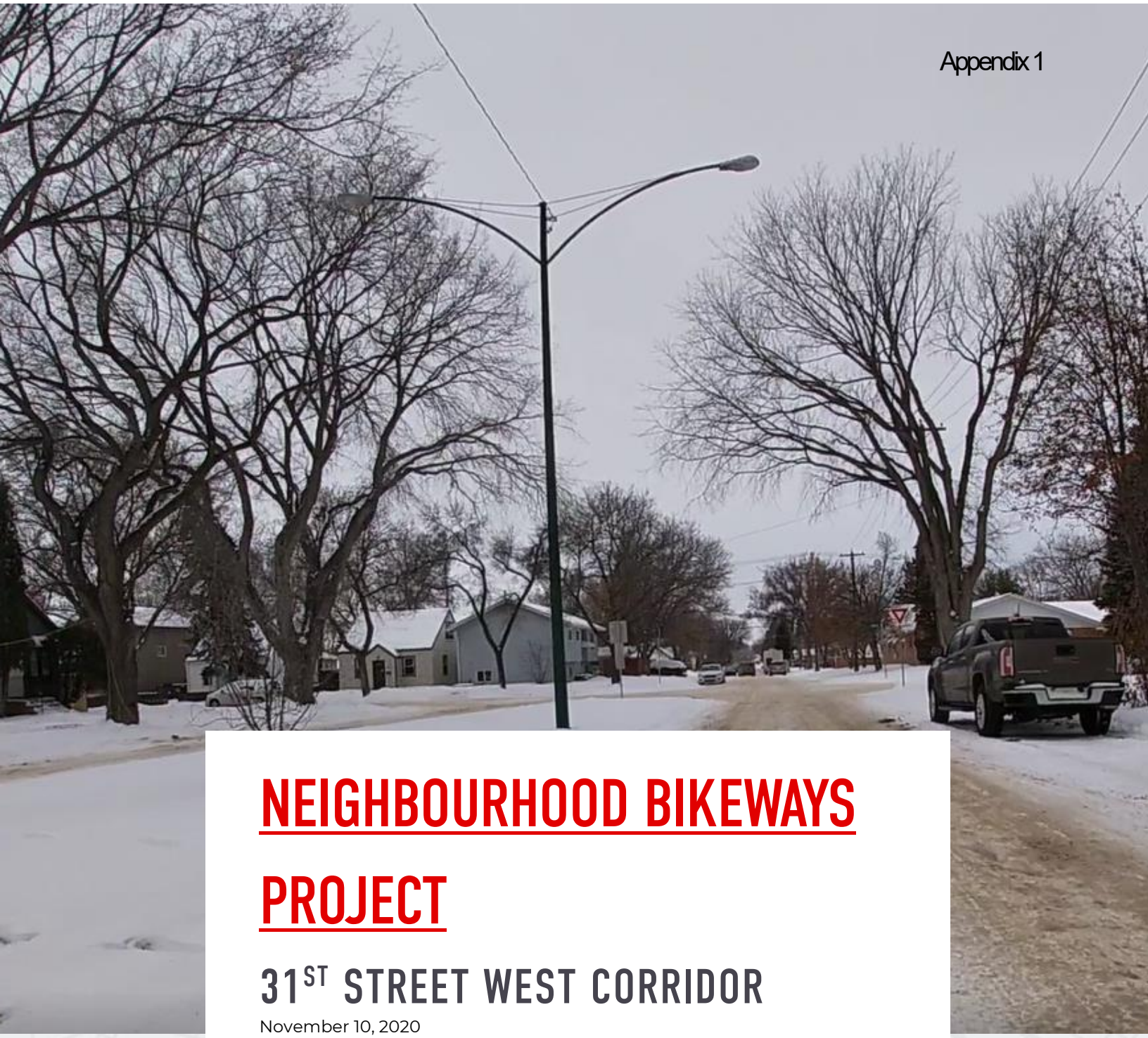

NEIGHBOURHOOD BIKEWAYS PROJECT

31ST STREET WEST CORRIDOR

November 10, 2020

City of Saskatoon

URBAN SYSTEMS

PREPARED FOR:

City of Saskatoon

222 3rd Avenue North

Saskatoon, SK S7K 0J5

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File: 3257.0009.01

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1.0 INTRODUCTION

The City of Saskatoon (City) is committed to promoting active transportation and providing transportation choices that are safe and comfortable for people of all ages and abilities year-round. As part of the City's 2016 Active Transportation Plan (AT Plan), the City has committed to the following action item under the theme of connectivity: **"Develop a complete and connected bicycle network for all ages and abilities."**

To help work towards achieving this action item, the City undertook this Neighbourhood Bikeways Project to develop conceptual designs for active transportation facilities on the following four corridors:

- **3rd Avenue North:** From 25th Street East to 2nd Avenue North;
- **29th or 31st Street West:** From the Circle Drive underpasses to Idylwyld Drive North;
- **14th Street East:** From Saskatchewan Crescent East to Cumberland Avenue South; and
- **Dudley Street:** From Dawes Avenue to Spadina Crescent West.

In addition to these four corridors, the City is also conducting a separate study for improvements on Victoria Avenue from 8th Street East to Taylor Street East. These corridors have been selected for review because they provide important connections to existing or future walking and cycling facilities or were identified in the AT Plan. The Neighbourhood Bikeways Project will help identify measures to provide more travel choices and improve safety, accessibility, and connectivity for each of these corridors, including the evaluation and design of walking and cycling facility improvements for each corridor.

These corridors were identified as high priorities due to the opportunity to coordinate infrastructure improvements with other work scheduled in the next one to three years. While these corridors vary in context, location, and length, they all share the possibility of encouraging cycling by improving the connectivity between residential areas, the established cycling routes on the Meewasin Trail network, and destination areas in the vicinity of Idylwyld Drive and the Central Business District (CBD). The corridors are intended to be designed as all ages and abilities (AAA) cycling facilities to ensure they are comfortable for all users, regardless of age or ability.

This report summarizes the existing conditions and recommended concept for the **31st Street West** corridor. Note that while both 29th Street West and 31st Street West are discussed in this report, 31st Street West was recommended as the preferred corridor for this project, along with some intersection safety improvements along 29th Street West.

1.1 PROJECT GOALS

1. To improve pedestrian and cycling connections between residential areas along the proposed routes and their neighbouring areas;
2. To improve safety and mobility for all road users by making the corridors more bicycle and pedestrian friendly;
3. To connect to existing pathways, and future cycling corridors effectively; and
4. To coordinate improvements with other upcoming infrastructure projects scheduled along the proposed corridors.

1.2 STUDY PROCESS

The study was developed through five phases, with two opportunities for public input between February and October 2020, as shown in **Figure 1.**

Figure 1. Study Process

1.3 REPORT OVERVIEW

This report summarizes the overall study process and recommendations for the 29th Street West and 31st Street West corridors and includes the following sections:

- **Section 1 – Introduction** provides an overview of the project, including project goals, study process, and report overview;
- **Section 2 – Corridor Review** summarizes existing conditions along the corridor, including the route context, policy context, road network characteristics, pedestrian facilities, bicycle facilities, transit services and facilities, collisions, and the results of a Multi-Modal Level of Service (MMLOS) analysis;
- **Section 3 – Phase 1 Engagement Summary** provides an overview of the Phase 1 Engagement process and input received;
- **Section 4 – Recommended Design** summarizes the key features of the recommended conceptual design;
- **Section 5 – Phase 2 Engagement Summary** provides an overview of the Phase 2 Engagement process and input received; and
- **Section 6 – Closing and Next Steps** provides a summary of the report and next steps for the City to advance this project to detailed design and construction.

2.0 CORRIDOR REVIEW

This section summarizes existing conditions for the 29th Street West and 31st Street West corridors, including the following characteristics:

- **Route context**, including a general description of the corridor and neighbourhood context, adjacent land uses, connections to existing cycling routes, and nearby infrastructure and destinations;
- **Policy context**, including background information from the AT Plan as well as applicable Local Area Plans (LAPs), Neighbourhood Traffic Reviews (NTRs), and the Saskatoon Cycling Guide;
- **Road network characteristics**, including the existing roadway cross-section, road network classification, traffic volumes and speeds, traffic operational analysis, and parking supply and utilization;
- **Pedestrian facilities**, including existing sidewalks, crossing treatments, and other pedestrian amenities such as curb ramps;
- **Bicycle facilities**, including existing on-street and off-street bicycle routes;
- **Transit services and facilities**, including existing bus routes and bus stops; and
- **Collisions,** including a review of collision data between 2014 and 2018.

2.1 ROUTE CONTEXT

2.1.1 ROUTE DESCRIPTION AND NEIGHBOURHOOD CONTEXT

29th Street West

The 29th Street West corridor extends for 27 blocks for approximately 2.9 kilometres between Vancouver Avenue North in the west and Idylwyld Drive North in the east. This corridor is notable for being one of few east-west routes which provides an uninterrupted direct path between Circle Drive and Idylwyld Drive North in Saskatoon's west side neighbourhoods. As a result, this corridor is an important route for both motorized traffic and transit as well as for active transportation.

The 29th Street West corridor passes through a central portion of three residential neighbourhoods from west to east: Mount Royal, Westmount, and Caswell Hill. The corridor connects these neighbourhoods to Idylwyld Drive North in the east.

31st Street West

The 31st Street West corridor extends for 22 blocks for approximately 2.4 kilometres between Avenue W North in the west and Idylwyld Drive North in the east. The 31st Street West corridor is notable for passing through two large parks with multi-use pathways. The presence of these green spaces along the corridor means that, unlike 29th Street West, motorized traffic cannot use 31st Street West as a continuous east-west route which limits vehicular traffic.

The 31st Street West corridor passes through or runs adjacent to four residential neighbourhoods: Mount Royal, Westmount, Caswell Hill, and Hudson Bay Park. The route connects these neighbourhoods to Idylwyld Drive North in the east.

2.1.2 ADJACENT LAND USES

29th Street West

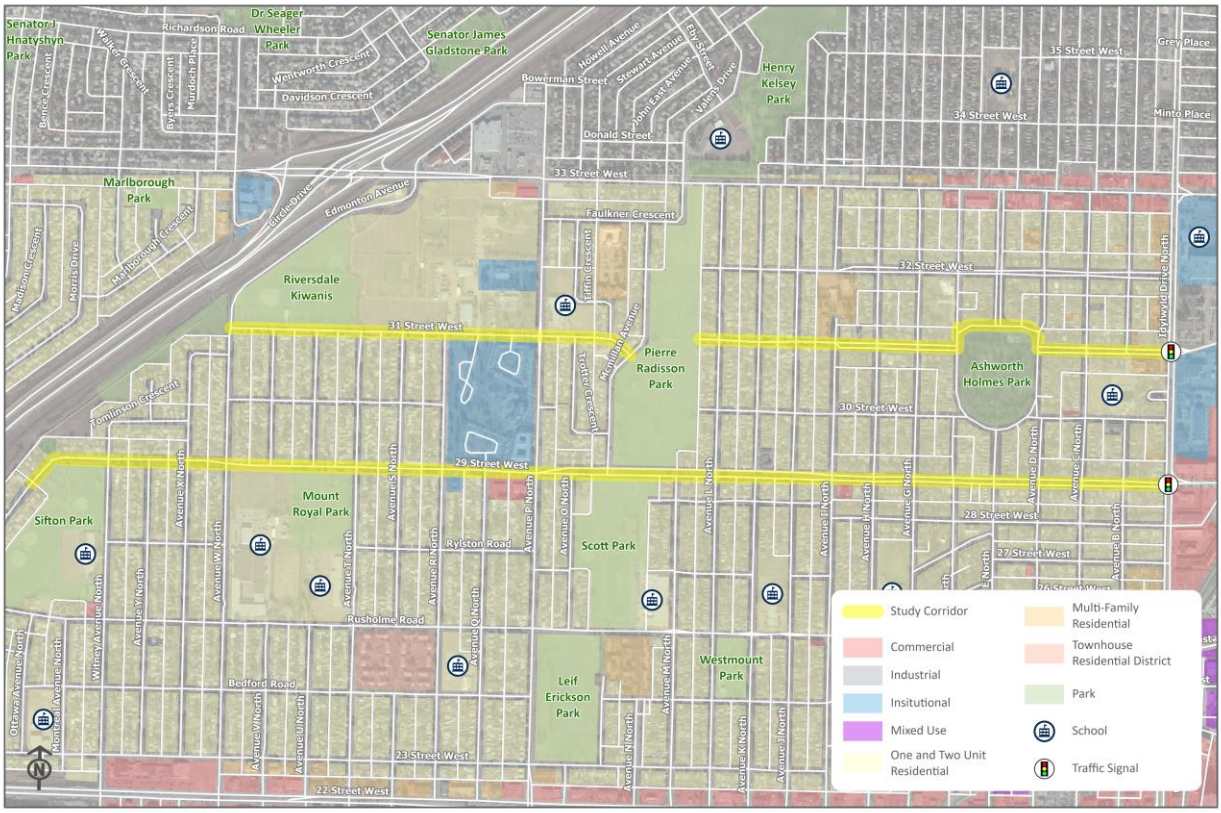
Land uses along the 29th Street West corridor consist almost exclusively of single family residential uses, with small pockets of commercial land uses along the corridor at Avenue I and Avenue P. There is a significant seniors' community (Jubilee Residences) on the corridor between Avenue P and Avenue R, and an additional multi-family development at Avenue K. The corridor also runs adjacent to several large parks in its western half, and is located within two blocks of several schools. The 29th Street West corridor connects to the commercial land uses along Idylwyld Drive North in the east.

31st Street West

The 31st Street West corridor connects commercial, recreational, and educational land uses along Idylwyld Drive North in the east with the primarily single-family residential areas in the neighbourhoods to the west. While there are small pockets of multi-family residential development scattered throughout the 31st Street West corridor, most of the corridor features single-family detached homes. There are no commercial zones along this corridor, but it does run parallel to the commercial corridor on 33rd Street West between Avenue F North and Idylwyld Drive North. This corridor does provide access to several notable greenspaces, recreational, and institutional land uses and is within two blocks of several educational institutions. There are also several seniors care facilities adjacent to this corridor.

Figure 2 shows adjacent land uses for both 29th Street West and 31st Street West.

Figure 2. 29th Street West and 31st Street West Adjacent Land Uses



2.1.3 NEARBY INFRASTRUCTURE AND DESTINATIONS

The following notable destinations and infrastructure have been identified near the 29th Street West and 31st Street West corridors:

- **Several parks**, including:
  - Ashworth Holmes Park
  - Pierre Radisson Park
  - Scott Park
  - Mount Royal Park
  - Sifton Park
  - Riversdale Kiwanis Park & Newsham Fields
- **Several schools** within a two-block distance, including:
  - Caswell Community School
  - St. Edward School
  - Bedford Road Collegiate
  - Westmount Community School
  - ED Feehan Catholic High School
  - Howard Coad School

    - Mount Royal Collegiate
    - Royal West Campus
- **Recreational facilities,** including:
    - Mayfair pool
    - Harry Bailey Aquatic Centre
- **Saskatchewan Polytechnic** (one of Saskatoon's major post-secondary institutions)
- The western terminus of 29th Street West ties into a pedestrian underpass which passes under Circle Drive and provides a connection to neighbourhoods farther to the west. The western terminus of 31st Street West is at Avenue W North where the route joins onto a multi-use path and leads to a pedestrian underpass which crosses Circle Drive into the neighbourhoods farther to the west.

2.2 POLICY CONTEXT

2.2.1 ACTIVE TRANSPORTATION PLAN

The AT Plan contains the following information relevant to the 29th Street West and 31st Street corridors:

29th Street West

- 29th Street West was identified as a proposed route for the future AAA Bicycle Network for its entire length, including a connection to the neighbourhoods west of Circle Drive via the pedestrian underpass.
- The AT Plan identified the following areas as having high or very high priority for sidewalk installations:
    - Avenue R North to Avenue W North (currently only has sidewalk on south side); and
    - Avenue L North to Avenue O North (currently only has sidewalk on north side).
- In terms of bicycle network prioritization, 29th Street West is identified as being very high priority between Idylwyld Drive North and Avenue P North and high priority for the remainder of the corridor.

31st Street West

- 31st Street West was identified as a proposed route for the future AAA Bicycle Network for its entire length.
- In terms of bicycle network prioritization, the corridor is identified as being high priority between Ashworth Holmes Park and Pierre Radisson Park and moderate priority for its remainder.

The AT Plan includes consideration for a future direct connection to the CBD through Saskatoon's rail yards north of downtown.

As part of the AT Plan, a city-wide Level of Traffic Stress (LTS) analysis was conducted. LTS is a Geographic Information System (GIS) analysis that assesses the appropriateness and comfort of road infrastructure based on a cyclist's level of stress. LTS classifies road segments based on four levels of traffic stress. LTS 1 is the most comfortable where children can play, LTS 2 is tolerated by the adult population, LTS 3 is tolerated by cyclists who are 'enthused and confident' and LTS 4 is tolerated only by those in the 'strong and fearless' cyclist category.

The analysis identified an LTS of 4 along 29th Street West between Avenue P and Idylwyld Drive and along 31st Street West between Avenue I North and Idylwyld Drive North. This is the highest rating of traffic stress, indicating that only "strong and fearless" cyclists are likely to use the corridor. Routes with an LTS of 3 or higher require additional infrastructure to make cycling viable for most residents. The remainder of both corridors have an LTS of 2 indicating that adults will tolerate vehicle traffic, but the route is still unsuitable for children.

The AT Plan identified Mount Royal and Westmount as being among the top seven neighbourhoods in the city in terms of equity need. This means that there is a high need for active transportation infrastructure in the neighbourhood and a relative lack of existing active transportation infrastructure. Investing in active transportation infrastructure in these neighbourhoods is likely to produce significant

results. Caswell Hill was identified as having a moderate equity need for active transportation infrastructure.

2.2.2 LOCAL AREA PLANS

LAPs have been developed for Westmount and Caswell Hill. Mount Royal and Hudson Bay Park do not currently have LAPs. Some key findings from the 2001 Caswell Hill LAP which are relevant to this corridor study are as follows:

- There was a specific goal to provide safe pedestrian and cycling passage with a special focus on pedestrians crossing 29th Street West.
- There was an intention to install pedestrian bumpouts and crosswalk markings on 29th Street West at Avenue F North or Avenue G North. This work has since been completed, including new crosswalk painting and curb installations at these intersections.
- Future bicycle routes will be designed to ensure no loss of pedestrian access or comfort.
- There was concern among residents of 29th Street West for the safety of children crossing the road. There is interest in installing stop signs, or other traffic calming devices, on 29th Street West to allow for children to safely cross the street near schools and parks. The City installed an Active Pedestrian Crossing at Avenue B North.
- There are accessibility concerns regarding a lack of wheelchair ramps on sidewalks throughout the neighbourhood.
- The Caswell Hill Planning Group wished to see speeding reduced on 29th Street West and supported reclassifying 29th Street West from a collector to a local street and adding traffic calming measures.
- The LAP indicated concern that reducing central median widths could cause an increase in vehicle speeds on 29th Street West.
- Parking congestion was identified as an area of concern on 31st Street West near Idylwyld Drive North.
- There is opposition to having a bicycle route through Ashworth Holmes Park. The LAP suggested 29th Street West or going around the park as alternative options.

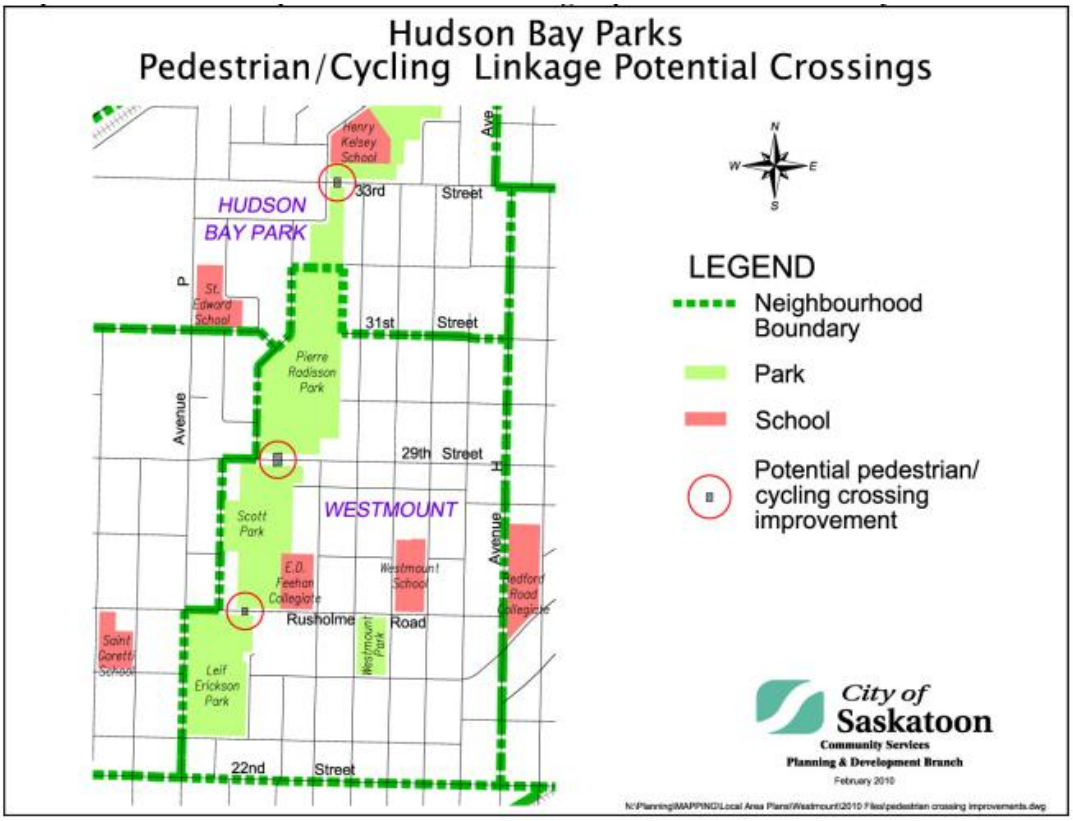
Some key findings from the 2011 Westmount LAP which are relevant to this corridor study are as follows:

- The LAP identifies speeding as a concern on 29th Street West and has a goal of providing traffic calming and appropriate pedestrian crossings on 29th Street West.
- The LAP identifies 31st Street West as having shared on-road cycling lanes with bike routes marked at Avenue H North and Pierre Radisson Park.
- The LAP has a goal of improving the bicycle network throughout the neighbourhood.
- The LAP identifies that there is “huge potential” for development of an alternative transportation linkage through the Hudson Bay parks. The LAP includes plans for street crossings between the parks in the area (**Figure 3**).
- The LAP identifies that the neighbourhood has a large daily population of school aged youth

under the legal driving age, making the neighbourhood ideal for investments in AAA active transportation facilities.

