



July 2, 2019

Sam van Huizen, C.E.T.
Traffic & Transportation Planner | Strategic Infrastructure
Engineering Department | Development Services Division
City of Brandon
638 Princess Avenue
Brandon MB R7A 0P3

Dear Mr. van Huizen:

RE: Functional Design of the Braecrest Drive Corridor – Final Report

On behalf of our project team, I am pleased to submit the following for the Functional Design of the Braecrest Corridor:

- Four copies of the Final Functional Design Report; and
- Three memory sticks with the complete report in pdf format.

We would like to acknowledge the participation and assistance of the project Steering Committee, including the City of Brandon, Manitoba Infrastructure and Assiniboine Community College, and their respective departments.

We thank you for the opportunity to provide our services on this interesting and challenging project and look forward to working together again in the near future.

Yours very truly,

WSP Canada Group Limited

A handwritten signature in blue ink, reading 'Kerra Mruss', with a horizontal line underneath.

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Manager - Transportation Planning Manitoba
Planning & Advisory

KM/tc
Encl.
WSP ref.: 18M-01581-00

CITY OF BRANDON

FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR FUNCTIONAL DESIGN REPORT

JUNE 2019

CONFIDENTIAL





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CITY OF BRANDON

TYPE OF DOCUMENT (VERSION)
CONFIDENTIAL

PROJECT NO.: 18M-01581-00
DATE: JUNE 2019

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1 INTRODUCTION

1.1 STUDY PURPOSE

Braecrest Drive is an east-west collector roadway that serves the North Hill neighbourhood, which is comprised of a mix of residential, commercial, and recreational uses. Braecrest Drive is within the City of Brandon's (City's) jurisdiction and provides an important connection between 18th Street North and 1st Street North, which are under both Manitoba Infrastructure's (MI's) jurisdiction (north of Braecrest Drive) and the City's jurisdiction (south of Braecrest Drive). 18th Street North and 1st Street North are primary arterials for Brandon, providing local and regional connections.

WSP was retained by the City of Brandon to complete the Functional Design of the Braecrest Drive Corridor. The main objective of this study is to develop a functional design of the Braecrest Drive corridor from 18th Street North (Provincial Trunk Highway (PTH) 10) to 1st Street North (PTH 1A) in the City of Brandon. The study considered:

- Intersection improvements;
- Additional roadway connections;
- Mobility and safety for all users;
- Emergency service operations;
- Transit operations;
- Right-of-way requirements;
- Constructability of all alternatives;
- Serviceability to the variety of land uses;
- Vehicular and multi-modal connectivity; and
- Connections / safe transitions from collectors and arterials.

The study included a background review and analysis of existing and future conditions for the study area, corridor and intersection assessment, development and evaluation of alternatives, and functional design of the preferred alternative. A meaningful public and stakeholder consultation process was completed to aid in the successful completion of the study.

1.2 STUDY AREA

The study area identified for this project is illustrated in **Figure 1.1** and includes:

- Braecrest Drive between 18th Street North (PTH 10) and 1st Street North (PTH 1A);
- 18th Street North from Kirkcaldy Drive to Clare Avenue;
- 1st Street North from Kirkcaldy Drive to Clare Avenue; and
- Various local residential streets off Braecrest Drive.



Figure 1.1: Study Area

2 BACKGROUND INFORMATION

2.1 LAND USE

Land use within the Braecrest Drive study area is largely directed by the Brandon and Area Planning District (BAPD) Development Plan, the North Brandon Gateway Secondary Plan, and the City of Brandon's Zoning By-Law. The BAPD Development Plan and North Brandon Gateway Secondary Plan both influence long-range land-use in the study area, and the Zoning By-Law regulates the use and development of land and buildings in the study area.

Property boundaries potentially impacted by the project have been identified. **Figure 2.1** and **Figure 2.4** both illustrate the parcel boundaries within and surrounding the study area.

2.1.1 BRANDON AND AREA PLANNING DISTRICT DEVELOPMENT PLAN

The BAPD Development Plan identifies land use designations and corresponding objectives and policies for land within the Braecrest Drive study area. Land use designations within the Braecrest Drive study area (**Figure 2.1**) include Commercial, Residential, and Parks and Green Space. There are also land use designations for Institutional, Industrial, Development Reserve, and General Agricultural surrounding the study area.

Within the study area, lands designated as Commercial are generally located along 18th Street North, 1st Street North and scattered along Braecrest Drive between Bison Way and 1st Street North. Commercial land use designation supports large-scale retail and commercial development on major transportation routes (i.e. 18th Street North and 1st Street North) and small-scale retail operations such as convenience stores and specialty stores serving local neighbourhoods. Commercial land uses typically have significant traffic generation.

Residential designated lands are scattered throughout the study area. Larger pockets of residential designated lands are generally located in each quadrant of the study area. Cater Drive, Knowlton Drive, Braecrest Drive, Mockingbird Drive, and Bluebird Street provide access into each residential pocket. The Residential land use designation supports a wide range of residential uses including single-detached, multi-unit, mobile and modular home developments, and supportive housing, as well as allows compatible non-residential uses such as places of worship, home-based businesses, parks, and school sites. Residential land uses typically have moderate to significant traffic generation, depending on the density of the residential land use.

Lands within the study area designated as Park and Green Space are generally located north of Braecrest Drive extending north to Clare Avenue, and south of Braecrest Drive extending to Kirkcaldy Drive and west to 18th Street North. The Parks and Green Space land use designation is intended to develop and maintain a broad array of parks and open space for recreational uses as well as to provide landscaped areas as a buffer between residential land use and other land uses that may be incompatible with residential development. Parks and Green Space land uses typically have low traffic generation.

Adjacent to the study area are lands designated as Institutional, Industrial, Development Reserve, and General Agricultural. Lands designated as Institutional are generally located east of 1st Street North between Lori Road and Veterans Way to support the growth and development of existing and new institutional uses, primarily Assiniboine Community College (ACC). A small pocket of Industrial designated lands is located east of 1st Street North generally between Glen Avenue and Clare Avenue. The Industrial designation provides opportunities for industrial development in locations where land use conflicts are minimized. Lands located east of 1st Street North and west of 18th Street North are designated as Development Reserve. This land use designation helps to protect the lands from fragmentation until the lands are required for urban development. General Agricultural designated lands are located west of 18th Street North, south of Braecrest Drive, and north of Grand Valley Road. Agricultural land use designation supports agricultural activities, land preservation, recreation, and community expansion where development onto agricultural lands is warranted.

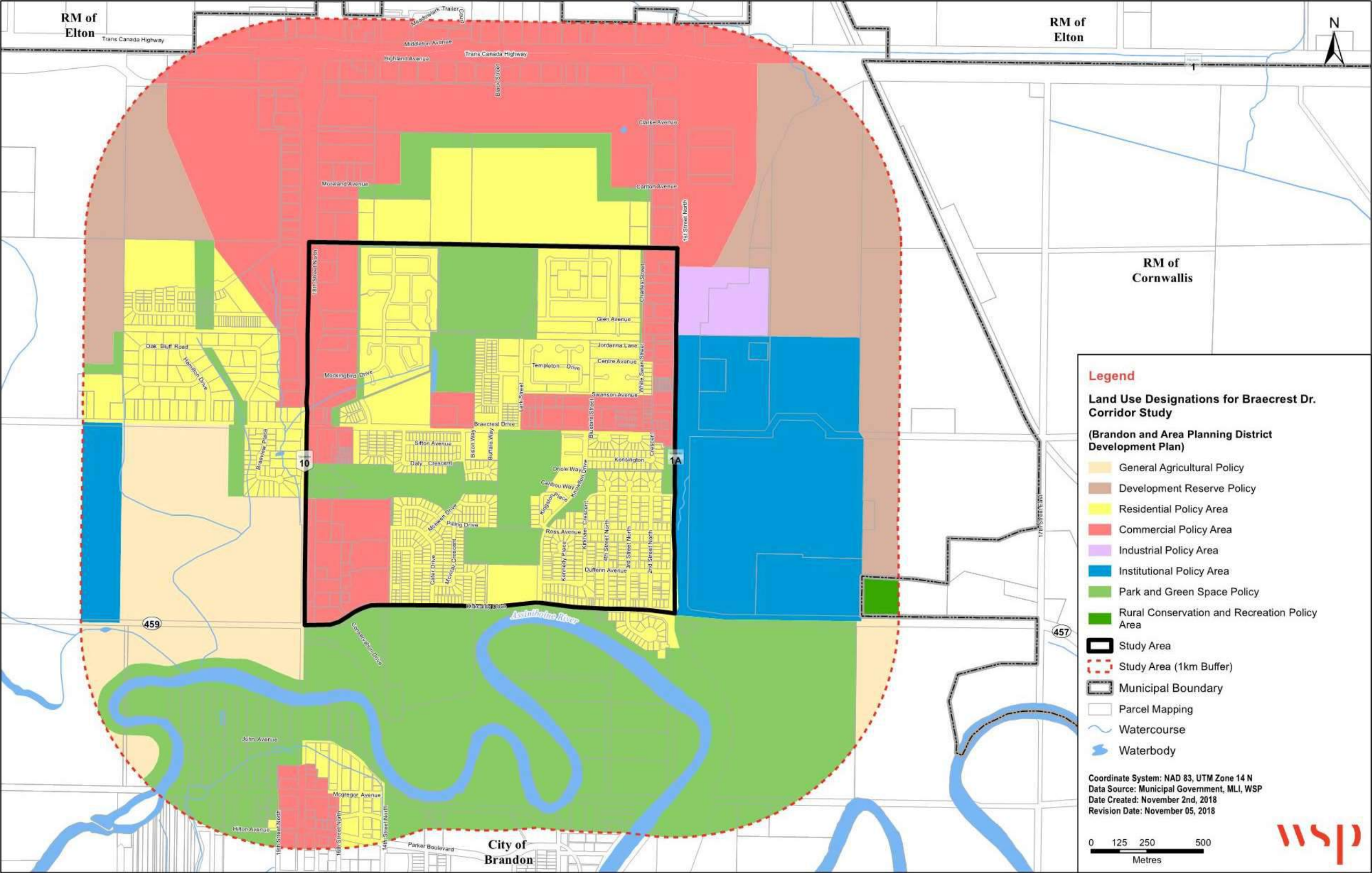


Figure 2.1: Land Use Designations

The BAPD Development Plan also contains objectives and policies that deal directly with transportation. Transportation objectives support an efficient and logical hierarchy of streets throughout the BAPD. 18th Street North is identified as an arterial street with limited access to provide for a high level of safety and efficiency. Under the development plan, development in the vicinity of and along 1st Street North and 18th Street North will be permitted only if the development will not affect future improvements or the safe and efficient operation of the roadway.

The following has been identified as potential land use and development patterns influenced by objectives and policies in the BAPD Development Plan:

- Future residential development can be accommodated within the study area east of Quail Ridge Road and north of Braecrest Drive and north of Clare Avenue between 18th Street North and 1st Street North. Future residential development may include a mix of housing types and tenure and provide various ranges of housing density;
- Future commercial development can be accommodated within the study area on the west and east sides of 18th Street North between the Trans-Canada Highway and Braecrest Drive, on the east side of 18th Street North between Braecrest Drive and Kirkcaldy Drive, and on the west side of 1st Street North between Clare Avenue and Braecrest Drive; and
- Future commercial and retail development on 18th Street North and 1st Street North will have limited direct access onto 18th Street North and 1st Street North. Access may be directed to frontage roads and/or signalized intersections, where available.

2.1.2 THE NORTH BRANDON GATEWAY SECONDARY PLAN

The North Brandon Gateway Secondary Plan provides a framework for the future development of approximately 563 acres of lands generally located in the northern half of the study area, defined as the lands bound by Highland Avenue to the north, the proposed realignment of PTH 1A to the east, the proposed realignment of PTH 10 to the west, and Clare Avenue generally defining the southern boundary with the Northern Pines Golf Course lands extending the development area south to Braecrest Drive (**Figure 2.2**). At full build-out, the new neighbourhood is anticipated to accommodate a population of approximately 7,000 to 12,000 people and be utilized for residential and mixed-use purposes. The secondary plan designates land for commercial, mixed-use, institutional, residential, and parks and open space uses.

The following has been identified as potential land use and development patterns in the study area influenced by the objectives and policies in the North Brandon Gateway Secondary Plan:

- Commercial development is identified adjacent to the Trans-Canada Highway and the future realignment of PTH 10 (18th Street North) and PTH 1A (1st Street North). Commercial policies direct new large format commercial and retail development along major arterials and highways;
- Mixed-use development is identified along 18th Street North, Highland Avenue, and 1st Street North. Mixed-use development can include commercial/retail uses, moderate to high-density residential and mixed-use buildings. Single detached dwellings and mobile/modular homes are not permitted;
- Residential development policies encourage a range of housing type and tenure. Residential Low Density designated areas allow single-family detached homes, street-oriented townhouses, and multiple-family dwellings within a density range of 18 to 40 units per net hectare. Residential Moderate Density designated areas allow multiple-family dwellings within a density range of 41 to 86 units per net hectare;
- Two new east-west collectors will provide connections to 18th Street North and 1st Street North;
- One new north-south collector will intersect with Braecrest Drive at Daly Crescent; and
- Off-street active transportation facilities are proposed for 18th Street North, 1st Street North, and the new north-south local collector.

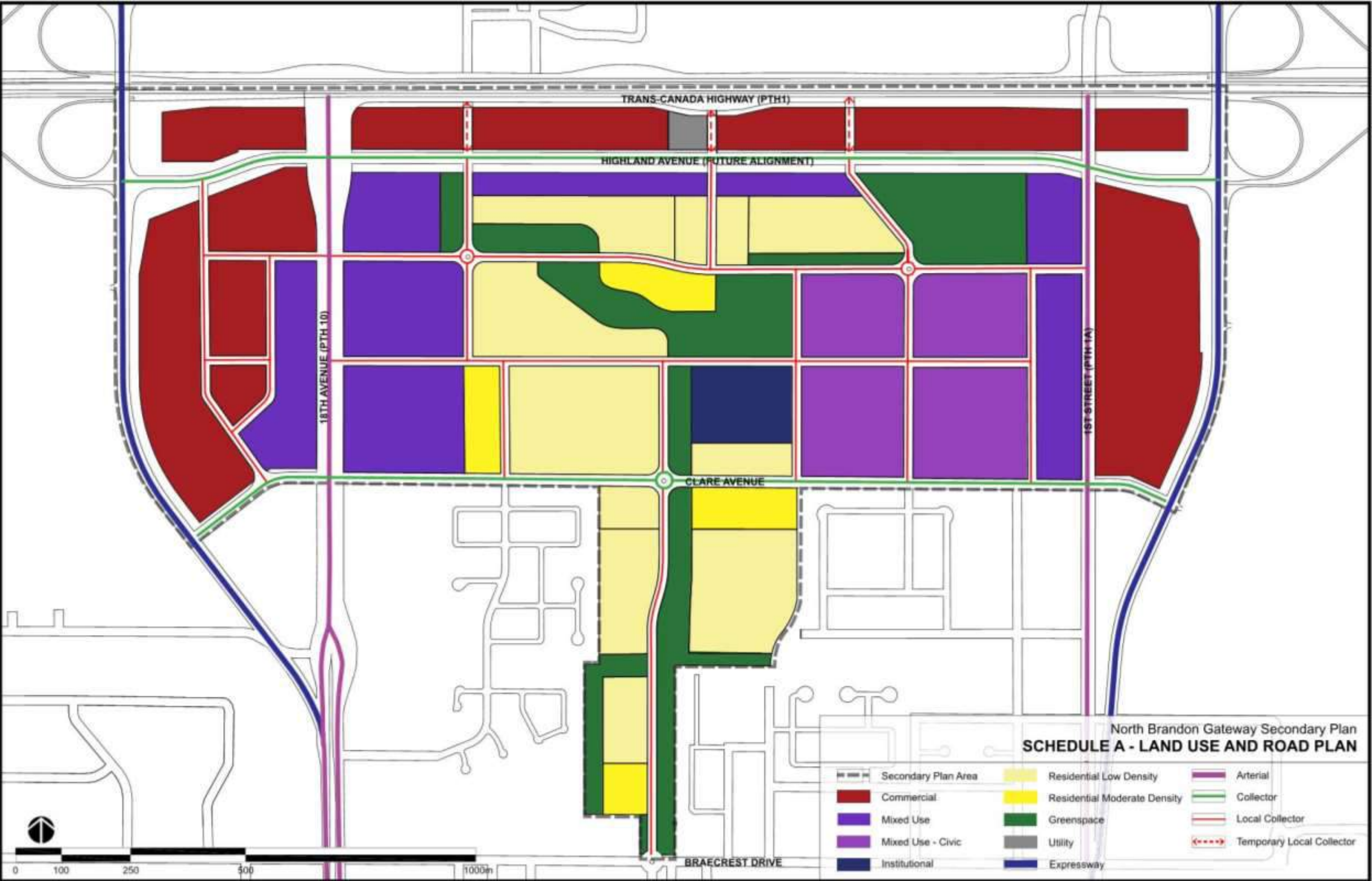


Figure 2.2: North Brandon Gateway Secondary Plan Land Use and Road Plan

2.1.3 CITY OF BRANDON ZONING BY-LAW

The City of Brandon Zoning By-Law and Zoning By-Law Map (**Figure 2.3**) supports the implementation of the BAPD Development Plan and North Brandon Gateway Secondary Plan as it states specific permitted uses and the required standards for each land use designation. The following zones are within and surrounding the study area: Residential Low Density, Residential Moderate Density, Residential High Density, Residential Single Detached, Residential Large Lot, Residential Mobile/Modular Home, Commercial General, Commercial Arterial, Commercial Highway, Industrial Restricted, Educational and Institutional, Development Reserve, Open Space, Parks and Recreation and Agricultural.

The following has been identified as potential land use and development patterns in the study area influenced by the Zoning By-Law:

- A vacant 12-acre parcel zoned Residential High Density (RHD) (**Figure 2.4**) is located east of Quail Ridge Road and north of Braecrest Drive. Permitted residential uses for RHD zoning include detached dwellings, semi-detached dwellings, duplex dwellings, row houses and multiple family dwellings with a maximum density of 148 units per hectare; and
- A vacant 10-acre parcel of land zoned Commercial General (CG) (**Figure 2.5**) is located at 501 Braecrest Drive, northwest of the intersection of Bluebird Street and Braecrest Drive. Permitted commercial uses for CG zoning include arts and cultural centres, assembly places, personal retail services, commercial establishments under 4,645 square metres gross floor area, community resource centres, residential dwellings, eating and drinking establishments, and offices. Development in a CG zone has a permitted maximum height of three storeys. The City of Brandon has recently received a development permit application for this site – additional information is discussed in **Section 2.1.4 Recent and Future Development**.

2.1.4 RECENT AND FUTURE DEVELOPMENT

Recent development in the study area includes two 18-unit life lease buildings and 18 townhouses generally located southeast of 18th Street North and Braecrest Drive. The first 18-unit building and townhouses are currently under construction with the rest of the site anticipated to commence construction in 2019.

Future development in the study area includes a proposed multi-family development at 501 Braecrest Drive. The City of Brandon has received an application for a development permit for three 12-unit buildings and three 24-unit buildings. Each building is proposed to be three storeys. The plan includes 163 on-site parking spots.

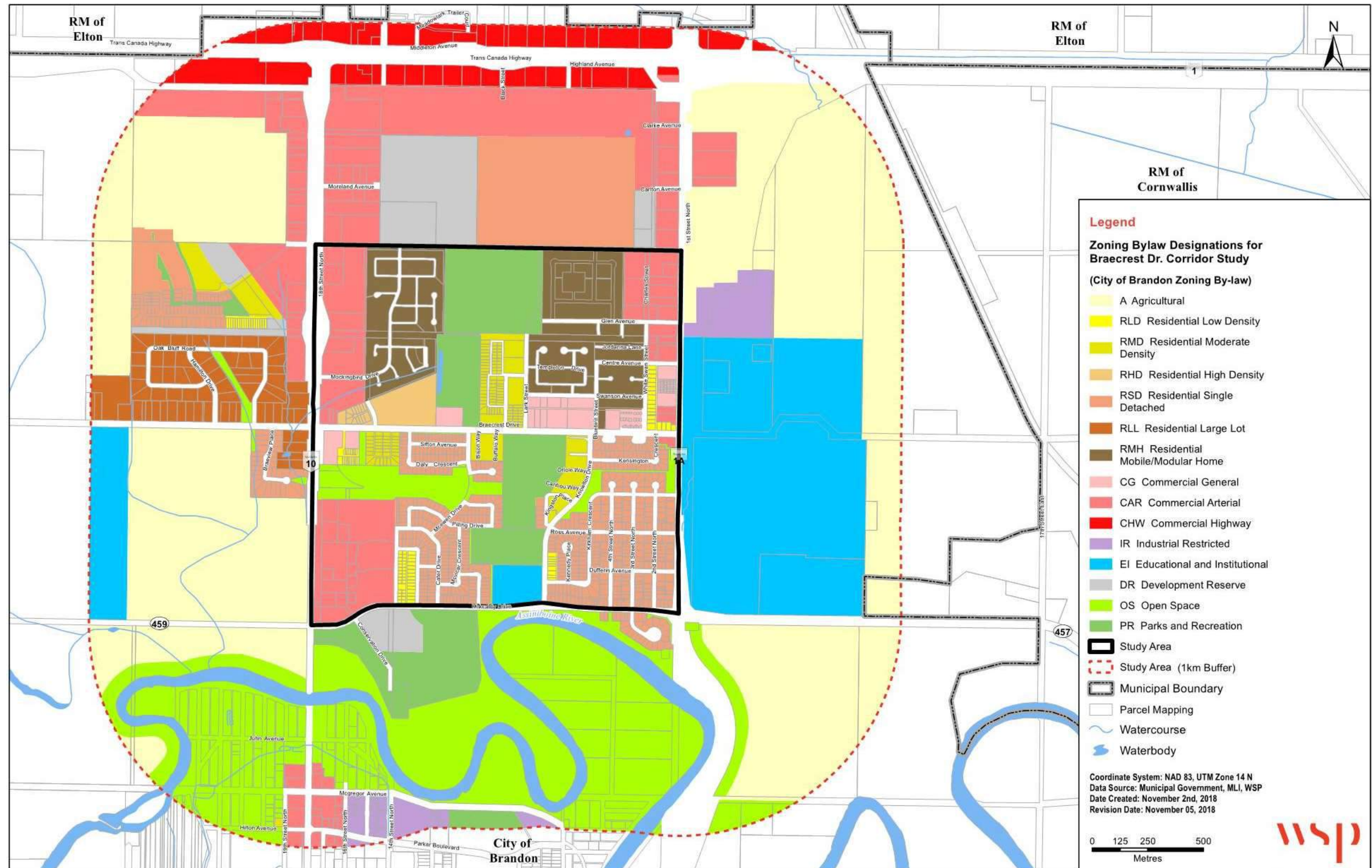


Figure 2.3: Zoning By-Law Designations

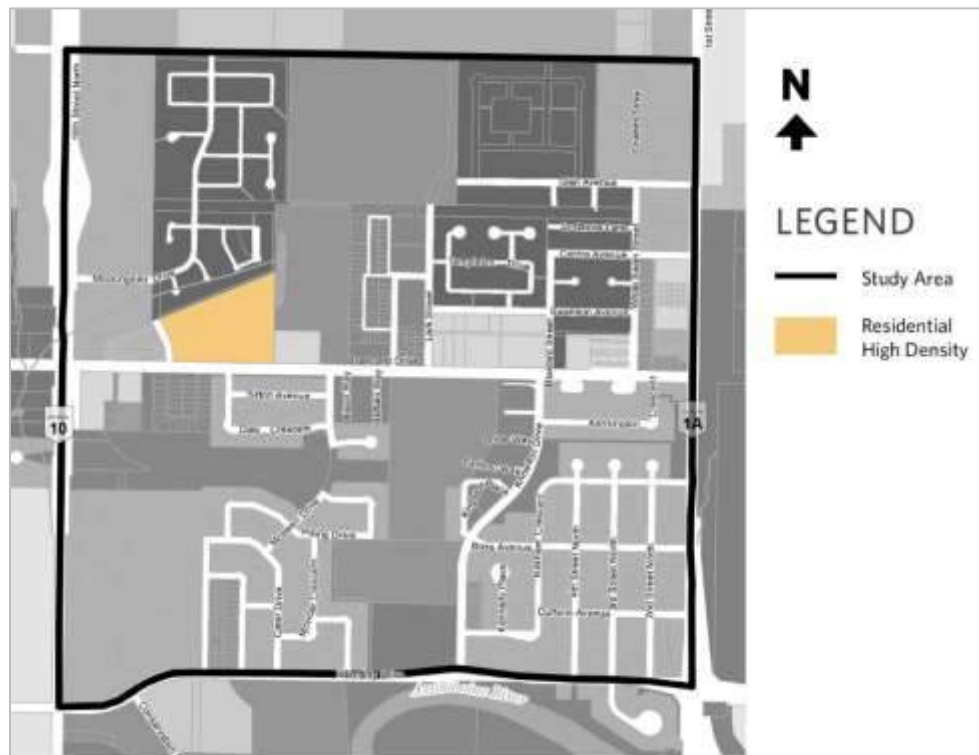


Figure 2.4: Vacant Parcel Zoned Residential High Density

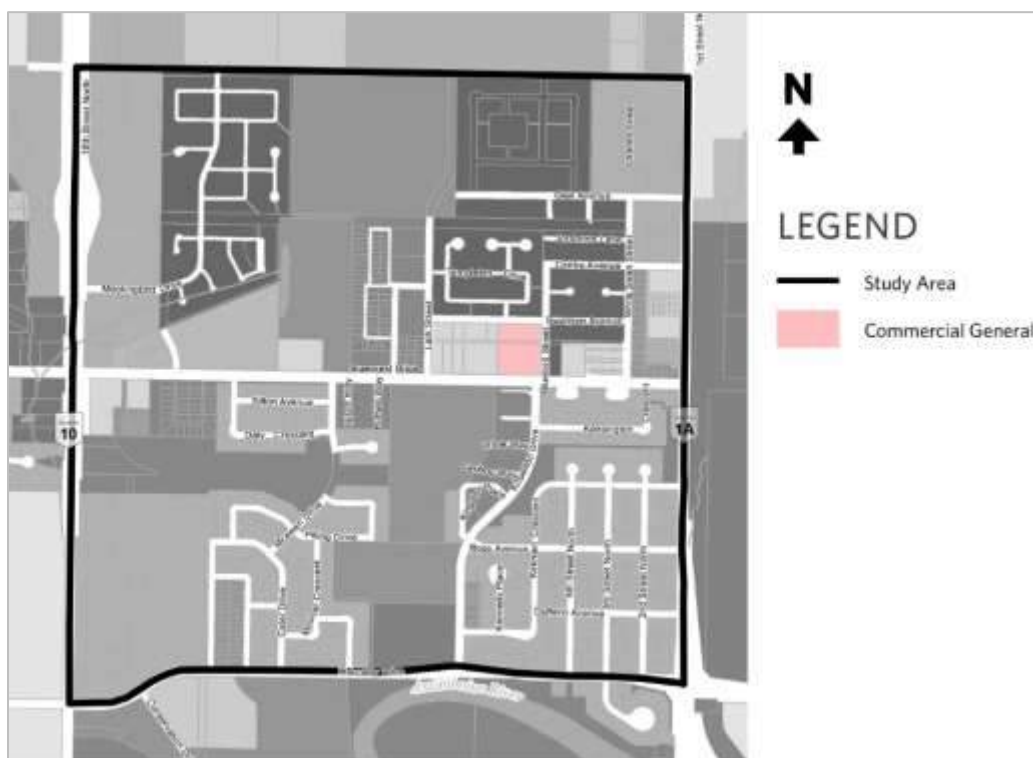


Figure 2.5: Vacant Parcel Zoned Commercial General

2.2 ROAD NETWORK

The study area is served by a road network composed of arterials, collectors, and local roads. The road network serves the needs of both residential access via City of Brandon collector streets and local roads and the needs of cross-city/inter-regional travel via MI arterial roads.

