. North-south facing stop signs (to further enhance compliance) will be added to the recommendations. |
| 4 | Ashworth Holmes Park | Parking on straight area around park | Parking on east side permitted. Parking restrictions already signed on east side (near crosswalks). |
| 5 | Jamieson St | Sharrows go into parked cars | Noted. Forwarded to project manager (Blairmore Bikeway) to follow up. |
| 6 | 23rd St between Ave E & Ave F | Pinch point increases frustration | Noted. Forwarded to project manager (Blairmore Bikeway) to follow up. |
| 7 | Ave B & 27th St | Revisit; dangerous "blind corner"; stop signs instead of yields | Carried. Add stop signs to recommendations |
| 8 | Unknown | Pedestrian-activated takes too long to activate once pressed | Rejected. Need location. |
| 9 | Ashworth Holmes Park | Trim hedge around park; makes it a blind corner | Forwarded to Parks Division for tree trimming. |
| 10 | Ave D between 29th St & 31st St | Speeding | Rejected. Speed study indicated 85th percentile speed = 40.9kph. Acceptable range. |
| 11 | Ave B & 25th St | Difficult to see/cars parked too close | Noted. "No parking" signs in place. Fire hydrant on northeast corner. Follow up with parking enforcement if parking occurs. |
| 12 | Ashworth Holmes Park | Accessibility ramps needed at all entries | Site check indicated ramps are in place at all entries except south end. Accessibility ramps have already been proposed in the traffic plan at this location. |

# College Drive Classification

**Recommendation**

That the Standing Policy Committee on Transportation recommend to City Council:

That the classification of College Drive, between the Canadian Pacific Railway tracks and the city limits, be modified to an Urban Expressway in order to improve connectivity into the Holmwood Sector.

## Topic and Purpose

The purpose of this report is to seek City Council endorsement to classify College Drive as an Urban Expressway in order to facilitate improved connectivity to and between the Holmwood Sector and the greater city.

## Report Highlights

1. The Brighton neighbourhood Traffic Impact Analyses (TIA) identified increased traffic demands resulting from higher density development in the Holmwood Sector.
2. The Transportation division undertook an analysis of options to accommodate the increased demand. The results of that analysis demonstrated that the option to re-classify College Drive from a Rural Highway to an Urban Expressway provides the best overall solution to accommodate the planned development in the Holmwood Sector.
3. To achieve the accelerated time frame for construction of the interchange at College Drive and McOrmond Drive, design parameters for the interchange need to be finalized by the end of March 2015.
4. The modified classification of College Drive, and additional access points into the Holmwood Sector Plan, will be incorporated into an upcoming amendment to the Holmwood Sector Plan, and the Brighton Neighbourhood Concept Plan.

## Strategic Goals

This report supports the Strategic Goal of Moving Around by planning the short-term priority of creating “complete communities” in new neighbourhoods that feature greater connectivity, both internally and externally. It also supports the long-term goal to develop an integrated transportation network that is practical and useful for vehicles, buses, bikes and pedestrians.

## Background

Access to the Holmwood Sector is limited by the Canadian Pacific Railway (CPR) line that runs the length of the southwest sector boundary and the future perimeter highway alignment, which currently bounds the east and southeast edge of the sector (Attachment 1). The approved Holmwood Sector Plan specifies seven access/egress locations for Holmwood which is estimated, at full build-out, to have a population that exceeds 73,000 people and employ nearly 18,500 individuals.

Since the Holmwood Sector Plan was developed, the City adopted a Strategic Plan and initiated the Growing Forward! Shaping Saskatoon project. Both of these initiatives and the Official Community Plan Bylaw No. 8769 promote a high degree of connectivity within and between neighbourhoods.

City Council at its meeting held on October 27, 2014, approved a report from the General Manager, Transportation & Utilities Department to expedite the timeline and eliminate the need for interim improvements for construction of the College Drive and McOrmond Drive interchange, and retain funding to hire an Owner's Engineer for the project. This project will be tendered in 2015 with completion anticipated for the end of 2017.

## Report

Traffic Impacts from Holmwood Sector Plan Development

As part of the development of the Holmwood Sector Plan, the Administration modeled forecast traffic volumes using the City's transportation model to a population of 400,000. Recently, the Administration received the TIA that was submitted by the Developer as part of the Brighton Neighbourhood Concept Plan. Based on more specific land use assumptions, the Brighton neighbourhood TIA indicated higher traffic demands as a result of increased density in the neighbourhood. This prompted a re-examination of the plans for the College Drive corridor, including existing and planned access points, and the College Drive and McOrmond Drive interchange.

Transportation Analysis

Re-examination of the planned interchange at College Drive and McOrmond Drive indicated that due to the increased density in the Brighton neighbourhood, the planned interchange would not have significant capacity to accommodate future traffic demands. As a result, options to either modify the interchange or add additional access points were considered and are outlined in Attachment 2.