- There is concern for speeding on 29th Street West due to the long lengths of continuous roadway with no stop signs.

Figure 3. Proposed Active Transportation Links from Westmount Local Area Plan



The Caswell Hill and Westmount LAP's indicate a clear intention to develop active transportation infrastructure in the neighbourhoods and highlight a significant amount of concern around speeding and safety around the 29th Street West corridor.

2.2.3 NEIGHBOURHOOD TRAFFIC REVIEW

Each of the residential neighbourhoods of the 29th Street West and 31st Street West corridors have completed a NTR. Through the NTR process, residents identified a number of concerns, including:

Caswell Hill (2015):

- Pedestrian safety was identified as a concern by residents at 29th Street West and Avenue C North and Avenue D North.
- 29th Street West was identified by residents as a route for short-cutting and speeding including

high volumes of heavy trucks.

- Concerns were raised by residents regarding drivers disobeying four-way stops at 29th Street West and Avenue E North and Avenue H North.
- Parking on 29th Street West was raised as a concern from residents for visibility of pedestrians wanting to cross the street.
- A pedestrian study at Avenue C North and 29th Street West found that a pedestrian device was not warranted.
- Recommendations for pedestrian intersection improvements on 31st Street West at Avenue D North and Avenue F North which have since been completed.
- Residents expressed concerns with pedestrian safety around Ashworth Holmes Park, including on 31st Street West.
- Residents expressed concerns with parking at 31st Street West and Avenue D North.
- Pedestrian studies were completed at intersections of 31st Street West and Avenue F North and Avenue H North. No crossing devices were warranted.

Westmount (2015):

- Ongoing speeding and volume concerns were identified by residents on 29th Street West. Residents suggested narrowing the roadway between Avenue P North and McMillan Avenue and installing stop signs.
- Snow removal must be considered when designing traffic calming.
- There is a safety concern from residents for crossing Avenue H on 29th Street West due to speeding.
- There are concerns from residents for pedestrian crossing safety at 29th Street West and McMillan Avenue. Residents suggested installing a roundabout.
- Pedestrian crossing improvements were suggested by residents for 29th Street West at Avenue I North, Avenue L North, and McMillan Avenue.

Hudson Bay Park (2015):

- Recommendation for installation of median islands at McMillan Avenue and 31st Street West intersection. A central median has since been installed.
- Speeding and shortcutting was identified by residents on McMillan Avenue. Pedestrian safety was identified as an issue by residents on McMillan Avenue adjacent to Pierre Radisson Park.
- Pedestrian studies were completed at intersections of 31st Street West and McMillan Avenue and Avenue H North. No crossing devices were warranted.

Mount Royal (2016):

- Speeding and shortcutting was identified as a concern by residents on 29th Street West.
- Pedestrian safety concerns were identified by residents at the intersections with Avenues R North, T North, W North, and X North.
- Pedestrian studies were completed at the intersections of 29th Street West and Avenue T North, Avenue R North, and Avenue X North. Pedestrian devices were not warranted at these locations. It should be noted that the City's Traffic Control at Pedestrian Crossings Policy was updated in 2018 to reflect new Transportation Association of Canada (TAC) guidelines.

2.2.4 SASKATOON CYCLING GUIDE

Saskatoon's Cycling Guide map identifies the westernmost portion of 29th Street West as a cycling route (Vancouver Avenue North to Avenue W North). The closest identified route is 31st Street West, which connects to this portion of 29th Street West via Avenue W North. The Cycling Guide shows the route to extend west through the pedestrian underpass beneath Circle Drive.

The map also identifies the entirety of the 31st Street West corridor as a cycling route. The route is shown to proceed south on Avenue W North to 29th Street West, and then west through the underpass beneath Circle Drive.

2.2.5 CAMPUS CONNECTOR MASTER PLAN

The 31st Street West corridor has the potential for a future connection to the proposed Campus Connector Master Plan which seeks to develop a multi-use pathway on the south side of 33rd Street East from Idylwyld Drive North to Spadina Crescent East. This potential connection would provide additional access to Saskatchewan Polytechnic, the Meewasin River Valley trails, and additional neighbourhoods.

2.3 ROAD NETWORK CHARACTERISTICS

2.3.1 ROADWAY CROSS-SECTION

Figure 4 to Figure 10 depict the general cross-section for the 29th Street West and 31st Street West corridors.

29th Street West

Between Tomlinson Crescent and Avenue P North, there is no centre median, as shown in **Figure 4**. Between Avenue P North and Idylwyld Drive North and Avenue P North, 29th Street West is divided by a centre median, with one motor vehicle lane in each direction with parking on both side of the street, with varying widths (as shown in the two cross-sections in **Figure 5** and **Figure 6**).

Figure 4. 29th Street West: Tomlinson Crescent to Avenue P North

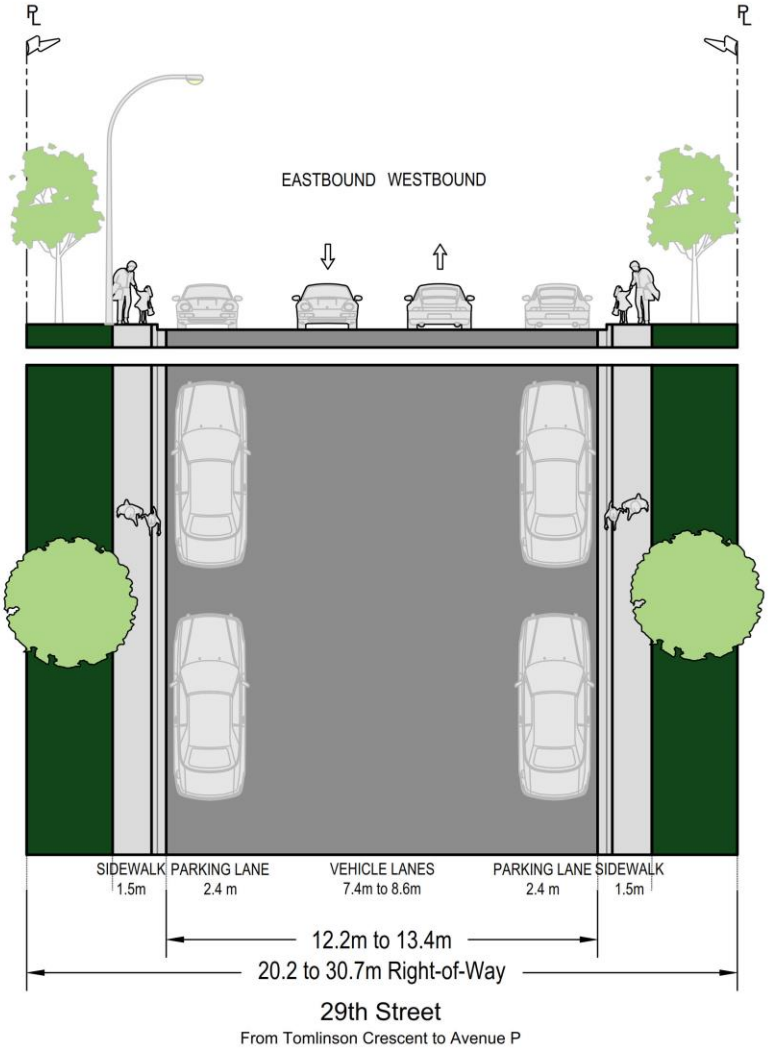


Figure 5. 29th Street West: Avenue P North to Avenue I North

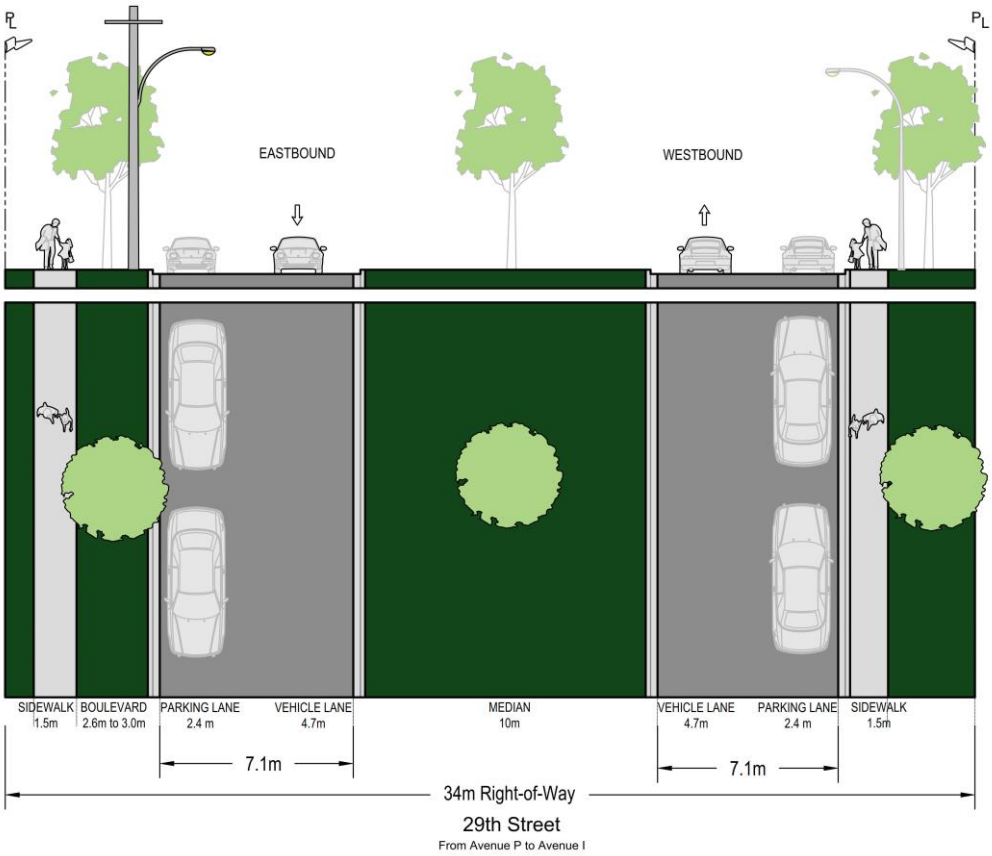
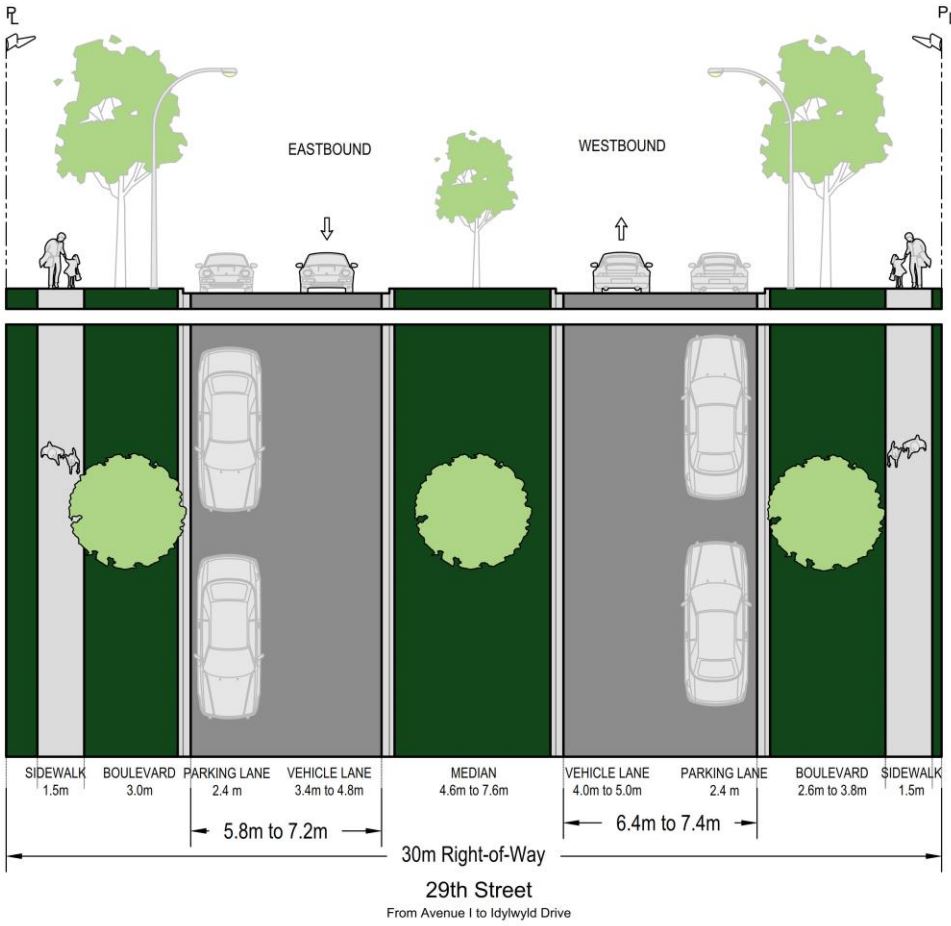


Figure 6. 29th Street West: Avenue I North to Idylwyld Drive North



31st Street West

Between Avenue W North and Avenue I North, there is no centre median, with varying widths for each segment shown between **Figure 7** and **Figure 9**. Between Avenue I North and Avenue F North, and between Avenue D North and Idylwyld Drive North, 31st Street West is divided by a centre median, with one motor vehicle lane in each direction with parking on both side of the street, with varying widths

Figure 7. 31st Street West: Avenue W North to Avenue P North

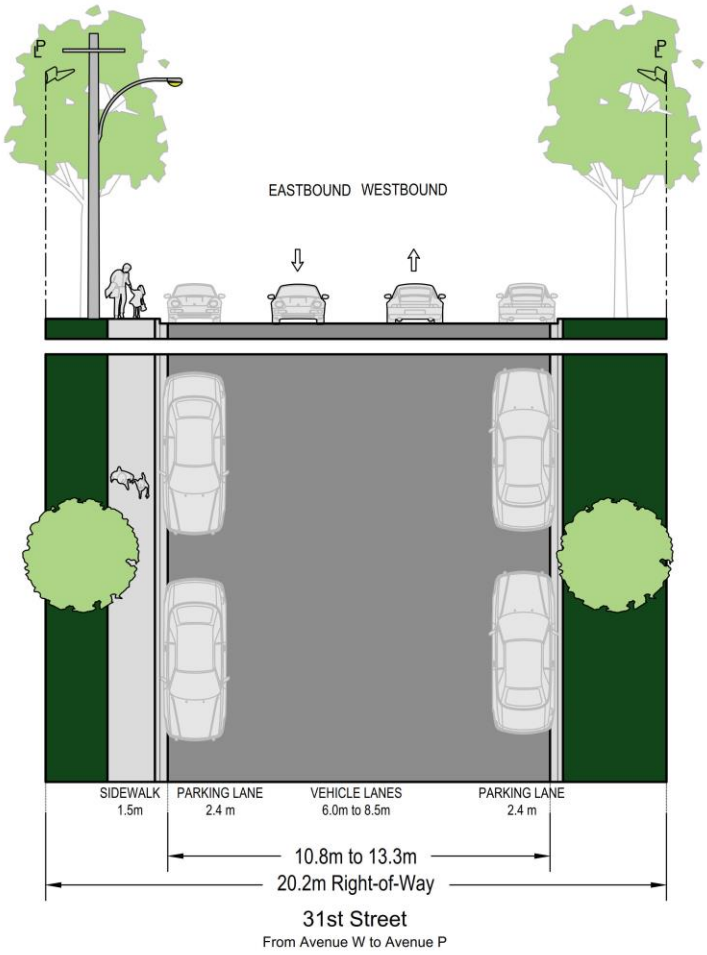


Figure 8. 31st Street West: Avenue P North to Tiffin Crescent

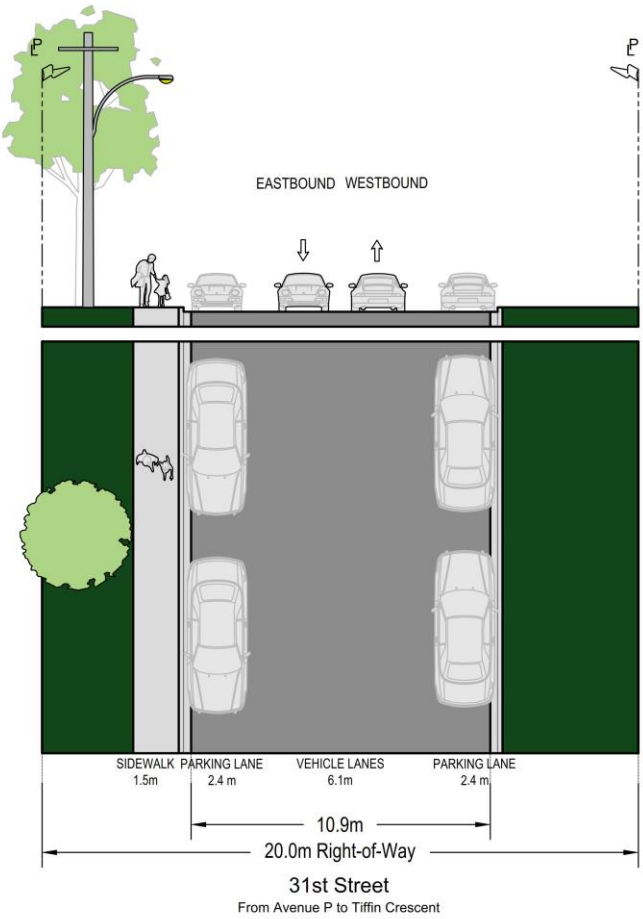


Figure 9. 31st Street West: Tiffin Crescent to Avenue I North

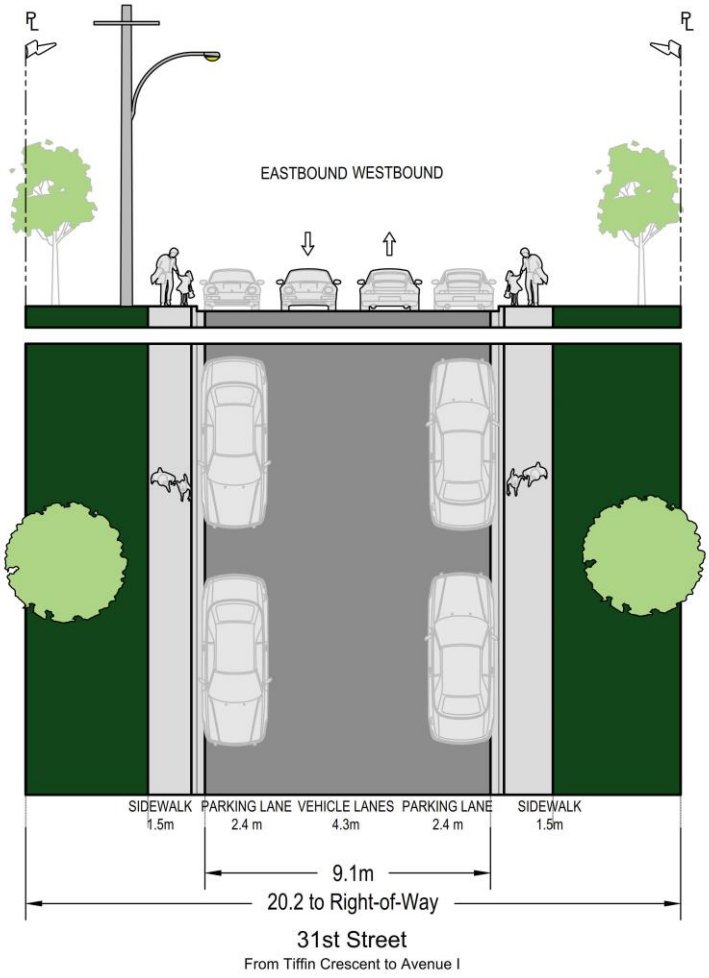
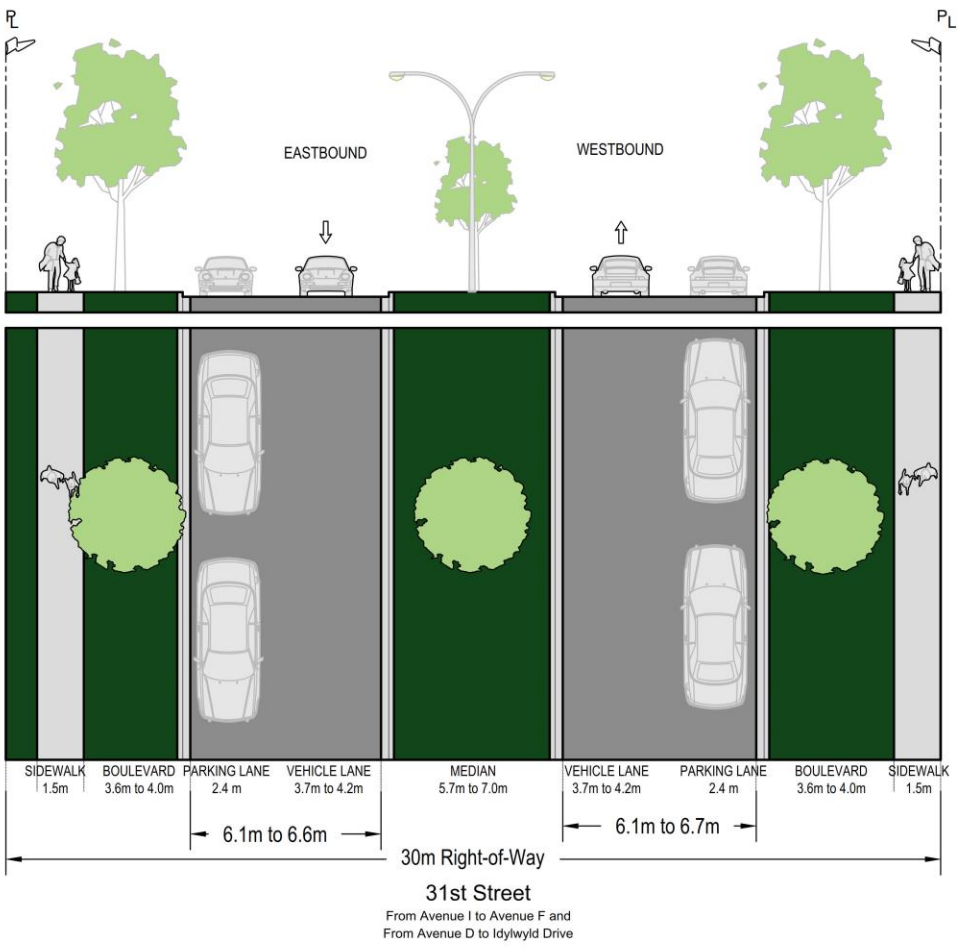