2.2.1 KEY ROADWAYS

The key roadways in the study area include: Braecrest Drive, the primary east-west collector road bisecting the study area; 1st Street North and 18th Street North, MI arterials which bound the study area to the east and west respectively; and Knowlton Drive, a north south collector connecting Braecrest Drive to Kirkcaldy Drive.

- **Braecrest Drive:** Braecrest Drive is a two-lane undivided collector roadway with a speed limit of 50 kilometres per hour and a mix of rural and urban cross-sections. Gravel or paved shoulders exist on the north side of Braecrest Drive from 18th Street North to White Swan Street and on the south side of Braecrest Drive from 18th Street North to Kensington Crescent. East of these limits, the roadway transitions to an urban cross-section with curb and gutter extending to 1st Street North. Braecrest Drive is approximately 1.6 kilometres in length between 18th Street North and 1st Street North, with 16 intersections and 15 private approaches within these limits. Traffic flow on Braecrest Drive is uninterrupted with no required stops between 18th Street North and 1st Street North. All intersecting roadways and access points to Braecrest Drive within the study area are stop-controlled. Braecrest Drive runs on an east-west alignment with no horizontal alignment changes within the study area. The vertical alignment is relatively flat, with the exception of minor down grades at the east and west project limits to meet the intersections with 1st Street North and 18th Street North respectively.
- **18th Street North:** 18th Street North is an arterial roadway under the jurisdiction of MI with a semi-urban cross-section consisting of raised medians and paved shoulders. Within the study area, 18th Street North is approximately 1.7 kilometres in length with four public road connections consisting of a signalized intersection at Kirkcaldy Drive, an unsignalized intersection at Braecrest Drive, a signalized intersection at Cumberland Avenue and an unsignalized intersection at Clare Avenue. In addition, there are two commercial accesses to the Corral Shopping Centre consisting of a signalized southern access and an unsignalized right-in/right-out northern access, and two residential accesses located south of Braecrest Drive. The 18th Street North cross-section varies throughout the study area with a four-lane divided cross-section from Kirkcaldy Drive to the signalized shopping centre entrance, a three-lane divided cross-section (two lanes northbound and one lane southbound) from the signalized shopping centre entrance to Cumberland Avenue, and a two-lane undivided cross-section north of Cumberland Avenue. The 18th Street North speed limit is 60 kilometres per hour from Kirkcaldy Drive to the right-in/right-out shopping centre access and 70 kilometres per hour from the right-in/right-out shopping centre access to the north limit of the study area. 18th Street North runs on a north south alignment with minor horizontal alignment changes to facilitate the changing cross section. The vertical alignment of 18th Street North includes a 5.9 percent grade beginning approximately 600 meters south of Braecrest Drive that transitions to a grade of 1.7 percent north of Braecrest Drive. The Braecrest Drive intersection lies on the vertical curve connecting these two grades.
- **1st Street North:** 1st Street North is an arterial roadway under the jurisdiction of MI with a semi-urban cross-section consisting of raised medians and paved shoulders. Within the study area, 1st Street North is approximately 1.7 kilometres in length with eight public road connections consisting of a signalized intersection at Kirkcaldy Drive, an unsignalized right-in/right-out/left-in intersection at Ross Avenue, an unsignalized right-in/right-out/left-in intersection at Kirkham Crescent, an unsignalized right-in/right-out intersection at Highland Road, an unsignalized intersection at Braecrest Drive, a signalized intersection at Centre Avenue / Lori Road, an unsignalized right-in/right-out intersection at Glenn Avenue, and an unsignalized intersection at Clare Avenue. In addition, there are numerous private residential and commercial accesses located on the west side of 1st Street North, and a service entrance to ACC on the east side of 1st Street North. The 1st Street North cross-section consists of a four-lane divided roadway from

Kirkcaldy Drive to north of Centre Avenue, and then transitions to a three-lane undivided roadway (two lanes northbound and one lane southbound) north of Centre Street. The 1st Street North speed limit is 70 kilometres per hour throughout the study area. 1st Street North runs on a north-south alignment with minor horizontal alignment changes to facilitate the changing cross section. The vertical alignment of 1st Street North includes a 5.6 percent grade beginning north of Kirkcaldy Drive that transitions to a grade of 1.6 percent north of Braecrest Drive. The Braecrest Drive intersection lies on the vertical curve connecting these two grades.

- **Knowlton Drive:** Knowlton Drive is a two-lane undivided collector roadway with a speed limit of 50 kilometres per hour and an urban cross-section. Knowlton Drive is approximately 800 meters in length between Braecrest Drive and Kirkcaldy Drive and has numerous private approach and public road intersections. Knowlton Drive connects the study area to important amenities including the Brandon Community Sportsplex and Kirkcaldy Heights School. There is a residential school speed zone located adjacent to the school (30 kilometres per hour from 8:00 to 17:00, Monday to Friday, September to June). Traffic flow on Knowlton Drive is uninterrupted with no required stops between Braecrest Drive and Kirkcaldy Drive. All intersecting roadways and access points to Knowlton Drive are stop-controlled. Knowlton Drive runs in a north-south direction, and includes a reverse curve horizontal alignment. The vertical alignment runs on a downgrade as it connects Braecrest Drive to Kirkcaldy Drive.

2.2.2 KEY INTERSECTIONS

There are five key intersections in the study area: (1) 18th Street North and Braecrest Drive; (2) 1st Street North and Braecrest Drive; (3) Braecrest Drive and Knowlton Drive; (4) 1st Street North and Centre Avenue / Lori Road; and (5) 18th Street North and Cumberland Avenue.

- **18th Street North and Braecrest Drive:** 18th Street North / Braecrest Drive is an unsignalized 4-leg intersection between a three-lane divided roadway and a two-lane undivided roadway with stop-control on Braecrest Drive. On the northbound approach, 18th Street North includes a left-turn lane, two through lanes, and a right-turn lane that connects to a right-turn cut-off as it exits to Braecrest Drive eastbound. On the southbound approach, 18th Street North includes a left-turn lane and a combined through/right-turn lane. On the westbound approach, Braecrest Drive includes a combined left-turn/through lane and a right-turn cut-off that connects to an acceleration lane on northbound 18th Street North. On the eastbound approach, Braecrest Drive includes a single approach lane. Private accesses in the southwest quadrant of the intersection are located within the intersection functional area. The intersection is located on a vertical curve that connects a 5.9 percent grade south of the intersection to a 1.7 percent grade north of the intersection.
- **1st Street North and Braecrest Drive:** 1st Street North / Braecrest Drive is an unsignalized T-intersection between a four-lane divided roadway and a two-lane undivided roadway with stop control on Braecrest Drive. On the northbound approach, 1st Street North includes a left-turn lane and two through lanes. On the southbound approach, 1st Street North includes a through lane and a shared through/right-turn lane. On the eastbound approach, Braecrest Drive includes a left-turn lane and a short right-turn lane. Private accesses in the southwest quadrant of the intersection are located within the intersection functional area. The intersection is located on a vertical curve which connects a 5.6 percent grade south of the intersection to a 1.6 percent grade north of the intersection.
- **Braecrest Drive and Knowlton Drive:** Braecrest Drive / Knowlton Drive is an unsignalized T-intersection between two two-lane undivided roadways with stop control on Knowlton Drive. On the westbound approach, Braecrest Drive includes a shared left-turn/through lane and a right-turn lane that commences approximately 20 metres east at Bluebird Street and continues through the Knowlton Drive intersection before terminating approximately 80 metres to the west. This right-turn lane can be used as a by-pass lane when left-turning traffic is present. On the eastbound approach, Braecrest Drive includes a through lane and a right-turn lane. On the northbound approach, Knowlton Drive includes a single approach lane. Private accesses in the southwest quadrant of the intersection and the Bluebird Street intersection to the east are within the intersection functional area.

- **1st Street North and Centre Avenue / Lori Road:** 1st Street North / Centre Avenue / Lori Road is a signalized four-leg intersection between a four-lane divided roadway and a two-lane undivided roadway. On the northbound approach, 1st Street North includes a left-turn lane, two through lanes, and a right-turn lane. On the southbound approach, 1st Street North includes a left-turn lane, a through lane, and a shared through/right-turn lane. On the eastbound approach, Centre Avenue includes a single approach lane. On the westbound approach, Lori Road includes a shared left-turn/through lane and a right-turn lane.
- **18th Street North and Cumberland Avenue:** 18th Street North / Cumberland Avenue is a signalized four-leg intersection between a three-lane divided roadway and a two-lane undivided roadway. On the northbound approach, 18th Street North includes a left-turn lane, a through lane, and a shared through/right-turn lane. On the southbound approach, 18th Street North includes a left-turn lane and a combined through/right-turn lane. On the eastbound approach, Cumberland Avenue includes a single approach lane. On the westbound approach, Cumberland Avenue includes a single approach lane. Parallel service road intersections with Cumberland Avenue are located immediately east and west of this intersection.

2.2.3 TRANSPORTATION PLANS

The *Functional Design Study of PTH 1 West and Connection Highways to Brandon* was completed by Earth Tech (Canada) Inc. for MI in 2002. The study developed a functional plan for the upgrading of PTH 1 West to an expressway classification through the Brandon area. The recommended plan includes the construction of Parclo AB interchanges at the relocated intersections of PTH 1 West with PTH 10 and PTH 1A. The construction of the two interchanges would require the realignment of PTH 10 to the west of its current location beginning north of Braecrest Drive and the realignment of PTH 1A to the east of its current location beginning just south of Braecrest Drive. 18th Street North and 1st Street North would become local roads north of Braecrest Drive and will terminate south of the PTH 1 West service road. Connections to the realigned PTH 10 and PTH 1A are also recommended to be modified as part of the future interchange project; however, the connections to Braecrest Drive are proposed to remain on both PTH 10 and PTH 1A. The recommended plan from the *Functional Design Study of PTH 1 West and Connection Highways to Brandon* is shown in **Figure 2.6**.

2.2.4 NEIGHBOURHOOD CONNECTIONS

The study area for the project includes the neighbourhood bounded by Kirkcaldy Drive, 18th Street North, Clare Avenue and 1st Street North, which is commonly known as the North Hill neighbourhood. Connections into the neighbourhood are primarily off Kirkcaldy Drive at the south and Braecrest Drive in the middle, which are the only two roads that connect 18th Street North to 1st Street North. Both streets are accessed from 18th Street North or 1st Street North. There are also a number of direct connections into the neighbourhood from 18th Street North or 1st Street North; however, these other routes do not connect through the neighbourhood.

2.2.5 ASSINIBOINE COMMUNITY COLLEGE CONNECTIONS

The ACC North Hill Campus is located east of 1st Street North between Veteran's Way and Lori Road. The primarily vehicular access into the North Hill Campus is currently via the signalized intersection of 1st Street North and Lori Road / Centre Avenue at the north end of the site, and there is a secondary access via Lori Road from the east. There is also a restricted right-in/right-out service entrance located on 1st Street North just north of Kirkham Crescent. Pedestrians and cyclists also access the campus at 1st Street North and Braecrest Drive and connect to the internal campus street and pathway system. This location was formerly a vehicular access to the site that is no longer open (**Figure 2.7**).

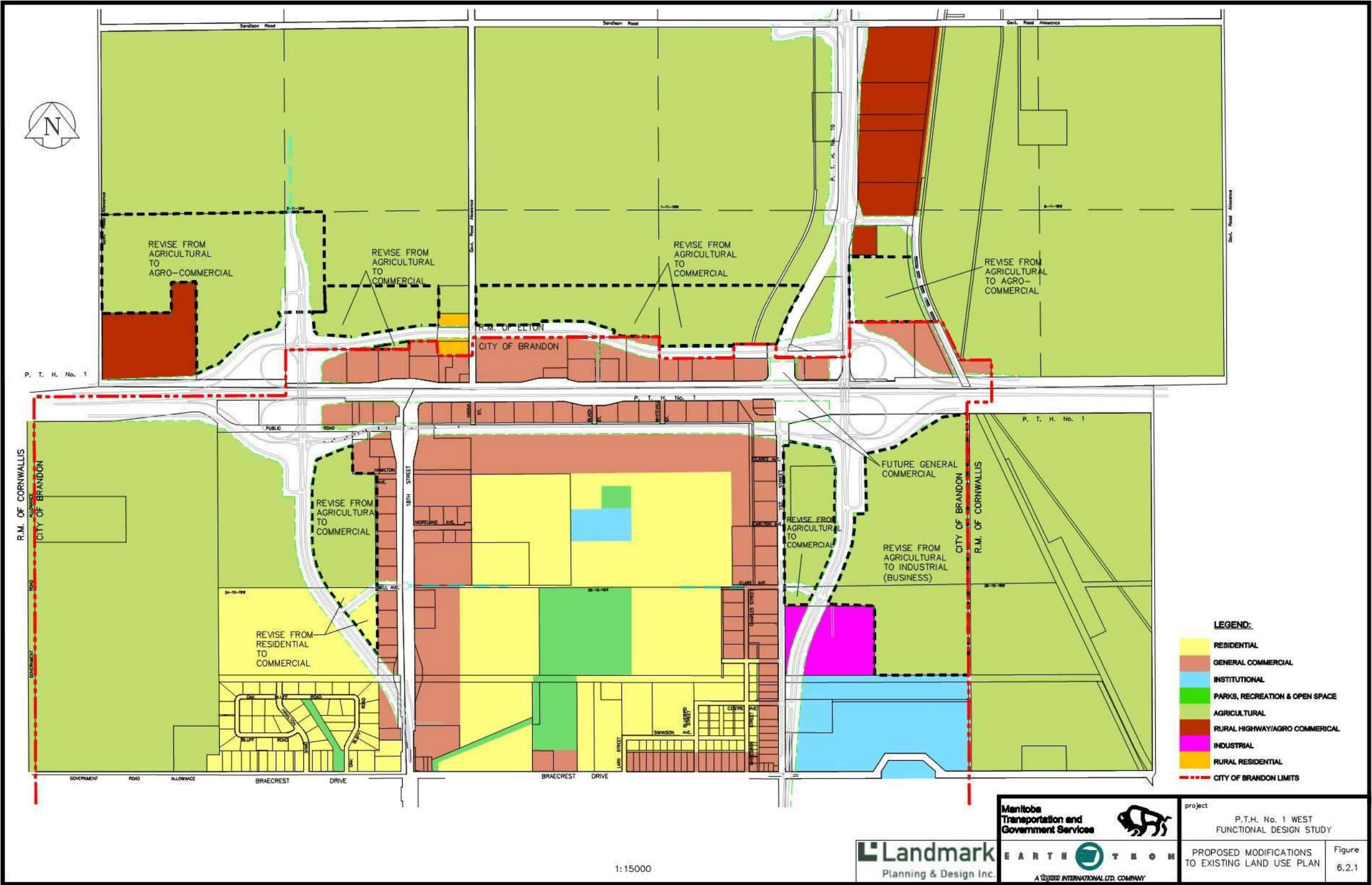


Figure 2.6: Proposed Interchanges at PTH 1 with PTH 10 and PTH 1A



Figure 2.7: 1st Street North at Braecrest Drive

Access from the south off Veteran’s Way is challenging due to the significant change in grade and Lori Road east of the campus is a gravel road. The majority of visitors want to access the campus from 1st Street North; however, there is a large change in elevation on 1st Street North adjacent to the ACC North Hill Campus that begins north of Veteran’s Way / Kirkcaldy Drive and ends near Braecrest Drive that makes access to and from the campus challenging. The grade on the North Hill adjacent to the campus is approximately 5.6 percent.

ACC completed a *North Hill Campus Master Plan (DIALOG + MMM)* in 2014 that provides a framework for the campus in terms of built form, open space and circulation network. A critical component of the study was to look at the way people travel to and from campus. A key theme identified through the study was the need to create a campus that is accessible through all modes of transportation, and creating more entrance points along 1st Street North into the campus was recommended. There is also a desire for Transit service to enter the ACC North Hill Campus. The circulation framework identified in the study is shown in **Figure 2.8**. It should be noted that MI is responsible for PTH 1A (1st Street) adjacent to ACC and was not part of the study.

2.2.6 EMERGENCY SERVICES NEEDS ASSESSMENT

Representatives from the City of Brandon Fire & Emergency Services were part of the internal stakeholder meetings held during Phase One of Public and Stakeholder Engagement for the study. No specific issues related to emergency services needs or design requirements were noted; however, Brandon Fire & Emergency Services will continue to be part of the Study and will participate in future Public and Stakeholder Engagement to ensure there are no issues with any proposed recommendations for the study area.



Figure 2.8: ACC North Hill Campus Circulation Framework

2.3 TRAFFIC VOLUMES

2.3.1 TRAFFIC VOLUMES

Current (2017 and 2018) traffic counts were obtained from the City of Brandon for the study area intersections of:

- 18th Street North (PTH 10) and Braecrest Drive;
- 1st Street North (PTH 1A) and Braecrest Drive; and
- Braecrest Drive and Knowlton Drive.

The weekday a.m. and p.m. peak hours were selected for analysis as these are the most critical times for traffic in the study area. The existing 2018 peak hour traffic volumes are illustrated in **Figure 2.9**. It should be noted that traffic counts at adjacent intersections do not balance exactly as peak hours at adjacent intersections do not always occur at the same time and there may be private approaches located between intersections that are not included in the study network. Traffic volumes were balanced to ensure reasonable traffic volume differences of 10 percent or less between adjacent intersections. A few issues were noted in the 2017 18th Street North and Braecrest Drive count and the 2018 1st Street North and Braecrest Drive count that required estimations of traffic volumes:

- The traffic count at 18th Street North and Braecrest Drive during the weekday p.m. peak hour did not include any northbound right-turn volumes. The 2015 count at that location was used to determine the ratio between the northbound through volume and northbound right-turn volume during the weekday p.m. peak hour, and that ratio was applied to the 2018 northbound through volume to estimate the northbound right-turn volume (227 vehicles per hour [vph]); and
- The traffic count at 1st Street North and Braecrest Drive showed identical or almost identical eastbound left-turn and right-turn volumes in the weekday a.m. peak hour (139 vph for each movement), and again in the weekday p.m. peak hour (93 and 95 vph in the eastbound left- and right-turn directions, respectively). These volumes provide total incoming eastbound volumes that are significantly different from the eastbound outgoing volumes on Braecrest Drive at Knowlton Drive, and the split of left- and right-turning vehicles is significantly different from the split in the 2009 count. It was assumed that the eastbound volumes on Braecrest Drive at PTH 1A (1st Street North) are incorrect in both the weekday a.m. and p.m. peak hour counts. It was assumed that in the weekday a.m. peak hour count, the 139 vph would be reasonable if it was the total entering eastbound volume. The split of eastbound left- to right-turning vehicles was calculated in the 2009 count, and that ratio was determined to be approximately 15 percent turning left and 85 percent turning right. This split was applied to the 139 vehicles to estimate 21 vph turning left and 118 vph turning right during the weekday a.m. peak hour. The weekday p.m. peak hour eastbound volumes don't appear to be correct in any way, so they were disregarded and the outgoing eastbound traffic volume on Braecrest Drive at Knowlton Drive was assumed to be the total incoming eastbound volume at 1st Street North, and was then split using the 15 percent left and 85 percent right discussed above to estimate 36 vph turning left and 201 vph turning right.

Detailed traffic counts are included in **Appendix A**.

Historic traffic volumes were also available from the Manitoba Highway Traffic Information System (MHTIS) for the intersections of:

- PTH 10 (18th Street North) and Braecrest Drive (2006 and 2015);
- PTH 10 (18th Street North) and Corral Centre Access (2006 and 2012);
- PTH 10 (18th Street North) and Cumberland Avenue (2012);
- PTH 10 (18th Street North) and Kirkcaldy Drive (2008 and 2013);
- PTH 1A (1st Street North) and Braecrest Drive (2009);

- PTH 1A (1st Street North) and Center Avenue (2009 and 2012);
- PTH 1A (1st Street North) and Kirkcaldy Drive (2009 and 2013);
- PTH 1A (1st Street North) and Braecrest Drive (2009); and
- PTH 1A (1st Street North) and Braecrest Drive (2009).

Historical traffic data indicates that traffic volumes in the study area should be expected to grow at the following average rates per year in future years during the weekday a.m. and p.m. peak hours:

- 18th Street North (PTH 10): 3.0 percent;
- 1st Street North (PTH 1A): 2.0 percent;
- Braecrest Drive 2: 1.0 percent; and
- Local roads were all assumed to grow at 0.5 percent.

Background traffic volumes are determined by projecting existing traffic volumes to the horizon years. Using the annual growth rates, background traffic volumes for 2023, 2028, and 2038 were calculated and are illustrated in **Figure 2.10**, **Figure 2.11**, and **Figure 2.12** for the weekday a.m. and p.m. peak hours respectively.

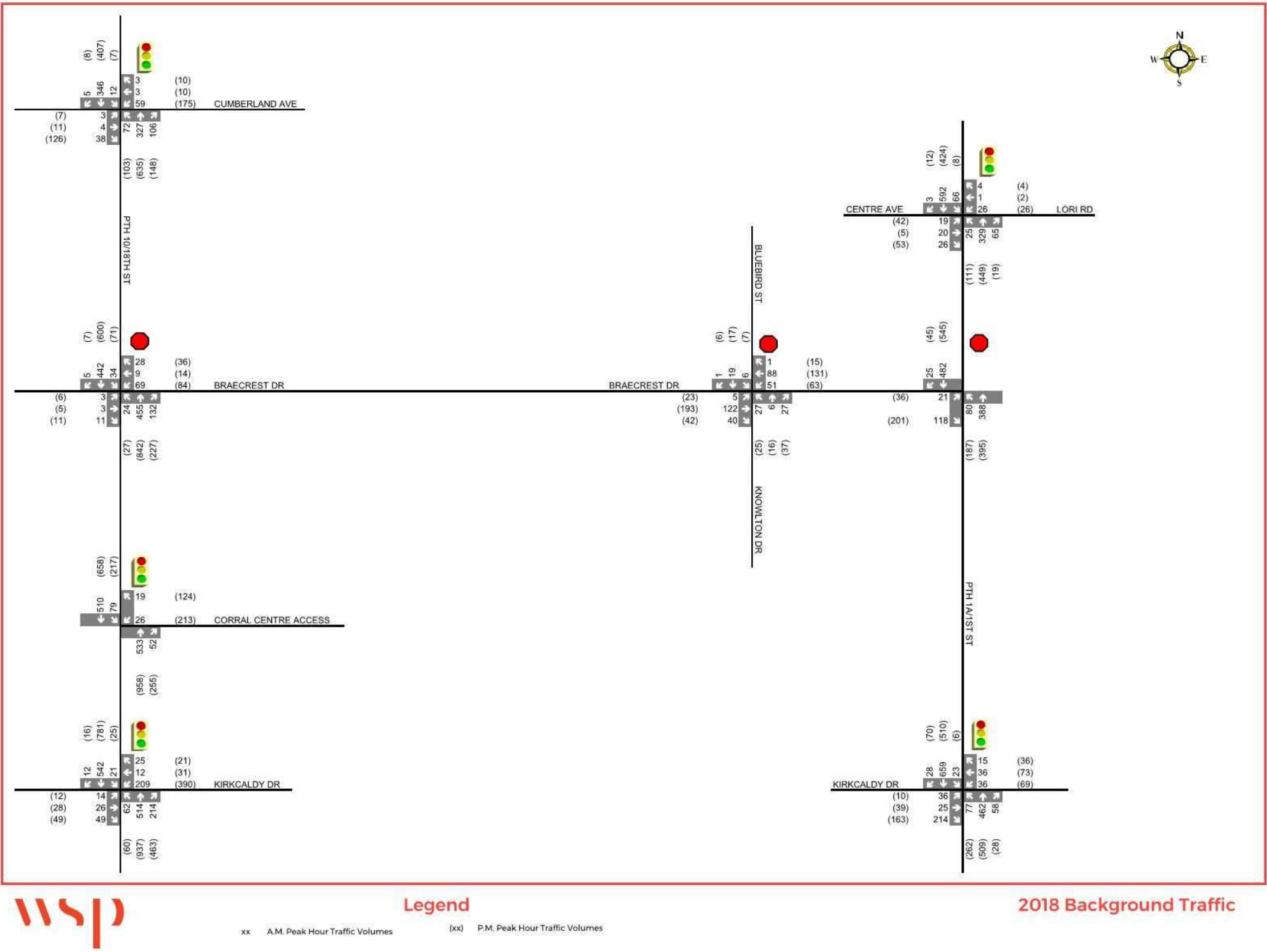
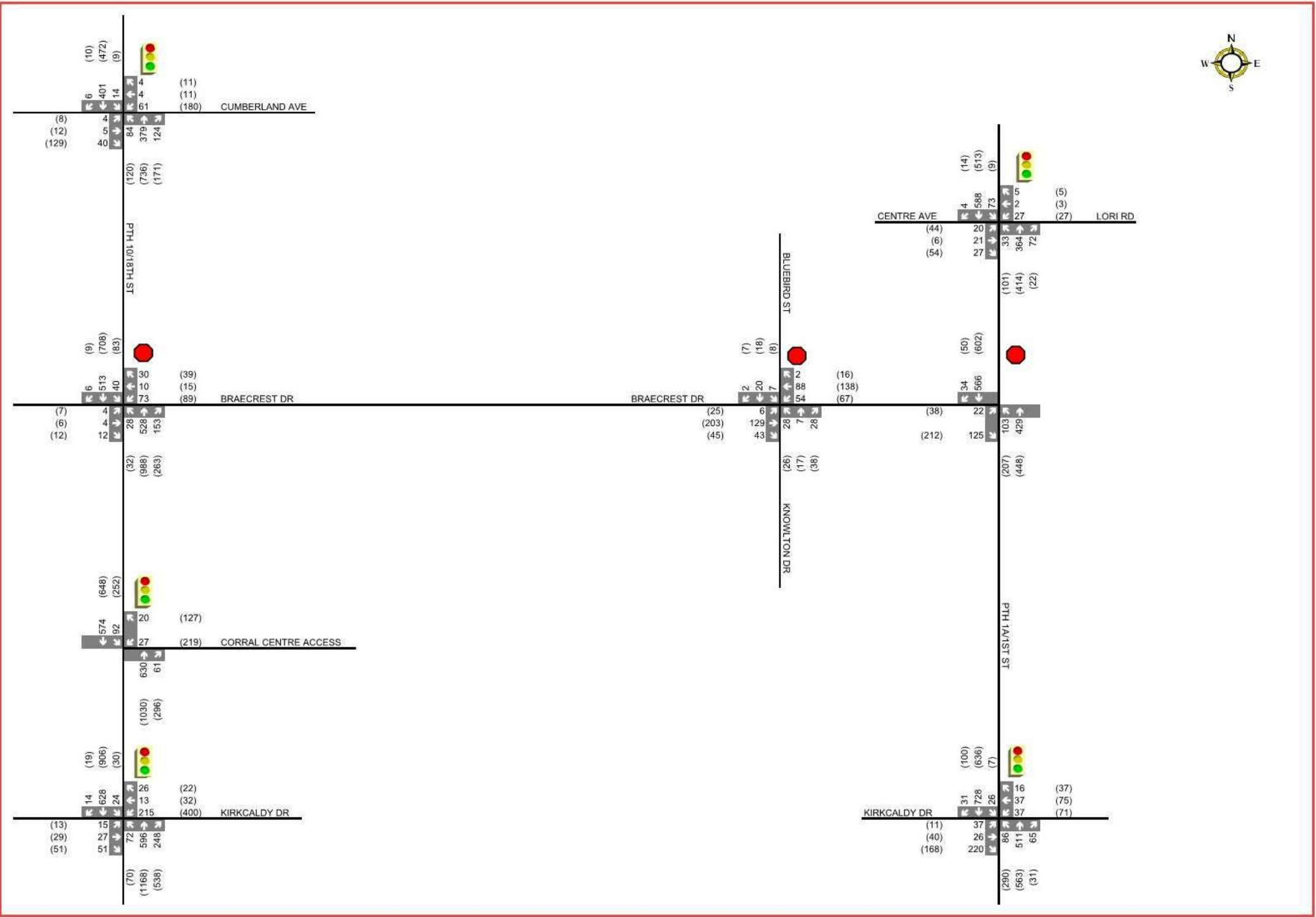