The recommended option is to re-classify College Drive between the CPR tracks and the city limits to an Urban Expressway with a posted speed limit of 80km/h. This would facilitate a tight-urban diamond interchange and provide the ability to improve connectivity into the Brighton neighbourhood by adding additional access points along College Drive. The combination of the interchange and additional access points provides:

1. The required capacity to support the planned development in the Holmwood Sector;
2. Provides multiple entrances and exits to the sector, thus improving connectivity during normal and abnormal conditions, such as temporary closure of an access point; and
3. Allows the road to function as a more complete street in the future, providing the opportunity for other transportation modes such as cycling facilities and walking trails. These facilities are not permitted on a Rural Highway.

The Administration believes that the combination of classifying this section of College Drive to an Urban Expressway, and allowing additional access points, is the appropriate long term strategy. The current restricted-access Rural Highway, disecting developed areas, will not meet the needs and expectations of residents in future years.

College Drive and McOrmond Drive Interchange

With City Council's endorsement of the preferred option, the Administration will proceed with finalizing the functional design for the construction of the College Drive and McOrmond Drive interchange. To achieve the accelerated timeframe for the construction of the interchange, a Request for Proposal will be issued in the second quarter of 2015. In order to meet this timeline, the functional design for the interchange needs to be finalized by the end of March 2015. A tight-urban diamond interchange is projected to cost $35 million.

Sector Plan and Neighbourhood Concept Plan Amendment

Growth in population and traffic to and from the Holmwood Sector are expected to have a significant impact on the function of College Drive, both within the sector and on the existing roadway west to the University of Saskatchewan campus. Additionally, ongoing development on the University of Saskatchewan lands is expected to have access requirements and may further impact the function of the corridor. The Administration will therefore undertake a functional planning study of the College Drive corridor in due course.

The Administration will initiate a process to amend the Holmwood Sector Plan to incorporate the findings of the functional planning study and to address a number of other items including the revised alignment of Perimeter Highway once it is confirmed, additional urban growth opportunities, neighbourhood connectivity, and open space needs.

The Administration will also initiate the process to amend the Brighton Neighbourhood Concept Plan, in consultation with Dream Developments. The amendment will specifically address one additional access point in the neighbourhood along College Drive.

## Options to the Recommendation

If College Drive remains a Rural Highway cross-section with a speed limit of 90km/h or 100km/h, a Partial Cloverleaf-B (Parclo-B) interchange will be required to accommodate forecasted traffic volumes. Due to the land required for this type of interchange, the existing grade of College Drive and the proximity of adjacent properties, a horizontal and vertical realignment of College Drive would be required. This would require the acquisition of additional property to accommodate the realignment, and would eliminate the ability for improved connectivity into the neighbourhood. The estimated cost of this option is approximately $50 Million.

This alternate option is not recommended as it prevents future additional access points along College Drive and has a significantly higher construction cost with no added capacity over the recommended option.

## Public and/or Stakeholder Involvement

In 2013, the functional plan for the College Drive and McOrmond Drive interchange was presented at a public open house. The feedback at that time focused on the desire to expedite the construction of the interchange and the desire to retain a free flow movement for southbound traffic. No information related to the re-classification of College Drive was presented at that time. Additional stakeholder and public involvement would occur as a result of the Holmwood Sector Plan and Brighton Neighbourhood Concept Plan amendment process.

## Communication Plan

Information regarding the interchange will be made available on the City's website. As the project progresses, specific information, including any construction or traffic flow impacts, will be shared via the City's Daily Road Report, the City Service Alerts (saskatoon.ca/service-alerts), the online construction map (saskatoon.ca/constructionmap) and through advertisements and public service announcements as appropriate.

## Financial Implications

The costs associated with changing the classification of the roadway pertain to the modification of the speed limit signs at an estimated cost of $1,000. Funding is available in the operating budget to complete this work.

## Other Considerations/Implications

There are no policy, environmental, privacy, or CPTED considerations or implications.

## Due Date for Follow-up and/or Project Completion

The Administration will be reporting further on the finalized funding strategy for the interchange at College Drive and McOrmond Drive in the second quarter of 2015. The amendment to the Holmwood Sector Plan is planned for early 2016.

## Public Notice

Public Notice is required for consideration of this matter, pursuant to Section 3 of Policy No. C01-021, The Public Notice Policy, is not required.