Figure 10. 31st Street West: Avenue I North to Avenue F North / Avenue D North to Idylwyld Drive North



2.3.2 ROAD NETWORK CLASSIFICATION AND INTERSECTION CONTROLS

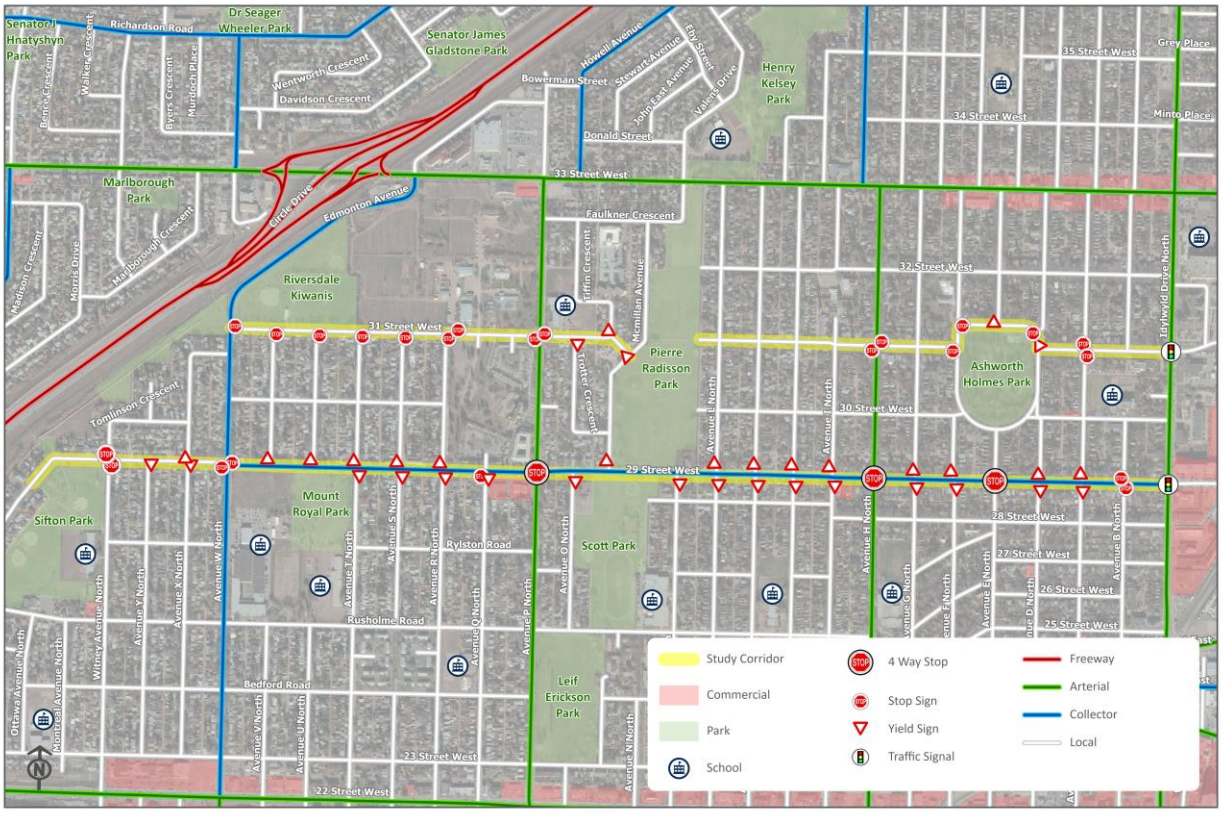
Road network classification and intersection controls for both 29th Street West and 31st Street West is shown in

Figure 11**.**

29th Street West is classified as a local street west of Avenue W North, and a collector street between Avenue W North and Idylwyld Drive North. There is one signalized intersection at the east end of the corridor at Idylwyld Drive North, and five stop controlled intersections at Avenue B North, Avenue E North, Avenue H North, Avenue P North, and Avenue W North. All other intersections are yield controlled.

31st Street West is classified as a local street. There is one signalized intersection at the east end of the corridor at Idylwyld Drive North, and several stop controlled intersections throughout the corridor.

Figure 11. 29th Street West and 31st Street West: Road Network Classification



2.3.3 PAVEMENT CONDITION

Pavement condition along the corridor is considered to be satisfactory or good for most of both corridors, with the exception of the segments of 29th Street West between Avenue E North and Avenue I Avenue (fair to poor), and 31st Street West between Avenue F North and Avenue H North (very poor) and Avenue H North to Avenue L North (fair), as shown in **Table 1**.

Table 1. 29th Street West and 31st Street West: Pavement Condition

Corridor	From	To	Average Surface Condition (2017)	Ride Index (2017)	Comments
29th Street West	Idylwyld Drive North	Avenue E North	Satisfactory	Mediocre	Last treatment in 2014
	Avenue E North	Avenue I North	Fair to poor	Mediocre	No future plans for preservation
	Avenue I North	Avenue P North	Good	Good to very good	Last resurfaced in 2016
	Avenue P North	Avenue T North	Assumed good	Assumed good	Last treatment in 2017
	Avenue T North	Avenue W North	Assumed good	Assumed very good	Last resurfaced in 2019
	Avenue W North	Vancouver Avenue North	Assumed good	Assumed very good	Last resurfaced in 2018
31st Street West	Idylwyld Drive North	Avenue B North	Satisfactory to good	Good	Microsurface recommended
	Avenue B North	Avenue F North	Good	Good	Last resurfaced in 2017
	Avenue F North	Avenue H North	Very poor	Good	Next treatment in 2021
	Avenue H North	Avenue L North	Fair	Fair to mediocre	Last treatment in 1996
	McMillan Avenue	Avenue P North	Good	Good to very good	Last treatment in 2014
	Avenue P North	Avenue W North / Edmonton Avenue	Fair to good	Good to very good	Last treatment in 2001

2.3.4 TRAFFIC VOLUMES AND SPEEDS

The City of Saskatoon provided weekly traffic counts and 85th percentile speeds for the selected corridors. **Table 2** below summarizes the AADT and 85th percentile speeds for the 29th Street West and 31st Street West corridors.

On 29th Street West, traffic volumes are moderate throughout the corridor, with daily traffic volumes between 2,000 and 4,000 vehicles per day or less. However, speeding was observed to be an issue in the western segment of the corridor, with 85th percentile speeds of 55 km/h between Avenue V North and Avenue U North, and between McMillan Avenue and Avenue L North.

On 31st Street West, traffic volumes are relatively low throughout the corridor, with daily traffic volumes of 1,000 vehicles per day or less. However, speeding was observed to be an issue in the western segment of the corridor, with 85th percentile speeds of 60 km/h between Avenue V North and Avenue U North.

Table 2. 29th Street West and 31st Street West: Annual Average Daily Traffic (AADT)

Corridor	From	To	Average Daily Traffic (vpd)	85th Percentile Speed (km/h)	Heavy Vehicle Percentage
29th Street West	Avenue V North	Avenue U North	2,100	55	4%
	McMillan Avenue	Avenue L North	3,000	55	3%
	Avenue D North	Avenue C North	4,000	55	3%
31st Street West	Avenue V North	Avenue U North	700	60	7%
	Avenue A North	Avenue B North	1,000	45	No Data

Note: *vpd = vehicles per day*

2.3.5 TRAFFIC OPERATIONAL ANALYSIS

The longest queue lengths along the corridor occur at the intersection of 29th Street West and Idylwyld Drive North.

The longest queue lengths along the 31st Street West corridor occur at the intersection of 31st Street West and Idylwyld Drive North.

Table 3 and **Table 4** show the existing morning and afternoon (in brackets) peak hour turning movement counts and traffic analysis for intersections along the 29th Street West and 31st Street West corridors, respectively.

Level of Service and Delays

The intersections studied along the 29th Street West corridor operate from LOS A to LOS E during AM and PM peak hours, with the worst movements having up to a 78 second delay.

The intersections along the 31st Street West corridor operate at a LOS C or better during AM and PM peak hours, with the exception of 2 movements which operate at a LOS D and LOS E. The worst movement has up to a 68 second delay in the peak PM period.

Volume to Capacity Ratios

All intersections along the 29th Street West corridor have a v/c ratio at or under 0.80.

All intersections along the 31st Street West corridor have a v/c ratio under 0.70.

Queue Lengths

The longest queue lengths along the corridor occur at the intersection of 29th Street West and Idylwyld Drive North.

The longest queue lengths along the 31st Street West corridor occur at the intersection of 31st Street West and Idylwyld Drive North.

Table 3. 29th Street West: Intersection Analysis – AM (PM)

Intersection Control	Approach	Control	Volume	Level of Service	Total Delay (s)	V/C Ratio	95% Queue Length (m)
29th Street West & Avenue W North							
Four-Way Stop	Eastbound Left, Thru, Right	Stop	84 (88)	A (B)	9.9 (12.3)	0.17 (0.27)	0.6 (1.1)
	Westbound Left, Thru, Right	Stop	100 (149)	B (B)	12.6 (11.4)	0.26 (0.32)	1.0 (1.4)
	Northbound Left,Thru, Right	Stop	139 (296)	A (C)	9.8 (18.8)	0.24 (0.66)	0.9 (4.9)
	Southbound Left, Thru, Right	Stop	291 (376)	B (C)	13.7 (19.3)	0.55 (0.67)	3.3 (5.1)
	Overall			**B (C)**	-	-	-
29th Street & Idylwyld Drive North							
Signal	Eastbound Left, Thru	Signal	148 (113)	**E (E)**	74.9 (78.9)	0.79 (0.78)	31.9 (47.7)
	Eastbound Right	Signal	212 (107)	B (B)	11.2 (10.6)	0.55 (0.39)	19.3 (11.1)
	Westbound Left, Thru	Signal	17 (29)	**D (E)**	44.1 (57.6)	0.13 (0.44)	11.6 (17.2)
	Westbound Right	Signal	4 (32)	A (A)	0.0 (5.9)	0.01 (0.16)	0.0 (0.6)
	Northbound Left	Signal	20 (194)	A (B)	5.2 (12.0)	0.07 (0.60)	3.6 (22.8)
	Northbound Thru, Right	Signal	1117 (1253)	A (A)	7.6 (7.3)	0.52 (0.52)	75.5 (90.9)
	Southbound Left	Signal	14 (15)	B (B)	11.5 (12.5)	0.10 (0.09)	4.1 (5.6)
	Southbound Thru, Right	Signal	1027 (1144)	B (B)	11.5 (14.9)	0.46 (0.55)	94.9 (123.8)
	Overall			**B (B)**	-	-	-

Table 4. 31st Street West: Intersection Analysis – AM (PM)

Intersection Control	Approach	Control	Volume	Level of Service	Total Delay (s)	V/C Ratio	95% Queue Length (m)
31st Street West & Avenue P North							
Two-Way Stop	Eastbound Left, Thru, Right	Stop	75 (38)	C (C)	19.0 (20.4)	0.31 (0.22)	9.7 (6.3)
	Westbound Left, Thru, Right	Stop	72 (34)	B (C)	12.6 (17.6)	0.17 (0.15)	4.7 (3.9)
	Northbound Left,Thru, Right	Free Flow	3 (408)	A (A)	0 (0.5)	0 (0.02)	0 (0.4)
	Southbound Left, Thru, Right	Free Flow	474 (338)	A (A)	1.1 (0.8)	0.04 (0.02)	0.9 (0.5)
	Overall			**A (A)**	-	-	-
31st Street West & Avenue H North							
Two-Way Stop	Eastbound Left, Thru, Right	Stop	13 (13)	B (B)	12.2 (14.2)	0.04 (0.06)	0.9 (1.4)
	Westbound Left, Thru, Right	Stop	9 (10)	B (B)	10.8 (14.4)	0.05 (0.05)	1.2 (1.3)
	Northbound Left,Thru, Right	Free Flow	232 (353)	A (A)	0.3 (0.3)	0.01 (0.01)	0.1 (0.2)
	Southbound Left, Thru, Right	Free Flow	244 (253)	A (A)	0.1 (0.3)	0 (0.01)	0.1 (0.2)
	Overall			**A (A)**	-	-	-
31st Street West & Idylwyld Drive North							
Signal	Eastbound Left, Thru, Right	Signal	20 (32)	D (C)	38.7 (24.7)	0.26 (0.19)	1.4 (0.0)
	Westbound Left, Thru	Signal	13 (58)	**E (E)**	59.2 (67.6)	0.27 (0.66)	5.1 (15.6)
	Westbound Right	Signal	5 (12)	A (B)	3.6 (15.0)	0.05 (0.09)	0.0 (2.5)
	Northbound Left	Signal	20 (47)	A (A)	2.4 (6.5)	0.08 (0.19)	2.0 (8.6)
	Northbound Thru, Right	Signal	1062 (1314)	A (A)	2.6 (6.7)	0.42 (0.51)	39.7 (94.1)
	Southbound Left	Signal	5 (15)	A (A)	2.4 (5.6)	0.05 (0.09)	0.6 (3.3)
	Southbound Thru, Right	Signal	1073 (1189)	A (A)	2.2 (5.9)	0.34 (0.44)	36.1 (73.6)
	Overall			**A (A)**	-	-	-

2.3.6 PARKING

Parking utilization on the study corridors was estimated by counting the number of vehicles parked on each segment of the corridor over 3 time periods throughout the day.

29th Street West

Table 5 summarizes the parking utilization for the 29th Street West corridor. Some key findings from this data include:

- The 29th Street West corridor from Vancouver Avenue North to Idylwyld Drive North is mostly comprised of low density residential land uses and leads to high parking utilization during the

morning and overnight hours.

- Available parking for many segments far exceeds the demand, and as a result overall parking utilization of the corridor is low.
- Events in the adjacent park areas may affect parking utilization values along this corridor. The values below should be taken as typical values during non-event days. Parking utilization along this corridor may need to be reviewed during special events.

31st Street West

Table 6 summarizes the parking utilization for the 31st Street West corridor. Some key takeaways from this data are:

- Similar to the 29th Street West corridor, the 31st Street West corridor from Edmonton Avenue to Idylwyld Drive North is mostly comprised of low density single family homes and leads to high parking utilization during the morning and overnight hours.
- Available parking for many segments far exceeds the demand, and as a result overall parking utilization of the corridor is low.
- From Edmonton Avenue to Avenue P North, there are no residential homes on the north side of 31st Street West, and as a result parking utilization is extremely low on the north side.
- Events in the adjacent park areas may affect parking utilization values along this corridor. The values stated below should be taken as typical values during non-event days. Parking utilization along this corridor may need to be reviewed during special events.

See **Figure 12** to **Figure 15** for a visualization of parking utilization for 29th Street West and 31st Street West.

Table 5. 29th Street West: Parking Utilization

Block		Side	Parking Utilization			
From	To		5:00-7:00	11:30-1:30	16:00-18:00	Average
Idylwyld Drive North	Avenue B North	North	37%	46%	37%	40%
		South	46%	56%	28%	43%
Avenue B North	Avenue C North	North	69%	52%	43%	55%
		South	33%	24%	33%	30%
Avenue C North	Avenue D North	North	57%	41%	41%	46%
		South	69%	35%	35%	46%
Avenue D North	Avenue E North	North	17%	9%	17%	14%
		South	69%	43%	61%	58%
Avenue E North	Avenue F North	North	11%	11%	11%	11%
		South	12%	12%	24%	16%
Avenue F North	Avenue G North	North	30%	40%	50%	40%
		South	56%	28%	37%	40%
Avenue G North	Avenue H North	North	19%	28%	9%	19%
		South	37%	37%	56%	43%
Avenue H North	Avenue I North	North	43%	52%	52%	49%
		South	52%	52%	69%	58%
Avenue I North	Avenue J North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue J North	Avenue K North	North	10%	10%	10%	10%
		South	11%	0%	11%	7%
Avenue K North	Avenue L North	North	0%	0%	0%	0%
		South	9%	0%	0%	3%
Avenue L North	McMillan Avenue	North	3%	3%	3%	3%
		South	0%	0%	0%	0%
McMillan Avenue	Avenue P North	North	4%	4%	0%	3%
		South	0%	0%	0%	0%
Avenue P North	Avenue Q North	North	14%	21%	21%	18%
		South	0%	8%	0%	3%
Avenue Q North	Avenue R North	North	0%	0%	0%	0%
		South	9%	0%	26%	12%
Avenue R North	Avenue S North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue S North	Avenue T North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue T North	Avenue U North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue U North	Avenue V North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue V North	Avenue W North	North	22%	11%	22%	18%
		South	0%	0%	0%	0%
Avenue W North	Avenue X North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue X North	Tomlinson Crescent	North	9%	0%	13%	7%
		South	0%	0%	0%	0%

Table 6. 31st Street West: Parking Utilization

Block		Side	Parking Utilization			
From	To		5:00-7:00	11:30-1:30	16:00-18:00	Average
Idylwyld Drive North	Avenue B North	North	46%	46%	46%	46%
		South	10%	10%	50%	23%
Avenue B North	Avenue C North	North	19%	19%	28%	22%
		South	28%	28%	56%	37%
Avenue C North	Avenue D North	North	41%	33%	24%	33%
		South	49%	41%	24%	38%
Avenue F North	Avenue G North	North	61%	52%	52%	55%
		South	50%	40%	20%	37%
Avenue G North	Avenue H North	North	74%	56%	65%	65%
		South	37%	37%	28%	34%
Avenue H North	Avenue I North	North	22%	22%	22%	22%
		South	43%	0%	11%	18%
Avenue I North	Avenue J North	North	22%	22%	22%	22%
		South	12%	24%	12%	16%
Avenue J North	Avenue K North	North	12%	24%	12%	16%
		South	43%	43%	43%	43%
Avenue K North	Avenue L North	North	10%	0%	10%	7%
		South	0%	0%	0%	0%
Avenue L North	McMillan Avenue North	North	43%	43%	0%	29%
		South	0%	0%	0%	0%
McMillan North Avenue	Avenue P North	North	4%	8%	8%	6%
		South	0%	26%	0%	9%
Avenue P North	Avenue R North	North	0%	4%	0%	1%
		South	0%	0%	0%	0%
Avenue R North	Avenue S North	North	0%	0%	0%	0%
		South	9%	9%	9%	9%
Avenue S North	Avenue T North	North	0%	0%	0%	0%
		South	28%	37%	19%	28%
Avenue T North	Avenue U North	North	0%	0%	6%	2%
		South	0%	0%	0%	0%
Avenue U North	Avenue V North	North	0%	0%	0%	0%
		South	0%	0%	0%	0%
Avenue V North	Avenue W North	North	0%	0%	0%	0%
		South	11%	11%	11%	11%