Figure 2.9: Existing Traffic Volumes



Legend

xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes

2023 Background Traffic

Figure 2.10: 2023 Background Traffic Volumes

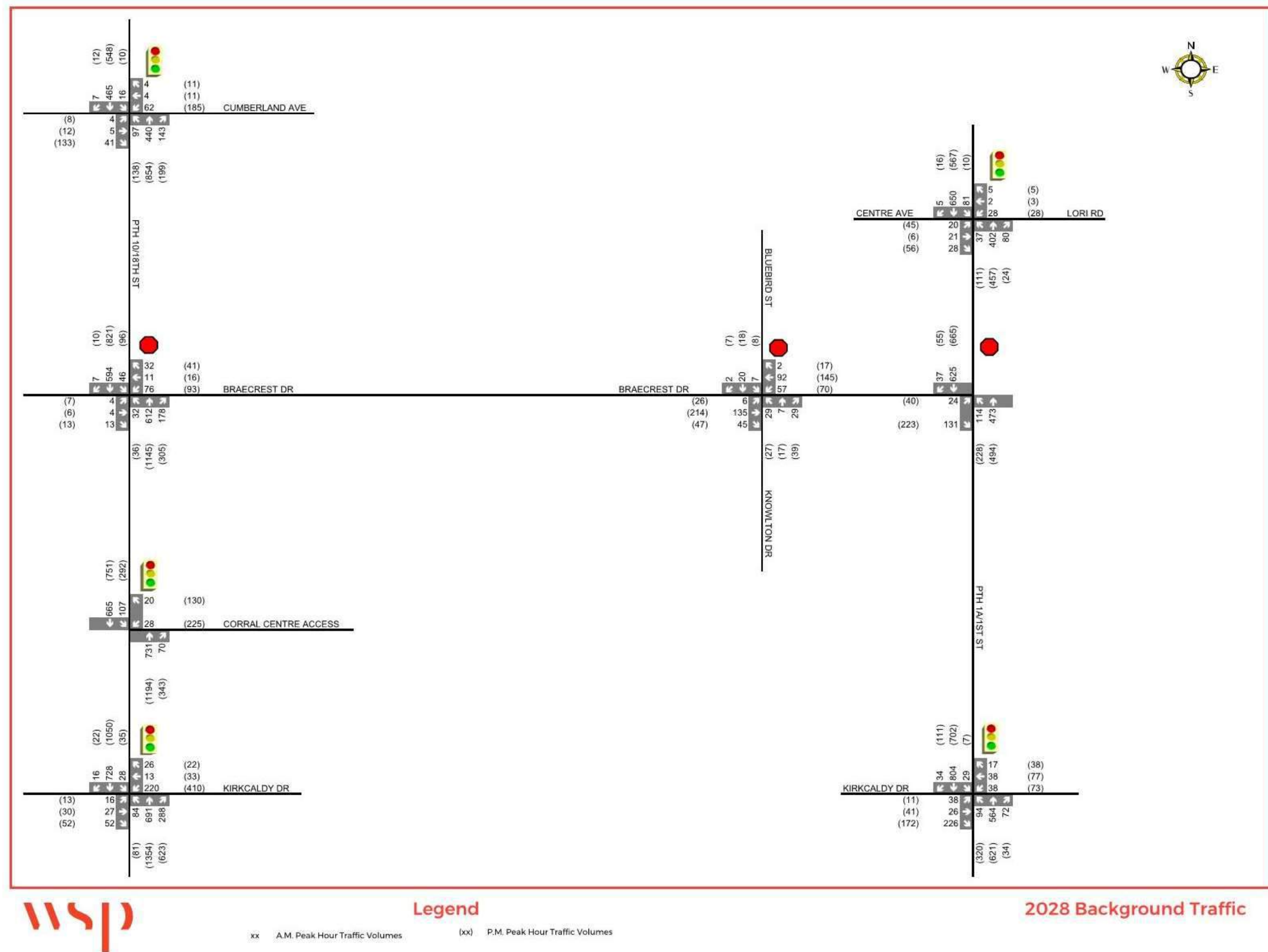
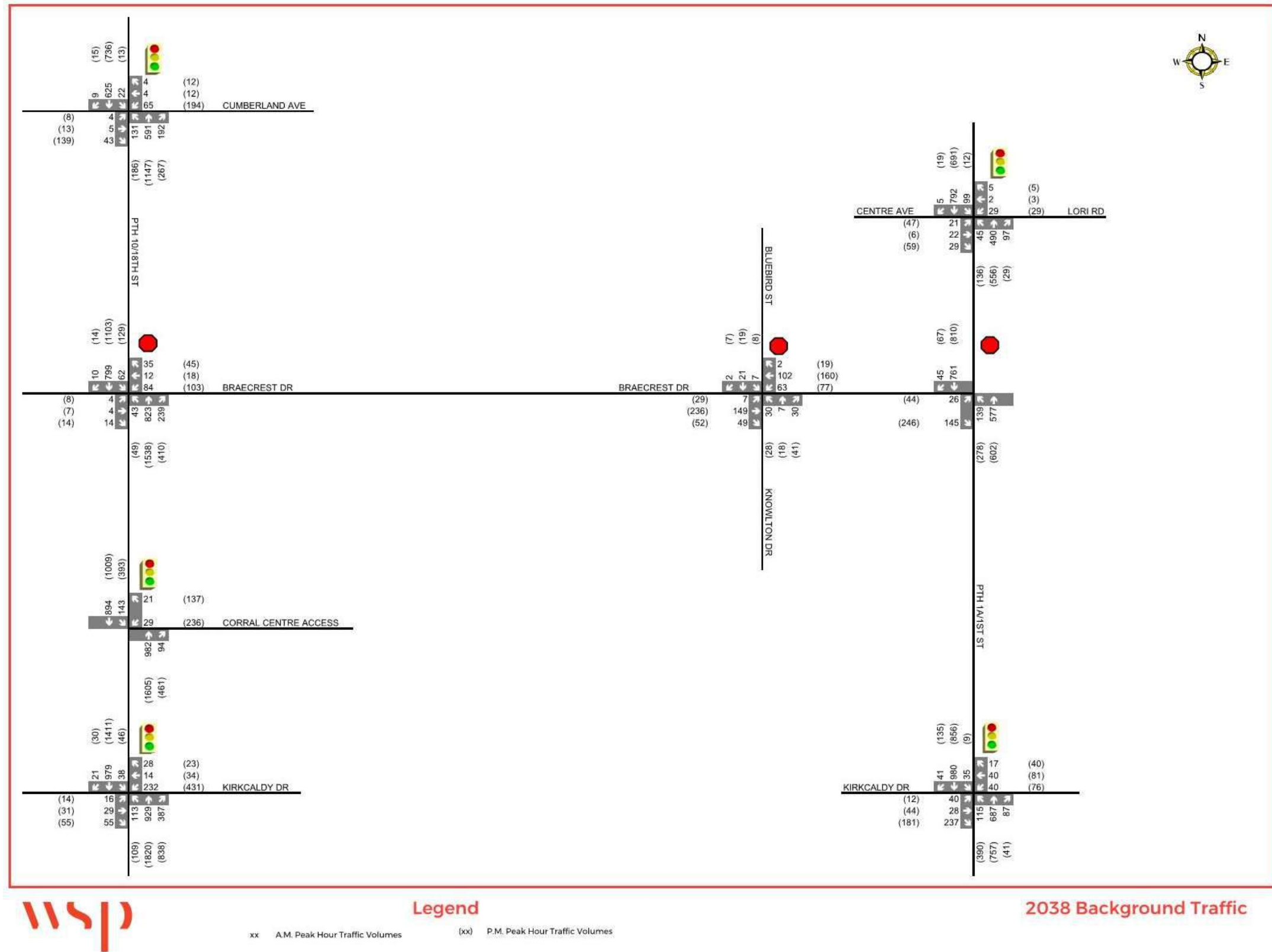


Figure 2.11: 2028 Background Traffic Volumes



2.3.2 TRAFFIC SPEEDS

The Brandon Police Service conducted a speed study in November 2018 to track existing speeds on Braecrest Drive. The speed equipment was placed in the 700 block of Braecrest Drive (near Sir Winston Churchill Park) and the study ran from November 5 through November 14, 2018. The posted speed limit on Braecrest Drive is 50 kilometres per hour.

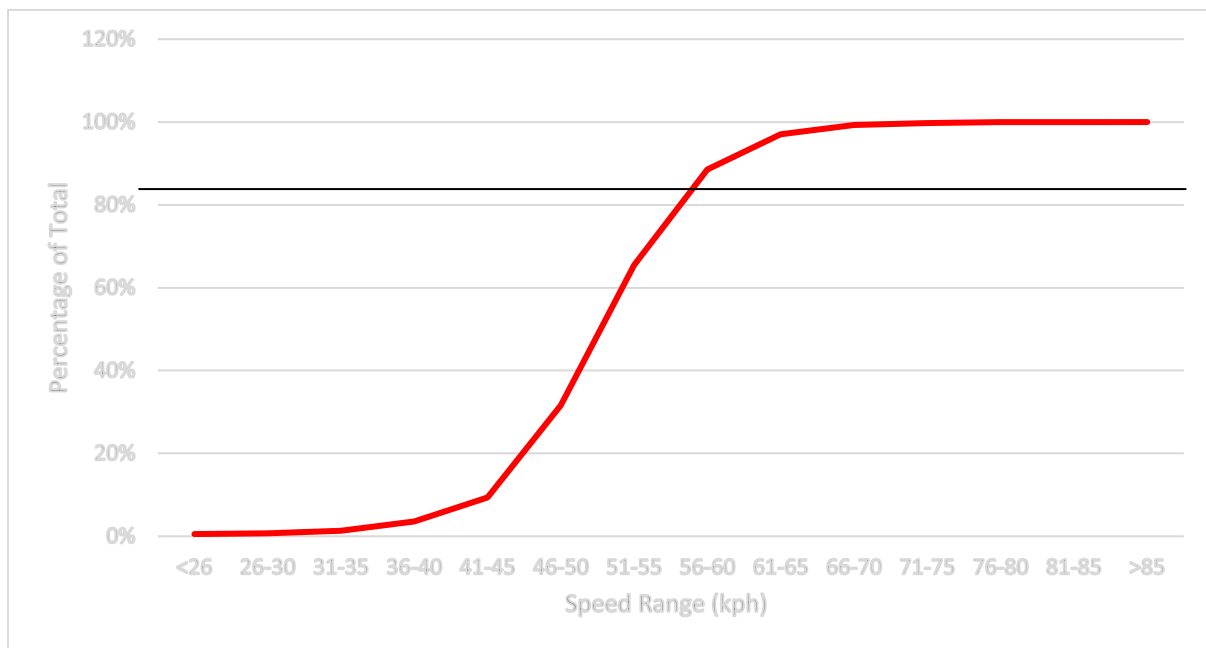
The study tracked speeds in the eastbound and westbound directions on Braecrest Drive. Unfortunately, it appears that some of the speeds were not recorded or lost (there are more than three times the number of eastbound data points than westbound data points); however, the results are still likely representative of the speeds that vehicles are currently travelling on Braecrest Drive. The speed study is summarized in **Table 2.1** and **Figure 2.13**.

The data indicates that the majority of vehicles on Braecrest Drive (57 percent) are travelling between 51 and 60 kilometres per hour. Approximately one third (31.6 percent) of vehicles are travelling at speeds less than 40 kilometres per hour and just over 11 percent of vehicles are travelling at speeds over 60 kilometres per hour. The 85th percentile speed on Braecrest Drive is between 55 and 60 kilometres per hour.

Table 2.1: Speed Study Results on Braecrest Drive

SPEED RECORDED	EB VEHICLES	WB VEHICLES	TOTAL VEHICLES	% OF TOTAL TRAFFIC
≤ 40 kph	356	182	538	3.5 %
41 – 50 kph	3,471	790	4,261	28.1 %
51 – 60 kph	6,614	2,038	8,652	57.0 %
61 – 70 kph	1,115	510	1,625	10.7 %
> 70 kph	78	30	108	0.7 %
TOTAL	11,634	3,550	15,184	100.0 %

Note: Speed study was conducted November 5 to November 14, 2018.



Note: Speed study was conducted November 5 to November 14, 2018.

Figure 2.13: Speed Study Results on Braecrest Drive

2.3.3 COLLISION HISTORY

Manitoba Public Insurance (MPI) provided collision information for intersections within the study area for the ten-year period from 2008 to 2017. The collision data is summarized in **Table 2.2** below. The data include both injury and physical damage claims. It should be noted that the numbers reflect the information as of October 2018, and that claims can be reported up to two years after the incident.

Table 2.2: Collision Claims by Intersection (2008-2017)

LOCATION	TOTAL COLLISIONS	REPORTED PROPERTY DAMAGE	REPORTED FATALITIES	REPORTED INJURIES
18th Street North and Braecrest Drive	60	106	1	18
18th Street North and Cumberland Avenue/Outback Drive	0	0	0	0
1st Street North and Braecrest Drive	13	26	0	5
1st Street North and Centre Avenue	5	9	0	1
Braecrest Drive and Knowlton Drive	6	10	0	1
Braecrest Drive and Daly Crescent	3	5	0	1
Braecrest Drive and Lark Street	3	6	0	2
Braecrest Drive and Village Drive	1	1	0	0
Braecrest Drive and White Swan Street	1	2	0	0
Totals	92	165	1	28

Source: MPI.

The data indicates that a very high percentage of the collisions within the study area occurred at the intersections of 18th Street North and Braecrest Drive (65 percent of all reported collisions) and 1st Street North and Braecrest Drive (14 percent of all reported collisions). Together, these two locations account for 79 percent of the total reported collisions within the study area from 2008 to 2017.

It should be noted that there was an additional collision that resulted in a fatality at the intersection of 18th Street North and Braecrest Drive that is not included in the data due to how the incident was reported. The two-vehicle collision occurred in November 2016 and resulted in several injuries and a fatality.

A collision analysis involves a review of the collision history of a facility through an assessment of multiple years of collision statistics. The purpose of this review is to establish collision rates and to identify possible relationships between the collisions that have occurred and the geometric features and operational conditions of the facility. Collision rate is a measure of the risk faced by the road user and is based on the number of incidents that occurred and the volume of traffic during a specified period. Collision rates at intersections that exceed 1.5 incidents per million entering vehicles (MEV) for an intersection are often considered as warranting further investigation.

Collision rates were calculated for the intersections of Braecrest Drive at 18th Street North, 1st Street North and Knowlton Drive as traffic counts were available for these locations. The average daily number of entering vehicles for the intersections of 18th Street North and Braecrest Drive and 1st Street North and Braecrest Drive were determined using historical intersection traffic counts from 2009 to 2018. The 2018 traffic count was used for Braecrest Drive and Knowlton Drive.

The collision rates by intersection based on the collision data provided are shown in **Table 2.3**. None of the intersections analyzed had a collision rate greater than 1.5 incidents per MEV; however, the intersection of 18th Street North and Braecrest Drive had a significantly higher collision rate than the other two locations.

Table 2.3: Collision Rates by Intersection

LOCATION	TOTAL COLLISIONS (2008-2017)	AVERAGE # COLLISIONS / YEAR	AVERAGE DAILY ENTERING VEHICLES	COLLISION RATE (INCIDENTS PER MEV)
18th Street North and Braecrest Drive	60	6	16,500	1.00
1st Street North and Braecrest Drive	13	1.3	14,000	0.25
Braecrest Drive and Knowlton Drive	6	0.6	5,345	0.31

2.4 TRANSIT AND ACTIVE TRANSPORTATION

2.4.1 TRANSIT SERVICE

Brandon Transit operates two routes within the study area: (1) Route 4 – TransCanada and (2) Route 5 – Assiniboine. Both routes operate seven days per week with the exception of certain statutory holidays. Brandon Transit has indicated that they have no plans to adjust service in the study area in the future.

Route 4 – TransCanada is shown in **Figure 2.14**. The route operates as a loop in the clockwise direction. Buses travel west on Princess Avenue through downtown (with a small loop on 13th Street, Pacific Avenue and 10th Street), north on 18th Street North, east on Middletown Avenue adjacent to the Trans-Canada Highway, and then south on 1st Street North. There are several stops within the study area, including northbound 18th Street North at Kirkcaldy Drive, the Corral Centre, north of Braecrest Drive, Cumberland Avenue, and Clare Avenue, and southbound 1st Street North at Clare Avenue, north of Glen Avenue, Centre Avenue/Lori Road, Braecrest Drive, Kirkham Crescent, and Kirkcaldy Drive.

Buses on Route 4 – TransCanada operate hourly from 6:00 am to 10:00 am, every 30 minutes from 10:00 am to 6:00 pm and hourly from 6:00 pm to midnight Monday to Friday, hourly from 6:00 am to midnight on Saturday, and hourly from 9:00 am to 7:00 pm on Sundays and statutory holidays. Transit ridership by stop was obtained from Brandon Transit for the period from January to September 2018 and is summarized in **Table 2.4**. There were over 63,000 passengers on Route 4 buses during this period. Of the 49,243 passengers with a known boarding/alighting location, over one quarter used stops within the study area.

Route 5 – Assiniboine is shown in **Figure 2.15**. The route operates as a loop in the counter clockwise direction. Buses travel east on Rosser Avenue through the downtown, north on 1st Street North, meander through the north hill neighbourhood via Centre Avenue, White Swan Street, Braecrest Drive, Knowlton Drive and Kirkcaldy Drive, and south on 18th Street North (loop through Parker Boulevard, 8th Street, and Stickney Avenue). There are several stops within the study area, including northbound 1st Street North at Kirkcaldy Drive and ACC North Hill Campus at Kirkham Crescent, on Centre Avenue and White Swan Street, and multiple stops on Knowlton Drive and Kirkcaldy Drive.

Buses on Route 5 – Assiniboine operate hourly from 6:00 am to 10:00 am, every 30 minutes from 10:00 am to 6:00 pm, and hourly from 6:00 pm to midnight Monday to Saturday, and hourly from 9:00 am to 7:00 pm on Sundays and statutory holidays. Transit ridership by stop was obtained from Brandon Transit for the period from January to September 2018 and is summarized in **Table 2.5**. There were over 66,000 passengers on Route 5 buses during this period. Of the approximately 53,000 passengers with a known boarding/alighting location, over 40 percent used stops within the study area.

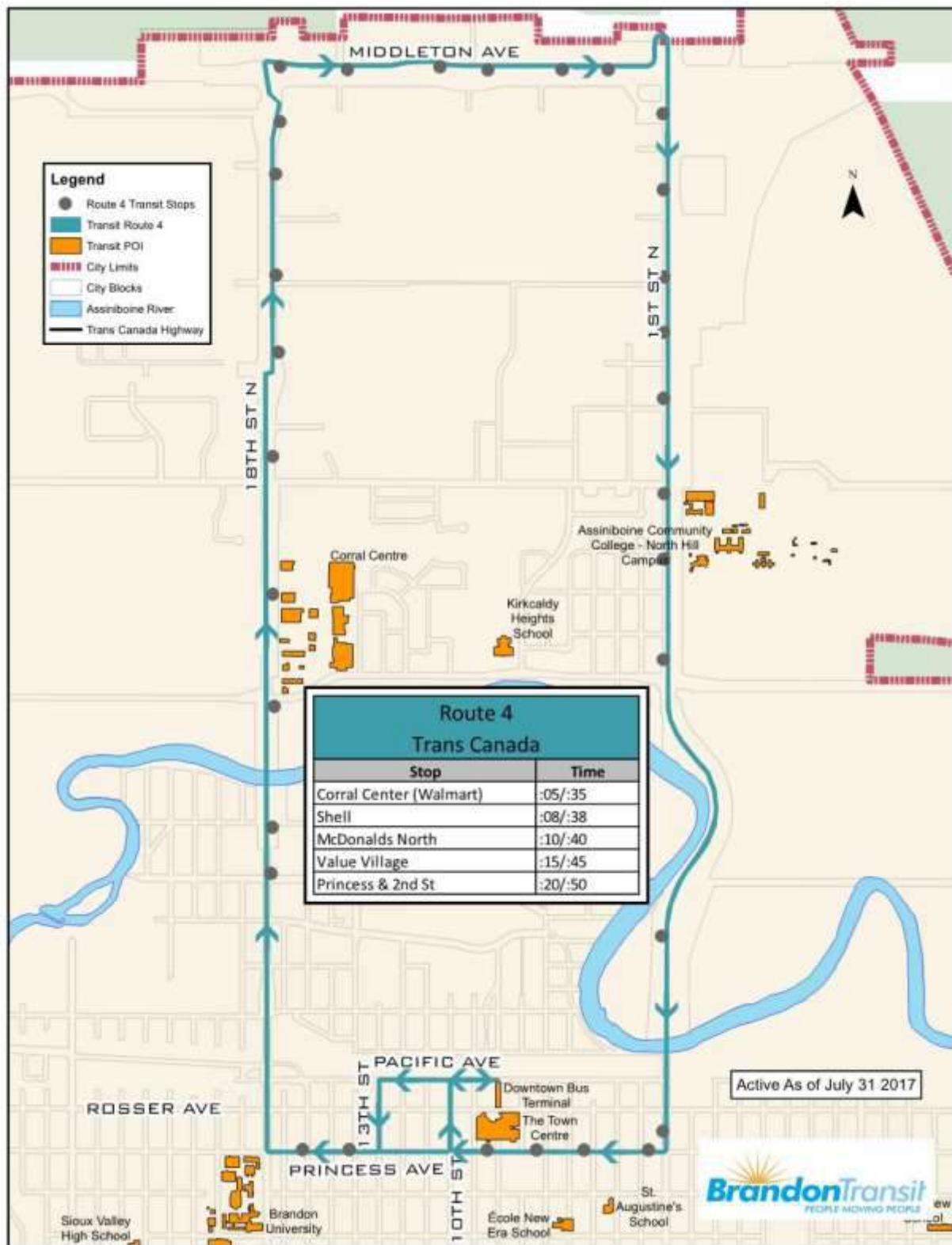


Figure 2.14: Route 4 – TransCanada

Table 2.4: Route 4 – TransCanada Transit Ridership by Stop

STOP LOCATION	RIDERSHIP	STOP LOCATION	RIDERSHIP
1st Street North @ Highland Road (ACC)	1	Princess Avenue @ 2nd Street	199
Centre Avenue @ 1st Street North (Value Village)	3	Dufresne Furniture	200
Rosser Avenue @ 17th Street	5	Princess Avenue @ 5th Street	216
Rosser Avenue @ 15th Street	6	TSC Store	229
Dinsdale Park	15	Best Western Motel	371
Galilee Auto	21	Domo	881
Maxim Trucks	33	Kia	929
Princess Avenue @ 6th Street	42	Comfort Inn	1,187
Princess Avenue @ 11th Street	44	North Hill McDonalds	1,196
Lindenberg Seeds	48	1st Street North @ Kirkham Cres	1,430
18th Street North @ John Avenue	50	Freightliner	1,786
Mohawk	65	Value Village Stop	1,953
18th Street North @ Clare Avenue	104	Princess Avenue @ 14th Street	1,976
Patmore Nursery	107	Shell	2,054
Princess Avenue @ 13th Street	132	Princess Avenue @ 16th Street	2,504
1st Street North @ Kirkcaldy Drive	158	Walmart	8,004
Meadowlark Campground	159	Unknown	13,920
Petro Canada	173	Downtown Terminal	22,778
Midway Motel	184	Grand Total	63,163
Inside Study Area			13,814
Unknown Location			13,920
Outside Study Area (Grey Text)			35,429

Note: Data is for the period January to September 2018. Excludes fare categories of cargo, bicycle, mobility device, Handi Transit fee, stroller, card fee and offloading.



Figure 2.15: Route 5 – Assiniboine

Table 2.5: Route 5 – Assiniboine Transit Ridership by Stop

STOP LOCATION	RIDERSHIP	STOP LOCATION	RIDERSHIP
Princess Avenue @ 11th Street	1	White Swan Street @ Braecrest Drive	608
10th Street @ McTavish Avenue (East Side/Superstore)	1	19th Street @ Fred Brown Way	677
Value Village Stop	1	Rosser Avenue @ 15th Street	686
Princess Avenue @ 16th Street	3	Kirkcaldy Drive @ Knowlton Drive	761
Princess Avenue @ 14th Street	7	Stickney Avenue @ 13th Street North (Sokol)	1,051
1st St N @ Optimist Park	27	Rosser Avenue @ 3rd Street	1,389
Rosser Avenue @ 10th Street	48	1st Street North @ Highland Road (ACC North Campus)	1,565
1st Street North @ Veterans Way (East Side)	149	Knowlton Drive @ Sportsplex	1,898
Rosser Avenue @ 12th Street	227	Stickney Avenue @ 16th Street North	1,982
Kirkcaldy Drive @ Fraser Crescent	242	Centre Avenue @ 1st Street North (Value Village)	2,164
Rosser Avenue @ 6th Street	417	Stickney Avenue @ 9th Street North	2,548
Parker Boulevard @ 17th Street North (South Side)	431	Knowlton Drive @ Braecrest Drive	2,637
18th Street North @ Grand Valley Road	450	Kirkcaldy Drive @ Home Depot	11,288
Stickney Avenue @ 11th Street North	487	Unknown	13,546
Rosser Avenue @ 17th Street	545	Downtown Terminal	20,666
		Grand Total	66,502
Inside Study Area			21,790
Unknown Location			13,546
Outside Study Area (Grey Text)			31,166

Note: Data is for the period January to September 2018. Excludes fare categories of cargo, bicycle, mobility device, Handi Transit fee, stroller, card fee and offloading.

Both transit routes utilize portions of 18th Street North and 1st Street North; however, the two routes travel in opposite directions so do not utilize the same stops. Route 5 – Assiniboine also operates along Braecrest Drive between White Swan Street and Knowlton Drive. Existing transit stops within the study area have a mix of amenities, including signs, benches and shelters. Several of the transit stops do not have pedestrian sidewalks connecting to the stops, as shown in **Figure 2.16**.



Figure 2.16: Transit Stop on 1st Street North Near Kirkcaldy Drive

It should also be noted that residents of the North Hill neighbourhood who are travelling to Braecrest Drive between 18th Street North and Knowlton Drive are eligible for TransCab. TransCab is a free service offered by Brandon Transit that will pick up residents at a designated pick up location and take them to one of two TransCab stops where they can catch regular bus routes.

2.4.2 ACTIVE TRANSPORTATION

There are a number of existing active transportation facilities located within the study area, including an off-street multi-use trail that runs along the south side of Braecrest Drive from 18th Street North to Kensington Crescent (see **Figure 2.17**). There are additional off-street multi-use trails located within the study area, as well as sidewalks located along a number of roadways. There is an existing pedestrian crosswalk of Braecrest Drive at Knowlton Drive, and there are several signalized intersections with pedestrian crossings within the study area. The existing network of pedestrian and cycling facilities within the study area is illustrated in **Figure 2.18**.

Daily pedestrian and cycling crossing counts were available for the intersections of Braecrest Drive with 18th Street North, 1st Street North and Knowlton Drive and are summarized in **Table 2.6**.

Table 2.6: Pedestrian and Cycling Counts

COUNT LOCATION	COUNT DATE	PEDESTRIANS	BICYCLES	TOTAL
Braecrest Drive & 18th Street North	Nov 22, 2017	11	1	12
Braecrest Drive & 1st Street North	Sept 19, 2018	49	10	59
Braecrest Drive & Knowlton Drive	Oct 24, 2018	264	4	268

There are a large number of pedestrians and cyclists moving through the intersection of Braecrest Drive and Knowlton Drive, either travelling east-west along the existing pathway on the south side of Braecrest Drive or north-south along Knowlton Drive to access Kirkcaldy Heights School, the Brandon Community Sportsplex, or existing greenspace in the area.



Figure 2.17: Existing Active Transportation Trail on Braecrest Drive

There are also a number of pedestrians crossing 1st Street North at Braecrest Drive, moving to and from the ACC North Hill Campus from the neighbourhood or bus stops. The existing pathway that runs along the south side of Braecrest Drive currently ends at Kensington Crescent, just one block before 1st Street North.



Figure 2.18: Existing Active Transportation Facilities

The purpose of the *Brandon Greenspace Master Plan (GMP)* is to “promote a healthy community, improve the character and identity of the city, and promote economic development and tourism”, and is intended to guide the City over the next twenty years. The long-term goal of the GMP is to build a system of greenspace throughout Brandon that is linked by walking and cycling facilities. The existing trail system has numerous gaps that require connection so that users can easily and safely move around the city. The active transportation infrastructure for the City of Brandon recommended in the GMP is illustrated in **Figure 2.19**.