## Attachments

1. Holmwood Sector Plan – Roadway Plan
2. Comparison of Options

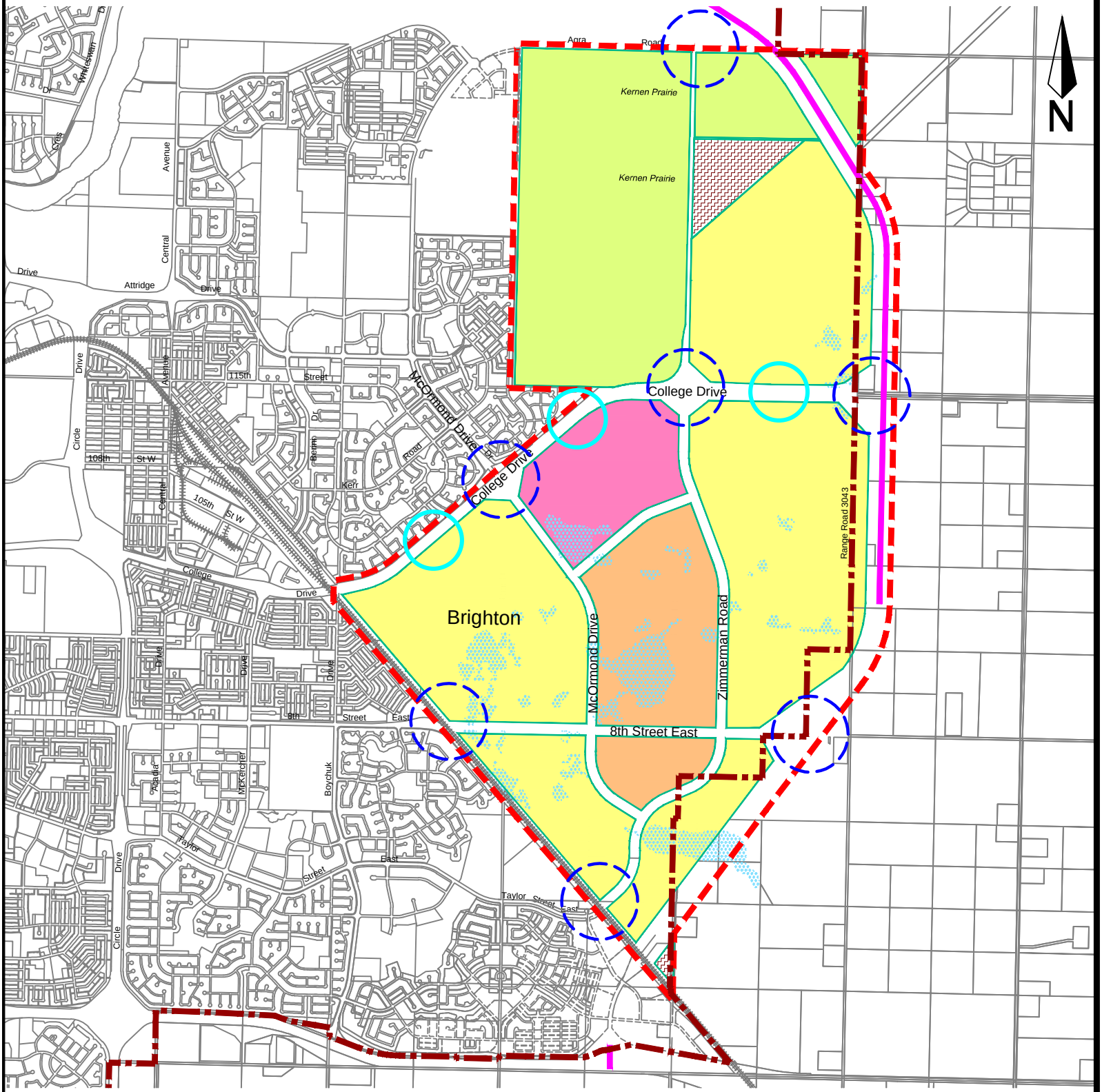
## Report Approval

| | |
|---|---|
| Written by: | Danae Balogun, Senior Planner, Planning and Development |
| | Chris Schulz, Senior Planner II, Planning and Development |
| Reviewed by: | Angela Gardiner, Director of Transportation |
| | Alan Wallace, Director of Planning and Development |
| Approved by: | Jeff Jorgenson, General Manager Transportation & Utilities Department |

TRANS – DB AG - College Drive Classification.docx

# Holwmood Sector Plan

## Roadway Plan




Scale: N.T.S.