Figure 12. 29th Street West and 31st Street West: Morning Parking Utilization

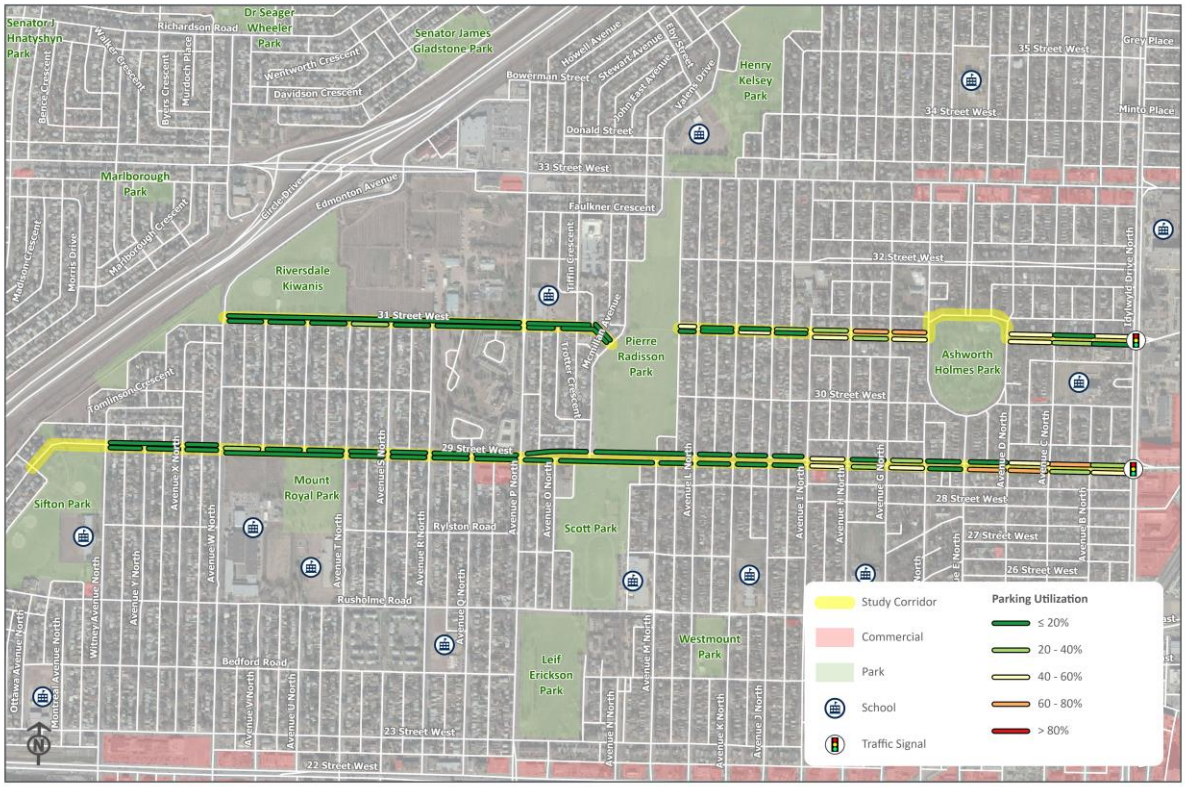


Figure 13. 29th Street West and 31st Street West: Mid-day Parking Utilization

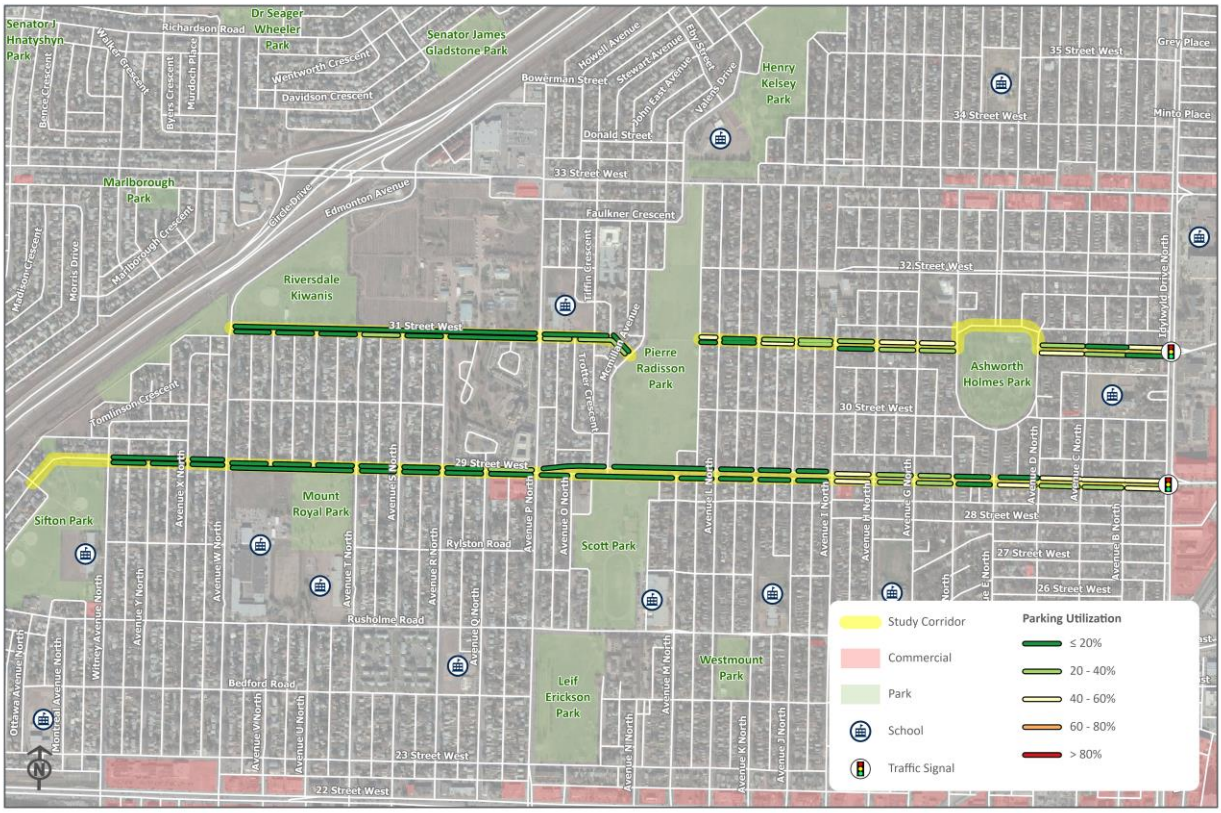


Figure 14. 29th Street West and 31st Street West: Evening Parking Utilization

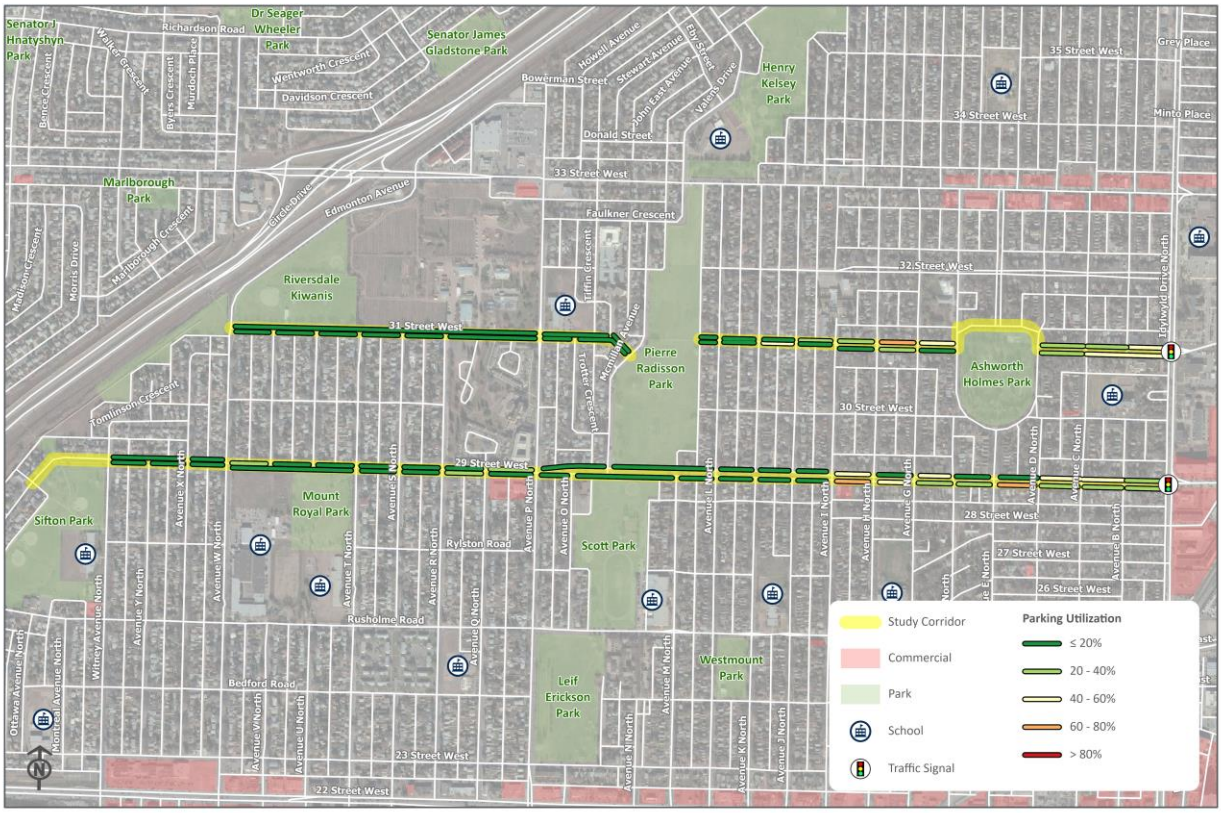
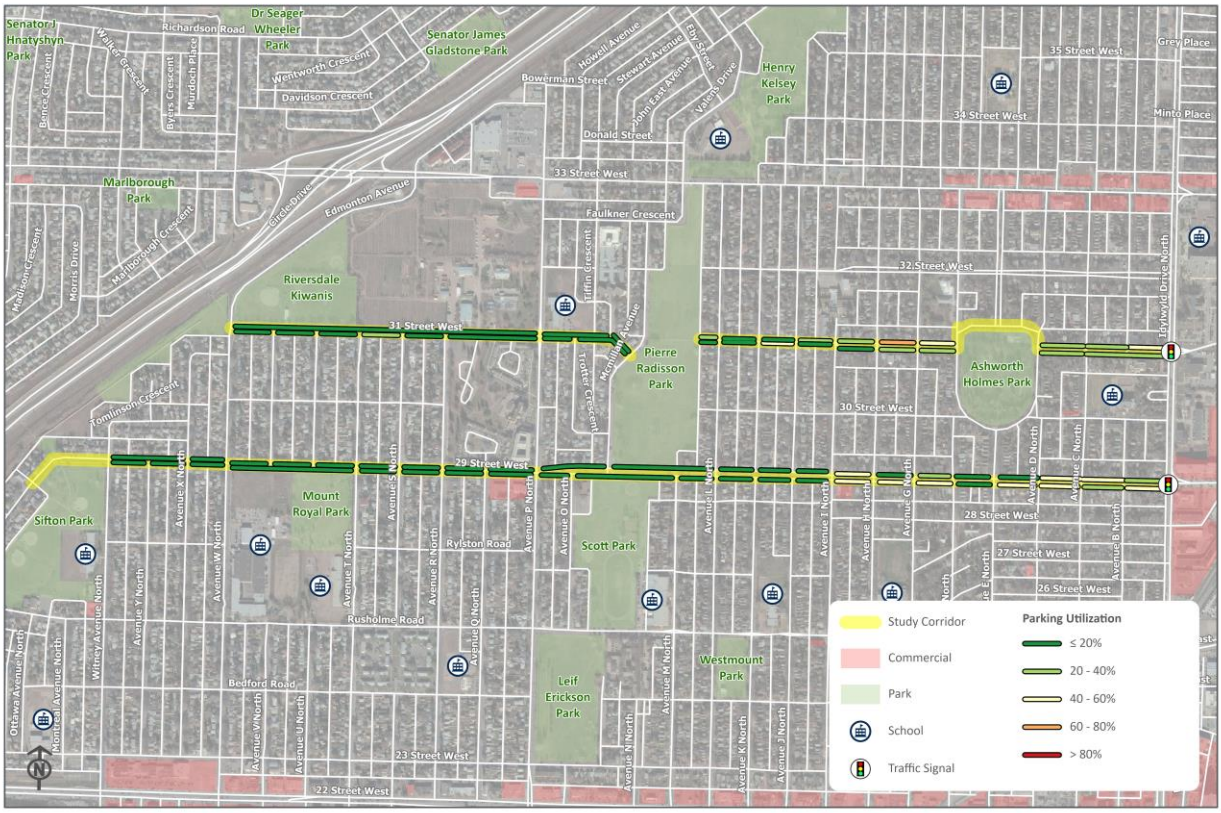


Figure 15. 29th Street West and 31st Street West: Average Daily Parking Utilization



2.4 PEDESTRIAN FACILITIES

The following table provides a summary of pedestrian facilities along the 29th Street West and 31st Street West corridor. There is generally a lack of pedestrian facilities throughout most of the corridor. **Figure 16** provides a visualization of the pedestrian amenities on 29th Street West and 31st Street West.

Table 7. 29th Street West: Existing Sidewalks and Pathways Summary

From	To	Sidewalk
Idylwyld Drive North	Avenue I North	• Both sides – separated sidewalk with boulevard
Avenue I North	Avenue L North	• North side – combined curb and sidewalk • South side – separated sidewalk with boulevard
Avenue L North	Avenue O North	• North side only – combined curb and sidewalk
Avenue O North	Avenue R North	• Both sides – combined curb and sidewalk
Avenue R North	Avenue S North	• South side only – combined curb and sidewalk
Avenue S North	Avenue T North	• North side –combined curb and sidewalk (below desired width) • South side – combined curb and sidewalk
Avenue T North	Avenue W North	• South side only – combined curb and sidewalk
Avenue W North	Circle Drive 29th Street West Pedestrian Underpass	• Both sides – combined curb and sidewalk

Table 8. 29th Street West: Intersection Pedestrian Accommodation

Intersecting Street	Ramps	Comments
Idylwyld Drive North	Lacks ramps oriented in some directions of travel	• Standard crosswalks present in all four directions at traffic signal
Avenue B North	Lacks ramps oriented in some directions of travel	• Active pedestrian corridors (north-south zebra crosswalks with overhead signs) present on east and west legs of intersection • Curb extensions present on northeast and southwest corners • Large central median
Avenue C North	Lacks ramps oriented in some directions of travel	• North-south zebra crosswalks present on east and west legs of intersection • Curb extensions present on northeast and southwest corners • Large central median
Avenue D North	Lacks pedestrian ramps in most corners	• Large central median
Avenue E North	Lacks ramps oriented in some directions of travel	• Standard crosswalks in all four directions present at 4-way stop • Large central median
Avenue F North	Lacks pedestrian ramps in most corners	• Large central median
Avenue G North	Lacks ramps oriented in some directions of travel	• North-south zebra crosswalks present on east and west legs of intersection • Curb extensions present on northeast and southwest corners • Large central median
Avenue H North	Lacks ramps oriented in some directions of travel	• Standard crosswalks present in all four directions at 4-way stop • Large central median
Avenue I North	No ramps present	• North-south zebra crosswalk present on east leg of intersection • Large central median
Avenue J North	Lacks ramps oriented in some directions of travel	• Large central grassed median extends through intersection preventing cross-traffic and without pedestrian permeability
Avenue K North	Lacks ramps oriented in some directions of travel	• Large central grassed median extends through intersection preventing cross-traffic and without pedestrian permeability
Avenue L North	Lacks ramps oriented in some directions of travel	• North-south zebra crosswalks present on east and west legs of intersection • Temporary curb extensions present on northeast and southwest corners • Large central median

Intersecting Street	Ramps	Comments
Avenue M North	Lacks ramps oriented in some directions of travel	• Large central grassed median extends through intersection preventing cross-traffic and without pedestrian permeability • Avenue M North only intersects to the south with Pierre Radisson Park to the north
McMillan Avenue	Lacks ramps oriented in some directions of travel	• North-south zebra crosswalks present on east and west legs of intersection • Large central median • Temporary curb extensions to be installed
Avenue O North	Lacks ramps oriented in some directions of travel	• Large central grassed median extends through intersection preventing cross-traffic and without pedestrian permeability • Avenue O North only intersects to the south
Avenue P North	Ramps present on all corners	• Standard crosswalks present in all four directions at 4-way stop • Large central median comes to an end
Avenue Q North	Ramps present on all corners	
Avenue R North	Lacks ramps oriented in some directions of travel	• North-south standard crosswalk present on west leg of intersection
Avenue S North	Lacks ramps oriented in some directions of travel	
Avenue T North	Lacks ramps oriented in some directions of travel	• North-south standard crosswalks present on east and west legs of intersection
Avenue U North	No ramps present	• North-south standard crosswalks present on east and west legs of intersection • Intersecting road only to the north with Mount Royal Park to the south
Avenue V North	Lacks ramps oriented in some directions of travel	• North-south standard crosswalks present on east and west legs of intersection • Intersecting road only to the north with Mount Royal Park to the south
Avenue W North	Lacks ramps oriented in some directions of travel	• East-west standard crosswalks present on north and south legs of intersection
Avenue X North	Lacks ramps oriented in some directions of travel	
Avenue Y North	Lacks ramps	
Tomlinson Crescent / Witney Avenue North	Lacks ramps oriented in some directions of travel	
Circle Drive 29th Street West Pedestrian Underpass	Ramps present	• Mid-block standard crosswalk present to provide access to pedestrian underpass

Table 9. 31st Street West: Existing Sidewalks and Pathways Summary

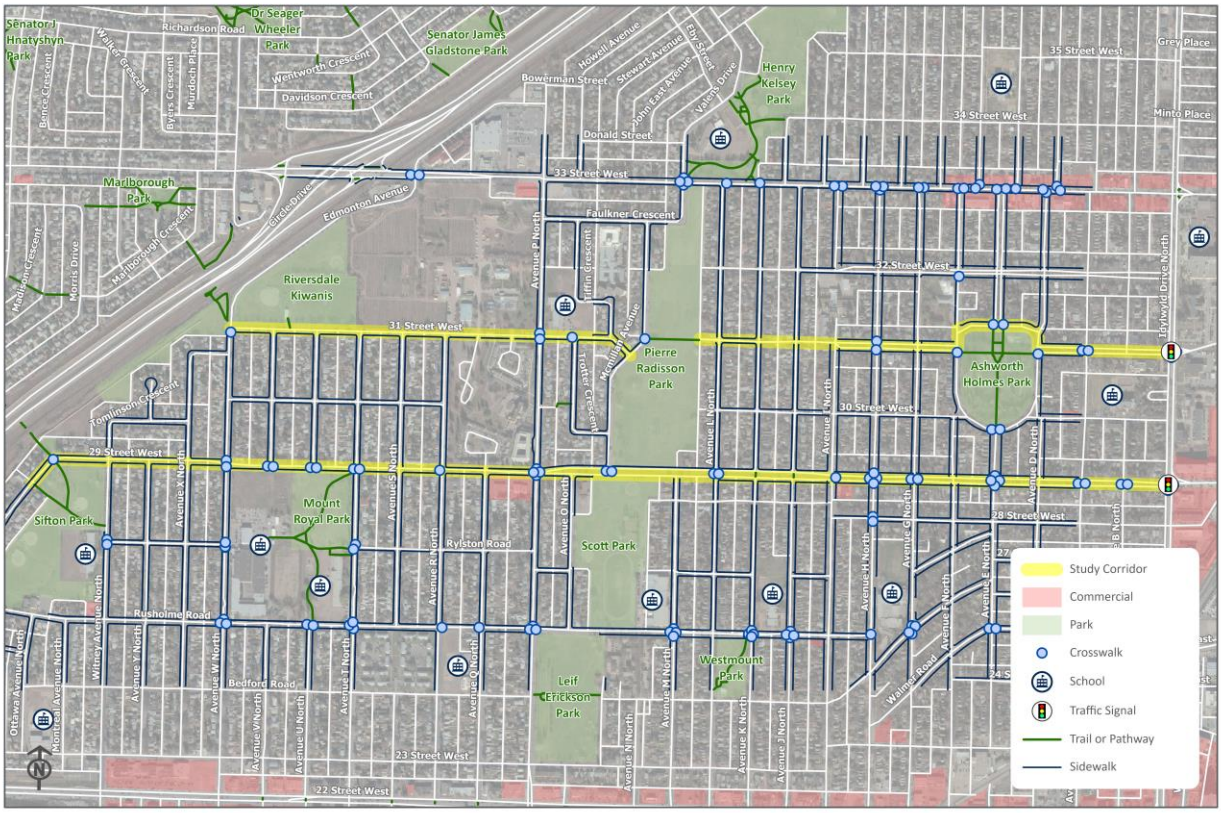
From	To	Sidewalk
Idylwyld Drive North	Avenue D North	• Both sides – separated sidewalk with boulevard
Avenue D North	Avenue F North	• Multi-use pathway – Ashworth Holmes Park
Avenue F North	Avenue I North	• Both sides – separated sidewalk with boulevard
Avenue I North	Avenue K North	• No sidewalks
Avenue K North	Avenue L North	• Both sides – separated sidewalk with boulevard
Avenue L North	Pierre Radisson-East	• No sidewalks (gravel roadway)
Pierre Radisson – East	Pierre Radisson – West	• Multi-use pathway – Pierre Radisson Park
Pierre Radisson – West	31st Street West	• North side only – combined curb and sidewalk
McMillan Avenue	Tiffin Crescent	• Both sides – combined curb and sidewalk
Tiffin Crescent	Avenue W West	• South side only – combined curb and sidewalk

Table 10. 31st Street West: Intersection Pedestrian Accommodation

Intersecting Street	Ramps	Comments
Idylwyld Drive North	Lacks ramps oriented in some directions of travel	• Standard crosswalks present in all four directions at traffic signal • Large central median
Avenue B North	Lacks ramps oriented in some directions of travel	• Large central median
Avenue C North	Lacks ramps oriented in some directions of travel	• East-west standard crosswalk present on south leg of intersection • Curb extensions present on northwest and southwest corners • Large central median
Avenue D North	Ramps present	• East-west zebra crosswalk present on south leg of intersection • Curb extension present on southeast corner • Large central median • Provides access to Ashworth Holmes Park
Avenue E North	Ramps present	• North-south zebra crosswalks present on west and east legs of intersection • Provides access to Ashworth Holmes Park
Avenue F North	Lacks pedestrian ramps in most corners	• East-west zebra crosswalk present on south leg of intersection • Temporary curb extensions present on southwest and southeast corners

Intersecting Street	Ramps	Comments
		• Large central median • Provides access to Ashworth Holmes Park
Avenue G North	No ramps present	• Large central median
Avenue H North	Lacks ramps oriented in some directions of travel	• East-west zebra crosswalks present on north and south legs of intersection • Large central median
Avenue I North	Ramps present	• Large central median ends
Avenue J North	No ramps present	
Avenue K North	Lacks ramps oriented in some directions of travel	
Avenue L North	No ramps present	
McMillan Avenue	Lacks ramps oriented in some directions of travel	• Mid-block zebra crosswalk present • Provides access to Pierre Radisson Park
Tiffin Crescent	Lacks ramps oriented in some directions of travel	
Trotter Crescent	Lacks ramps oriented in some directions of travel	• North-south standard crosswalk present on west leg of intersection
Avenue P North	Lacks ramps oriented in some directions of travel	• East-west zebra crosswalks present on north and south legs of intersection • Pedestrian crossing signs present • Central median present
Avenue R North	Ramps present	
Avenue S North	Ramps present	
Avenue T North	No ramps present	
Avenue U North	No ramps present	• Intersecting road only to the north with Mount Royal Park to the south
Avenue V North	Lacks ramps oriented in some directions of travel	• Intersecting road only to the north with Mount Royal Park to the south
Avenue W North	No ramps present	• East-west standard crosswalk present on south leg of intersection provides access to 31st Street West Circle Drive pedestrian underpass