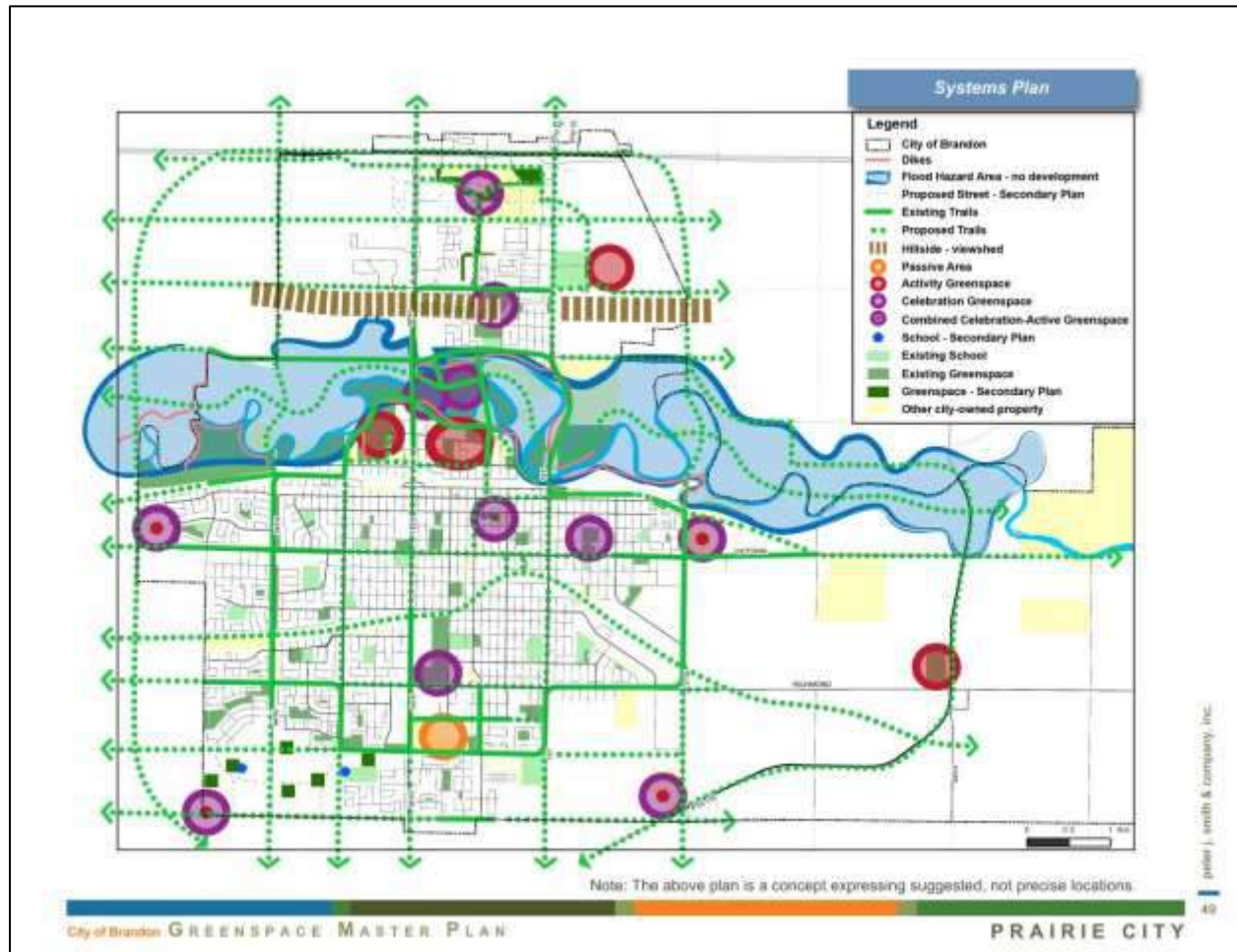


Figure 2.19: Greenspace Master Plan Proposed Systems Map

The GMP proposes a number of new trails for the study area, including:

- Extending the existing trail on 18th Street North, north of Braecrest Drive to the Trans-Canada and potentially further north;
- Extending the existing trail on 1st Street North, north of Kirkcaldy Drive to the Trans-Canada and potentially further north;
- Extending the existing trail on Braecrest Drive west of 18th Street North and east of 1st Street North into the ACC North Hill Campus; and
- Additional new trails north of Braecrest Drive between 18th Street North and 1st Street North, including a new east-west trail at approximately Clare Avenue and a new north-south trail at around Daly Crescent.

These proposed facilities will provide pedestrian and cycling links between facilities and neighbourhoods that can accommodate users of all ages and abilities, and will serve the needs of current and future users.

2.5 DRAINAGE AND UTILITIES

Cobra, the online City of Brandon Reference Atlas, is an interactive and digital mapping application that contains information about the City of Brandon, including drainage and utility data. The existing infrastructure facilities within the study area are illustrated in **Figure 2.20** and **Figure 2.21**. Land drainage infrastructure is shown in green, water infrastructure is shown in blue and sewer infrastructure is shown in red.

There are existing land drainage facilities on Hanbury Place south of Braecrest Drive as well as on Braecrest Drive between Kelly Place and Kensington Crescent. Water and sewer infrastructure is currently located within the Braecrest Drive right-of-way, with connections into the various residential neighbourhoods off Braecrest Drive. No changes to the existing drainage and utility infrastructure are planned at this time, outside of new connections to proposed developments in the study area.



Figure 2.20: City Drainage and Utilities on Braecrest Drive (18th Street North to Village Drive)



Figure 2.21: City Drainage and Utilities on Braecrest Drive (Village Drive to 1st Street North)

3 PHASE ONE PUBLIC & STAKEHOLDER ENGAGEMENT

The goal of Phase One Public and Stakeholder Engagement was to introduce the project and its scope, and to seek stakeholder and public input on transportation and active transportation issues and opportunities as they currently exist in the study area.

Project staff facilitated three public engagement activities for Phase One. Engagement activities included stakeholder meetings, an online survey and an online mapping tool (**Table 3.1**). The feedback received from these activities was considered when developing the conceptual design options.

Table 3.1: Phase One Public Engagement Activities

ENGAGEMENT ACTIVITY	PUBLIC PARTICIPATION
Stakeholder Meeting	27 (20 attendees at a group meeting, and 7 one-on-one meetings)
Online Survey	67 completed surveys
Online Mapping Tool	138 views 33 comments 24 pins

The following points briefly summarize stakeholder and public feedback from Phase One Public Engagement:

- Braecrest Drive is used by both local area residents and residents from other neighbourhoods to access community and regional destinations;
- Some residents in the study area travel to controlled intersections to cross 18th Street North and 1st Street North rather than crossing at unsignalized intersections;
- 18th Street North currently carries high traffic volumes, and a perception exists that the roadway is becoming busier as a result of commercial and retail development in the North Hill neighbourhood;
- Turning from westbound Braecrest Drive onto southbound 18th Street North is very difficult when 18th Street North is busy;
- Left-hand turns from eastbound Braecrest Drive onto northbound 1st Street North are perceived to be challenging due to traffic volumes and flow;
- There are few pedestrian crosswalks in the study area;
- Existing multi-use paths in the study area are well used; however, there are gaps in the infrastructure; and
- The expansion of Clare Avenue to connect 18th Street North and 1st Street North is viewed as desirable by many stakeholders to provide another east-west route in the study area.

Additional stakeholder and public comments from Phase One Public Engagement can be reviewed in the Public Engagement Report – Phase One (**Appendix D**).

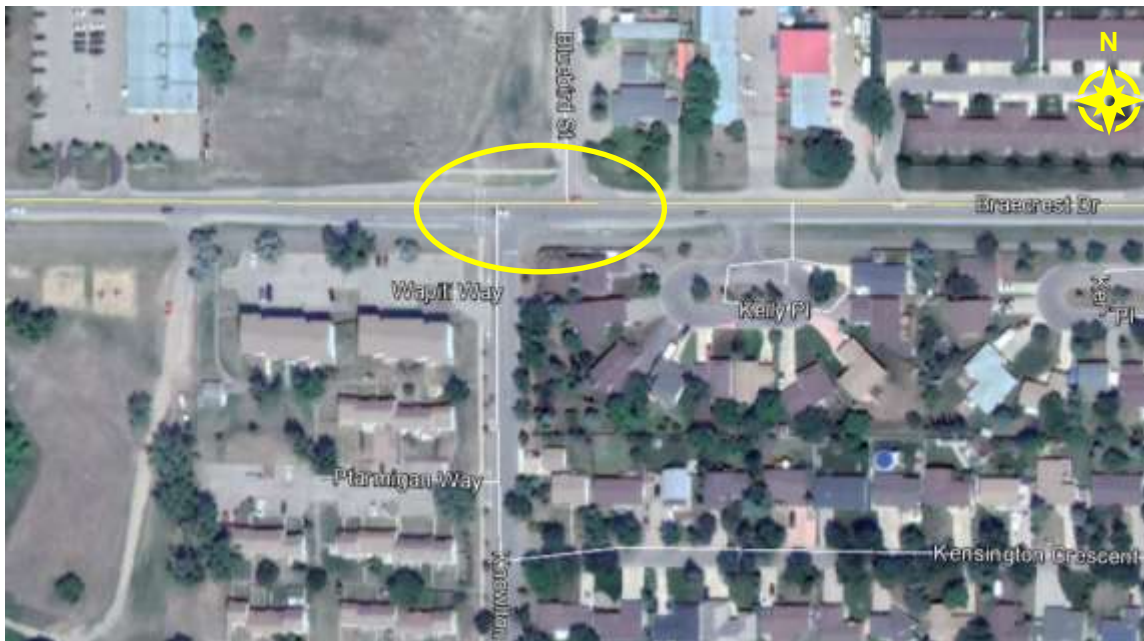
4 CORRIDOR AND INTERSECTION ASSESSMENT

4.1 SITE INVESTIGATION

Site visits of the Braecrest Drive Corridor study area were conducted on Friday, October 19, 2018, and on Thursday, November 22, 2018. October 19 was sunny with scattered clouds and a high of 12°C, and November 22 was cloudy with a high of -1°C. The study team travelled through the study area, recorded video driving down Braecrest Drive, and took photos of the corridor, major intersections, and any other items of relevance.

The following was noted during the site visit:

- There are no required stops for vehicles on Braecrest Drive between 18th Street North and 1st Street North and the alignment is very straight, which could encourage speeding. The speed limit on Braecrest Drive is 50 kilometres per hour;
- The intersections of Braecrest Drive with Knowlton Drive and Bluebird Street (see **Figure 4.1**) are offset by approximately 25 metres, which can create confusion when there are vehicles wanting to turn at both intersections at the same time;



Source: Google Earth Pro

Figure 4.1: Offset Intersections of Braecrest Drive with Knowlton Drive and Bluebird Street

- A number of transit stops in the study area do not have pedestrian facilities (sidewalks, pedestrian crossings, etc.) leading to them (see **Figure 4.2**);



Figure 4.2: Existing Transit Stop

- A multi-use pathway runs along the south side of Braecrest Drive from 18th Street North to Kensington Crescent, just one block west of 1st Street North (see **Figure 4.3**). The pathway connects to an existing pathway on the east side of 18th Street North south of Braecrest Drive and is well utilized by pedestrians and cyclists. There are no active transportation facilities on 1st Street North near Braecrest Drive;



Figure 4.3: Existing Pathway on Braecrest Drive

- There is one signed pedestrian crossing of Braecrest Drive between 18th Street North and 1st Street North at Knowlton Drive (see **Figure 4.4**). Kirkcaldy Heights School and Brandon's Community Sportsplex are both located on Knowlton Drive south of Braecrest Drive near Kirkcaldy Drive;



Figure 4.4: Pedestrian Crossing of Braecrest Drive at Knowlton Drive

- There are existing residential developments north of Braecrest Drive between 18th Street North and 1st Street North that do not have a sidewalk or pathway connection along Braecrest Drive or a formal crossing of Braecrest Drive to access the multi-use pathway that runs along the south side of Braecrest Drive, including at Quail Ridge Drive, between Daly Crescent and Lark Street, and between Bluebird Street and 1st Street North;
- The slope on 1st Street North is fairly steep and there is a drop-in grade south of Braecrest Drive;
- At the existing unsignalized intersection of 1st Street North and Braecrest Drive (see **Figure 4.5**), traffic on 1st Street North is free-flowing while traffic on Braecrest Drive approaches a stop sign at the intersection. During peak periods, traffic is fairly busy on 1st Street North, which makes turning from Braecrest Drive onto 1st Street North more difficult, especially for eastbound drivers wanting to turn left onto northbound 1st Street North. Drivers can avoid this unsignalized maneuver by using White Swan Street to access the signals at Centre Avenue and 1st Street North to make a left turn;



Figure 4.5: Intersection of 1st Street North and Braecrest Drive

- Pedestrians are crossing 1st Street North near Braecrest Drive to access the ACC Campus (there are bus stops located on the east and west sides of 1st Street North). There is no pedestrian crossing of 1st Street North, north of the signals at Kirkcaldy Drive. The speed limit on 1st Street North is 70 kilometres per hour. There is also no formal connection into the ACC Campus at Braecrest Drive, although there used to be a road access at this location. The access is now closed to vehicles, but pedestrians do not have to walk through the ditch to access the campus (see **Figure 4.6**);



Source: Google Earth Pro

Figure 4.6: Braecrest Drive Closed Access into ACC Campus

- The slope on 18th Street North is fairly steep and there is a drop-in grade south of Braecrest Drive;
- At the existing unsignalized intersection of 18th Street North and Braecrest Drive (see **Figure 4.7**), traffic on 18th Street North is free-flowing while traffic on Braecrest Drive approaches a stop sign at the intersection. During peak periods, traffic is busy on 18th Street North, which makes traveling through the intersection on Braecrest Drive or turning from Braecrest Drive onto 18th Street North difficult, especially for westbound drivers wanting to turn left onto southbound 18th Street North. There is enough room in the median on 18th Street North to allow for a two-stage left-turn maneuver; however, the majority of drivers are attempting to complete a one-stage left-turn at this location. Some westbound drivers wanting to travel south actually make a right-turn onto northbound 18th Street North and then make a U-turn at the signals at Cumberland Avenue/Outback Drive to avoid the unsignalized left-turn maneuver. Other drivers use Knowlton Drive to access the signals at Kirkcaldy Drive and 18th Street North to make a left turn. There is no access to the signals at Cumberland Avenue/Outback Drive from Braecrest Drive; and
- Pedestrians are crossing 18th Street North near Braecrest Drive to access the pathways on Braecrest Drive and 18th Street North. There is no pedestrian crossing of 18th Street North, north of the signals at Kirkcaldy Drive. The speed limit on 18th Street North at Braecrest Drive is 70 kilometres per hour.



Figure 4.7: Intersection of 18th Street North and Braecrest Drive

4.2 TRAFFIC ANALYSIS

4.2.1 TRAFFIC VOLUMES

Existing 2018 traffic volumes and background traffic volumes for the horizon years of 2023, 2028, and 2038 were estimated and are illustrated in **Figure 2.10** through **Figure 2.12** for the weekday a.m. and p.m. peak hours.

A number of planned developments within the study area were identified during corridor and intersection assessment. There are three development parcels on Braecrest Drive that will likely develop within the study horizon years.

- **Braecrest Drive at 18th Street North:** This 1.25-acre site on the south side of Braecrest Drive near 18th Street North is currently under construction. The development includes two 18-unit life lease buildings and 18 townhomes, for a total of 54 residential dwelling units. The development was assumed to be completed by horizon year 2023.
- **501 Braecrest Drive:** A development plan for this two-acre site on the north side of Braecrest Drive near Bluebird Street has recently been approved by the City of Brandon. The development is planned to include three 12-unit buildings and three 24-unit buildings, for a total of 108 residential dwelling units. The development was assumed to be completed by horizon year 2023.
- **Braecrest Drive at Quail Ridge Drive:** This site is approximately 12.26 acres in size and is located on the north side of Braecrest Drive near Quail Ridge Drive. There is no proposed development at this location; however, assuming 24 units per acre for this location results in approximately 294 residential dwelling units. The development was assumed to be completed by horizon year 2038.

In addition to these three residential developments, corridor and intersection analysis identified the North Brandon Gateway Secondary Plan, which provides a framework for the future development of approximately 563 acres of land immediately north of the study area bound by Highland Avenue to the north, the proposed realignment of PTH 1A to the east, the proposed realignment of PTH 10 to the west and Clare Avenue to the south. At full build-out, the development is anticipated to accommodate a population of approximately 7,000 to 12,000 people and will be

utilized for residential, and mixed-use purposes. This new neighbourhood will have direct signalized connections to 1st Street North and 18th Street North in the short-term and to the realigned PTH 1A and PTH 10 in the long-term, and new traffic from this development was therefore assumed to not impact traffic volumes on Braecrest Drive. Traffic from this development was assumed to be included in the background growth on 1st Street North (2.0 percent per year) and 18th Street North (3.0 percent per year) for the horizon years.

Trips generated by the three proposed residential developments on Braecrest Drive were estimated for the weekday a.m. and p.m. peak hours based on the *Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition*. Forecast trip generation for the proposed development is outlined in **Table 4.1**. It was assumed that all trips generated would be new auto trips, as pass-by trips and modal split would not likely significantly apply to this area and type of development.

Trip distribution refers to the directional split of traffic entering and exiting the study area, and trip assignment refers to the assignment of distributed trips to the adjacent road network. Trip distribution for the proposed developments are based on existing traffic volumes in the study area. It was assumed that all traffic from the 501 Braecrest Drive development would use the 1st Street North and Braecrest Drive intersection, and all traffic from the Braecrest Drive at 18th Street North and Braecrest Drive at Quail Ridge Drive developments would use the Braecrest Drive, and 18th Street intersection. In reality, some traffic from each development would likely use the other intersection, but it was assumed the numbers would approximately balance out. The following trip distribution was used for this study:

- In the weekday a.m. peak hour, of the development traffic accessing 1st Street North, 15 percent was assumed to travel to the north and 85 percent was assumed to travel to the south, while 25 percent was assumed to travel from the north and 75 percent was assumed to travel from the south;
- In the weekday p.m. peak hour, of the development traffic accessing 1st Street North, 15 percent was assumed to travel to the north and 85 percent was assumed to travel to the south, while 20 percent was assumed to travel from the north and 80 percent was assumed to travel from the south;
- In the weekday a.m. peak hour, of the development traffic accessing 18th Street North, 30 percent was assumed to travel to the north and 70 percent was assumed to travel to the south, while 20 percent was assumed to travel from the north and 80 percent was assumed to travel from the south; and
- In the weekday p.m. peak hour, of the development traffic accessing 18th Street North, 30 percent was assumed to travel to the north and 70 percent was assumed to travel to the south, while 25 percent was assumed to travel from the north and 75 percent was assumed to travel from the south.

New trips generated by the proposed developments were distributed and assigned to the road network based on the splits noted above. Background traffic volumes were combined with the additional traffic assigned to the road network to determine traffic projections for the post development scenarios. Year 2023, 2028 and 2038 post development traffic volumes for the weekday a.m. and p.m. peak hours are illustrated in **Figure 4.8** through **Figure 4.10**.

Table 4.1: Trip Generation

DEVELOPMENT	ITE LAND USE TYPE	ITE CODE	ITE TRIP GENERATION FORMULA	IN RATE	OUT RATE	YEAR 2023				YEAR 2028				YEAR 2038			
						DWELLING UNITS	TOTAL TRIPS			DWELLING UNITS	TOTAL TRIPS			DWELLING UNITS	TOTAL TRIPS		
							TOTAL	IN	OUT		TOTAL	IN	OUT		TOTAL	IN	OUT
Weekday A.M. Peak Hour																	
Braecrest Drive at 18 th Street North	Multi-family Housing (Low-Rise)	220	$\text{Ln}(\text{T}) = 0.95 \text{ Ln}(\text{X}) - 0.51$	23%	77%	54 d.u.	27	6	21	54 d.u.	27	6	21	54 d.u.	27	6	21
501 Braecrest Drive	Multi-family Housing (Low-Rise)	220	$\text{Ln}(\text{T}) = 0.95 \text{ Ln}(\text{X}) - 0.51$	23%	77%	108 d.u.	51	11	40	108 d.u.	51	11	40	108 d.u.	51	11	40
Braecrest Drive at Quail Ridge Drive	Multi-family Housing (Mid-Rise)	221	$\text{Ln}(\text{T}) = 0.98 \text{ Ln}(\text{X}) - 0.98$	26%	74%	0 d.u.	0	0	0	0 d.u.	0	0	0	294 d.u.	98	25	73
Weekday A.M. Peak Hour Total						162 d.u.	78	17	61	162 d.u.	78	17	61	456 d.u.	176	42	134
Weekday P.M. Peak Hour																	
Braecrest Drive at 18 th Street North	Multi-family Housing (Low-Rise)	220	$\text{Ln}(\text{T}) = 0.89 \text{ Ln}(\text{X}) - 0.02$	63%	37%	54 d.u.	34	21	13	54 d.u.	34	21	13	54 d.u.	34	21	13
501 Braecrest Drive	Multi-family Housing (Low-Rise)	220	$\text{Ln}(\text{T}) = 0.89 \text{ Ln}(\text{X}) - 0.02$	63%	37%	108 d.u.	63	40	23	108 d.u.	63	40	23	108 d.u.	63	40	23
Braecrest Drive at Quail Ridge Drive	Multi-family Housing (Mid-Rise)	221	$\text{Ln}(\text{T}) = 0.96 \text{ Ln}(\text{X}) - 0.63$	61%	39%	0 d.u.	0	0	0	0 d.u.	0	0	0	294 d.u.	125	76	49
Weekday P.M. Peak Hour Total						162 d.u.	97	61	36	162 d.u.	97	61	36	456 d.u.	222	137	85

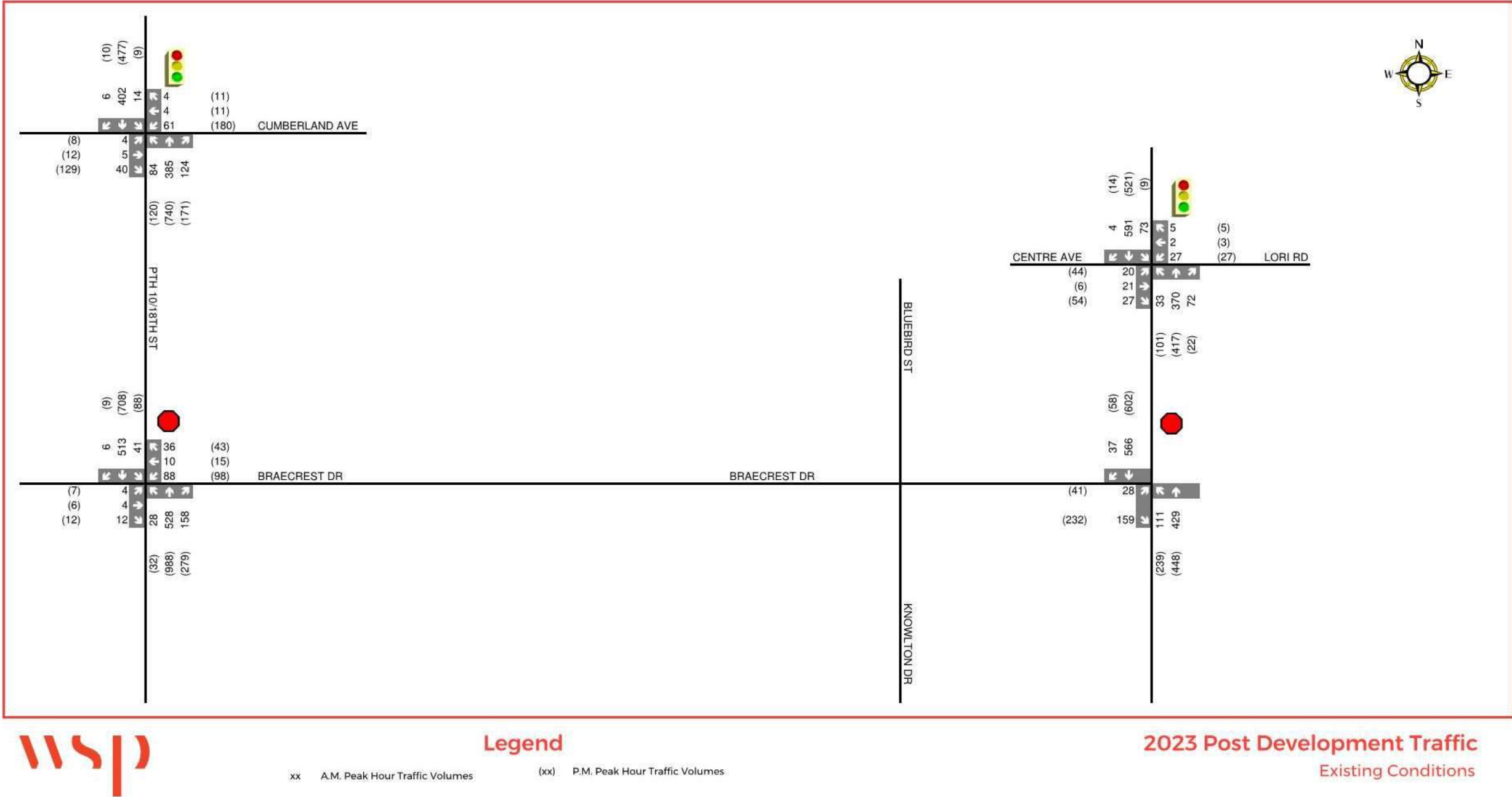
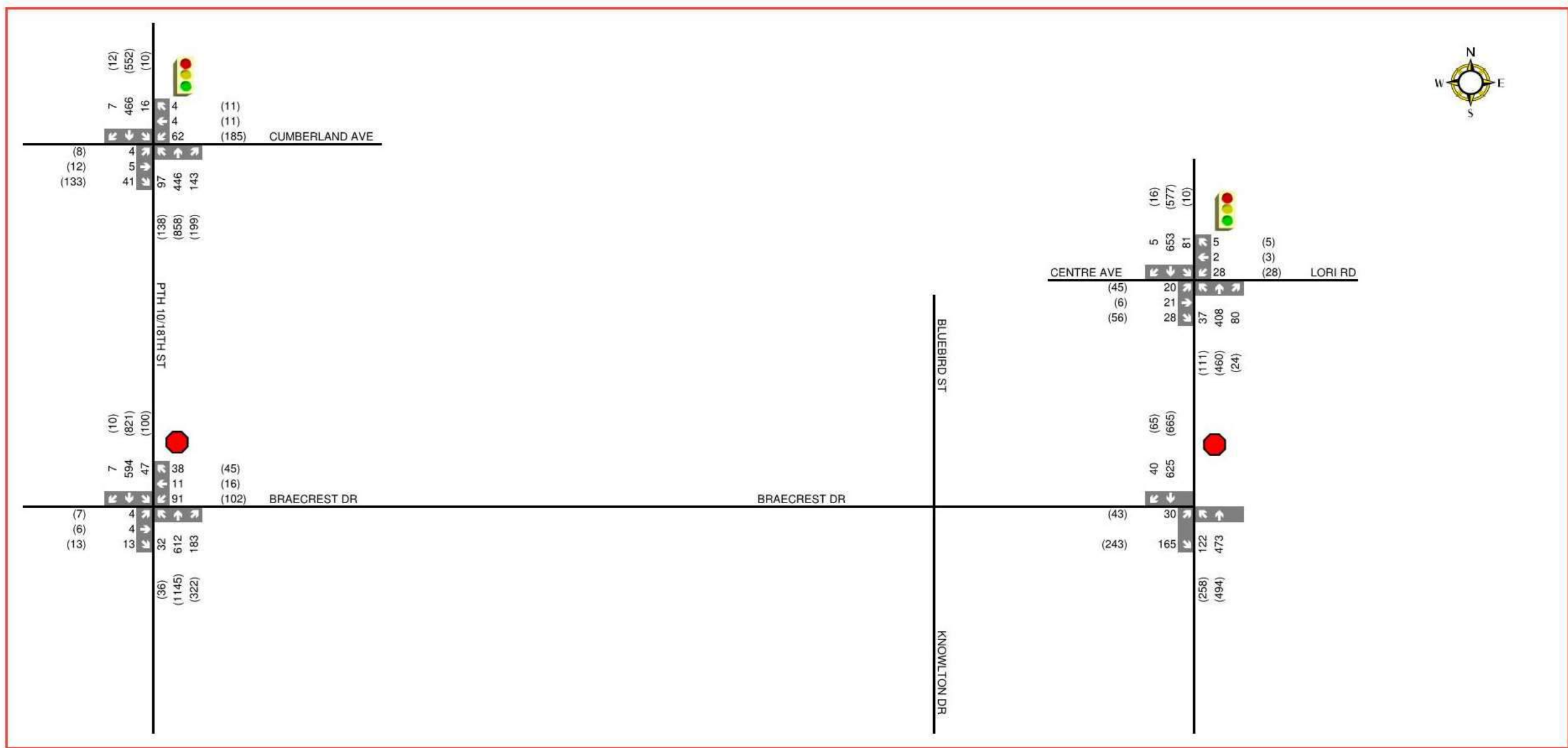