## Legend

- City Limits
- Sector Boundary
- Neighbourhood Boundary
- Highways
- Sector Access Point (as specified in Holmwood Sector Plan)
- Proposed Additional Access

City of Saskatoon
Community Services - Planning and Development

NOTE: The information contained on this map is for reference only and not to be used for legal purposes.
January 2015



File No: 4110 - 12 - 5

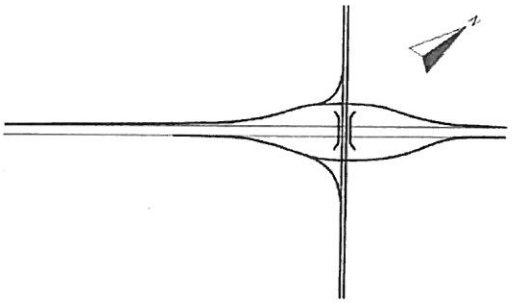
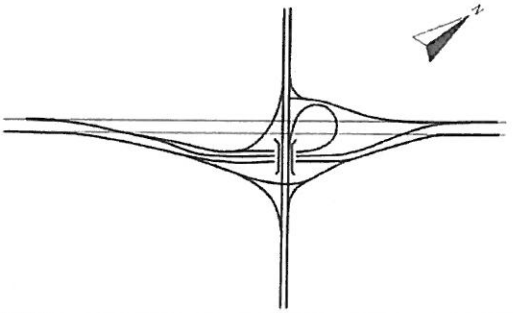
S:\Baskets\PL\Cityplan\Future Growth\Sector Plans\East Sector\Figures

## Comparison of Options

Table 1: Future Case Scenario Comparison

| | RECOMMENDED OPTION | ALTERNATE OPTION |
|---|---|---|
| **Classification** | Expressway – urban/semi-urban | Freeway – rural |
| **College/McOrmond Interchange** | Tight-Urban Diamond | ParClo-B |
| *Cost Estimate* | $35M | $50M+ |
| *Accommodates Holmwood growth* | ✔ | ✔ |
| *Accommodates current & forecast traffic volumes* | ✔ | ✔ |
| *Adequate ROW available* | ✔ | X (property acquisition required - $) |
| *College Drive alignment* | ✔ (Existing alignment is retained) | X (horizontal & vertical re-alignment Required - $) |
| **College/Zimmerman Interchange** | Optional | Required - $30M |
| **Neighbourhood Access** | Permits additional access along College Dr. | Prevents additional access along College Dr. |
| **Active Transportation Link** | ✔ | X |

Table 2: Traffic Volume Projections (Level of Service)

| | | Level of Service (400K population) |
|---|---|---|
| **Recommended Option:**<br>Revised Roadway Classification<br>Tight Urban Diamond Interchange with additional access points along College Drive<br>  | North intersection | A(A) |
| | South intersection | B(B) |
| **Alternate Option:**<br>Existing Roadway Classification<br>ParClo-B Interchange<br>  | North intersection | A(A) |
| | South intersection | B(B) |

Morning Traffic Volumes are shown without brackets: AM
Afternoon Traffic Volumes are in brackets: (PM)

6000-1

**From:** Web NoReply
**Sent:** March 06, 2015 7:55 PM
**To:** City Council
**Subject:** Form submission from: Write a Letter to Council



Submitted on Friday, March 6, 2015 - 19:54
Submitted by anonymous user: 204.83.109.168
Submitted values are:

Date: Friday, March 06, 2015
To: His Worship the Mayor and Members of City Council
First Name: Mike
Last Name: Possberg
Address: 914 Budz Green
City: Saskatoon
Province: Saskatchewan
Postal Code: S7N4M9
Email: mhp122@hotmail.ca
Comments:
I just saw the proposal to reclassify College Drive from the railway overpass to the city limits with the intent of adding new intersections. This proposal can not proceed in my opinion. According to the 2013 Department of Highways traffic counts College Drive approaching McOrmond had 23,800 vehicles per day. I'm sure this number is 25,000 today and growing. Once Holmwood is built out with a population of 70,000 people the traffic volumes will double or triple at which time College drive should have a third lane in each direction, likely a dedicated HOV lane. Intersections with traffic lights is not feasible for these traffic volumes. College Drive must remain a freeway. In addition, this is not only the main access point into the city core from the east sector bus also the main access point into the city from Highways 5 and 41 with heavy truck traffic.

With respect to the interchange at McOrmond I understood the design was already approved. I full support the existing design. The new proposal would remove the loop in the NE quadrant of the interchange. With the volume of traffic exiting College Drive onto McOrmond NW the loop has to remain in the final design.

I understand there is a belief that traffic volumes at McOrmond and College Drive will decrease with the new North Bridge however I totally disagree. The traffic using this intersection is not coming from the north end. It is coming from the downtown, university, south end of the city, etc. North end traffic is using Attridge. I doubt the new bridge will have a significant impact on traffic at that intersection.

I conclusion, I urge you to defeat the proposal to add intersections with traffic lights on College Drive. College has to remain a freeway to move the huge volumes of traffic as this area develops. Enough mistakes were made in the past when building infrastructure in this city, do not make another major blunder that will impede us in the future. Build the interchange at McOrmond as designed and leave College Drive as a freeway.

The results of this submission may be viewed at:
https://www.saskatoon.ca/node/398/submission/6747