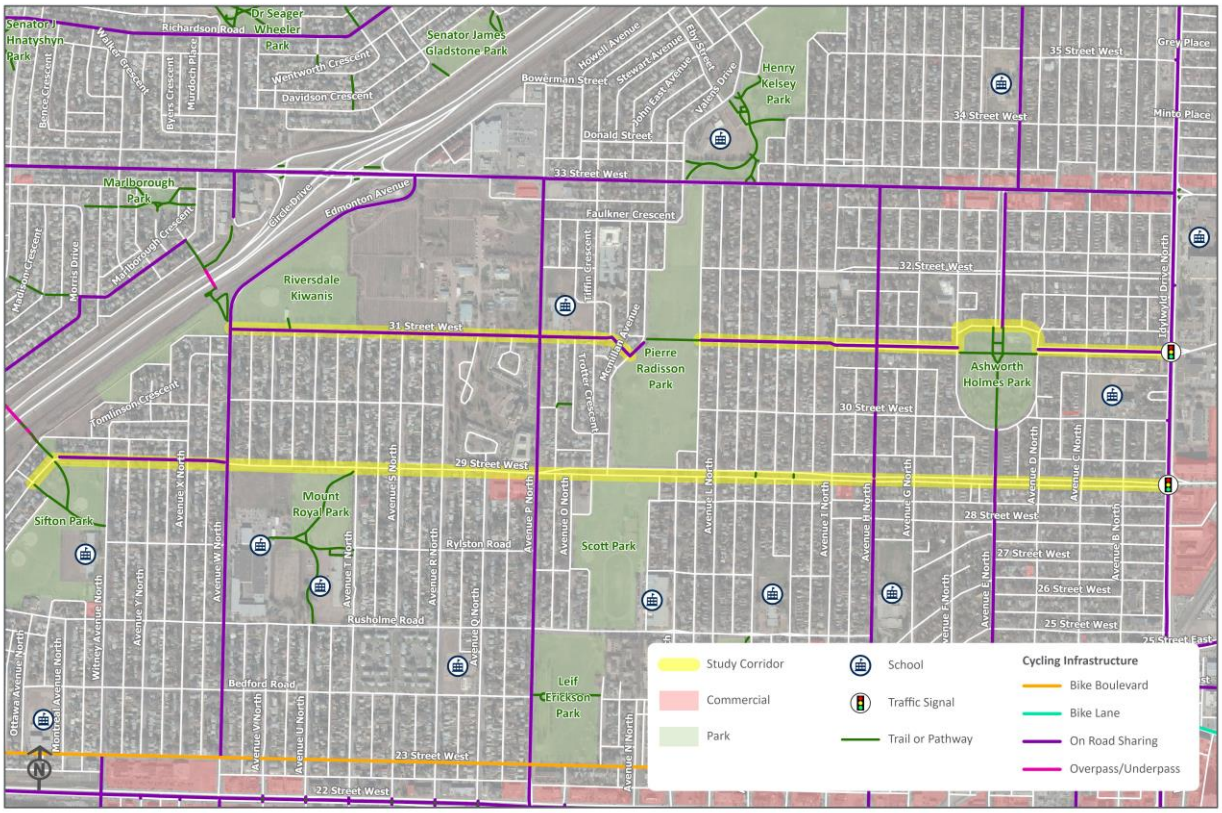
Figure 16. 29th Street West and 31st Street West: Pedestrian Amenities



2.5 BICYCLE FACILITIES

No cycling specific infrastructure is present on the 29th Street West corridor. Bicycle route signs were observed on the cross-street at the intersection with Avenue T North. The 31st Street West corridor includes signage specifically for bicycles. **Figure 17** shows cycling routes in the vicinity of the 29th Street West and 31st Street West corridors.

Figure 17. 29th Street West and 31st Street West: Cycling Routes



2.6 TRANSIT SERVICES AND FACILITIES

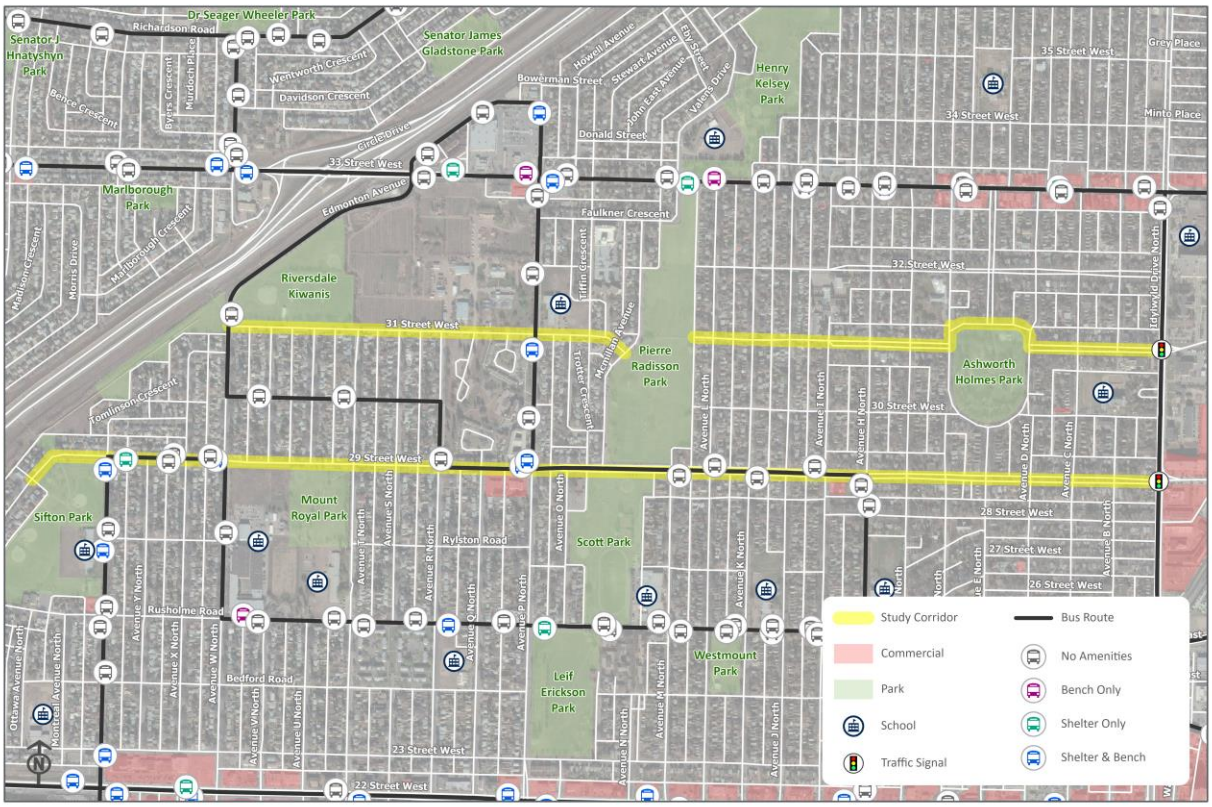
Saskatoon Transit Routes 3 and 5 utilize portions of the 29th Street West corridor. Route 3 uses the corridor between Avenue H North and Avenue R North. Route 5 uses the corridor between Avenue W North and Witney Avenue North. Both routes operate at 30 minute frequency. The location of relevant bus stops and transit frequency are described in **Table 11. Figure 18** shows the transit amenities on the 29th Street West corridor.

No transit routes use 31st Street West.

Table 11. 29th Street West: Existing Transit Infrastructure

Bus Stop Location	Routes Served	Direction	Amenities
Avenue I North (far side)	3	Westbound	None
Avenue K North (far side)	3	Eastbound	None
Avenue L North (near side)	3	Westbound	None
Avenue M North (far side)	3	Eastbound	None
Avenue P North (far side)	3	Westbound	Bench and shelter
Avenue W North (far side)	5	Westbound	None
Avenue W North (near side)	5	Eastbound	Shelter
Avenue X North (far side)	5	Westbound	None
Avenue X North (near side)	5	Eastbound	None
Witney Avenue North (far side)	5	Eastbound	Shelter

Figure 18. 29th Street West and 31st Street West: Transit Amenities



2.7 COLLISIONS

Collision data for the 29th Street West and 31st Street West corridors was provided by the City of Saskatoon for the years 2014 to 2018. The data is summarized below in Table 12 and Table 13.

29th Street West

- There were a total of 192 collisions over the 5-year period. Of those collisions, 13% resulted in injuries (25 collisions), while 87% resulted in property damage (167 collisions).
- The intersection with the greatest number of collisions was 29th Street West and Idylwyld Drive North, where 37% of all collisions occurred (71 collisions).
- The most common type of collision was a rear-end collision totaling 30% of all collisions (58 collisions) followed by right angle collisions at 20% (39 collisions).
- There were 2 collisions involving cyclists, both of which occurred in 2016.
- There were 4 collisions involving pedestrians, with 1 occurring in 2014, 1 in 2016, and 2 collisions in 2018.
- 5 of 6 collisions involving pedestrians or cyclists happened at the intersection of 29th Street and Idylwyld Drive. 4 of the 6 collisions happened in daylight conditions.

Table 12. 29th Street West: Collision History

Year	Number of Total Collisions		
	Property Damage	Personal Injury	Grand Total
2014	43	7	50
2015	31	2	33
2016	26	7	33
2017	29	2	31
2018	38	7	45
Grand Total	**167**	**25**	**192**

31st Street West

- There was a total of 92 collisions occurring over the 5-year period. Of those collisions, 23% resulted in injuries (21 collisions), while 77% resulted in property damage (71 collisions).
- Of those collisions, the intersection of 31st Street West and Idylwyld Drive North had the greatest number of collisions at 39 (42% of all collisions).
- The most common type of collision was a rear-end collision, which accounted for 38% of all collisions (35 collisions).
- There were 7 collisions involving pedestrians, 2 of which occurred at the intersection of 31st Street West and Idylwyld Drive North.The others occurred at various locations and time along the corridor. There were no notable trends due to the small sample size.
- There were no collisions involving cyclists.

Table 13. 31st Street West: Collision History

Year	Number of Total Collisions		
	Property Damage	Personal Injury	Grand Total
2014	15	6	21
2015	13	3	16
2016	6	7	13
2017	16	2	18
2018	21	3	24
Grand Total	**71**	**21**	**92**

2.8 MULTI-MODAL LEVEL OF SERVICE

Based on the existing conditions review in the previous section, a Multi-Modal Level of Service (MMLOS) was developed for each corridor. MMLOS is defined as a set of discrete quantitative measures used to describe the convenience and comfort experienced by all roadway users over a particular roadway segment or at a particular intersection. MMLOS builds on the fact that, in the past, municipalities often focused on the performance of only vehicular traffic in evaluating the level of service (LOS) on streets. MMLOS was developed to provide a similar tool to assess convenience and comfort for all road users.

The MMLOS analysis included three separate analyses for each corridor: Bicycle Level of Service, Pedestrian Level of Service, and Multi-Modal Intersection Level of Service. For each of these assessments, each segment of the corridor was assigned a score ranging from 0-17 and a letter grade was assigned to each segment for this score. An overall score for each corridor was then developed based on creating a normalized average score by multiplying the segment score by the length of each segment, and then dividing the total score by the total length of the corridor. Further details about the MMLOS methodology are provided in **Appendix A.**

The results of the MMLOS analysis for the 29th Street West and 31st Street West corridor are presented in **Table 14** and **Figure 19** to **Figure 22** on the following pages.

Table 14. Overall Summarized MMLOS Results

Corridor	Bicycle Score		Pedestrian Score		Intersection Score	
	Score	Letter Grade	Score	Letter Grade	Score	Letter Grade
29th Street	8.9	C	10.1	B	13.5	A
31st Street	12.2	B	9.1	C	12.6	A

Figure 19. 29th Street and 31st Street West: Bicycle Level of Service (Corridor)

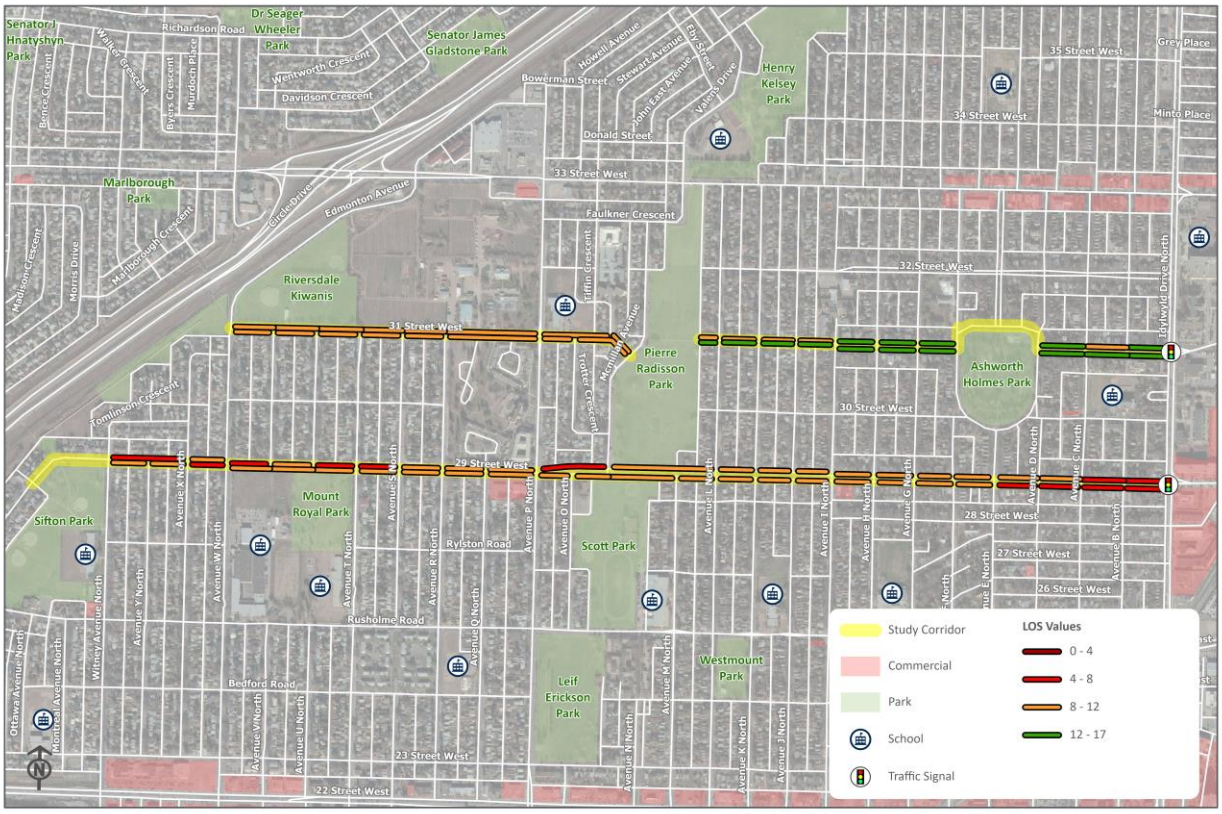


Figure 20. 29th and 31st Street West: Pedestrian Level of Service (Corridor)

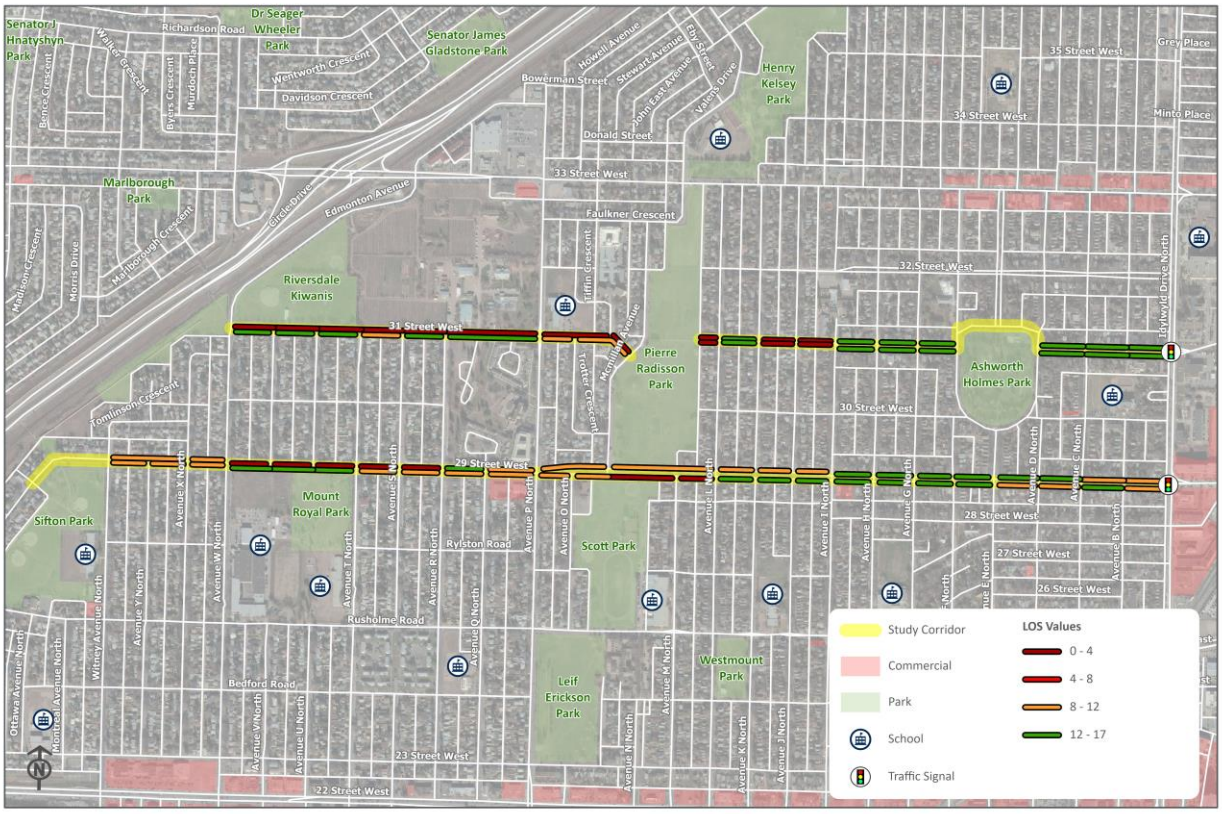


Figure 21. 29th and 31st Street West: Intersection Level of Service for East / West Crossings

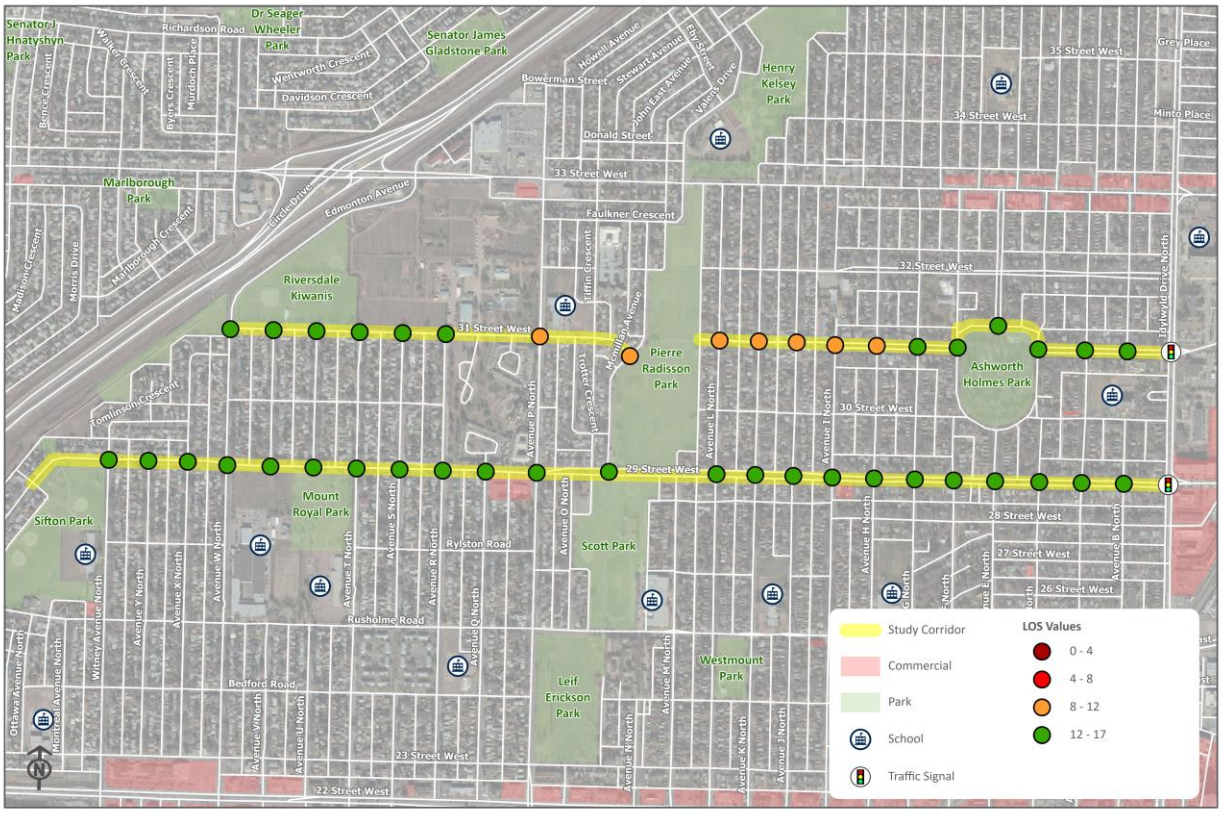
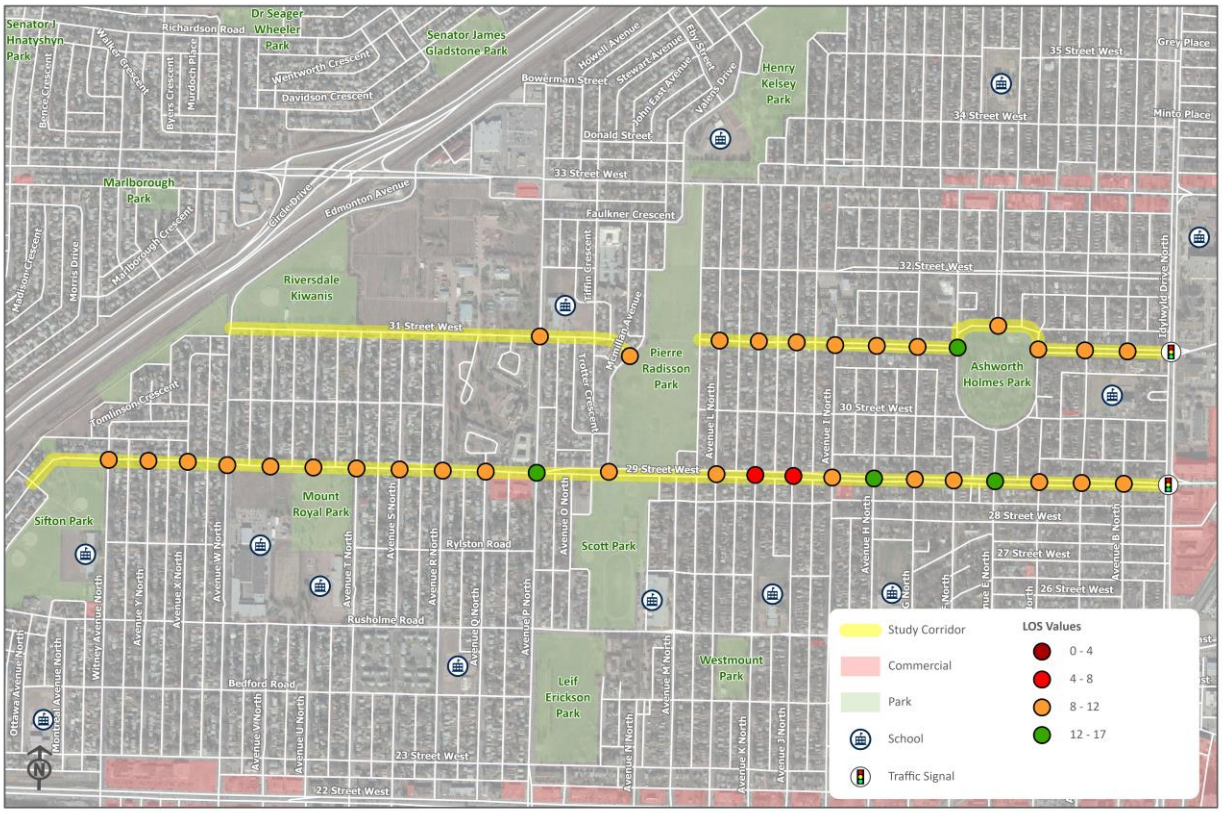