Figure 4.8: 2023 Post Development Traffic Volumes

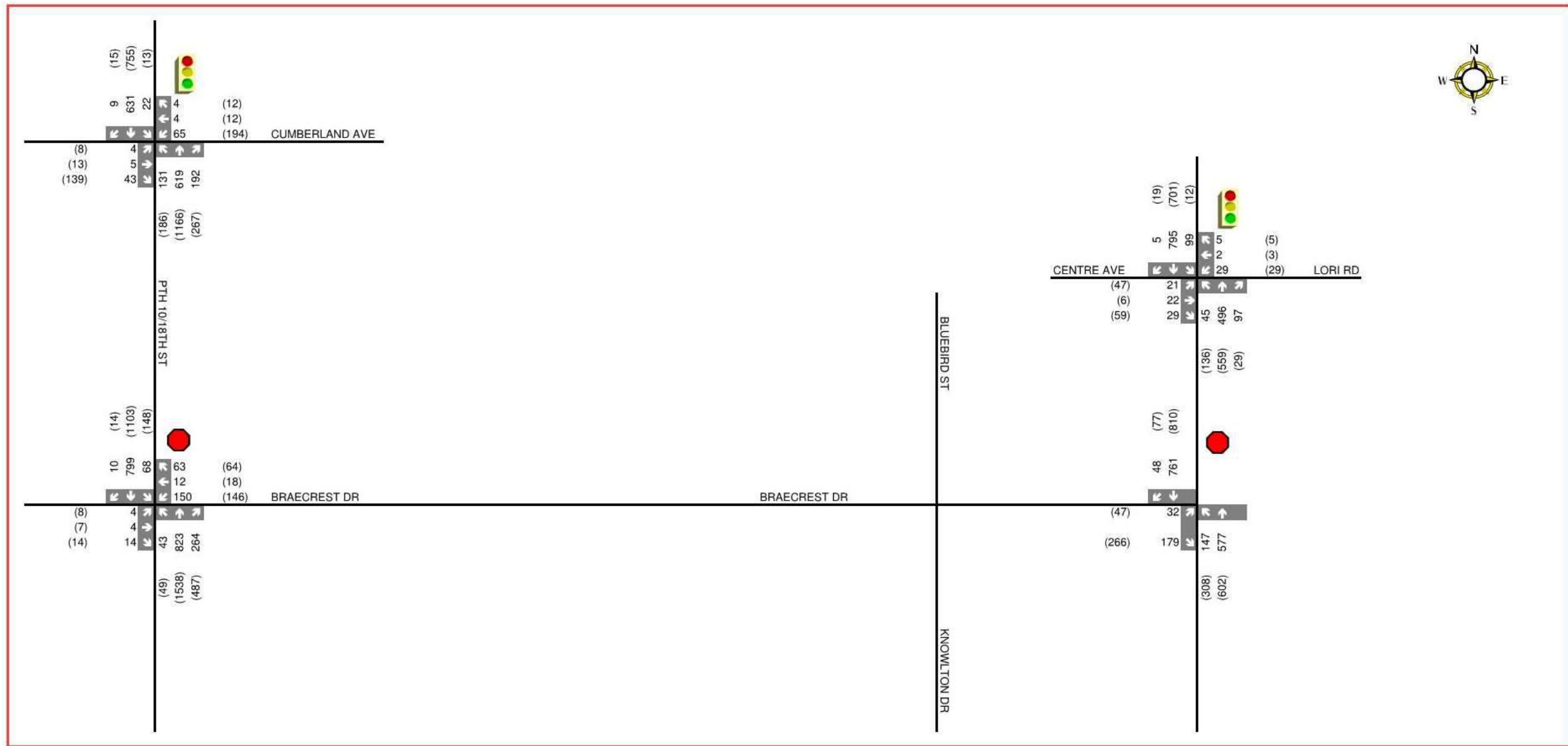


Legend

xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes

2028 Post Development Traffic Existing Conditions

Figure 4.9: 2028 Post Development Traffic Volumes



Legend

xx A.M. Peak Hour Traffic Volumes (xx) P.M. Peak Hour Traffic Volumes

2038 Post Development Traffic Existing Conditions

Figure 4.10: 2038 Post Development Traffic Volumes

4.2.2 TRAFFIC ANALYSIS

The traffic analysis for the study area was undertaken using Synchro 10.0 traffic analysis software and SimTraffic 10.0 simulation software. The relative performance of an intersection is measured in terms of level of service (LOS). LOS ranges from A (excellent) to F (beyond capacity). In general, LOS E is considered to be at capacity. LOS criteria for signalized intersections are defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, cycle length, green ratio, and ratio for the lane group in question.

LOS criteria for unsignalized intersections is also defined in terms of delay. Delay is the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. This includes the time required for the vehicle to travel from the last-in-queue position to the first.

LOS D or better for the overall intersection is widely considered desirable for a signalized intersection in an urban area during peak traffic periods. At unsignalized intersections, LOS E or better is generally considered desirable for minor streets accessing major roadways, with LOS C or better acceptable for through movements on the major roadway during peak traffic periods.

Intersection capacity utilization level of service (ICU LOS) provides additional insight into how an intersection is functioning and how much extra capacity is available to handle traffic fluctuations, and incidents. ICU LOS ranges from A (excellent) to H (beyond capacity), with ICU LOS E generally considered to be at practical capacity.

The volume to capacity (v/c) ratio is used to determine the level of congestion for each lane group. If the v/c ratio is greater than or equal to 1.00, that approach is operating above capacity. A v/c ratio of 0.85 is considered the maximum acceptable level for through and shared through/turning lanes, and a v/c ratio of 0.90 is generally considered the maximum acceptable level for turning lanes.

Detailed Synchro reports for the analysis are available in **Appendix B**.

BRAECREST DRIVE AND 1ST STREET NORTH

The existing intersection of Braecrest Drive and 1st Street North is a three-legged unsignalized intersection with the following existing geometry:

- The northbound approach on 1st Street North consists of a left-turn lane and two through lanes;
- The southbound approach on 1st Street North consists of a through lane and a shared through/right-turn lane; and
- The eastbound approach on Braecrest Drive consists of a left-turn lane and a right-turn lane.

1st Street North is free flowing while traffic on Braecrest Drive approaches a stop sign at the intersection. **Table 4.2** summarizes the results of the intersection analysis for Braecrest Drive and 1st Street North.

The data provided in **Table 4.2** indicates the following:

- The intersection is forecast to operate at an acceptable level of service during the morning peak hour for all scenarios. The eastbound approach on Braecrest Drive is the critical movement and is forecast to operate at LOS C or better during the weekday a.m. peak hour for all forecast scenarios; and
- The intersection is forecast to operate at an acceptable level of service during the afternoon peak hour for all scenarios except the 2038 post development scenario, when the level of service falls to LOS E. The reduction in overall intersection level of service is caused by the forecast high delay for the critical eastbound movement in 2038. The eastbound approach on Braecrest Drive is forecast to operate at LOS F during the weekday p.m. peak hour for the 2038 background and post development scenarios.

No operational issues were observed in the SimTraffic simulations.

Table 4.2: Braecrest Drive and 1st Street North Synchro Results

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2018 Existing Traffic	A (2 sec)	A (32%)	0.21 (SBT)	EB	B (13 sec)
2023 Background Traffic	A (2 sec)	A (36%)	0.24 (SB)	EB	B (13 sec)
2028 Background Traffic	A (2 sec)	A (38%)	0.27 (SBT)	EB	B (14 sec)
2038 Background Traffic	A (2 sec)	A (44%)	0.32 (SBT)	EB	C (16 sec)
2023 Post Development Traffic	A (3 sec)	A (36%)	0.24 (SBT)	EB	B (14 sec)
2028 Post Development Traffic	A (3 sec)	A (39%)	0.27 (SBT)	EB	B (14 sec)
2038 Post Development Traffic	A (3 sec)	A (44%)	0.32 (SBT)	EB	C (17 sec)
Weekday P.M. Peak Hour					
2018 Existing Traffic	A (4 sec)	A (40%)	0.32 (EB)	EB	C (17 sec)
2023 Background Traffic	A (4 sec)	A (43%)	0.37 (EB)	EB	C (19 sec)
2028 Background Traffic	A (5 sec)	A (46%)	0.50 (EB)	EB	C (23 sec)
2038 Background Traffic	C (23 sec)	A (53%)	1.17 (EB)	EB	F (150 sec)
2023 Post Development Traffic	A (5 sec)	A (45%)	0.48 (EB)	EB	C (22 sec)
2028 Post Development Traffic	A (6 sec)	A (48%)	0.64 (EB)	EB	D (28 sec)
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)

BRAECREST DRIVE AND 18TH STREET NORTH

The existing intersection of Braecrest Drive and 18th Street North is a four-legged unsignalized intersection with the following existing geometry:

- The northbound approach on 18th Street North consists of a left-turn lane, two through lanes and a right-turn cut-off lane;
- The southbound approach on 18th Street North consists of a left-turn lane and a shared through/right-turn lane;
- The eastbound approach on Braecrest Drive consists of a single shared approach lane (combined left-turn, through and right-turn lane); and
- The westbound approach on Braecrest Drive consists of a shared left-turn/through lane and a right-turn cut-off lane.

18th Street North is free flowing while traffic on Braecrest Drive approaches a stop sign at the intersection.

Table 4.3 summarizes the results of the intersection analysis for Braecrest Drive and 18th Street North.

Table 4.3: Braecrest Drive and 18th Street North Synchro Results

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2018 Existing Traffic	A (4 sec)	A (46%)	0.55 (WB)	WB	E (42 sec)
2023 Background Traffic	A (7 sec)	A (51%)	0.79 (WB)	WB	F (81 sec)
2028 Background Traffic	C (19 sec)	B (56%)	1.24 (WB)	WB	F (>200 sec)
2038 Background Traffic	F (>200 sec)	C (68%)	3.61 (WB)	WB	F (N/A*)
2023 Post Development Traffic	B (13 sec)	A (53%)	0.97 (WB)	WB	F (125 sec)
2028 Post Development Traffic	D (30 sec)	B (57%)	1.48 (WB)	WB	F (>200 sec)
2038 Post Development Traffic	F (>200 sec)	C (72%)	6.50 (WB)	WB	F (N/A*)
Weekday P.M. Peak Hour					
2018 Existing Traffic	F (57 sec)	B (57%)	2.44 (WB)	WB	F (>200 sec)
2023 Background Traffic	F (>200 sec)	B (64%)	5.04 (WB)	WB	F (N/A*)
2028 Background Traffic	F (>200 sec)	C (70%)	11.06 (WB)	WB	F (N/A*)
2038 Background Traffic	F (N/A*)	E (86%)	N/A*	EB & WB	F (N/A*)
2023 Post Development Traffic	F (>200 sec)	B (64%)	5.72 (WB)	WB	F (N/A*)
2028 Post Development Traffic	F (>200 sec)	C (70%)	12.50 (WB)	WB	F (N/A*)
2038 Post Development Traffic	F (N/A*)	E (88%)	N/A*	EB & WB	F (N/A*)

* N/A – Delay is so high that Synchro indicates an error and a value is not provided.

The data provided in **Table 4.3** indicates the following:

- The intersection is forecast to operate at an acceptable level of service during the morning peak hour for the background and post development scenarios up to 2028. In the 2038 background and post development scenarios, the intersection is forecast to operate at LOS F. The westbound approach on Braecrest Drive is the critical movement and is forecast to operate at LOS F in all future scenarios, with increasing levels of delay; and
- The intersection is forecast to operate at LOS F during the afternoon peak hour for all scenarios, including the existing 2018 scenario. The westbound approach on Braecrest Drive is forecast to operate at LOS F with over 200 seconds of delay during all scenarios. Delay for the westbound movement is so high in some of the future scenarios that it does not register (Synchro gives an error for the delay for that movement). The eastbound approach on Braecrest Drive is also forecast to operate at LOS F with very high delays during the 2038 background and post development scenarios.

The following operational issues were observed in the SimTraffic simulations:

- In the weekday a.m. peak hour on the westbound approach on Braecrest Drive, queuing was observed in the 2038 background scenario, occasional queuing was observed in the 2028 post development scenario and significant queuing was observed in the 2038 post development scenario;
- In all weekday p.m. peak hour background scenarios, queuing and significant delays were observed on the westbound approach on Braecrest Drive, with queues increasing in each horizon year;

- In the 2038 weekday p.m. peak hour background scenario, the northbound through traffic on 18th Street North queued from the adjacent signals at Cumberland Avenue beyond Braecrest Drive, causing additional queuing on the Braecrest Drive eastbound approach;
- In all weekday p.m. peak hour post development scenarios, significant queuing and delays were observed on the westbound approach on Braecrest Drive, with queues increasing in each horizon year; and
- In the 2038 weekday p.m. peak hour post development scenario, the northbound through traffic on 18th Street North queued from the adjacent signals at Cumberland Avenue beyond Braecrest Drive, causing additional queuing on the Braecrest Drive eastbound approach.

4.2.3 TRAFFIC SIGNAL WARRANT ANALYSIS

A traffic signal warrant analysis was carried out at the two unsignalized intersections of Braecrest Drive and 1st Street North, and Braecrest Drive and 18th Street North utilizing MI's approved methodology (Traffic Signal & Pedestrian Signal Head Warrant Analysis).

The warrant is based on a review of the average six-hour peak turning movements, the distance to upstream traffic signals, median width and local demographics. Traffic volumes at the two intersections were estimated by calculating the multiplier between the a.m. peak hour and the second highest a.m. hour, and the multipliers between the p.m. peak hour and the peak noon hour, the second highest noon hour, and the second highest p.m. hour. These multipliers were used to factor the future a.m. and p.m. peak hour post development traffic volumes to the second highest a.m. hour, the two noon peak hours, and the second highest p.m. peak hour volumes. No pedestrians were counted at either intersection, but it is known that pedestrians desire to cross at these locations. If facilities were provided, the pedestrian volumes would likely impact the signal warrant results.

The Traffic Signal & Pedestrian Signal Head Warrant Analysis (developed by the Transportation Association of Canada) is based on a 100-priority point warrant. MI's practice is to use a 100-priority point warrant in communities with populations above 10,000, where a traffic signal is warranted for consideration when the 100-priority point threshold is exceeded and there are greater than 75 vehicles per hour (vph) approaching on the minor street.

The signal warrant results for the two intersections are shown in **Table 4.4**. The detailed warrant analysis is included in **Appendix C**.

- Traffic signals are not currently warranted at the intersection of Braecrest Drive and 1st Street North, but are warranted based on the 2028 post development traffic volumes.
- Traffic signals are currently warranted at the intersection of Braecrest Drive and 18th Street North based on 2018 existing traffic volumes. The priority point rating of 103 is just over the priority point threshold and there are greater than 75 vehicles per hour approaching on the minor street.

Table 4.4: Signal Warrant Analysis

INTERSECTION	ANALYSIS YEAR	PRIORITY POINTS	SIDE STREET VOLUME	SIGNAL WARRANTED
Braecrest Drive & 1st Street North	2018 Existing	57	> 75	No
	2023 Post Development	88	> 75	No
	2028 Post Development	103	> 75	Yes
Braecrest Drive & 18th Street North	2018 Existing	102	>75	Yes

5 DESIGN OPTIONS

5.1 STUDY AREA OPTIONS

Based on observations from the site visit, results of the background analysis, and feedback from Phase One of public engagement, issues and concerns within the Braecrest Drive Corridor study area can be grouped into three locations:

- Braecrest Drive between 1st Street North and 18th Street North;
- The intersection of Braecrest Drive and 1st Street North and 1st Street North immediately north and south of Braecrest Drive; and
- The intersection of Braecrest Drive and 18th Street North and 18th Street North immediately north and south of Braecrest Drive.

Potential options for the study were therefore developed by location. Both “enhancements” (i.e., choose to do all, some, or none) at some locations and “alternatives” (i.e., choose to do one only) at other locations were developed to address the existing issues. This means that the various sub-enhancements or sub-alternatives can be combined in a number of different configurations to form overall options for the entire study area. The conceptual options are presented in the following sections of this report.

5.2 BRAECREST DRIVE OPTIONS

Four possible enhancements were developed for Braecrest Drive. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for Braecrest Drive are presented in **Figure 5.1**.

5.2.1 ENHANCEMENT 1: INTERSECTION MODIFICATIONS

One of the issues that was noted during the site visit and mentioned in the public engagement feedback is speeding on Braecrest Drive (the current posted speed limit is 50 kilometres per hour). The results of the speed study conducted by the City of Brandon confirm that the 85th percentile speed of vehicles on Braecrest Drive is currently between 55 and 60 kilometres per hour, and that over 10 percent of vehicles on Braecrest Drive are travelling at speeds over 60 kilometres per hour.

A second item noted during the site visit and mentioned in the public engagement feedback is the offset intersections of Braecrest Drive with Knowlton Drive and Bluebird Street, which can result in confusion for drivers when there are vehicles wanting to turn at both intersections at the same time.

A third item noted during the site visit and mentioned in the public engagement feedback is providing improved access to the multi-use pathway that runs along the south side of Braecrest Drive.

In order to address the issues of speeding and the offset intersections on Braecrest Drive, as well as provide additional crossing opportunities for pedestrians and cyclists to access the multi-use pathway, additional intersection control has been identified at two locations along the corridor:

- **Braecrest Drive and Knowlton Drive / Bluebird Street:** A roundabout has been identified for the intersection in the long-term, with an all-way stop at Braecrest Drive and Knowlton Drive possible in the short-term. As the adjacent development at 501 Braecrest Drive is proceeding and land from the development is not available, Bluebird Street cannot be realigned to intersect with Braecrest Drive immediately across from Knowlton Drive. Therefore, a modified oval shaped roundabout that would not require any road realignment is proposed for this location. A roundabout would help to reduce speeding on Braecrest Drive, eliminate driver confusion at the offset intersection, and allow a safe pedestrian crossing

of Braecrest Drive. The design would need to be confirmed to determine if the roundabout could fit within the existing right-of-way or what property impacts there may be; and

- **Braecrest Drive and Daly Crescent:** A roundabout has been identified for the intersection in the long-term, with an all-way stop possible in the short-term. A roundabout would help to reduce speeding on Braecrest Drive and allow a safe pedestrian crossing of Braecrest Drive. A roundabout at this location would also connect to the future north-south roadway that is planned to connect to Braecrest Drive as part of the North Brandon Gateway Secondary Plan. The design would need to be confirmed to determine if the roundabout could fit within the existing right-of-way or what property impacts there may be.

The proposed intersection modifications for Braecrest Drive are presented in **Figure 5.1**.

5.2.2 ENHANCEMENT 2: PEDESTRIAN CROSSINGS

In order to provide additional access to the multi-use pathway that runs along the south side of Braecrest Drive in the west part of the study area, a pedestrian crossing of Braecrest Drive is proposed at Quail Ridge Drive. This crossing would serve residents on Whistler Landing, as well as residents coming from Monterey Estates off Mockingbird Drive. The crossing would also serve the future development at Braecrest Drive and Quail Ridge Drive. The crossing would include signage and pavement markings.

In order to provide additional access to the multi-use pathway that runs along the south side of Braecrest Drive in the central part of the study area and a direct connection to Sir Winston Churchill Park, a pedestrian crossing of Braecrest Drive is also proposed at Lark Street. This crossing is approximately mid-way between the proposed roundabouts at Daly Crescent (approximately 250 metres to the west) and Knowlton Drive / Bluebird Street (approximately 285 metres to the east) and would serve residents living north of Braecrest Drive between Daly Crescent and Bluebird Street. The crossing would include signage and pavement markings.

The proposed pedestrian crossings of Braecrest Drive at Quail Ridge Drive and at Lark Street are presented in **Figure 5.1**.

5.2.3 ENHANCEMENT 3: PATHWAY CONNECTION FROM KENSINGTON CRESCENT TO 1ST STREET NORTH

The multi-use pathway that runs along the south side of Braecrest Drive is a well-used active transportation facility in the neighbourhood. However, the pathway ends at Kensington Crescent, just a short block from 1st Street North. Adding a pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North would allow users to access the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North. The design would need to confirm that the pathway could fit within the existing Braecrest Drive right-of-way without impacting drainage.

The proposed pathway connection on Braecrest Drive from Kensington Crescent to 1st Street North is presented in **Figure 5.1**.

BRAECREST DRIVE ENHANCEMENTS



Figure 5.1: Braecrest Drive Enhancements

5.2.4 ENHANCEMENT 4: SIDEWALK CONNECTIONS

There are existing residential homes north of Braecrest Drive between Bluebird Street and 1st Street North with no access to the pathway on the south side of Braecrest Drive. Adding a sidewalk on the north side of Braecrest Drive between Bluebird Street and 1st Street North would allow residents on Braecrest Drive, as well as those located off White Swan Street, a safe route to the crossing at Knowlton Drive where they can access the pathway. Connecting the sidewalk to 1st Street North would also allow these residents to access the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North. The design would need to confirm that the sidewalk could fit within the existing Braecrest Drive right-of-way without impacting drainage.

There are also existing residential homes north of Braecrest Drive between Lark Street and Daly Crescent with no access to the pathway on the south side of Braecrest Drive. Adding a sidewalk on the north side of Braecrest Drive between Lark Street and Daly Crescent would allow residents located off Lark Street and Village Drive a safe route to the proposed pedestrian crossing at Daly Street where they can access the pathway. The design would need to confirm that the sidewalk could fit within the existing Braecrest Drive right-of-way without impacting drainage.

The proposed sidewalk connections on the north side of Braecrest Drive from Bluebird Street to 1st Street North and from Lark Street to Daly Crescent are presented in **Figure 5.1**.

5.3 1ST STREET NORTH OPTIONS

Three possible enhancements were developed for 1st Street North. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for 1st Street North are presented in **Figure 5.2**.

5.3.1 ENHANCEMENT 1: TRANSIT CONNECTION

There is an existing transit stop on the west side of 1st Street North just south of Braecrest Drive without a formal pedestrian connection. Adding a pedestrian connection from Braecrest Drive to the transit stop would make the stop more accessible to all pedestrians, including people in wheelchairs or those pushing a stroller. Proper snow clearing in the winter would also ensure the stop was accessible all year round. The design would need to confirm that the pedestrian connection could fit within the existing 1st Street North right-of-way without impacting drainage.

The proposed sidewalk connection to the transit stop on the west side of 1st Street North south of Braecrest Drive is presented in **Figure 5.2**.

5.3.2 ENHANCEMENT 2: MULTI-USE PATHWAY

There is an existing multi-use pathway on the east side of 1st Street North south of Kirkcaldy Drive. The *Brandon Greenspace Master Plan* identifies a long-term plan to extend the pathway on the east side of 1st Street North, north of Kirkcaldy Drive to the Trans-Canada and potentially further north. Adding a multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive would connect the North Hill neighbourhood to the active transportation facilities south of Kirkcaldy Drive, and provide pedestrian and cyclist access to the ACC Campus from south of Kirkcaldy Drive. The design would need to confirm that the multi-use pathway connection could be constructed within the existing 1st Street North right-of-way without impacting drainage. The existing grade on 1st Street North, which is approximately six percent south of Braecrest Drive, also presents a challenge and would need to be investigated further to determine if accessibility requirements can be met.

The proposed multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive is presented in **Figure 5.2**.

Assiniboine Community College

ACC Campus Bus Turn Around

New Multi-Use Pathway Between Bracrest Drive and Veterans Way

Veterans Way

1st St. N.

2nd St. N.

3rd St. N.

Bracrest Dr.

Kirkham Cr.

Ross Ave.

Dufferin Ave.

Kirkcaldy Dr.

Pedestrian Connection to Existing Bus Stop

LEGEND:

- PEDESTRIAN PUSH BUTTON
- BUS STOP EXISTING/RELOCATION
- BUS STOP CLOSURE
- ROADWAY CONNECTION
- SIDEWALK
- PEDESTRIAN CROSSING
- MULTI-USE PATHWAY

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5.3.3 ENHANCEMENT 3: ACC BUS TURNAROUND

There are currently two transit routes that run along 1st Street North and provide service to the ACC Campus. ACC representatives have indicated that they are interested in having transit service within the ACC Campus. Transit previously entered the campus via Lori Road; however, the delay to the route schedule was determined to be too significant and transit no longer enters the campus. Route 5 travels northbound on 1st Street North and there is currently a transit stop at the ACC Service Road south of Braecrest Drive. A turnaround off the ACC Service Road would allow transit vehicles to enter the campus to drop off and pick up riders and then return to its route without delaying the timing of the route.

The proposed transit turnaround on the ACC Service Road off 1st Street North is presented in **Figure 5.2**.

5.4 18TH STREET NORTH OPTIONS

Two possible enhancements were developed for 18th Street North. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for 18th Street North are presented in **Figure 5.3**.

5.4.1 ENHANCEMENT 1: TRANSIT CONNECTION

There is an existing transit stop on the east side of 18th Street North, north of Braecrest Drive at the end of the acceleration lane without a formal pedestrian connection. Relocation of the transit stop to just north of Braecrest Drive would allow for a pedestrian connection to be constructed. Buses could pull out of the through lane on 18th Street North into the acceleration lane to pick up or drop off passengers at the stop, and then use the acceleration lane to get up to speed and merge back into traffic. Adding a pedestrian connection from Braecrest Drive to the transit stop would make the stop more accessible to all pedestrians, including people in wheelchairs or those pushing a stroller. Proper snow clearing in the winter would also ensure the stop was accessible all year round. The design would need to confirm that the pedestrian connection could fit within the existing 18th Street North right-of-way without impacting drainage.

The proposed sidewalk connection to the transit stop on the east side of 18th Street North, north of Braecrest Drive is presented in **Figure 5.3**.

5.4.2 ENHANCEMENT 2: REDUCED SPEED LIMIT

The existing speed limit on 18th Street North is 70 kilometres per hour until approximately the entrance to the Corral Centre south of Braecrest Drive, when it reduces to 60 kilometres per hour. The signalized intersection at Cumberland Avenue marks the start of the urban area, and reducing the speed limit to 60 kilometres per hour at the signalized intersection at Cumberland Avenue would result in lower speeds on 18th Street North adjacent to the unsignalized intersection of Braecrest Drive.

The proposed speed limit reduction to 60 kilometres per hour on 18th Street North, north of Braecrest Drive is presented in **Figure 5.3**.

18TH STREET N. ENHANCEMENTS

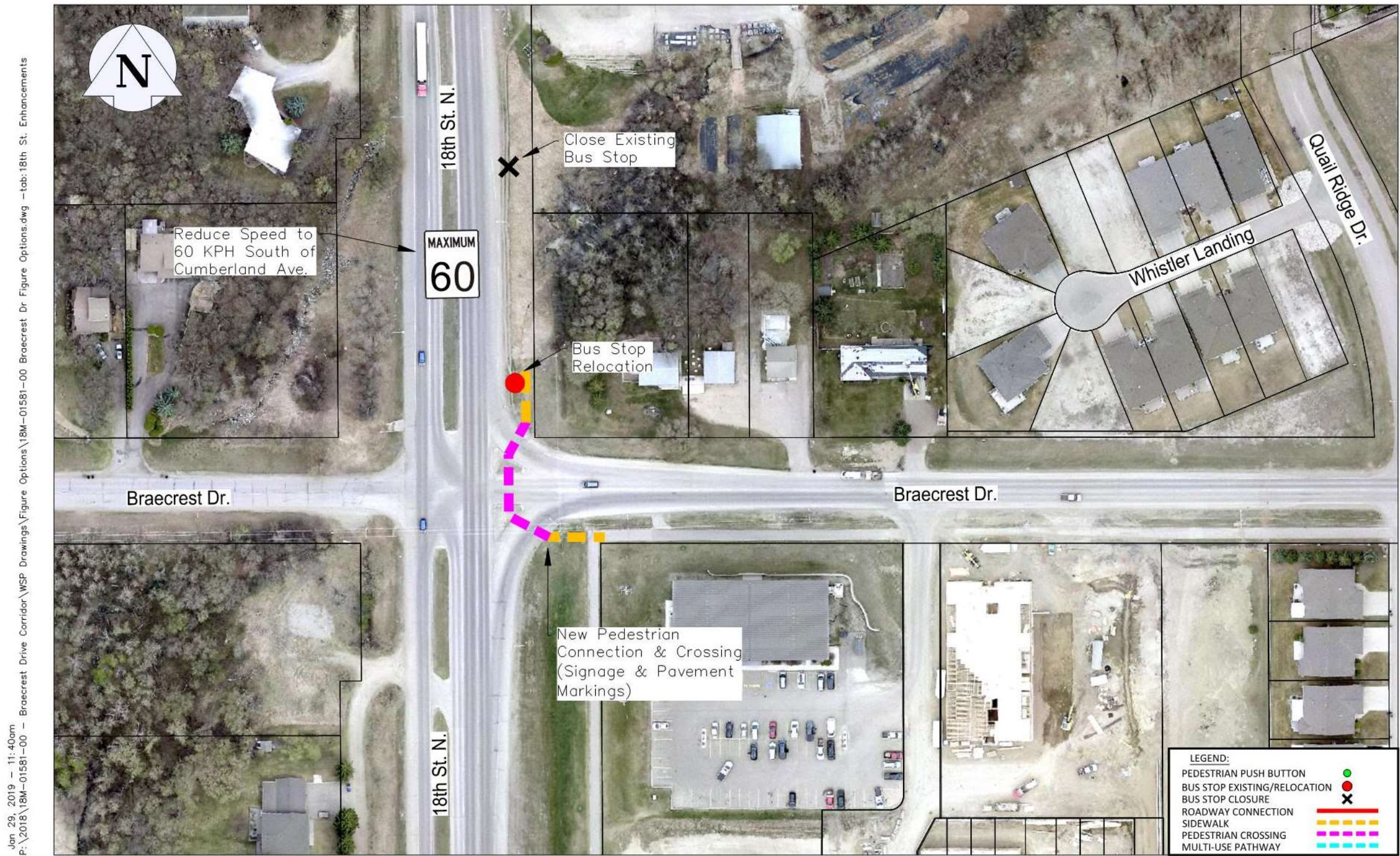


Figure 5.3: 18th Street North Enhancements

5.5 BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC MANAGEMENT OPTIONS

There are existing concerns with traffic operations at the intersection of Braecrest Drive and 1st Street North. The traffic analysis for the intersection previously presented indicates that operations are more critical during the afternoon peak hour, and the eastbound movement is forecast to operate at LOS F with high levels of delay by 2038, with or without the identified developments. In addition, traffic signals are forecast to be warranted at the intersection in 2028 with the identified developments.

Two possible traffic management alternatives were developed for the intersection of Braecrest Drive and 1st Street North to improve traffic operations and user safety. Only one of the possible alternatives can be recommended for the intersection. The proposed alternatives for Braecrest Drive and 1st Street North are presented in **Figure 5.4**.

5.5.1 ALTERNATIVE 1: RESTRICT LEFT TURNS (PERMANENT)

The major concern at the intersection of Braecrest Drive and 1st Street North is the eastbound left-turn from Braecrest Drive onto northbound 1st Street North when traffic on 1st Street North is heavy. Permanently restricting eastbound left-turns would eliminate the main issue. Extending the median on 1st Street North would force eastbound vehicles on Braecrest Drive to turn right onto southbound 1st Street North. Vehicles wanting to travel north on 1st Street North can use White Swan Drive to access the signals at Centre Avenue and 1st Street North. The demand for the left-turn movement is relatively low (just 36 vehicles in the 2018 p.m. peak hour) so there will not be a significant amount of traffic diverted to White Swan Drive.

Permanently restricting left-turns at the intersection of Braecrest Drive and 1st Street North is presented in **Figure 5.4**.

The Synchro analysis for the intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations when eastbound left-turns are restricted. **Table 5.1** summarizes the results of the updated intersection analysis for Braecrest Drive and 1st Street North (the original 2038 post development results are shown for comparison). The detailed Synchro results are included in **Appendix B**. The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS B or better when eastbound left-turns are restricted at the intersection.

Table 5.1: Braecrest Drive and 1st Street North Synchro Results – Restrict Left-Turns

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2038 Post Development Traffic	A (3 sec)	A (44%)	0.32 (SBT)	EB	C (17 sec)
2038 Post Development Traffic (no EB left-turns)	A (2 sec)	A (40%)	0.32 (SBT)	EB	B (11 sec)
Weekday P.M. Peak Hour					
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (no EB left-turns)	A (4 sec)	A (49%)	0.43 (NBL)	NBL	B (13 sec)

The traffic signal warrant analysis for the intersection was also updated. The signal warrant results are shown in **Table 5.2**. The detailed warrant analysis is included in **Appendix C**. When eastbound left-turns are restricted at the intersection, traffic signals are not warranted until the 2038 post development scenario.

BRAECREST DRIVE & 1ST STREET N. - TRAFFIC MANAGEMENT ALTERNATIVES

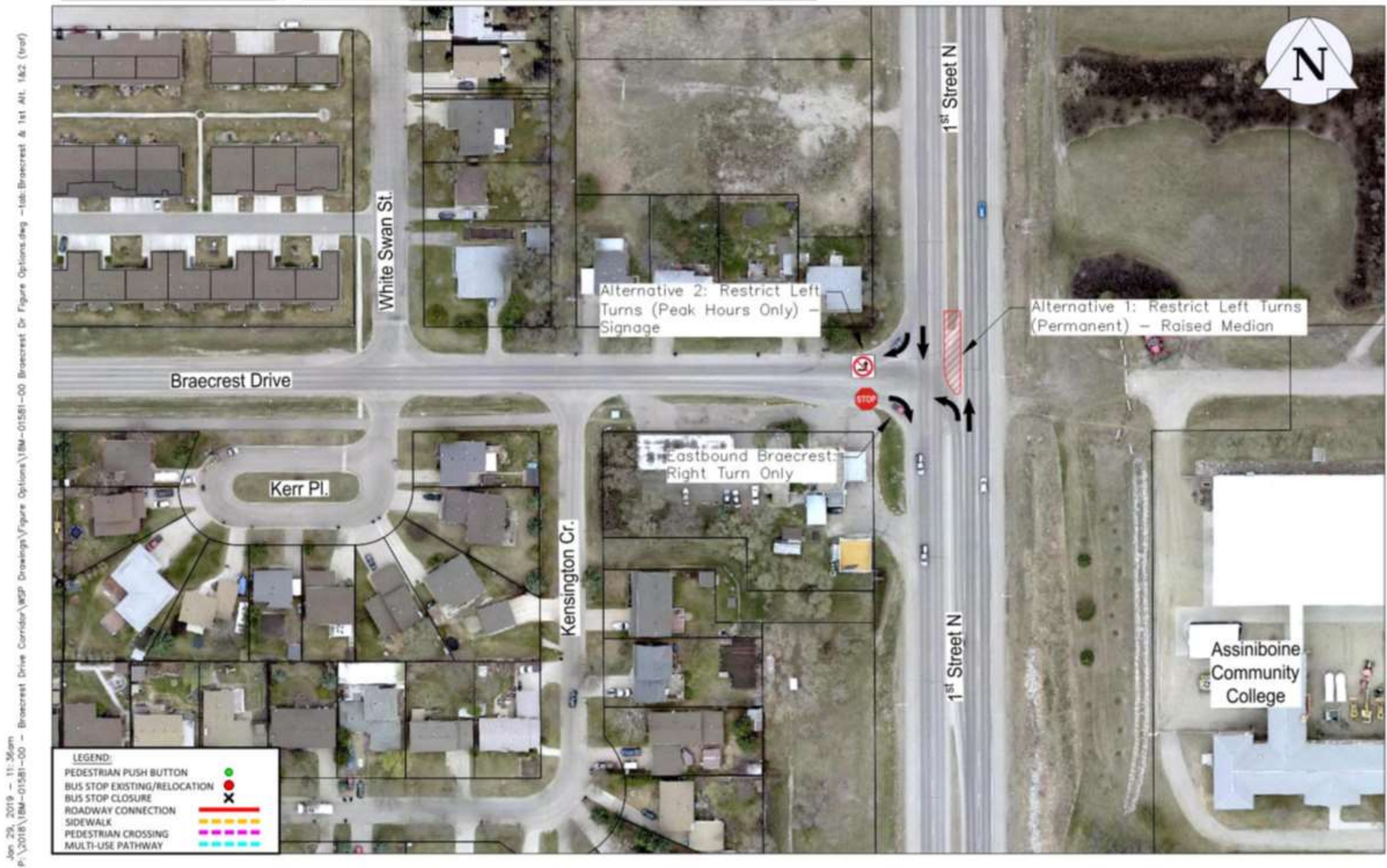


Figure 5.4: Braecrest Drive and 1st Street North Traffic Management Alternatives

Table 5.2: Signal Warrant Analysis for Braecrest Drive and 1st Street North – Restrict Left-Turns

INTERSECTION	ANALYSIS YEAR	PRIORITY POINTS	SIDE STREET VOLUME	SIGNAL WARRANTED
Braecrest Drive & 1st Street North	2028 Post Development	103	> 75	Yes
	2028 Post Development (no EB left-turn)	87	> 75	No
	2038 Post Development (no EB left-turn)	122	> 75	Yes

5.5.2 ALTERNATIVE 2: RESTRICT LEFT TURNS (PEAK HOURS ONLY)

The major concern at the intersection of Braecrest Drive and 1st Street North is the eastbound left-turn from Braecrest Drive onto northbound 1st Street North when traffic on 1st Street North is heavy. The primary concern is during weekday peak periods, which include the morning, noon and afternoon peak hours. Restricting eastbound left-turns during peak periods would address the primary issue. Signage would be used to identify the hours when left-turns are restricted. Police enforcement would be beneficial, especially immediately after the restrictions go into effect. Similar to Alternative 1, vehicles wanting to travel north on 1st Street North can use White Swan Drive to access the signals at Centre Avenue and 1st Street North. Again, the demand for the left-turn movement is relatively low (just 36 vehicles in the 2018 p.m. peak hour) so there will not be a significant amount of traffic diverted to White Swan Drive. Assuming good driver compliance during peak periods would result in similar levels of service at the intersection as presented for Alternative 1.

Restricting left-turns during peak periods at the intersection of Braecrest Drive and 1st Street North is presented in **Figure 5.5**.

5.5.3 ADDITIONAL ALTERNATIVES

The Steering Committee subsequently requested that vehicular access to the ACC North Hill Campus from 1st Street North at Braecrest Drive also be investigated.

ACCESS TO ACC AT BRAECREST DRIVE

Vehicles currently access the ACC North Hill Campus from 1st Street North via the signalized intersection at Centre Avenue / Lori Road, approximately 300 metres north of Braecrest Drive. There is an additional right-in/right-out service road connection into the North Hill Campus just over 200 metres south of Braecrest Drive. The impacts on operations at the Braecrest Drive and 1st Street North intersection were investigated with access to the North Hill Campus at Braecrest Drive. Several intersection configurations were investigated and traffic volumes entering and exiting the campus were redistributed accordingly. The Synchro analysis for the intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations. The weekday p.m. peak hour was investigated as it is the most critical time period for traffic operations at the intersection. It should be noted that traffic signals are still warranted by 2038 for all scenarios.

Table 5.3 summarizes the results of the updated intersection analysis for Braecrest Drive and 1st Street North (the previous 2038 post development results are shown for comparison).

Table 5.3: Braecrest Drive and 1st Street North Synchro Results – With Access to ACC

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday P.M. Peak Hour					
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (no EB left-turns)	A (4 sec)	A (49%)	0.43 (NBL)	NBL	B (13 sec)
2038 Post Development Traffic (with ACC access and EB & WB right-in/right-out/left-in only)	A (4 sec)	A (51%)	0.44 (EBR)	EBR	B (13 sec)
2038 Post Development Traffic (with all-directional ACC access)	F (98 sec)	B (61%)	2.18 (EBL/T)	WBL/T	F (>200 sec)
2038 Post Development Traffic (signalized with all-directional ACC access)	B (17 sec)	C (66%)	0.73 (SBT)	EBT	C (26 sec)

When access to the North Hill Campus is allowed with restricted movements at the intersection (no eastbound or westbound left-turn or through movements), all movements at the intersection are forecast to operate at acceptable levels of service.

The intersection is forecast to fail when all-directional access to ACC is allowed (no restricted movements at the intersection). The level of service is improved and all movements are forecast to operate at LOS C or better when traffic signals are added at the intersection; however, the existing grade on 1st Street North south of Braecrest Drive, approximately six percent, is a concern. Northbound vehicles on 1st Street North that get stopped by the signal may queue back onto the steeper grade during peak periods, which may be an issue during slippery winter conditions.

Limited access to ACC at Braecrest Drive (right-in only, possible right-out) was taken forward as an alternative for evaluation.

5.6 BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMMODATION OPTIONS

There is currently a demand for pedestrians to cross 1st Street North at Braecrest Drive to access the ACC Campus and nearby bus stop facilities. Two possible pedestrian accommodation alternatives were developed for the intersection of Braecrest Drive and 1st Street North to allow pedestrians to safely cross 1st Street North. Only one of the possible alternatives can be recommended for the intersection.

5.6.1 ALTERNATIVE 1: HALF SIGNAL AT BRAECREST DRIVE

The Transportation Association of Canada (TAC) *Pedestrian Crossing Control Guide, Third Edition* (June 2018) was used to determine the recommended crossing treatment for 1st Street North. Based on the average daily traffic (between 9,000 and 12,000 vehicles per day), speed limit (70 kilometres per hour) and number of lanes (two lanes per direction with raised median) on 1st Street North, a traffic signal system is recommended. Therefore, the first alternative to accommodate pedestrians crossing 1st Street North is a pedestrian activated half signal at the intersection with Braecrest Drive. The half signal would be located on the north side of the intersection so as not to conflict with the northbound left-turn movement on 1st Street North. The signal would be activated by pedestrian

push buttons and vehicles on 1st Street North would stop at the red light to allow pedestrians to safely cross 1st Street North. A formal pathway connection on the east side of 1st Street North leading to the ACC Campus would be part of the half signal alternative.

The existing grade on 1st Street North is approximately six percent south of Braecrest Drive. Northbound vehicles on 1st Street North that get stopped by the half signal may queue back onto the steeper grade during peak periods, which may be an issue during slippery winter conditions. However, the signal would only get triggered when pedestrians are wanting to cross 1st Street North, and there is less demand for the pedestrian crossing during winter months when this would be an issue.

The half signal at the intersection of Braecrest Drive and 1st Street North is presented in **Figure 5.5**.

5.6.2 ALTERNATIVE 2: HALF SIGNAL NORTH OF BRAECREST DRIVE

The second alternative to accommodate pedestrians crossing 1st Street North is a half signal north of the intersection with Braecrest Drive. Shifting the crossing further north would provide additional queuing distance for northbound vehicles that get stopped by the half signal before they queue back onto the steeper grade on 1st Street North. This alternative also includes relocating the existing transit stop on southbound 1st Street North from south of Braecrest Drive to north of Braecrest Drive at the proposed crossing location. The signal would be activated by pedestrian push buttons and vehicles on 1st Street North would stop at the red light to allow pedestrians to safely cross 1st Street North. A formal pedestrian connection on the west side of 1st Street North between Braecrest Drive and the proposed crossing and a formal pedestrian connection on the east side of 1st Street North leading to the ACC Campus would be part of the pedestrian crossing alternative.

The half signal north of the intersection with Braecrest Drive is presented in **Figure 5.6**.

BRAECREST DRIVE & 1ST STREET N. - PEDESTRIAN ACCOMODATION ALTERNATIVES

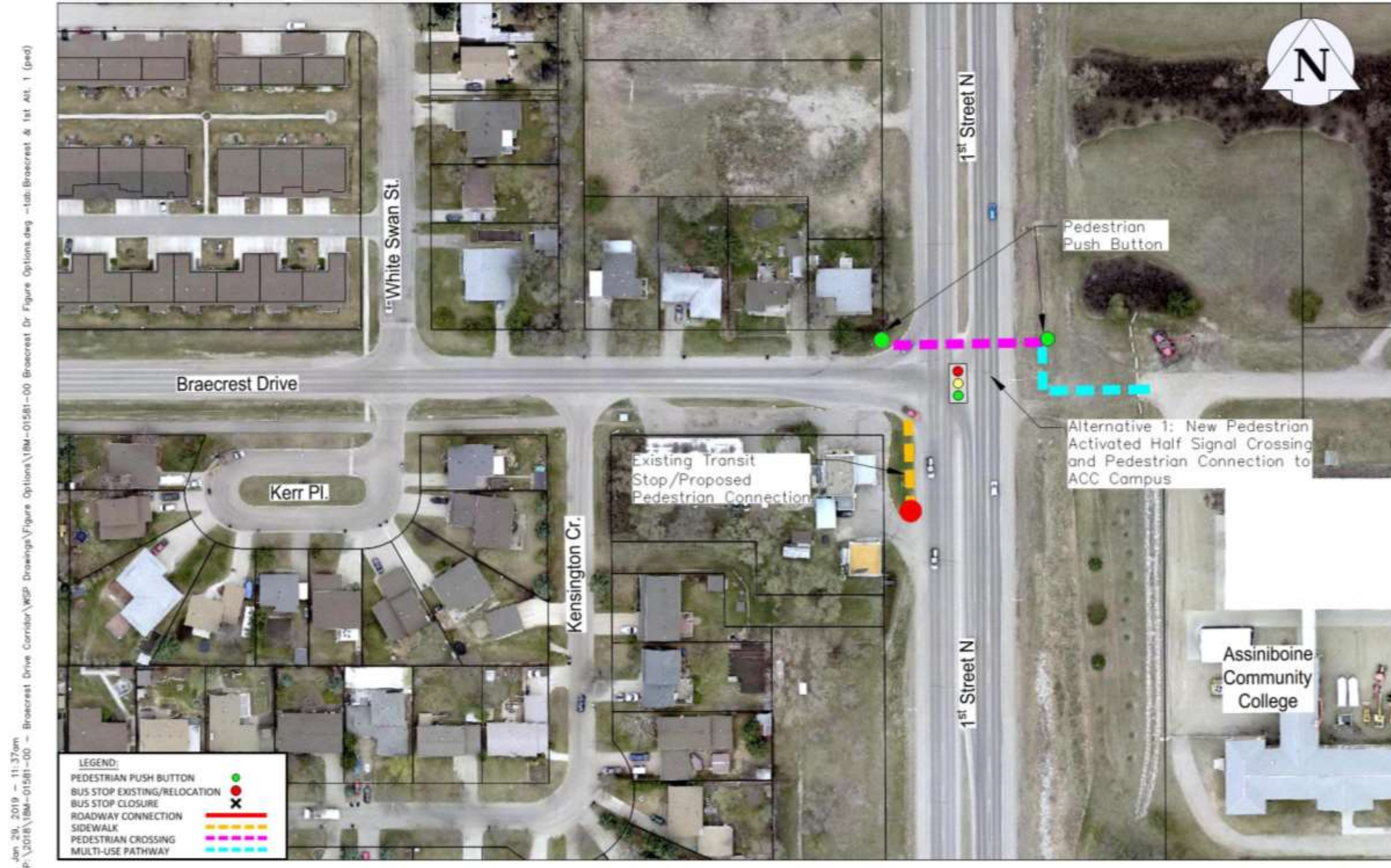


Figure 5.5: Braecrest Drive and 1st Street North Pedestrian Accommodation Alternative 1

BRAECREST DRIVE & 1ST STREET N. - PEDESTRIAN ACCOMODATION ALTERNATIVES

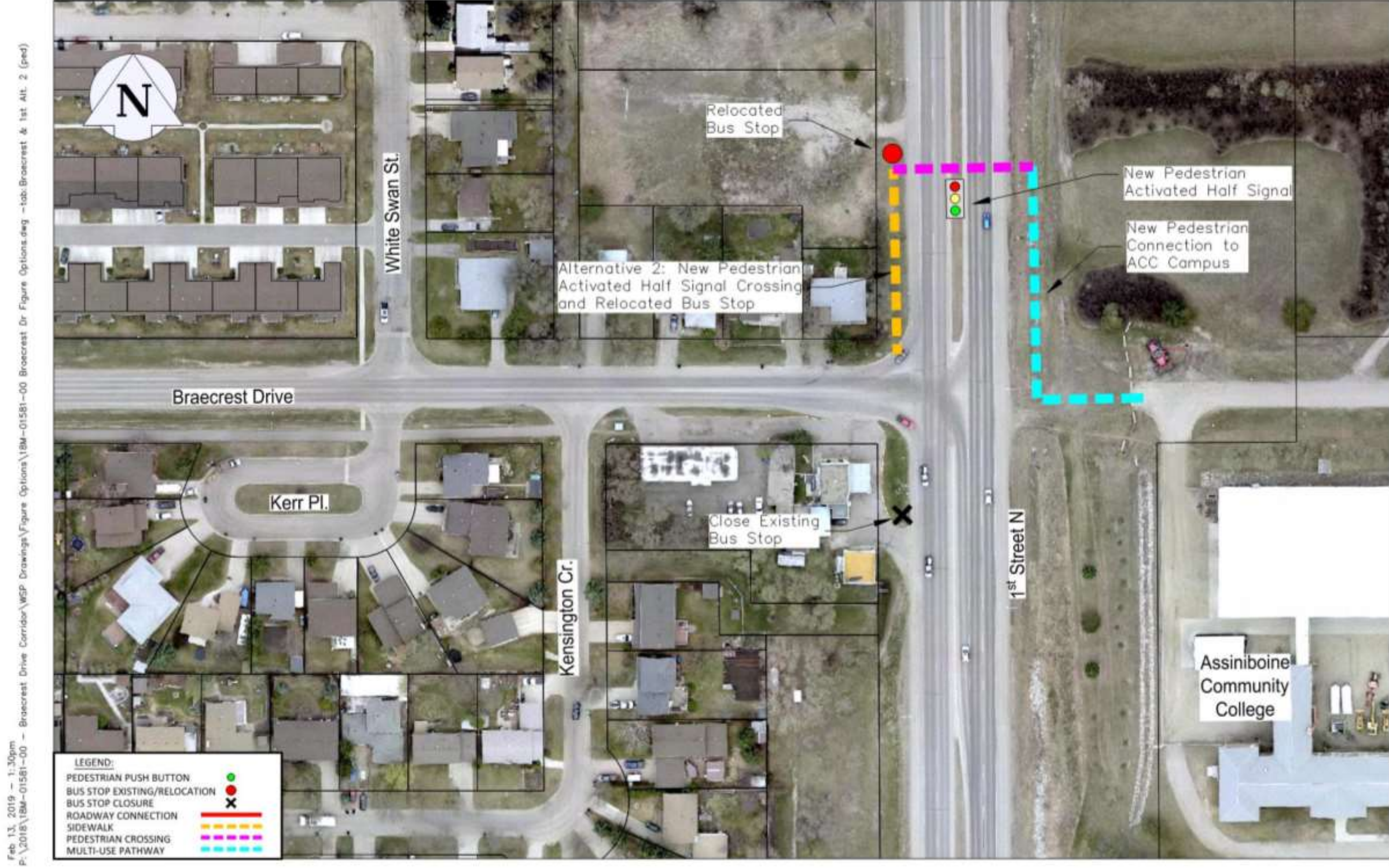


Figure 5.6: Braecrest Drive and 1st Street North Pedestrian Accommodation Alternative 2

5.7 BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT OPTIONS

There are existing concerns with traffic operations at the intersection of Braecrest Drive and 18th Street North. The traffic analysis for the intersection previously presented indicates that the intersection is currently operating at LOS F during the afternoon peak hour. The westbound approach is experiencing significant delays, which are forecast to increase as traffic volumes increase and additional developments move forward. Traffic signals are currently warranted at the intersection based on existing 2018 traffic volumes.

Four possible traffic management alternatives were developed for the intersection of Braecrest Drive and 18th Street North to improve traffic operations and user safety. Only one of the possible alternatives can be recommended for the intersection.

5.7.1 ALTERNATIVE 1: TRAFFIC SIGNALS WITH PEDESTRIAN PHASE

The intersection of Braecrest Drive and 18th Street North is unsignalized and traffic on Braecrest Drive approaches a stop sign at the intersection while traffic on 18th Street North is free flowing. This configuration makes certain movements challenging, particularly the westbound left-turn from Braecrest Drive onto southbound 18th Street North, especially during peak periods. In addition, there is currently a demand for pedestrians to cross 18th Street North at Braecrest Drive to access the existing multi-use pathways on the east side of 18th Street North and the south side of Braecrest Drive, and nearby bus stop facilities.

Adding a traffic signal at this intersection would allow vehicles on Braecrest Drive to easily and safely complete the left-turn and through movements, and the pedestrian phase would allow pedestrians to safely cross 18th Street North. However, the existing grade on 18th Street North south of Braecrest Drive, approximately six percent, is a concern. Northbound vehicles on 18th Street North that get stopped by the signal may queue back onto the steeper grade during peak periods, which may be an issue during slippery winter conditions.

Adding traffic signals at the intersection of Braecrest Drive and 18th Street North and pedestrian connections and a crossing is presented in **Figure 5.7**. The pedestrian crossing would be located on the south side of the intersection to connect directly to the existing pathways on Braecrest Drive and 18th Street North. The pedestrian phase would be activated by pedestrian push buttons. A formal pedestrian connection on the east side of 18th Street North leading to the existing multi-use pathway would be part of the traffic signal alternative.

The Synchro analysis for the intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations when the intersection is signalized. **Table 5.4** summarizes the results of the updated intersection analysis for Braecrest Drive and 18th Street North (the original 2038 post development results are shown for comparison). The detailed Synchro results are included in **Appendix B**. The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS D or better when the intersection is signalized. It should be noted that level of service for northbound and southbound traffic on 18th Street North is reduced as some vehicles are now required to stop at the signal when they were previously operating under free flow conditions.

The Synchro analysis forecasts that northbound vehicles on 18th Street North that get stopped at the signal will queue back onto the steeper grade during peak periods. As previously noted, this could be an issue during slippery periods in winter.

Table 5.4: Braecrest Drive and 18th Street North Synchro Results – Signalized

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2038 Post Development Traffic	A (3 sec)	A (44%)	0.32 (SBT)	EB	C (17 sec)
2038 Post Development Traffic (signalized)	B (13 sec)	D (77%)	0.79 (SBT)	WBT/L	C (34 sec)
Weekday P.M. Peak Hour					
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (signalized)	C (27 sec)	F (93%)	0.96 (SBT)	SBL	D (53 sec)

5.7.2 ALTERNATIVE 2: RESTRICT LEFT TURNS (PERMANENT)

The major concern at the intersection of Braecrest Drive and 18th Street North is the westbound left-turn from Braecrest Drive onto southbound 18th Street North when traffic on 18th Street North is heavy. Permanently restricting eastbound and westbound left-turns and through movements would eliminate this issue. Adding additional median on 18th Street North would force vehicles on Braecrest Drive to turn right onto 18th Street North. Vehicles wanting to turn left could make a right turn and then use the adjacent signals to make a U-turn to travel in the opposite direction. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive.

Permanently restricting left-turns and through movements at the intersection of Braecrest Drive and 18th Street North is presented in **Figure 5.8**.