Figure 22. 29th and 31st Street West: Intersection Level of Service for North / South Crossings



3.0 PHASE 1 ENGAGEMENT SUMMARY

The first phase of public engagement was conducted in March, 2020. A range of opportunities were available to provide input during this phase of engagement for all corridors, including a series of five open houses, an online survey, social media, emails, and phone calls. This section summarizes the promotion and advertising that was conducted, the objectives of the engagement, and the engagement opportunities

The first phase of public engagement was promoted and advertised through a range of channels to ensure that interested community members and stakeholders were aware of the engagement opportunities. Promotion and advertising included:

- **Delivering flyers to all residences and businesses** with 150 metres on each side of the study corridors;
- **Sending flyers to key stakeholders** inviting them to submit comments directly to the City, to attend the open houses, and/or to forward the invitations to other members of their stakeholder group.
- **Community consultants** were contacted and asked to pass information along to the relevant community associations. City councillors were also notified.
- **Placing portable billboards or changeable message boards** along each study corridor to advertise the open houses; and
- Posting information about the public engagement opportunities on the **City of Saskatoon Engage webpage** and on the **City's social media pages**.

3.1 ENGAGEMENT OBJECTIVES

The purpose of the first phase of engagement was to obtain input on existing conditions, opportunities, and challenges for each corridor. Specific engagement objectives were to:

- **Present general information** to the public regarding active transportation and neighbourhood bikeways;
- Discuss **existing conditions, issues, and opportunities** for each corridor;
- Discuss **considerations and possible improvements** for all modes of transportation for each corridor; and.
- Help **inform design elements** for each corridor's transportation needs.

3.2 ENGAGEMENT OPPORTUNITIES

The public was invited to attend and provide input at a series of five open houses held between March 4 and March 12, 2020. Each of the open houses was focused primarily on one of the study corridors and was held at a venue near the subject corridor. Although each open house focused primarily on the subject corridor, project information for all corridors was available at all open houses. It should be noted that an additional open house was held for the Victoria Avenue bikeway project through the engagement process, although that corridor was not included in this study.

The open houses provided background information and an opportunity to provide input on each of the study corridors, including Victoria Avenue. A large format roll plot was provided for the public to provide feedback on the corridor of focus at each event.

Participants were invited to share their input by:

- Sharing feedback at www.saskatoon.ca/engage;
- Speaking with project team members;
- Adding sticky note comments to any of the engagement materials;
- Using social media; and/or
- Filling out a comment form.

The following two key questions were asked about each of the corridors.

1. What would you like to see stay the same?
2. What would you like to see improved?

Nearly 100 community members participated in the open house events for the first phase of engagement, including 16 community members for the 29th Street West and 31st Street West corridors, as shown in **Table 15**. A detailed summary of open house input for the 29th Street West and 31st Street West corridors is provided in **Appendix B.**

An online survey was also available for feedback between March 5 and March 25, 2020 on the City of Saskatoon Engage webpage. Community members were also able to comment directly on the City of Saskatoon Engage webpage. Over 60 survey responses were received. A detailed summary of survey responses for the 29th Street West and 31st Street West corridors is provided in **Appendix C**.

The public was also invited to provide comments by email, telephone, or through social media channels. The City received emails from 16 residents, 5 phone calls, and one person commented on a social media post for all corridors.

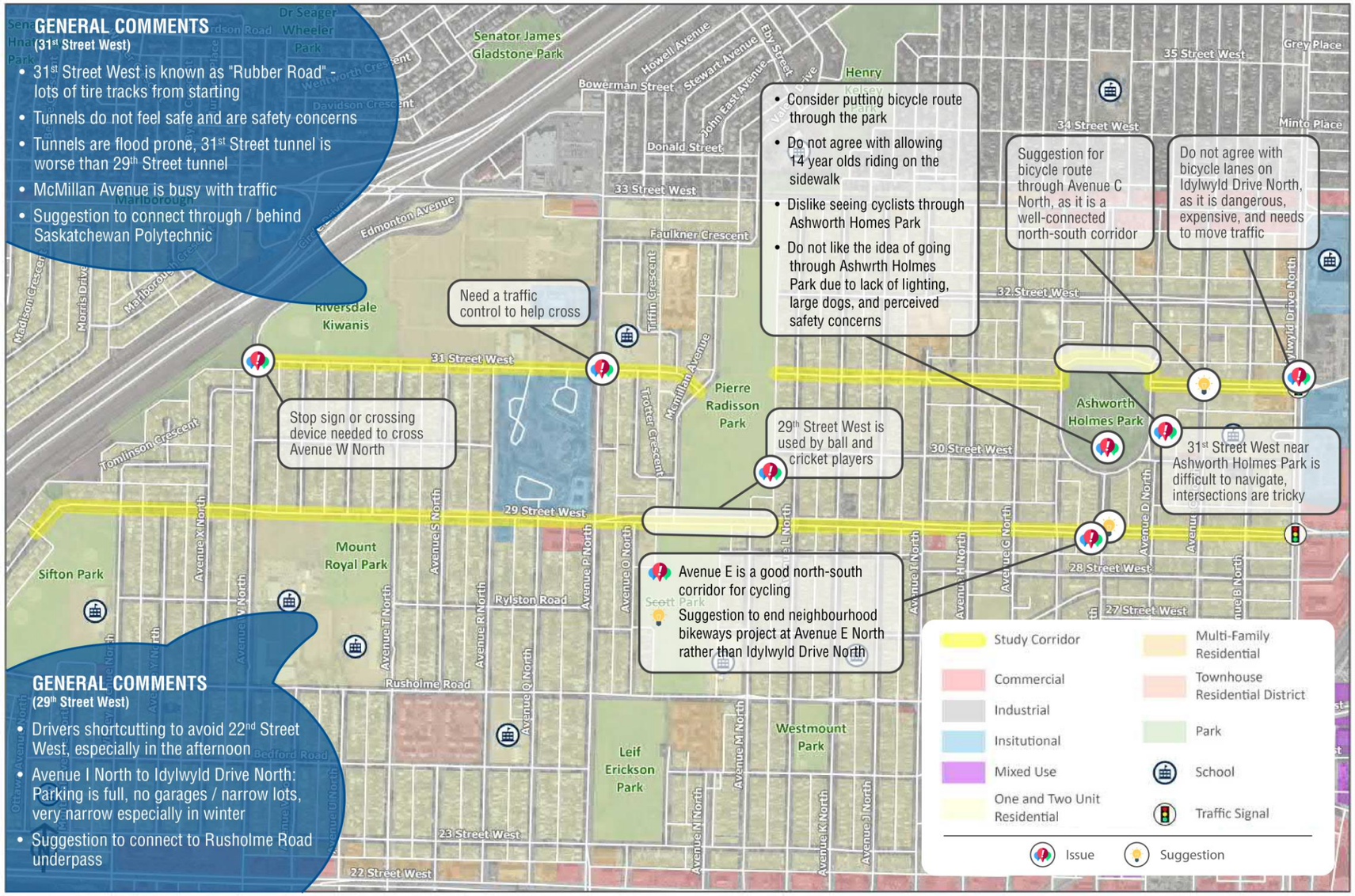
Table 15. Summary of Engagement Opportunities

Event	Location	Date	Number of attendees
14th Street East Corridor Open House	Emmanuel Anglican Church	7-9 PM March 4, 2020	25
Dudley Avenue Corridor Open House	Saskatoon French School	7-9 PM March 5, 2020	11
3rd Avenue South Corridor Open House	Frances Morrisson Public Library	7-9 PM March 9, 2020	19
Victoria Avenue Corridor Open House	Queen Elizabeth School	7-9 PM March 11, 2020	22
29th Street West /31st Street West Corridor Open House	Howard Coad Elementary School	7-9 PM March 12, 2020	16

3.3 SUMMARY OF PUBLIC INPUT

A number of suggestions and issues were identified by members of the public that attended the open houses and completed the online survey. **Figure 23** below summarizes the input received on the roll plot during the 29th West / 31st Street West open house.

Figure 23. 29th Street West and 31st Street West Open House Feedback Summary



Additional input received on the open house display boards highlighted the differences between the two corridors. Many community members felt that if 29th Street West were selected as the preferred cycling route, that a separated facility would be required in the existing centre boulevard or that space for a separated facility would need to be created, by narrowing the centre boulevard or by removing on-street parking. In comparison, most community members felt that the 31st Street West corridor would allow a comfortable shared street configuration. Improved connections at both the east and west ends of the corridors were identified as areas requiring improvements.

When open house attendees were asked to provide advantages to both of the corridors, the following responses were received.

Advantages of 29th Street West

- Closer and better connected to downtown;
- More direct since there are no gaps due to parks;
- Trees in centre median are attractive;
- Good alternative to 23rd Street West bicycle boulevard; and
- Already has 4 way stops at major intersections.

Advantages of 31st Street West

- Better connections to the 33rd Street West multi-use pathways;
- Lower traffic volumes than 29th Street West;
- Direct connection with Saskatchewan Polytechnic; and
- No transit.

Feedback received through the online survey highlighted a similar mix of responses regarding a preference between the 29th Street West and 31st Street West corridors. Other common responses included the importance of on-street parking on both corridors, the benefit of Ashworth Holmes and Pierre Radisson Parks on 31st Street West, and the importance of connections to Saskatchewan Polytechnic Campus and the 33rd Street West multi-use pathway at the eastern end of the 31st Street West corridor.

A summary of improvement opportunities for the 29th Street West and 31st Street West corridors from the public input included a desire to:

- Maintain on-street parking;
- Improve connection to Saskatchewan Polytechnic campus and 33rd Street West multi-use pathway;
- Slow down traffic;
- Improve safety at major intersections;
- Improve facilities through parks;
- Better signage; and
- Improve connections under Circle Drive.

3.4 SUMMARY OF OPPORTUNITIES AND CHALLENGES

Based on the technical analysis and public input, a number of key themes have been identified that present either challenges or opportunities along the 29th Street West and 31st Street West corridors. These themes will be used to develop concept designs that create safe and comfortable cycling facilities that meet the project goals. The key themes for 29th Street West and 31st Street West corridors include:

- High traffic volumes, importance of on-street parking, and narrow roadway width due to the wide centre boulevard make providing cycling facilities on 29th Street West more challenging;
- Low traffic volumes and city parks breaking up continuous east-west motor vehicle travel make 31st Street West a desirable cycling route;
- There is an opportunity to reduce speed limit to 30 km/h making a shared street more comfortable;
- The proposed design should consider connections to the Saskatchewan Polytechnic campus and the existing facilities on 33rd Street West and to downtown; and
- There are opportunities to improve facilities for children walking and biking to schools along the corridor.

Based on the feedback received during the first phase of public engagement, project team members input, and the technical analysis, the 31st Street West corridor is recommended to be designated as the cycling corridor because it is already an existing designated bicycle route, provides important connections to Saskatchewan Polytechnic, and is already relatively comfortable due to low traffic volumes and speeds. Site-specific safety improvements along the 29th Street West corridor are also recommended.

4.0 RECOMMENDED DESIGN

The recommended design for the 31st Street West corridor consists of a neighbourhood bikeway for the majority of the corridor, along with a multi-use pathway connection through Pierre Radisson Park. The recommended design also includes improvements at key intersections along 29th Street West.

Key features of the design are summarized below for each segment. Detailed conceptual plans are provided in **Appendix D**.

4.1 31ST STREET WEST

The overall concept for this segment consists of a neighbourhood bikeway for the majority of the corridor, along with a multi-use pathway connection through Pierre Radisson Park. Key features include:

- **New all-way stop control, curb extensions, and painted crosswalks** at Avenue W North to improve intersection safety and connect to a proposed multi-use pathway to the Circle Drive underpass, as shown in **Figure 24;**
- **New curb extensions and traffic circles** are proposed at Avenue U North and Avenue R North to slow down motor vehicle traffic and improve safety for people walking and biking, as shown in **Figure 25;**
- **New curb extensions** are proposed at Avenue T North to slow down motor vehicle traffic and improve safety for people walking and biking, as shown in **Figure 26;**
- **New pedestrian and cyclist activated signals** at Avenue P North and Avenue H North to improve intersection safety.
- **New all-way stop, curb extensions, painted crosswalk, and multi-use pathway** to improve connection through Pierre Radisson Park, as shown in **Figure 27;**
- **Changing north-south traffic from yield to stop control** at several locations to improve safety;
- **New bike route signage** to direct cyclists around Ashworth Holmes Park due to vegetation constraints, utilities, and existing lighting poles that limit the width of the pathway through the park;
- **A new cyclist signal activation of the traffic signal** at Idylwyld Drive to improve intersection safety and connectivity for people biking, as shown in **Figure 28;**
- **Bicycle route signage and pavement markings** to improve cyclist visibility;
- **New sidewalks** are proposed at several locations along the corridor, pending further feasibility review; and
- **Parking is maintained on both sides of the street** for the entire corridor.

Figure 24 Avenue W Intersection

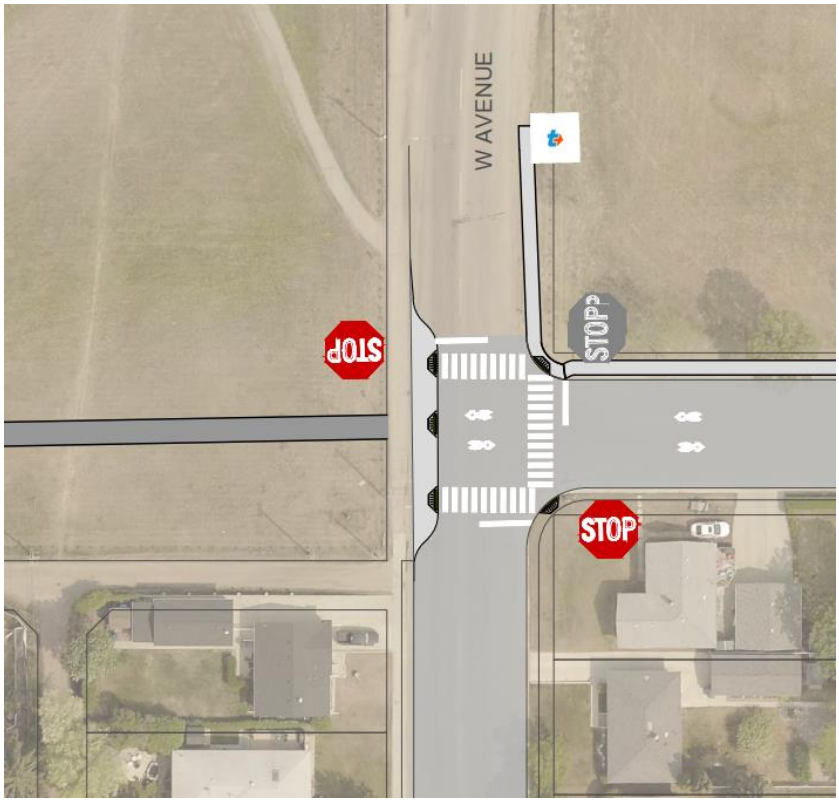


Figure 25 Traffic Circle and Curb Extension Example

Figure 26 Curb Extension Example

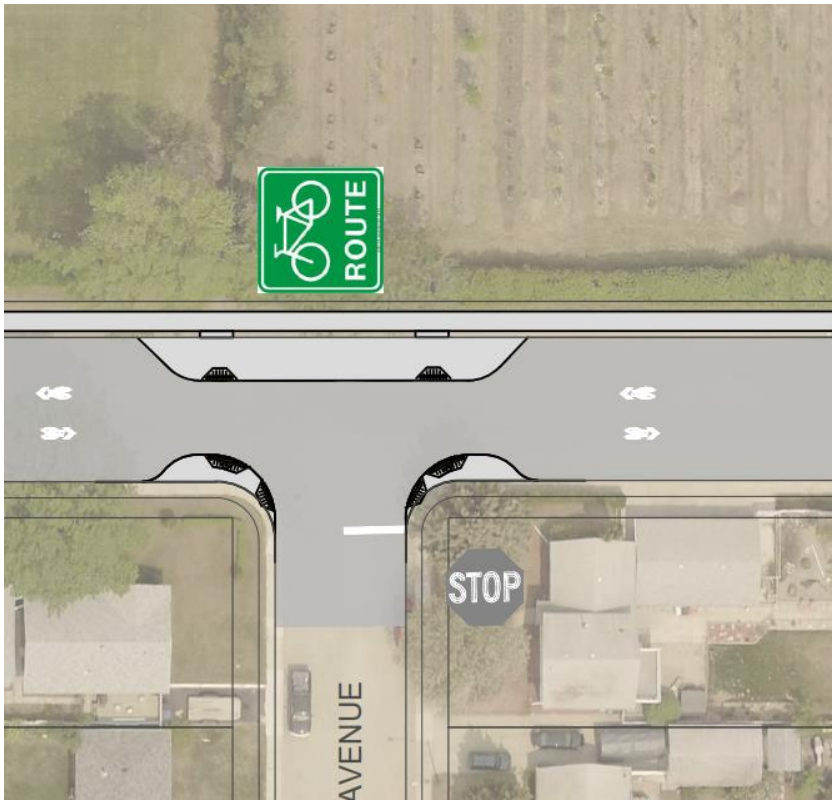


Figure 27 Multi-Use Pathway Transition Through Pierre Radisson Park

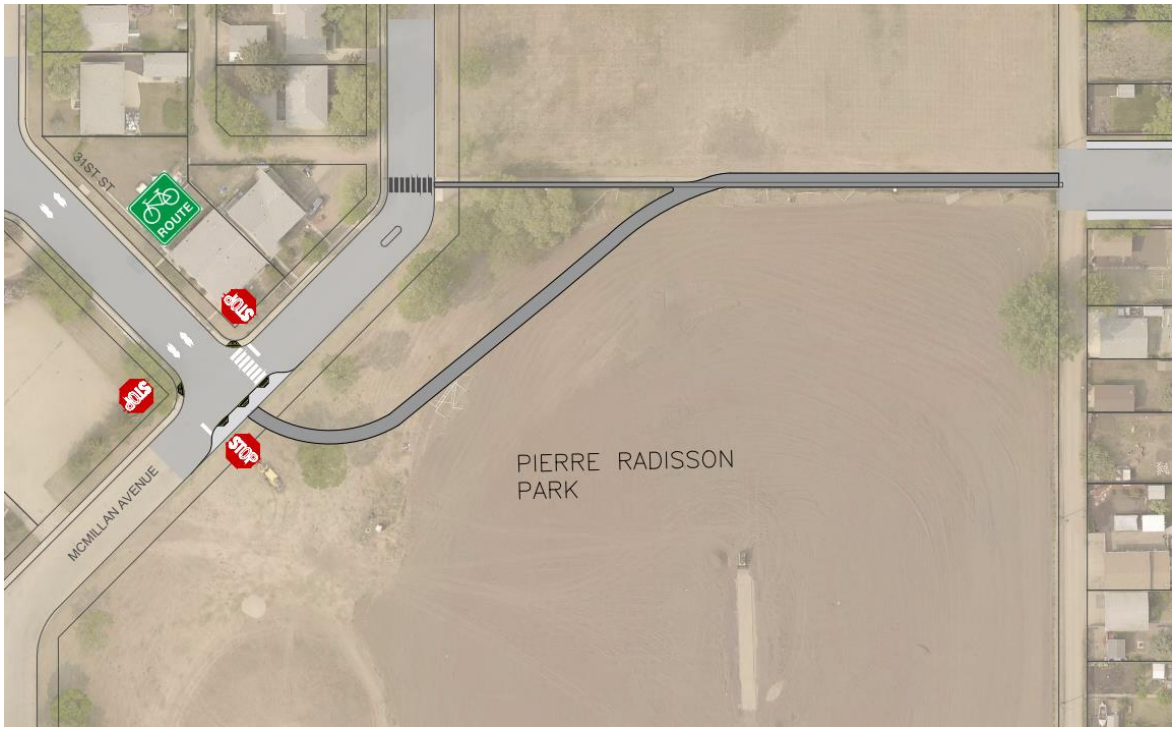
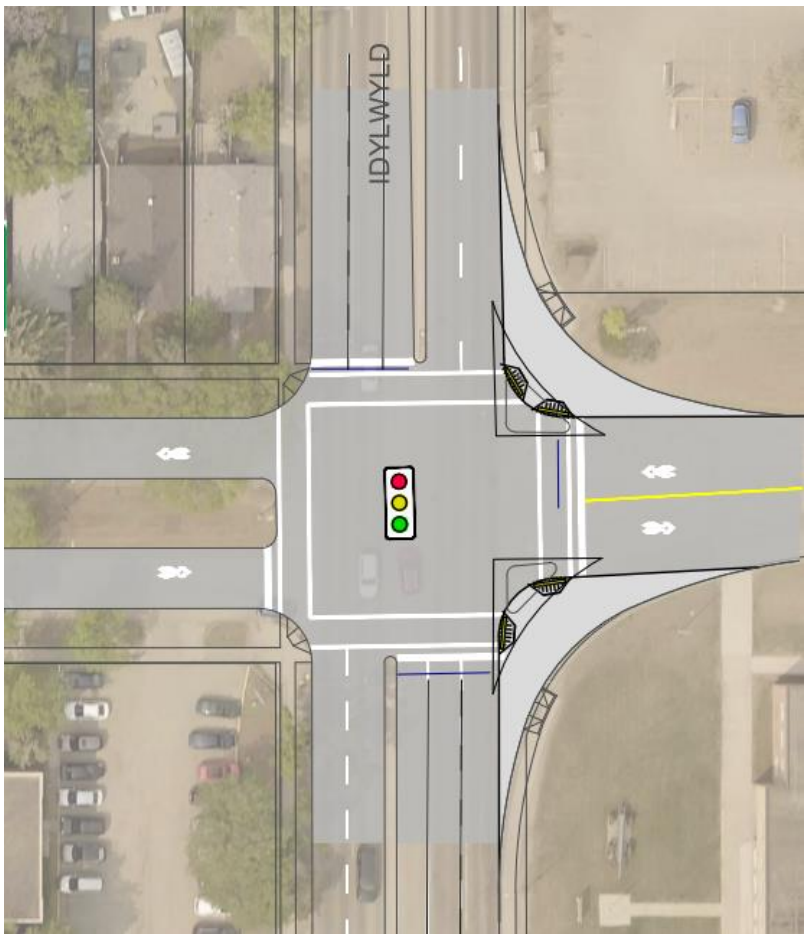