The Synchro analysis for the intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations when eastbound and westbound left-turns and through movements are restricted. It was assumed that 50 percent of westbound vehicles on Braecrest Drive wanting to make left-turns or through movements used an alternate route such as Knowlton Drive and did not go through the intersection at all, and the other 50 percent turned right onto northbound 18th Street North and then completed a U-turn movement at the signalized intersection with Cumberland Avenue. It was also assumed that all eastbound vehicles on Braecrest Drive wanting to make left-turns or through movements will turn right onto southbound 18th Street North and then complete a U-turn movement at the signalized access at the Corral Centre. **Table 5.5** summarizes the results of the updated intersection analysis for Braecrest Drive and 18th Street North (the original 2038 post development results are shown for comparison). The detailed Synchro results are included in **Appendix B**. The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS E or better when eastbound and westbound left-turns and through movements are restricted at the intersection. It should be noted that the reassignment of traffic at the intersection (specifically the westbound left-turns and through movements converted to right-turns and U-turns) results in a change in some of the results, specifically for the southbound movement as more traffic is now travelling southbound in a single lane through the intersection.

The traffic signal warrant analysis for the intersection was also updated. The signal warrant results are shown in **Table 5.6**. The detailed warrant analysis is included in **Appendix C**. When eastbound and westbound left-turns and through movements are restricted at the intersection, traffic signals are warranted based on the 2038 post development traffic volumes.

Table 5.5: Braecrest Drive and 18th Street North Synchro Results – Restrict Left Turns

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2038 Post Development Traffic	A (3 sec)	A (44%)	0.32 (SBT)	EB	C (17 sec)
2038 Post Development Traffic (no EB/WB left-turns or thrus)	A (2 sec)	B (57%)	0.57 (SBT)	EBR	C (20 sec)
Weekday P.M. Peak Hour					
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (no EB/WB left-turns or thrus)	A (3 sec)	D (73%)	0.77 (SBT)	EBR	E (35 sec)

Table 5.6: Signal Warrant Analysis for Braecrest Drive and 18th Street North – Restrict Left Turns

INTERSECTION	ANALYSIS YEAR	PRIORITY POINTS	SIDE STREET VOLUME	SIGNAL WARRANTED
Braecrest Drive & 18th Street North	2018 Existing	102	>75	Yes
	2023 Post Development (no EB or WB left-turns or through movements)	63	> 75	No
	2028 Post Development (no EB or WB left-turns or through movements)	84	> 75	No
	2038 Post Development (no EB or WB left-turns or through movements)	187	>75	Yes

5.7.3 ALTERNATIVE 3: RESTRICT LEFT TURNS (PEAK HOURS ONLY)

The major concern at the intersection of Braecrest Drive and 18th Street North is the westbound left-turn from Braecrest Drive onto southbound 18th Street North when traffic on 18th Street North is heavy. The primary concern is during weekday peak periods, which include the morning, noon and afternoon peak hours. Restricting left-turns and through movements during peak periods would address the primary concern. Signage would be used to identify the hours when left-turns are restricted. Police enforcement would be beneficial, especially immediately after the restrictions go into effect. Similar to Alternative 2, vehicles wanting to turn left could make a right turn and then use the adjacent signals to make a U-turn to travel in the opposite direction. Assuming good driver compliance during peak periods would result in similar levels of service at the intersection as presented in Section 8.2. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive.

Restricting left-turns during peak periods at the intersection of Braecrest Drive and 18th Street North is presented in **Figure 5.8**.

5.7.4 ALTERNATIVE 4: NEW ROADWAY CONNECTION FROM QUAIL RIDGE TO MOCKINGBIRD

The intersection of Braecrest Drive and 18th Street North is unsignalized and traffic on Braecrest Drive approaches a stop sign at the intersection while traffic on 18th Street North is free flowing. This configuration makes certain movements challenging, particularly the westbound left-turn from Braecrest Drive onto southbound 18th Street North, especially during peak periods. The adjacent intersection to the north on 18th Street North is Cumberland Avenue, which is signalized. Providing a new roadway connection from Quail Ridge Drive to Mockingbird Drive would allow westbound vehicles on Braecrest Drive to access the signals at 18th Street North and Cumberland Avenue and complete a safe left-turn movement. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive.

The new roadway connection from Quail Ridge Drive to Mockingbird Drive is presented in **Figure 5.9**.

The Synchro analysis for the Braecrest Drive and 18th Street North intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations when a new roadway connection from Quail Ridge Drive to Mockingbird Drive is available to access the signalized intersection of 18th Street North and Cumberland Avenue. It was assumed that eastbound and westbound left-turns and through movements would be restricted at Braecrest Drive during peak periods. **Table 5.7** summarizes the results of the updated intersection analysis for Braecrest Drive and 18th Street North (the original 2038 post development results are shown for comparison). The detailed Synchro results are included in **Appendix B**. The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS E or better when a new roadway connection from Quail Ridge Drive to Mockingbird Drive is available to access the signalized intersection of 18th Street North and Cumberland Avenue. It should be noted that the reassignment of traffic at the intersection (specifically the westbound left-turns and through movements that are now southbound movements) results in a change in some of the results, specifically for the southbound through and eastbound right-turn movements as more traffic is now travelling southbound in a single lane at the intersection.

Table 5.7: Braecrest Drive and 18th Street North Synchro Results – New Roadway Connection

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
Weekday A.M. Peak Hour					
2038 Post Development Traffic	A (3 sec)	A (44%)	0.32 (SBT)	EB	C (17 sec)
2038 Post Development Traffic (new roadway connection and no EB/WB left-turns or thrus)	A (1 sec)	B (61%)	0.62 (SBT)	EBR	C (23 sec)
Weekday P.M. Peak Hour					
2038 Post Development Traffic	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (new roadway connection and no EB/WB left-turns or thrus)	A (2 sec)	D (78%)	0.82 (SBT)	EBR	E (41 sec)

BRAECREST DRIVE & 18TH ST. N. TRAFFIC MANAGEMENT ALTERNATIVES

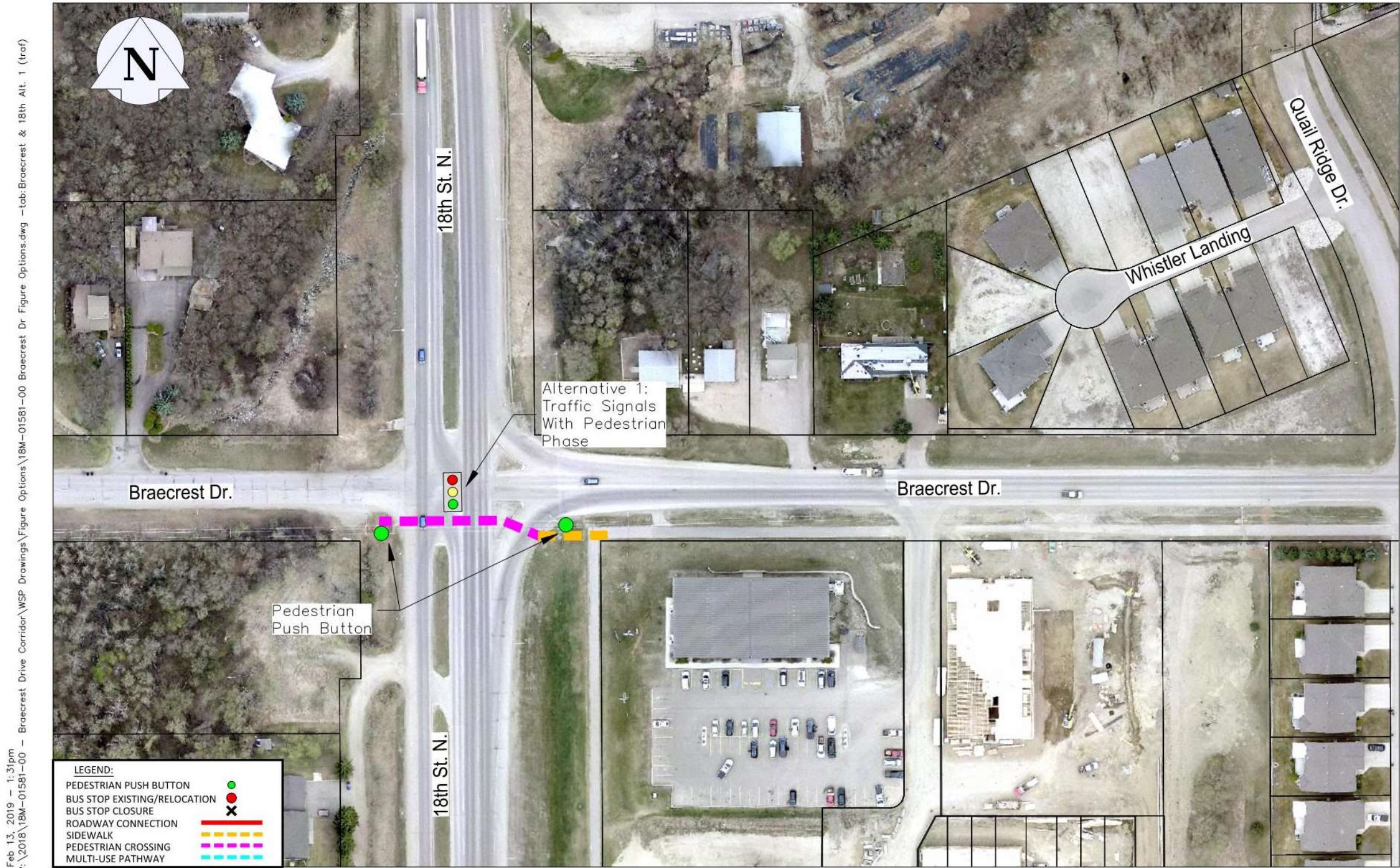


Figure 5.7: Braecrest Drive and 18th Street North Traffic Management Alternative 1

BRAECREST DRIVE & 18TH STREET N. TRAFFIC MANAGEMENT ALTERNATIVES

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P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Figure Options\18M-01581-00 Braecrest Dr Figure Options.dwg -tab: Braecrest & 18th Alt. 2&3 (traf)

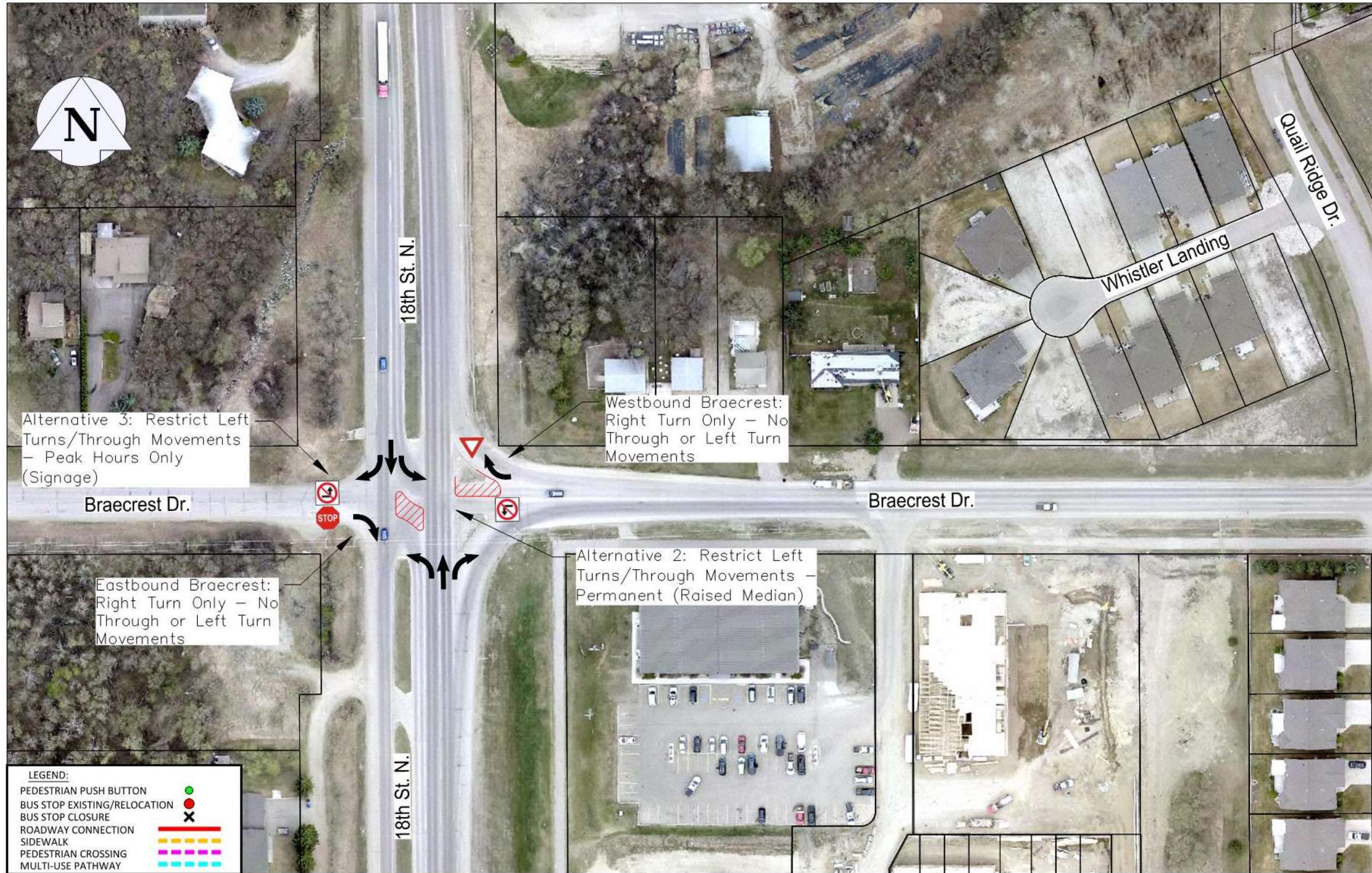


Figure 5.8: Braecrest Drive and 18th Street North Traffic Management Alternatives 2 and 3

BRAECREST DRIVE & 18TH STREET N. TRAFFIC MANAGEMENT ALTERNATIVES



Figure 5.9: Braecrest Drive and 18th Street North Traffic Management Alternative 4

5.7.5 ADDITIONAL ALTERNATIVES

Several additional alternatives for Braecrest Drive and 18th Street North were also investigated.

TWO SOUTHBOUND LANES ON 18TH STREET NORTH

18th Street North is currently two lanes in the northbound direction and one lane in the southbound direction adjacent to Braecrest Drive. WSP investigated the implications of adding a second southbound through lane on 18th Street North. The Synchro analysis for the intersection was updated for the critical 2038 post development scenario to determine the impacts on traffic operations. It was assumed that eastbound and westbound left-turns and through movements would be restricted, and the weekday p.m. peak hour was investigated as it is the most critical time period for traffic operations at the intersection. It should be noted that traffic signals are still warranted by 2038 for all scenarios. Several intersection configurations were investigated and traffic volumes were redistributed accordingly. **Table 5.8** summarizes the results of the updated intersection analysis for Braecrest Drive and 18th Street North (the previous 2038 post development results are shown for comparison). The level of service is improved during the afternoon peak hour when a second southbound through lane is added on 18th Street North. It should be noted that the reassignment of traffic at the intersection with the new roadway connection from Quail Ridge Drive to Mockingbird Drive impacts the results for individual movements at the intersection.

Table 5.8: Braecrest Drive and 18th Street North Synchro Results – Two SB Lanes on 18th Street North

SCENARIO	OVERALL INTERSECTION			CRITICAL MOVEMENT	
	LOS (DELAY)	ICU LOS	MAX V/C	MOVEMENT	LOS (DELAY)
WEEKDAY P.M. PEAK HOUR					
2038 Post Development Traffic (1 SB thru lane)	E (48 sec)	B (55%)	1.56 (EB)	EB	F (>200 sec)
2038 Post Development Traffic (1 SB thru lane and no EB/WB left-turns or thrus)	A (3 sec)	D (73%)	0.77 (SBT)	EBR	E (35 sec)
2038 Post Development Traffic (2 SB thru lanes and no EB/WB left-turns or thrus)	A (3 sec)	B (58%)	0.51 (WBR)	WBR	D (28 sec)
2038 Post Development Traffic (1 SB thru lane, new roadway connection and no EB/WB left-turns or thrus)	A (2 sec)	D (78%)	0.82 (SBT)	EBR	E (41 sec)
2038 Post Development Traffic (2 SB thru lanes, new roadway connection and no EB/WB left-turns or thrus)	A (2 sec)	B (58%)	0.53 (SBT)	SBL	C (22 sec)
2038 Post Development Traffic (1 SB thru lane and signalized)	C (27 sec)	F (93%)	0.96 (SBT)	SBL	D (53 sec)
2038 Post Development Traffic (2 SB thru lanes and signalized)	C (21 sec)	D (81%)	0.89 (NBT)	SBL	D (51 sec)

The traffic signal warrant analysis for the intersection was also updated. The signal warrant results are shown in **Table 5.9**. The detailed warrant analysis is included in **Appendix B**. Traffic signals are warranted in all scenarios based on the 2038 post development traffic volumes.

Table 5.9: Signal Warrant Analysis for Braecrest Drive and 18th Street North – Two SB Lanes on 18th Street North

INTERSECTION	ANALYSIS YEAR	PRIORITY POINTS	SIDE STREET VOLUME	SIGNAL WARRANTED
Braecrest Drive & 18th Street North	2018 Post Development Traffic (2 SB thru lanes and all movements allowed)	96	> 75	No
	2023 Post Development Traffic (2 SB thru lanes and all movements allowed)	136	> 75	Yes
	2023 Post Development Traffic (2 SB thru lanes and no EB/WB left-turns or thrus)	57	> 75	No
	2028 Post Development Traffic (2 SB thru lanes and no EB/WB left-turns or thrus)	76	> 75	No
	2038 Post Development Traffic (2 SB thru lanes and no EB/WB left-turns or thrus)	170	>75	Yes
	2023 Post Development Traffic (2 SB thru lanes, new roadway connection and no EB/WB left-turns or thrus)	46	< 75	No
	2028 Post Development Traffic (2 SB thru lanes, new roadway connection and no EB/WB left-turns or thrus)	62	< 75	No
	2038 Post Development Traffic (2 SB thru lanes, new roadway connection and no EB/WB left-turns or thrus)	130	> 75	Yes

The addition of a second southbound through lane on 18th Street North is forecast to delay the requirement for signals at the intersection of Braecrest Drive and 18th Street North; however, traffic signals will still be required in the future. Therefore, two southbound lanes on 18th Street North was not taken forward as an alternative for evaluation, but it should be noted that two southbound lanes on 18th Street North will likely be required in the future to accommodate the growing volumes of traffic on 18th Street North.

MEDIAN ACCELERATION LANE

WSP investigated a median acceleration lane to facilitate the westbound left-turn from westbound Braecrest Drive to southbound 18th Street North. This configuration would allow left-turning vehicles to cross northbound traffic and enter directly in to the median acceleration lane without stopping in the median, then accelerate and merge into southbound traffic. This type of configuration is most commonly used at unsignalized intersections on high-speed divided roadways that experience a high proportion of rear-end crashes related to the speed differential caused by vehicles turning left onto the highway, where intersection sight distance is inadequate, or where there are high volumes of trucks or heavy vehicles entering the roadway (*NCHRP Report 500 / Volume 5: A Guide for Addressing*

Unsignalized Intersection Collisions). Studies have indicated that median acceleration lanes can provide benefit at two-way stop controlled rural intersections by reducing the potential for right-angle collisions, side swipe collisions, and rear end collisions. Median acceleration lanes can increase intersection safety and decrease delay time; however, they will not result in any benefits unless they are properly used by drivers. *NCHRP Report 375: Median Intersection Design* notes that median acceleration lanes should be considered at locations where adequate median width is available and the following are true:

- 1 Limited gaps are available in the major road traffic stream;
- 2 Turning traffic must merge with high-speed through traffic;
- 3 There is a significant history of rear-end or sideswipe accidents;
- 4 Intermediate sight distance (twice the stopping sight distance) is inadequate; and
- 5 There are high volumes of trucks entering the divided highway.

The intersection of Braecrest Drive and 18th Street North does not meet all of these requirements. The intersection is in an urban environment and there is not a significant speed differential between Braecrest Drive (50 kilometres per hour) and 18th Street North (70 kilometres per hour). Braecrest Drive is not designated as a truck route and so there are not high volumes of westbound left-turning trucks turning at the intersection. Therefore, a median acceleration lane on southbound 18th Street North was not taken forward as an alternative for evaluation.

GRADE REDUCTION ON 18TH STREET NORTH

WSP reviewed the implications of reducing the vertical gradient on 18th Street North south of Braecrest Drive. The existing profile of 18th Street, provided by MI, was used to approximate the amount that the surface of the roadway would need to be lowered to achieve a reduction in the approach grade from the existing 5.9 percent to approximately 4.0 percent. Two scenarios were considered:

- **Scenario 1 - Reduce the entire grade to 4.0 percent:** To lower the entire vertical profile on 18th Street North to achieve a grade of 4.0 percent from the bottom of the hill to a point approximately 140 metres south of Cumberland Avenue would require the lowering of the Braecrest Drive intersection by a depth of approximately six metres; and
- **Scenario 2 - Reduce the grade to 4.0 percent starting approximately 200 metres south of Braecrest Drive:** To develop a vertical grade of 4.0 percent from 200 metres south of Braecrest Drive (approximating the forecast northbound queue length at a signalized intersection) to a point 200 metres north of Braecrest Drive would require the lowering of the Braecrest Drive intersection by a depth of approximately three metres.

Based on the amount of lowering that would be required at Braecrest Drive, a grade reduction on 18th Street North is not considered feasible and was therefore was not taken forward as an alternative for evaluation.

SERVICE ROAD CONNECTION ON EAST SIDE OF 18TH STREET NORTH

A service road connection on the east side of 18th Street North was suggested during the public engagement. There is an existing service road that runs along the east side of 18th Street North south of Cumberland Avenue and currently terminates at the former Patmore Nursery property (**Figure 5.10**). The service road connection would be similar to the new roadway connection from Quail Ridge Drive to Mockingbird Drive (Alternative 4) and would allow westbound vehicles on Braecrest Drive to access the signals at 18th Street North and Cumberland Avenue to complete a safe left-turn movement onto southbound 18th Street North.

There is not enough room in the existing 18th Street North right-of-way south of Mockingbird Drive to accommodate a service road so additional property acquisition would be required, including from the residential property in the northeast corner of the Braecrest Drive and 18th Street North intersection. The connection of the new service road to Braecrest Drive would need to be shifted away from 18th Street North (similar to the connection at Cumberland Avenue) which would result in additional property impacts. The new intersection of the service road on Braecrest Drive would be quite close to the 18th Street North intersection, so queuing of westbound traffic on Braecrest Drive at 18th Street North could sometimes block access to and from the service road. In addition, it is possible that eastbound traffic on Braecrest Drive wanting to access the service road could be delayed by westbound queuing, which could cause back-up into the 18th Street North intersection. There are also some significant changes

in the existing ground elevation in this area, which would increase the cost and difficulty to construct the service road connection.

As the service road connection provides similar benefits to the new roadway connection from Quail Ridge Drive to Mockingbird Drive but has a number of additional operational, construction and property impact issues, the service road connection on the east side of 18th Street North was not taken forward as an alternative for evaluation.



Source: Google Earth Pro

Figure 5.10: Existing Service Road Along East Side of 18th Street North

CLARE AVENUE EXTENSION

The extension of Clare Avenue from 18th Street North to 1st Street North was also suggested during the public engagement. The Clare Avenue extension has been identified as part of the North Gateway Secondary Plan and will be completed as development in the area proceeds. A new road extending north from Braecrest Drive at the intersection with Daly Crescent is also identified in the North Gateway Secondary Plan. The completion of Clare Avenue is scheduled in the City of Brandon's Capital Improvements Schedule so was not taken forward as an alternative for evaluation in this study.

6 PHASE TWO PUBLIC & STAKEHOLDER ENGAGEMENT

The goal of Phase Two Public and Stakeholder Engagement was to share what the Project Team learned from Phase One, the proposed design enhancements and alternatives, and how the design elements address key issues and concerns, as well as seek feedback on characteristics of design elements and evaluation criteria.

Phase Two Public and Stakeholder Engagement included three public engagement activities; a stakeholder meeting, public open house and a comment sheet (paper and online version) (**Table 6.1**). The feedback received from these activities was considered when evaluating the conceptual design options.

Table 6.1: Phase Two Public Engagement Activities

ENAGEMENT ACTIVITY	PUBLIC PARTICIPATION
Stakeholder Meeting	19 attendees
Public Open House	81 attendees
Comment Sheet	104 completed comment sheets

The following points briefly summarize stakeholder and public feedback from Phase Two Public Engagement:

- **Braecrest Drive Enhancements**
 - The proposed roundabouts are a good suggestion to help slow down vehicles and provide additional pedestrian crossings on Braecrest Drive.
 - The proposed pedestrian crossings on Braecrest Drive are a cost-efficient solution that will help improve safety for pedestrians with minimal traffic impacts.
 - The proposed sidewalk connections on Braecrest Drive should include the entire north side of Braecrest Drive from 18th Street North to 1st Street North regardless of where development is. In doing so, as development occurs, the study would help provide direction for Developers and the City on sidewalk connection requirements.
- **1st Street North Enhancements**
 - The proposed transit connection and multi-use pathway is liked by stakeholders and the public.
- **18th Street North Enhancements**
 - The bus stop north of Braecrest Drive on 18th Street North is not very well used and moving the location of the bus stop south of its current location closer to Braecrest Drive would not negatively impact Brandon Transit operations.
- **Braecrest Drive and 1st Street North Traffic Management Alternatives**
 - A permanent left turn restriction will improve traffic and vehicle safety as it is this turning movement which creates near misses and accidents. However, there are concerns that the proposed permanent restriction will result in additional traffic on White Swan Street. White Swan Street does not have sidewalks and increasing traffic volumes on a residential street without sidewalks is a concern for local area residents.
 - Limited access into ACC is well liked by members of the public who believe that it will be positive to have additional access into the campus.

➤ **Braecrest Drive and 1st Street North Pedestrian Accommodation Alternatives**

- A half signal north of Braecrest Drive is the preferred location for a pedestrian crossing as northbound left turning vehicles from Braecrest Drive onto 1st Street North will have a better view of the half signal, limiting the risk of pedestrian and vehicle conflict.

➤ **Braecrest Drive and 18th Street North Traffic Management Alternatives**

- A new roadway connection from Quail Ridge Drive to Mockingbird Drive is viewed as desirable as it provides a new north-south connection for vehicles to access 18th Street North, as well as directs vehicles to a signalized intersection (Outback Drive and 18th Street North).
- Stakeholders and members of the public have mixed opinions about adding signals at Braecrest Drive and 18th Street North. Some believe that signals would be the most suitable option as it provides the safest alternative for drivers, pedestrians and cyclists, while maintaining all-direction traffic operations. However, others suggest that a signal at Braecrest Drive and 18th Street North is not ideal because large vehicles may not be able to get up the hill in slippery conditions after being stopped at a signal at Braecrest Drive.

➤ **Evaluation Criteria**

- Draft evaluation categories and criteria was presented to stakeholders and the public for their input. Through an interactive activity, stakeholders and the public had the opportunity to share which evaluation criteria category they believe is the most important when evaluating the conceptual design options. **Table 6.2** shows how the evaluation criteria categories were ranked by stakeholders and the public (1 indicates the most important and 6 indicates the least important).

Table 6.2: Evaluation Criteria Category

CRITERIA		STAKEHOLDER MEETING	OPEN HOUSE	ONLINE SURVEY
1	Engineering and Safety	1	1	2
2	Community and Environmental Impacts	2	3	5
3	Traffic Operations	5	1	1
4	Active Transportation and Transit	4	4	6
5	Construction Costs	6	6	4
6	Ease of Construction and Maintenance	3	5	3

Additional stakeholder and public comments from Phase Two Public Engagement can be reviewed in the Public Engagement Report – Phase Two (**Appendix D**).

7 OPTION EVALUATION

7.1 EVALUATION CRITERIA

Evaluation criteria that reflect the goals for the project and input obtained through the public and stakeholder consultation were developed to evaluate the conceptual design options.