Figure 28 Idylwyld Drive Intersection



4.2 29TH STREET WEST

In addition to the corridor improvements along 31st Street West, the recommended concept also includes intersection safety improvements at Avenue W North, Avenue P North, and Avenue H North to improve intersection safety, as shown in **Figure 29**, **Figure 30**, and **Figure 31**, respectively.

Figure 29 Avenue W North Intersection

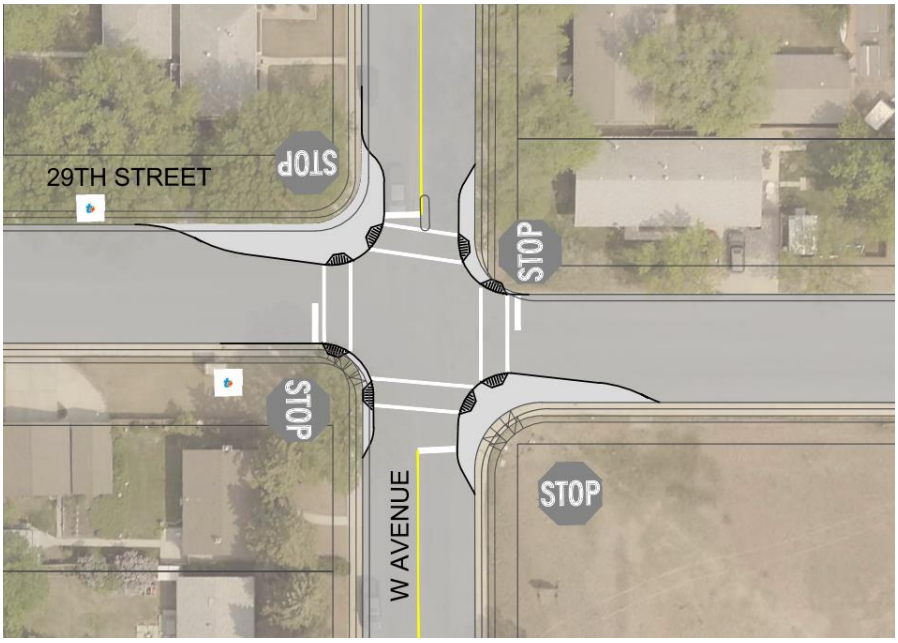


Figure 30 Avenue P North Intersection

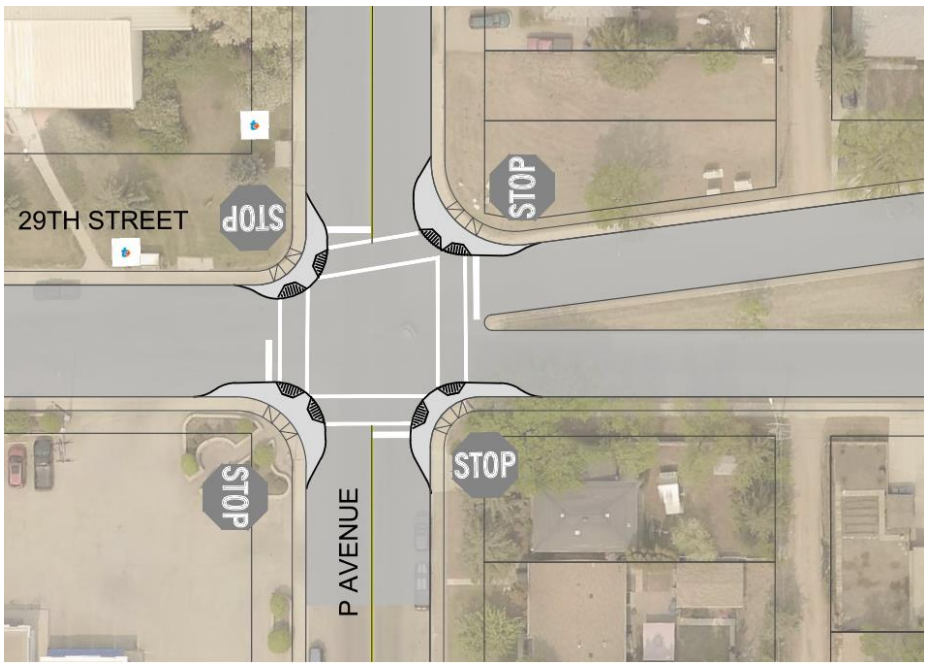
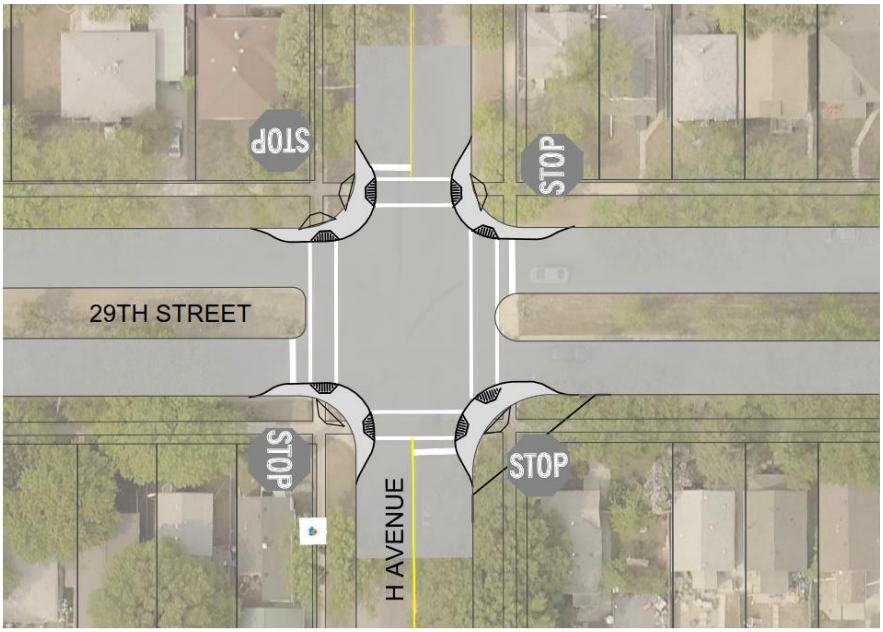


Figure 31 Avenue H North Intersection



4.3 COST ESTIMATES

Order-of-magnitude cost estimates were prepared for the proposed cost estimates based on typical unit costs for similar construction in the City of Saskatoon and elsewhere. The cost estimate for this corridor is approximately $3.67 million (including a 30% contingency and 10% for engineering and project management fees). This includes approximately $2.03 million for sidewalk improvements, $261,000 for bikeway improvements such as signage and pavement markings, $422,500 for traffic control devices, $351,000 for traffic calming measures, and $270,000 for other measures, as shown in **Table 16.**

Table 16 Cost Estimates

Item	Unit	Price
Bikeway improvements		$261,625
Sidewalk improvements		$2,031,575
Traffic control devices		$422,500
Traffic calming measures		$351,000
Miscellaneous (Traffic control, drainage, etc)		$270,400
Engineering and project management	10%	$334,000
Total		**$3,674,000**

5.0 PHASE 2 ENGAGEMENT SUMMARY

The second phase of public engagement for the 31st Street West corridor conducted in September, 2020. A range of opportunities was available to provide input during this phase of engagement for all corridors, including a series of three online public meetings, social media, emails, and phone calls. This section summarizes the promotion and advertising that was conducted, the objectives of the engagement, and the engagement opportunities

The second phase of public engagement was promoted and advertised through a range of channels to ensure that interested community members and stakeholders were aware of the engagement opportunities. Promotion and advertising included:

- **Delivering flyers to all residences and businesses** with 150 metres on each side of the study corridors;
- **Sending flyers to key stakeholders** inviting them to submit comments directly to the City, to attend the online meetings, and/or to forward the invitations to other members of their stakeholder group.
- **Community consultants** were contacted and asked to pass information along to the relevant community associations. City councillors were also notified.
- **Placing portable billboards or changeable message boards** along each study corridor to advertise the online meetings; and
- Posting information about the public engagement opportunities on the **City of Saskatoon Engage webpage** and on the **City's social media pages**.

5.1 ENGAGEMENT OBJECTIVES

The purpose of the second phase of engagement was to obtain input on the recommended designs for each corridor. Specific engagement objectives were to:

- Present the neighbourhood bikeway designs;
- Communicate how previous public input informed the designs;
- Collect public feedback on the designs to help prioritize the projects; and
- Summarize public feedback on the designs for the final report to City Council.

5.2 ENGAGEMENT OPPORTUNITIES

The public was invited to attend and provide input at a series of online public meetings held in August and September 2020 using Microsoft Teams Live. Each public meeting was dedicated to a specific corridor:

- August 19, 2020: Dudley Street
- September 9, 2020: 29th Street West and 31st Street West
- September 17, 2020: 14th Street West

An online public meeting has not been held for the 3rd Avenue Corridor. Public engagement for this

corridor will be deferred to future public engagement as part of the Downtown Bicycle Network.

The online public meetings presented an overview of the study process, existing conditions, and the recommended concept for each corridor. Each meeting started with a presentation and provided an opportunity for questions and answers following the presentation. All online public meetings were recorded and were posted to the City of Saskatoon Engage webpage.

In addition to the online public meetings, a video series was made available to provide information in advance of the online public meetings. Videos were prepared to provide a project overview, summarize key features of the designs, and the specific recommendations for each corridor. All videos were posted to the City of Saskatoon Engage webpage.

Participants were invited to share their input by:

- Sharing feedback at www.saskatoon.ca/engage;
- Asking questions during the online public meeting;
- Using social media;
- Completing a feedback form; and/or
- Emailing or phoning the City.

Twenty community members participated in the online public meetings during the second phase of engagement, as shown in Table 17 . The City received 7 emails, 6 phone calls, and 1 survey for the 31st Street corridor.

Table 17. Summary of Engagement Opportunities

Event	Date	Number of people engaged
Dudley Street Online Public Meeting	7-8 PM August 19, 2020	2
29th Street West and 31st Street West Online Public Meeting	7-8 PM September 9, 2020	8
14th Street West Online Public Meeting	7-8 M September 17, 2020	10

5.3 SUMMARY OF PUBLIC INPUT

There were a number of questions at the online public event, including:

- Comments about choosing 31st Street over 29th Street;
- Speeding traffic;
- Lighting through Pierre Radisson Park;
- Why some intersections were recommended to have stop signs instead of traffic signals;
- Concerns about cycling safety with curb extensions; and
- How the corridor will connect with the planned bicycle route on 33rd Street West.

Comments from the emails, phone calls and survey response included:

- Comments that 31st is a more desirable street for cycling due to lower traffic volumes and speeds;
- Comments about high parking demand on side streets;
- Comments about poor lighting at night;
- Comments suggesting roundabouts instead of 4-way stops;
- Concerns that 31st Street had already been selected by the project team as the recommended corridor;
- General comments about not supporting either option.

Based on the feedback received, no further changes have been made to the recommended concept.

6.0 CLOSING AND NEXT STEPS

This report summarizes the existing conditions, opportunities, and challenges for the 31st Street West corridor along with a recommended concept with cost estimates. This report also summarizes the engagement process and results based on two phases of public engagement. The recommended concept in this report is provided in **Appendix D** and will be presented to Council. The City will seek to identify capital funding to advance these projects to detailed design and construction should funding be obtained. The City would like to thank the residents of the City of Saskatoon for participating in this process.

APPENDIX A:
MULTI-MODAL LEVEL OF SERVICE METHODOLOGY

Based on the assessment of each corridor in the previous section, a Multi-Modal Level of Service (MMLOS) was developed for each corridor. This included three separate analyses for each corridor:

- Bicycle Level of Service (**Table A.1**);
- Pedestrian Level of Service (**Table A.2)**; and
- Multi-Modal Intersection Level of Service (**Table A.3).**

For each of these assessments, each segment of each corridor was assigned a score ranging from 0-17 (**Table A.4**).

Table A.1. Bicycle Level of Service Methodology (Corridor)

Indicator	Criteria	Points
Lane Width (Max. value = 3)	Travel lane between 4.0 – 5.5m Travel lane less than 4.0m Travel lane greater than 5.5m	3 2 1
On-Street Parking (Max value = 3)	No Yes	3 0
Conflicts (driveways, laneways, and intersections) (Max. value = 3)	No conflict points 1-2 conflict points / 100m 3-4 conflict points / 100m More than 5 conflict points / 100m	3 2 1 0
Daily Traffic Volumes (Max value = 4)	Less than 1,500 1,500 – 2,000 2,000 – 2,500 2,500 – 3,000 Greater than 3,000	4 3 2 1 0
Heavy Vehicle Percentage (Max value = 2)	0-5% 5-10% ≥10%	2 1 0
Speed Differential (Max. value = 2)	20-30 kph 40-50 kph >50 kph	2 1 0

Table A.2. Pedestrian Level of Service Methodology (Corridor)

Indicator	Criteria	Points
Network Connectivity (Max. value = 4)	Sidewalk on both sides with connections on both ends Sidewalk on both sides with connection on one end Sidewalk only on one side No sidewalk	4 3 2 1
Facility Width (Max. value = 2)	Min. 1.5m wide & barrier free Sidewalk width >1.5 m Non-existent	2 1 0
Conflicts (Max. value = 3)	No conflict points 1-2 conflict points / 100m 3-4 conflict points / 100m More than 5 conflict points / 100m	3 2 1 0
Amenities (Max. value = 2)	Buffer / boulevard more than 1.5 m Buffer / boulevard between less than 1.5m No buffer boulevard	2 1 0
Heavy Vehicle Percentage (Max value = 2)	0-5% 5-10% ≥10%	2 1 0
Daily Traffic Volumes (Max value = 4)	Less than 1,500 1,500 – 2,000 2,000 – 2,500 2,500 – 3,000 Greater than 3,000	4 3 2 1 0

Table A.3. Intersection Level of Service Methodology (Intersection)

Indicator	Criteria	Points
Number of traffic lanes to cross (both directions (Max. value = 4)	2 3 4 5 6	4 3 2 1 0
Traffic Control (Max value = 5)	Traffic Signal 4-Way Stop 2-Way Stop on street perpendicular to crossing Yield on street perpendicular to crossing Crosswalk only No Control	5 4 3 2 1 0
Heavy Vehicle Percentage (Max value = 2)	0-5% 5-10% ≥10%	2 1 0
Motor Vehicle LOS (Max. value = 6)	Local Street (No LOS) LOS = A, B, C LOS = D, LOS = E, F	6 4 2 0

Table A.4. Level of Service Grading

Score	Letter Grade
0 – 2.5	F
2.5 – 5.0	E
5.0 – 7.5	D
7.5 - 10	C
10 – 12.5	B
Above 12.5	A

APPENDIX B: PHASE 1 ENGAGEMENT OPEN HOUSE INPUT

Open house participants were invited to provide input on the current state of the five corridors being considered for the Neighbourhood Bikeways Project. Participants were invited to provide comments on a roll plot outlining the detailed physical characteristics of each corridor, and/or to provide comments on the open house display boards where they were asked 1) what they would like to see stay the same on the corridor, and 2) what they would like to see improved. This section provides a verbatim summary of the comments that were written down for each corridor.

29th Street West or 31st Street West – Circle Drive to Idylwyld Drive North

General Comments

- 29th Street West could be the most dangerous bikeway in Saskatoon (speeders).
- Bi-directional cycle track in the centre boulevard.
- 29th Street West has more than 1500 vehicles/day and getting busier.
- Lots of parking by ballfields on 29th Street West.
- Lots of larger trucks on 31st Street West.
- Summer traffic high at Riversdale Kiwanis Park.

What would you like to see stay the same?

- Bridge pathways need to be separated early in year.
- 29th Street West has always been the corridor used by cyclists.
- Don't take away parking and space for vehicles.
- Keep the trees.
- Maintain centre median.
- Traffic calming on 29th Street West has been successful.
- Maintain parking on 29th Street West.

What would you like to see improved?

- Improve path through Pierre Radisson Park.
- 29th Street West could be the most dangerous bikeway in Saskatoon (speeders).
- Bi-directional cycle track in the centre boulevard.
- How does this connect to downtown?
- What is the connection to the Blairmore bikeway?
- What happens when bikers get to Idylwyld Drive North?
    - Not allowed to bike on sidewalk, but apparent danger on main road.
    - Needs better egress.
- Connection to 31st / 29th Street West and 2nd Avenue North lane?
- Heavy machinery from City lots (31st Street West) and traffic from sports fields (Kiwanis) are potential dangers.
- Support reduced median to install bike lane.

- Do it right! 29th Street West could be fantastic.
- 29th Street West could benefit from traffic calming.
- Like a bike lane on 29th Street West but need to consider parking closer to Idylwyld
- Prefer a bike lane to a boulevard.
- Poor drainage at the tunnels under Circle Drive at 31st and 29th Street West.
- Would prefer to see a shared facility on 29th Street West or 31st Street West rather than a bike lane.
- Fix the sidewalks.
- Improve school safety/crossings.
- Use median space on 29th Street West for cyclists.
- Like to see travel speeds reduced on 29th Street West Street.
- Speeding – support traffic calming.

Advantages of 29th Street West

- Longer, closer to downtown.
- Better connected to downtown.
- More direct (less parks).
- 30 km/hr speed limit!
- Centre median trees "looks nice".
- I prefer 29th Street West route – it is an alternative to 23rd Street West bikeway – may be a little safer route – it is straight through to Idylwyld Drive North– it's a wider street.
- Already has 4 way stops at major intersections.
- 29th Street West better connection to downtown via Avenue E or F.

Advantages of 31st Street West

- 31st Street West connects better to 33rd Street West MUP.
- Everyone would be happier with 31st Street West.
- Don't like idea of going through park.
- 29th Street West is very busy.
- Lines up with Saskatchewan Polytech – destination.
- No busses.
- 31st Street West connects to 33rd Street West behind Polytech.
- 31st Street West is preferred because of lower traffic volumes.
- 31st Street West is a wide corridor.
- Closer to Saskatchewan Polytech.
- 29th Street West from Avenue I North to Idylwyld Drive North too narrow for bike lanes.

APPENDIX C: PHASE 1 ENGAGEMENT SURVEY INPUT

Respondents were asked to provide input on the current state of the five corridors being considered for the Neighbourhood Bikeways Project. In particular, respondents were asked 1) what they would like to see stay the same on the corridor, and 2) what they would like to see improved. Respondents were also asked how often they utilize each corridor: often, sometimes, rarely, or never. For this summary, comments from those respondents who utilize each corridor often or sometimes were grouped together, similarly respondents who utilize each corridor rarely or never were grouped together.

Respondents also had an opportunity to provide general comments about the project. General comments from all respondents are included in this summary.

What would you like to see stay the same?

Sometimes or Often Utilize the Street

- I like 29th Street West better. It runs straight through with 4-way stops at the major intersections. The west end connects to a tunnel under Circle Drive. If that gets closed it has more options than 31st Street West. It's easier to get from 29th Street West to 25th Street West or 23rd Street West to get into downtown.
- Enough spending money on bike lanes.
- Much of 29th Street West has recently been repaved and is an efficient direct route for traffic with no "dog legs." I want that to stay the same. 31st Street West makes a better bike corridor as it's between the major traffic routes of 33rd Street West and 29th Street West and has all the same "back roads" linking it so it's a good collector for bike traffic.
- 29th Street West: I want boulevards to stay the same, parking still accessible to residents. 31st Street West: Signage and painted lines.
- My preference is for 31st Street West to be the bikeway, because I think vehicle traffic can be re-routed to 29th Street West (a busier street), and the 31st Street West bikeway could go right through a couple of parks, which is a really nice route to cycle. I would like those that have residences on 31st Street West to still have vehicle access and parking for their homes.
- Much of 29th Street West is dangerous for cyclists because boulevards force cyclists too close to vehicles. 29th Street West has MUCH more vehicle traffic.
- Few impediments 29th Street West Street.
- 31st Street West is a better connection into Saskatchewan Polytech from the west and to infrastructure on 33rd Street West. Better to avoid the buses on 29th Street West.
- Do not support either option. Taxes keep going up and we can't even get our sidewalks fixed, let alone waste hundreds of thousands of dollars on bike lanes.
- Nothing really. It's a wide street with a lot of space to work with.
- 31st Street West has nice wide open roads for riding my bike. Lots of shade so it's not too hot in the summer. Ashworth Holmes Park is nice to bike through. I don't bike down 29th Street West often due to increased traffic, so I can't say much about that street.
- Leave 29th Street West the same. No bike pathways on 29th Street West. It's tough enough getting to work in the morning in the dark with narrow streets, never mind bikes on 29th Street West. Stick the bikes on 31st Street West or no bikeways at all. That would be best solution. No new bikeways.
- 31st Street West.

- 29th Street West – there's a lot of space and traffic flows nicely.
- 29th Street West is a high traffic street – why don't you direct bike traffic down Avenue E? Less traffic than Idylwyld Drive North and it is wider with not as many people parking on it.
- 31st Street West: that it is a residential street. 29th Street West: I would like to see traffic stay the same or less.

Rarely or Never Utilize the Street

- Single lane vehicle traffic.
- For 29th Street West this is an excellent opportunity for expanding an east west network for active transportation.
- No specific needs.
- 29th Street West - the middle boulevard is nice, but could be utilized if parking was required.
- If possible, having the bikeway go through the park would be preferential for me as a cyclist.

What would you like to see improved?

Sometimes or Often Utilize the Street

- Needs better options at Idylwyld Drive North. It should connect to SIAST behind the hotel. Basically a dead end at Idylwyld Drive North.
- I would like to see 31st Street from Edmonton Ave/W to Idylwyld Drive North become the main bike route. It links more parks and schools and provides a direct link to Saskatchewan Polytech campus.
- I would love to see a marked off / protected bike lane along 31st Street West, going through Pierre Radisson and Ashworth Holmes parks.
- The City should concentrate on turning low traffic streets into cycle routes, either 31st Street West or 30th Street West, whichever is more appropriate. Vehicular traffic should be discouraged (e.g., lower speed limits).
- Cycle lanes indicated on pavement.
- Bike lanes.
- Why not go through Ashworth Holmes park and through Pierre Radisson park to make it connected rather than discontinuous?
- Ticketing bikers that don't obey current rules.
- This would be a good place for a bicycle corridor if it connects to others. Circle Drive and Idylwyld Drive North are not destinations and so not good end points. Maybe connect to Riversdale and downtown via Avenue C North? How should people get north to 33rd Street corridor and on to University and City Park?
- I simply feel there isn't enough room for bike lanes on 29th Street West. Especially the area from Avenue H North to Idylwyld Drive North. If there isn't enough room it becomes a safety issue. I travel that route daily and there is barely enough room now. Unless the medians were either removed or narrowed.

- 31st Street West could benefit from more signage, maybe some paint, to let drivers know to share the road. I have to slow down at each intersection to make sure a car isn't crossing. Crossing Avenue H North is hazardous, some drivers stop when they shouldn't since I have stop sign. Some signage would help there. 29th Street West has increased traffic and lots of parked cars. A designated bike lane would help there, either with paint or barriers. Both 29th Street West and 31st Street West ends abruptly at Idylwyld Drive North, there isn't an easy way to get to the river from there. Also, it would be nice to have a designated way to get to the downtown bike lanes. Currently, I bike through whatever residential street is open to head north/south.
- Leave 29th Street West alone. The City cannot improve it. Unless they pave or patch up all the potholes. Look after automobilists for a change. You already have a bike pathway on 23rd Street West going west. What's wrong with you people? Why do bikes get specialized treatment? I am sick of this present City Council changing things that do not need change. Leave things alone is my motto!!!!
- Multi-use pathway to connect west neighbourhoods with SIAST and 33rd Street pathway.
- 29th Street West – protected bike lane.
- 29th Street West and 31st Street West from Avenue H North to Idylwyld Drive North both have a high number of people parking on the street due to rentals in the area and Saskatchewan Polytech. I would recommend that you use the Avenue E North as corridor from 29th Street West down to 25th Street West. The block of 31st Street West between Avenue G and Avenue H North, we have on-street garbage and recycling pickup. The same block on the north side is usually parked up at night and sometimes during the day.
- 29th Street West– less truck traffic, especially City of Saskatoon heavy trucks.

Rarely or Never Utilize the Street

- Install a bidirectional separated bikeway along one side of 31st Street West for the entire distance.
- Connect this bikeway to the 33rd Street West bikeway by routing it south of Harry Bailey Aquatic Centre and then east of Saskatchewan Poly campus/west of Robin Hood mill.
- 29th Street West may have the potential for a separated bike lane - and if not, I would recommend 31st Street West. If it's not separated, it's not worth it.
- Protected bike lanes. Safe transition to the ped/bike way on 33rd Street West. and the ped/bikeway under circle drive. What about a north/south connection along Avenue H to get downtown. Tunnel safety/lighting under Circle Drive.
- More lighted on demand pedestrian crosswalks along 29th Street West. I prefer separate bike/pedestrian ways, raised bike paths get taken over by pedestrians.
- 29th Street West: physical separation of bike lane.
- We made some pretty bad choices in the design of the rail crossing and underpass of Circle Drive. Hey, it was the 90's and there was no money! Can we blow that tunnel up and start over with a proper design? Maybe even make it a bridge over with a better connection to a street in Massey.
- 30 km speed limit.
- Connected to other bike routes - if its not connected people can't safely use it.

- Traffic calming .
- Permeable to bike road blockages.
- Addition of protected bike lanes.
- Wider sidewalks.

Hard Copy Survey Responses for 29th / 31st Street West

Which would you prefer the study focus on?

- 29th Street West 3
- 31st Street West 0

What would you like to see stay the same?

No feedback.

What would you like to see improved?

- Connection to the 2nd Avenue North lane, especially for Ploytech students.
- Traffic calming between Avenue P North and Avenue H North.
- Traffic calming; Enhanced signage indicating bike route.

APPENDIX D: RECOMMENDED CONCEPT

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NEIGHBOURHOOD BIKEWAYS
PROJECT
31st STREET WEST

Sheet Number		1 of 21
Project Number	Drawing Number	Revision
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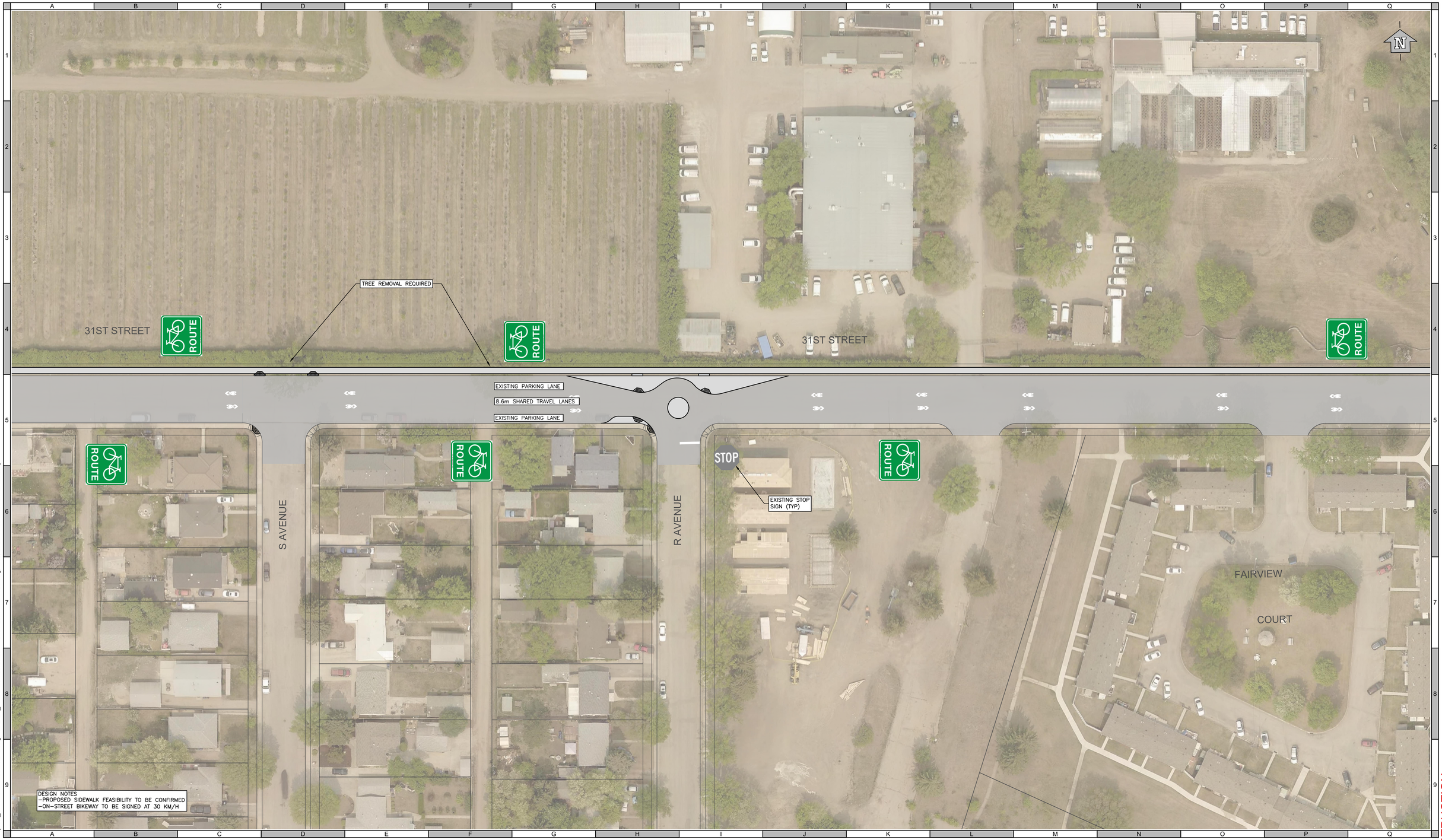

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ST. EDWARD SCHOOL

AVENUE

TIFFIN CRESCENT

31ST ST

TROTTER CRESCENT

MCMILLAN AVENUE

PIERRE RADISSON PARK

EXISTING CROSSWALK (TYP)

EXISTING STOP SIGN (TYP)

EXISTING PARKING LANE

6.0m SHARED TRAVEL LANES

EXISTING PARKING LANE

HALF SIGNAL WITH BICYCLE AND PEDESTRIAN ACTUATION.

PROPOSED STOP SIGN (TYP)

EXISTING MUP WIDENED TO 3.0m

3.0m MUP

CONNECT TO PROPOSED PIERRE RADISSON PARK MASTER PLAN CONCEPT

DESIGN NOTES
–PROPOSED SIDEWALK FEASIBILITY TO BE CONFIRMED
–ON–STREET BIKEWAY TO BE SIGNED AT 30 KM/H

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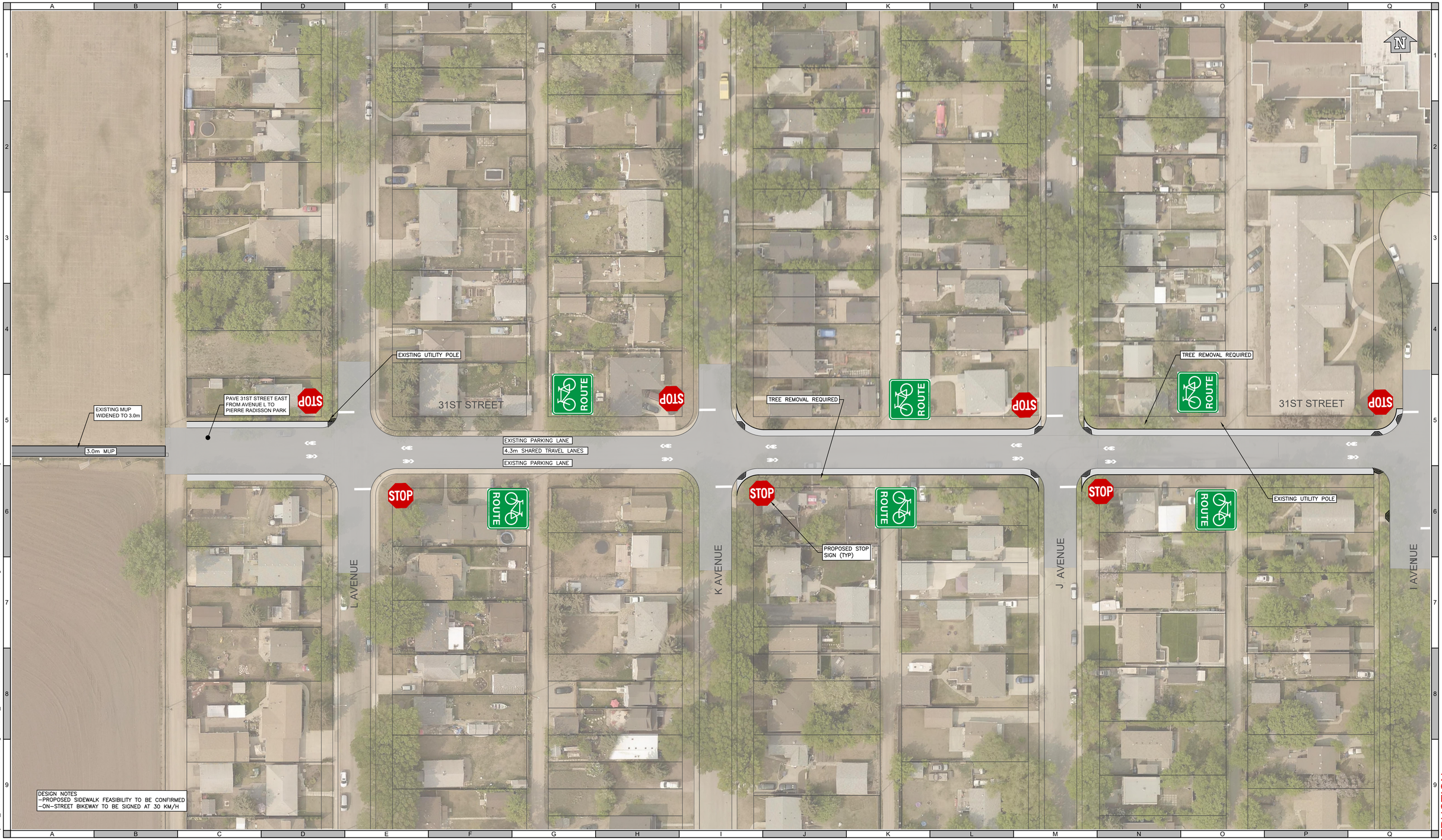

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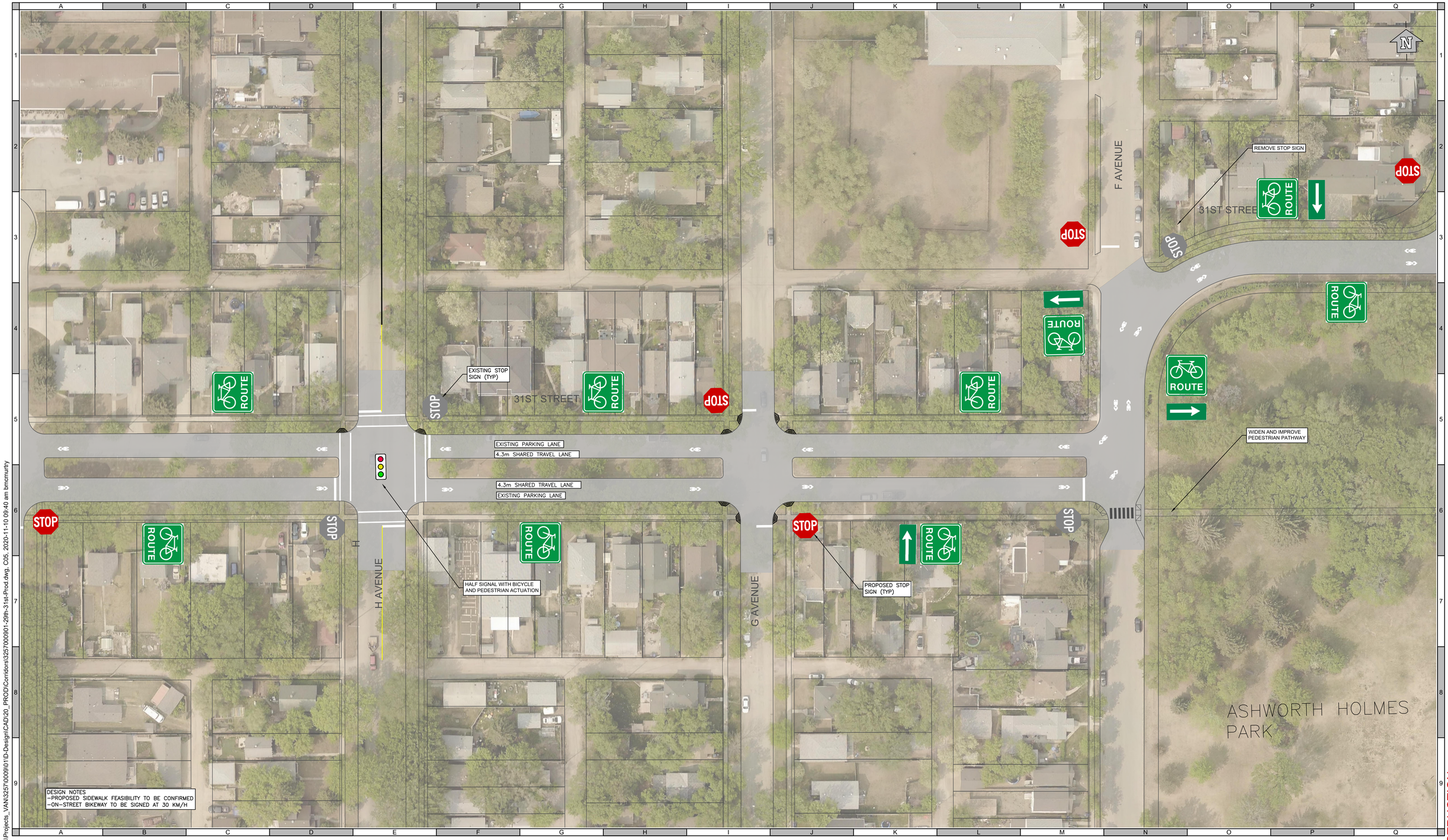

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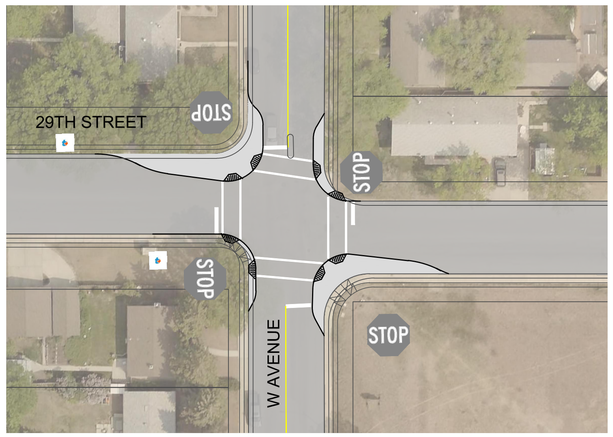

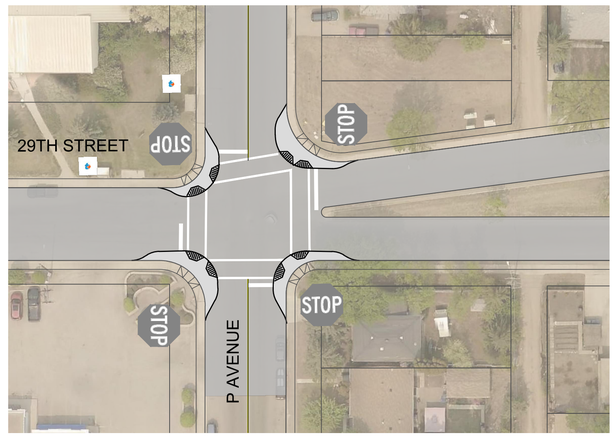

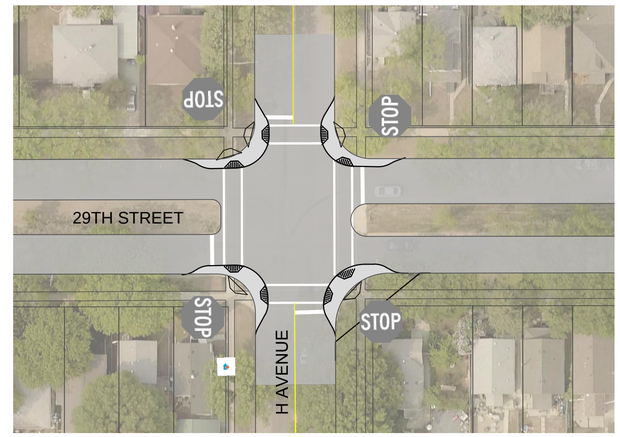

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