- **Engineering and Safety**
 - How well does the option meet the geometric design criteria for the project?
 - How well does the option meet Manitoba Infrastructure (MI) standards and align with MI plans?
 - How well does the option meet driver expectations?
 - How well does the option address safety issues for all users of the facility, including vehicles, pedestrians, and cyclists?
 - How well does the option accommodate large trucks and other heavy vehicles?
- **Community and Environmental Impacts**
 - Does this option require property acquisition and if so, how significant?
 - Does the option impact or improve access for area properties?
 - How does the option impact the community/neighbourhood?
 - What is the impact of the option on the surrounding environment?
 - How well does the option align with the goals of the ACC Master Plan?
- **Traffic Operations**
 - How well does the option accommodate traffic volumes (congestion/delays)?
- **Active Transportation and Transit**
 - Does the option improve pedestrian and cyclist infrastructure?
 - Does the option improve pedestrian and cyclist crossing risks?
 - How does the option impact transit operations?
 - How well does the option accommodate access for transit users?
 - Is the option accessible for all potential users?
- **Construction Costs**
 - How does the option impact utilities?
 - What are the construction costs associated with the option?
- **Ease of Construction and Maintenance**
 - How difficult is the option to construct and stage?
 - How difficult will the option be to maintain?

The evaluation criteria were reviewed with the Steering Committee and presented to the public for feedback prior to the evaluation of the conceptual design options. Feedback on the evaluation criteria from the Steering Committee and the public was used to draft proposed weightings. These draft weightings were then reviewed and further refined with the Steering Committee. The final weightings are shown in **Table 7.1**.

Table 7.1: Final Evaluation Criteria Weightings

CRITERIA		FINAL WEIGHTING
1	Engineering and Safety	30 %
2	Community and Environmental Impacts	15 %
3	Traffic Operations	20 %
4	Active Transportation and Transit	10 %
5	Construction Costs	10 %
6	Ease of Construction and Maintenance	15 %
TOTAL		100 %

Once the criteria and their weightings were confirmed, the options were evaluated against each criterion on a scale from 0 (poor) to 3 (good) to determine a final weighted evaluation score. The results of the evaluation were used to determine a final preferred alternative for the Braecrest Drive Corridor and are presented in the following sections.

7.2 BRAECREST DRIVE

7.2.1 BRAECREST DRIVE ENHANCEMENTS

Five possible enhancements were developed for Braecrest Drive and are described in detail in **Section 5.2**. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for Braecrest Drive include:

- **Enhancement 1: Intersection Modifications:** A roundabout has been identified for the intersection of Braecrest Drive and Knowlton Drive / Bluebird Street, with an all-way stop at Braecrest Drive and Knowlton Drive possible in the short-term. A roundabout has also been identified for the intersection of Braecrest Drive and Daly Crescent, with an all-way stop possible in the short-term;
- **Enhancement 2: Pedestrian Crossings:** Pedestrian crossings on Braecrest Drive are proposed at Quail Ridge Drive and at Lark Street. The crossings would include side mounted signage and pavement markings. A crossing at Quail Ridge Drive will provide additional access to the multi-use pathway that runs along the south side of Braecrest Drive in the west part of the study area and will serve residents on Whistler Landing, as well as residents coming from Monterey Estates off Mockingbird Drive. It will also serve the future development at Braecrest Drive and Quail Ridge Drive. A crossing at Lark Street will provide additional access to the multi-use pathway on the south side of Braecrest Drive in the central part of the study area and a direct connection to Sir Winston Churchill Park. This crossing would serve residents living north of Braecrest Drive between Daly Crescent and Bluebird Street;
- **Enhancement 3: Pathway Connection from Kensington to 1st Street North:** The multi-use pathway that runs along the south side of Braecrest Drive is a well-used active transportation facility in the neighbourhood. However, the pathway ends at Kensington Crescent, just a short block from 1st Street North. Adding a pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North would allow users to access the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North;
- **Enhancement 4A: Sidewalk Connections (Bluebird to 1st):** There are existing residential homes north of Braecrest Drive between Bluebird Street and 1st Street North with no access to the pathway on the south

side of Braecrest Drive. Adding a sidewalk on the north side of Braecrest Drive between Bluebird Street and 1st Street North would allow residents on Braecrest Drive, as well as those located off White Swan Street, a safe route to the crossing at Knowlton Drive where they can access the pathway. Connecting the sidewalk to 1st Street North would also allow these residents to access the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North; and

- **Enhancement 4B: Sidewalk Connections (Lark to Daly):** There are existing residential homes north of Braecrest Drive between Lark Street and Daly Crescent with no access to the pathway on the south side of Braecrest Drive. Adding a sidewalk on the north side of Braecrest Drive between Lark Street and Daly Crescent would allow residents located off Lark Street and Village Drive a safe route to the proposed pedestrian crossing at Daly Street where they can access the pathway.

7.2.2 BRAECREST DRIVE EVALUATION

For the options evaluation, Enhancement 1: Intersection Modifications was separated into Enhancement 1A: All-Way Stops and Enhancement 1B: Roundabouts. The characteristics of the enhancements and a summary of public input received for each enhancement are summarized in **Table 7.2**. Each of the enhancements were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each enhancement was determined.

Table 7.2: Braecrest Drive Enhancements

BRAECREST DRIVE ENHANCEMENTS	
Enhancement 1 Intersection Modifications	Technical Characteristics <ul style="list-style-type: none"> ▪ Add a roundabout at Braecrest Drive and Daly Crescent. ▪ Add a roundabout at Braecrest Drive and Knowlton Drive/Bluebird Street. ▪ All-way stop control could be implemented in the short-term at both intersections if required to address operational issues. ▪ Reduces speeding on Braecrest Drive. ▪ Allows for safe pedestrian crossings at each intersection. ▪ Eliminates driver confusion at the offset intersection of Knowlton Drive/Bluebird Street. ▪ A roundabout at Braecrest Drive and Daly Crescent would connect to the future north-south roadway planned to connect to Braecrest Drive as part of the North Brandon Gateway Secondary Plan. ▪ The design for each roundabout would need to be confirmed to determine if it could fit within the existing right-of-way or what property impacts there may be.
	Public Input <ul style="list-style-type: none"> ▪ Responses suggest that roundabouts on Braecrest Drive are needed to improve traffic management (i.e., slowing vehicle speed and aligning the Knowlton Dr./Bluebird St. intersection) and provide a safe place for pedestrians to cross. ▪ Other comments indicate concerns with adding roundabouts on Braecrest Drive due to cost, incorrect driver use, and potential impacts for larger vehicles.

BRAECREST DRIVE ENHANCEMENTS

Enhancement 2 Pedestrian Crossings

Technical Characteristics

- Add signed and marked pedestrian crossings at Quail Ridge Drive and at Lark Street.
- A crossing at Quail Ridge Drive would serve residents on Whistler Landing, as well as residents coming from Monterey Estates off Mockingbird Drive.
- A crossing at Lark Street would serve residents living north of Braecrest Drive between Daly Crescent and Bluebird Street and would provide a direct connection to Sir Winston Churchill Park.
- Both crossings provide additional access to the multi-use pathway on the south side of Braecrest Drive.

Public Input

- Comments share that adding pedestrian crossings on Braecrest Drive are a cost-effective solution that would improve safety for pedestrians with minimal disruptions to traffic.

Enhancement 3 Pathway Connections

Technical Characteristics

- Extend the multi-use pathway on the south side of Braecrest Drive from Kensington Crescent to 1st Street North.
- Provides access to the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North.
- The design would need to confirm that the pathway could fit within the existing Braecrest Drive right-of-way without impacting drainage.

Public Input

- Responses indicate concerns with adding the pathway connection on the south side of Braecrest Drive because of potential impacts on the adjacent property.
- A suggestion was made for the pathway to be built on the north side of Braecrest Drive from Kensington Crescent to 1st Street North to minimize property impacts.

Enhancement 4A Sidewalk (Bluebird to 1st)

Technical Characteristics

- Add a sidewalk on the north side of Braecrest Drive from Bluebird Street to 1st Street North.
- Provides pedestrians with a safe route to the crossing at Knowlton Drive and access to the multi-use pathway on the south side of Braecrest Drive.
- Connecting the sidewalk to 1st Street North provides residents on Braecrest Drive, as well as those located off White Swan Street, with access to the ACC Campus, transit stops on 1st Street North, and planned future active transportation facilities on 1st Street North.
- The design would need to confirm that the sidewalk could fit within the existing Braecrest Drive right-of-way without impacting drainage.

Public Input

- Comments suggest a desire for a sidewalk on the north side of Braecrest Drive.
- A suggestion was made to consider a sidewalk along the entire north side of Braecrest Drive from 18th Street North to 1st Street North. This recommendation would help provide direction for developers and the City as the vacant parcels on Braecrest Drive are developed.

BRAECREST DRIVE ENHANCEMENTS

Enhancement 4B Sidewalk (Lark to Daly)

Technical Characteristics

- Add a sidewalk on the north side of Braecrest Drive from Lark Street to Daly Crescent.
- Provides residents on Braecrest Drive between Lark Street and Daly Crescent, as well as residents located off Lark Street and Village Drive, with a safe route to the proposed crossings at Daly Street and Lark Street where they can access the multi-use pathway on the south side of Braecrest Drive.
- The design would need to confirm that the sidewalk could fit within the existing Braecrest Drive right-of-way without impacting drainage.

Public Input

- No specific comments regarding Enhancement 5.

As shown in **Table 7.3**, Enhancement 2: Pedestrian Crossings ranked highest with a weighted score of 280, followed closely by Enhancement 4B: Sidewalk Connection (Lark to Daly) which ranked second (weighted score of 275), Enhancement 4A: Sidewalk Connection (Bluebird to 1st) which ranked third (weighted score of 260) and Enhancement 1A: All-Way Stops which ranked fourth (weighted score of 250). Enhancement 1B: Roundabouts and Enhancement 3: Pathway Connection tied for fifth with a weighted score of 210. As previously noted, all, some or none of these enhancements could be recommended for the corridor. The results of the evaluation can be used to prioritize the implementation of the enhancements. For Braecrest Drive, the pedestrian crossings and sidewalk connections are recommended in the short-term, while the pathway connection should be considered for longer term implementation when the adjacent property is redeveloped. Due to the costs associated with the roundabouts they may be a longer-term initiative; however, all-way stops could be implemented in the shorter term to address operational issues (such as the offset geometry at Braecrest Drive and Knowlton Drive / Bluebird Street or pedestrian crossing concerns at Braecrest Drive and Daly Crescent) prior to the construction of the roundabouts if required.

Table 7.3: Braecrest Drive Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)					
			ENHANCEMENT 1: INTERSECTION MODIFICATIONS		ENHANCEMENT 2: PEDESTRIAN CROSSINGS	ENHANCEMENT 3: PATHWAY CONNECTION	ENHANCEMENT 4A: SIDEWALK CONNECTIONS (BLUEBIRD TO 1ST)	ENHANCEMENT 4B: SIDEWALK CONNECTIONS (LARK TO DALY)
			1A: All-Way Stops	1B: Roundabouts				
1	Engineering and Safety	30	2	2	3	2	3	3
2	Community and Environmental Impacts	15	3	3	3	2	2	3
3	Traffic Operations	20	2	3	2	2	3	3
4	Active Transportation and Transit	10	3	2	3	3	3	3

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)					
			ENHANCEMENT 1: INTERSECTION MODIFICATIONS		ENHANCEMENT 2: PEDESTRIAN CROSSINGS	ENHANCEMENT 3: PATHWAY CONNECTION	ENHANCEMENT 4A: SIDEWALK CONNECTIONS (BLUEBIRD TO 1ST)	ENHANCEMENT 4B: SIDEWALK CONNECTIONS (LARK TO DALY)
			1A: All-Way Stops	1B: Roundabouts				
5	Construction Costs	10	3	1	3	2	2	2
6	Ease of Construction & Maintenance	15	3	1	3	2	2	2
Enhancement Weighted Total			250	210	280	210	260	275
Enhancement Rank			4	5	1	5	3	2

7.3 1ST STREET NORTH

7.3.1 1ST STREET NORTH ENHANCEMENTS

Three possible enhancements were developed for 1st Street North and are described in detail in **Section 5.23**. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for 1st Street North include:

- **Enhancement 1: Transit Connection:** There is an existing transit stop on the west side of 1st Street North just south of Braecrest Drive without a formal pedestrian connection. Adding a pedestrian connection from Braecrest Drive to the transit stop would make the stop more accessible to all pedestrians, including people in wheelchairs or those pushing a stroller. Proper snow clearing in the winter would also ensure the stop was accessible all year round;
- **Enhancement 2: Multi-Use Pathway:** There is an existing multi-use pathway on the east side of 1st Street North south of Kirkcaldy Drive. The Brandon Greenspace Master Plan identifies a long-term plan to extend the pathway on the east side of 1st Street North, north of Kirkcaldy Drive to the Trans-Canada Highway and potentially further north. Adding a multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive would connect the North Hill neighbourhood to the active transportation facilities south of Kirkcaldy Drive, and provide pedestrian and cyclist access to the ACC Campus from south of Kirkcaldy Drive; and
- **Enhancement 3: ACC Bus Turnaround:** There are currently two transit routes that run along 1st Street North and provide service to the ACC Campus. Route 5 travels northbound on 1st Street North and there is currently a transit stop at the ACC Service Road south of Braecrest Drive. A turnaround off the ACC Service Road would allow transit vehicles to enter the campus to drop off and pick up riders and then return to its route without delaying the timing of the route.

7.3.2 1ST STREET NORTH EVALUATION

The characteristics of the enhancements and a summary of public input received for each enhancement are summarized in **Table 7.4**. Each of the three enhancements were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each enhancement was determined.

As shown in **Table 7.5**, Enhancement 1: Transit Connection ranked highest with a weighted score of 265 with Enhancement 3: ACC Bus Turnaround ranking a close second with a weighted score of 260. Enhancement 2: Multi-Use Pathway ranked third with a weighted score of 210. As previously noted, all, some or none of these enhancements could be recommended for the corridor. The results of the evaluation can be used to prioritize the implementation of the enhancements. For 1st Street North, the transit connection and bus turnaround are recommended in the short-term, while the multi-use pathway should be considered for longer term implementation due to challenges associated with the existing slope on 1st Street North, accessibility requirements and the underground springs in the area.

Table 7.4: 1st Street North Enhancements

1ST STREET NORTH ENHANCEMENTS	
Enhancement 1 Transit Connection	<p>Technical Characteristics</p> <ul style="list-style-type: none">▪ Add a pedestrian connection from Braecrest Drive to the transit stop on the west side of 1st Street North, south of Braecrest Drive.▪ Improves accessibility to the stop for all pedestrians, including those in wheelchairs or with strollers.▪ The design would need to confirm that the pedestrian connection could fit within the existing 1st Street North right-of-way without impacting drainage. <p>Public Input</p> <ul style="list-style-type: none">▪ No specific comments for Enhancement 1.
Enhancement 2 Multi-Use Pathway	<p>Technical Characteristics</p> <ul style="list-style-type: none">▪ Add a multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive.▪ Connects the North Hill neighbourhood to the AT facilities south of Kirkcaldy Drive.▪ Provides pedestrian and cyclist access to the ACC Campus from south of Kirkcaldy Drive.▪ Consistent with the Brandon Greenspace Master Plan and the ACC North Hill Campus Master Plan.▪ The design would need to confirm that the multi-use pathway connection could be constructed within the existing 1st Street North right-of-way without impacting drainage.▪ The existing grade on 1st Street North, which is approximately 6% south of Braecrest Drive, would need to be further investigated to determine if accessibility requirements can be met. <p>Public Input</p> <ul style="list-style-type: none">▪ The proposed design suggests that the multi-use pathway would be constructed on City of Brandon and ACC property – if this is the case, it is suggested that details regarding shared ownership need to be established prior to construction.

1ST STREET NORTH ENHANCEMENTS

Enhancement 3 ACC Turnaround

Technical Characteristics

- Provide a bus turnaround off the ACC Service Road.
- Allows transit vehicles to enter the campus to drop off and pick up riders without delaying the timing of the route.

Public Input

- Comments suggest that the addition of a bus turnaround at ACC is a good idea to help improve transit service to the campus and to provide a safe place for students to stand while waiting for the bus as students currently wait on 1st Street North.

Table 7.5: 1st Street North Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)		
			Enhancement 1: Transit Connection	Enhancement 2: Multi-Use Pathway	Enhancement 3: ACC Bus Turnaround
1	Engineering and Safety	30	3	2	3
2	Community and Environmental Impacts	15	3	3	2
3	Traffic Operations	20	2	3	3
4	Active Transportation and Transit	10	3	2	3
5	Construction Costs	10	3	1	2
6	Ease of Construction & Maintenance	15	2	1	2
Enhancement Weighted Total			265	210	260
Enhancement Rank			1	3	2

7.4 18TH STREET NORTH

7.4.1 18TH STREET NORTH ENHANCEMENTS

Two possible enhancements were developed for 18th Street North and are described in detail in **Section 5.4**. All of these enhancements, some of these enhancements or none of these enhancements could be recommended for the corridor. The proposed enhancements for 18th Street North include:

- **Enhancement 1: Transit Connection:** There is an existing transit stop on the east side of 18th Street North, north of Braecrest Drive at the end of the acceleration lane without a formal pedestrian connection. Relocation of the transit stop to just north of Braecrest Drive would allow for a pedestrian connection to be

constructed. Adding a pedestrian connection from Braecrest Drive to the transit stop would make the stop more accessible to all pedestrians, including people in wheelchairs or those pushing a stroller. Proper snow clearing in the winter would also ensure the stop was accessible all year round; and

- **Enhancement 2: Reduced Speed Limit:** The existing speed limit on 18th Street North is 70 kilometres per hour until approximately the entrance to the Corral Centre south of Braecrest Drive, when it reduces to 60 kilometres per hour. The signalized intersection at Cumberland Avenue marks the start of the urban area, and reducing the speed limit to 60 kilometres per hour at the signalized intersection at Cumberland Avenue would result in lower speeds on 18th Street North adjacent to the unsignalized intersection of Braecrest Drive.

7.4.2 18TH STREET NORTH EVALUATION

The characteristics of the enhancements and a summary of public input received for each enhancement are summarized in **Table 7.6**. The two enhancements were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each enhancement was determined.

As shown in **Table 7.7**, Enhancement 1: Transit Connection ranked highest with a weighted score of 240 and Enhancement 2: Reduced Speed Limit ranked second with a weighted score of 225. As previously noted, all, some or none of these enhancements could be recommended for the corridor. The results of the evaluation can be used to prioritize the implementation of the enhancements. For 18th Street North, the transit connection is recommended in the short-term, while the reduced speed limit should also be considered for implementation in conjunction with the recommendations for the intersection of Braecrest Drive and 18th Street North. The speed limit reduction would be most effective when additional development occurs along 18th Street North, north of Braecrest Drive.

Table 7.6: 18th Street North Enhancements

18TH STREET NORTH ENHANCEMENTS	
Enhancement 1 Transit Connection	<p>Technical Characteristics</p> <ul style="list-style-type: none"> ▪ Relocate the existing transit stop on the east side of 18th Street North located at the end of the acceleration lane north of Braecrest Drive to just north of Braecrest Drive and construct a pedestrian connection. ▪ A pedestrian connection would make the stop more accessible to all pedestrians, including those in wheelchairs and pushing a stroller. ▪ Allows buses to pull out of the through lane on 18th Street North into the acceleration lane to pick up or drop off passengers at the stop, and then use the acceleration lane to get up to speed and merge back into traffic. ▪ The design would need to confirm that the pedestrian connection could fit within the existing 1st Street North right-of-way without impacting drainage. <p>Public Input</p> <ul style="list-style-type: none"> ▪ Comments suggest that the bus stop on the east side of 18th Street North, north of Braecrest Drive is not often used. ▪ Transit is open to discussing relocating the bus stop to the proposed location. ▪ A few comments indicate concerns with relocating the bus stop. Comments suggest that the proposed location is not appropriate and that there are issues with drainage near the proposed location which would need to be addressed.

18TH STREET NORTH ENHANCEMENTS

Enhancement 2 Reduced Speed Limit

Technical Characteristics

- Reduce the speed limit on 18th Street North from 70 km/h to 60 km/h starting south of the signalized intersection at Cumberland Avenue.
- South of Cumberland Avenue was selected as the northern limit for the proposed 60 km/h speed limit because it marks the start of the urban area.

Public Input

- Responses suggest that the speed limit on 18th Street North should not be reduced as traffic should be encouraged to flow on 18th Street North. In addition, comments suggest that reducing the speed limit will result in more traffic accidents as drivers become frustrated due to slow moving traffic and make poor decisions.
- Other responses share a desire for the speed limit to be reduced on 18th Street North as they believe that it will help improve traffic management for the intersection of Braecrest Drive and 18th Street North. Comments suggests that with a reduced speed limit there will be more time for drivers to complete the southbound left turn from Braecrest Drive onto 18th Street North.

Table 7.7: 18th Street North Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)	
			ENHANCEMENT 1: TRANSIT CONNECTION	ENHANCEMENT 2: REDUCED SPEED LIMIT
1	Engineering and Safety	30	2	2
2	Community and Environmental Impacts	15	3	2
3	Traffic Operations	20	2	2
4	Active Transportation and Transit	10	3	2
5	Construction Costs	10	2	3
6	Ease of Construction & Maintenance	15	3	3
Enhancement Weighted Total			240	225
Enhancement Rank			1	2

7.5 BRAECREST DRIVE AND 1ST STREET NORTH

7.5.1 BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC ACCOMODATION ALTERNATIVES

There are existing concerns with traffic operations at the intersection of Braecrest Drive and 1st Street North. Three possible traffic management alternatives were developed to improve traffic operations and user safety and are described in detail in **Section 5.5**. Only one of the possible alternatives can be recommended for the intersection. The proposed alternatives for Braecrest Drive and 1st Street North include:

- **Alternative 1: Restrict Left Turns (Permanent):** The major concern at the intersection of Braecrest Drive and 1st Street North is the eastbound left-turn from Braecrest Drive onto northbound 1st Street North when traffic on 1st Street North is heavy. Permanently restricting eastbound left-turns would eliminate the main issue. Extending the median on 1st Street North would force eastbound vehicles on Braecrest Drive to turn right onto southbound 1st Street North. Vehicles wanting to travel north on 1st Street North can use White Swan Drive to access the signals at Centre Avenue and 1st Street North;
- **Alternative 2: Restrict Left Turns (Peak Hour Only):** The major concern at the intersection of Braecrest Drive and 1st Street North is the eastbound left-turn from Braecrest Drive onto northbound 1st Street North when traffic on 1st Street North is heavy, especially during weekday peak periods (morning, noon and afternoon peak hours). Restricting eastbound left-turns during peak periods would address the major issue. Signage would be used to identify the hours when left-turns are restricted, and police enforcement would be beneficial, especially immediately after the restrictions go into effect; and
- **Alternative 3: Limited Access to ACC:** Limited access to ACC could be allowed at the intersection of Braecrest Drive and 1st Street North. The northbound right-turn to enter the campus could be allowed, and the westbound right-out to exit the campus could be considered. Vehicles wanting to enter the campus from the north can use the existing signals at Lori Road to make a southbound left-turn. Vehicles wanting to exit the campus and travel south on 1st Street North can use the existing signals at Lori Road to make a left-turn onto southbound 1st Street North. Restricting eastbound and westbound left-turns and through movements will help address existing concerns when traffic on 1st Street North is heavy. It should be noted that a northbound right-turn lane could be required for access into ACC.

7.5.2 BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC ACCOMODATION EVALUATION

The characteristics of the alternatives and a summary of public input received for each alternative are summarized in **Table 7.8**. Each of the three alternatives were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each alternative was determined.

As shown in

Table 7.9, Alternative 3: Limited Access to ACC, ranked highest with a weighted score of 242.5, Alternative 1: Restrict Left-Turns (permanent) ranked second with a weighted score of 235 and Alternative 2: Restrict Left-Turns (peak hours only) ranked third with a weighted score of 225.

Table 7.8: Braecrest Drive and 1st Street North Traffic Management Alternatives

BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES	
Alternative 1 Restrict Left Turns (Permanent)	Technical Characteristics <ul style="list-style-type: none">Permanently restrict eastbound left-turns at Braecrest Drive and 1st Street North.Extend the median on 1st Street North to force eastbound vehicles on Braecrest Drive to turn right onto southbound 1st Street North.Northbound left-turns are not affected.Motorists destined to north on 1st Street North can use White Swan Drive to access the signals at Centre Avenue and 1st Street North.The eastbound left-turn movement is relatively low so there will not be a significant amount of traffic diverted to White Swan Drive.Synchro analysis indicates significantly improved level of service during the afternoon peak hour for the 2038 post development scenario, with all movements forecast to operate at LOS B or better.When eastbound left-turns are restricted at the intersection, traffic signals are not warranted until the 2038 post development scenario. Public Input <ul style="list-style-type: none">Responses share that a permanent left turn restriction will improve vehicle and pedestrian safety at 1st Street North and Braecrest Drive.If left turn restrictions are implemented, it is suggested that route signage directing drivers on how to access northbound 1st Street North is installed.Comments suggest a general dislike of directing vehicles to use White Swan Street. Specific concerns include pedestrian safety (there are no sidewalks on White Swan Street) and whether White Swan Street has the capacity to support additional traffic.Responses indicate that the proposed extended median may impact the City's snow clearing procedures. Emergency services shared that there are no issues with the extended median.
	Alternative 2 Restrict Left Turns (Peak Hours Only)

BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

Alternative 3 Limited Access to ACC

Technical Characteristics

- Allow limited access to ACC at Braecrest Drive and 1st Street North.
- Allow the northbound right-turn to enter the campus.
- The westbound right-out exiting the campus could be considered.

Public Input

- Responses suggest that a right turn in to ACC at Braecrest Drive is a positive idea as it provides an additional entrance to the campus. However, other comments questioned whether additional vehicle access is necessary as the main vehicle access is located at 1st Street North and Centre Avenue.
- Responses suggest that increasing the number of vehicle connections into ACC may make the campus less pedestrian friendly and may result in potential pedestrian vehicle conflicts at Braecrest Drive and 1st Street North.
- It is suggested that the addition of a right turn in may require a northbound deceleration lane on 1st Street North.
- It is suggested that a southbound left turn into ACC Campus be provided to help provide better connectivity to the campus and to future parking areas.

Additional Notes

- The traffic analysis for the intersection without restricting left-turns indicated that the eastbound movement is forecast to operate at LOS F with high levels of delay in the afternoon peak hour by 2038, with or without the identified developments.
- Without restricting left-turns, traffic signals are forecast to be warranted at the intersection in 2028 with the identified developments.

Table 7.9: Braecrest Drive and 1st Street North Traffic Management Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)		
			Alternative 1: Restrict Left-Turns (permanent)	Alternative 2: Restrict Left-Turns (peak hours only)	Alternative 3: Limited Access to ACC
1	Engineering and Safety	30	3	2	3
2	Community and Environmental Impacts	15	1	2	2.5
3	Traffic Operations	20	3	2	3
4	Active Transportation and Transit	10	2	2	2
5	Construction Costs	10	2	3	2
6	Ease of Construction & Maintenance	15	2	3	1
Enhancement Weighted Total			235	225	242.5
Enhancement Rank			2	3	1

7.6 BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMODATION

7.6.1 BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMODATION ALTERNATIVES

There is currently a demand for pedestrians to cross 1st Street North at Braecrest Drive to access the ACC Campus and nearby bus stop facilities. Two possible pedestrian accommodation alternatives were developed for the intersection of Braecrest Drive and 1st Street North to allow pedestrians to safely cross 1st Street North and are described in detail in **Section 5.6**. Only one of the possible alternatives can be recommended for the intersection. The proposed alternatives for Braecrest Drive and 1st Street North include:

- **Alternative 1: Half Signals at Braecrest Drive:** The first alternative to accommodate pedestrians crossing 1st Street North is a pedestrian activated half signal at the intersection with Braecrest Drive. The half signal would be located on the north side of the intersection so as not to conflict with the northbound left-turn movement on 1st Street North. The signal would be activated by pedestrian push buttons and vehicles on 1st Street North would stop at the red light to allow pedestrians to safely cross 1st Street North. A formal pathway connection on the east side of 1st Street North leading to the ACC Campus would be part of the half signal alternative; and
- **Alternative 2: Half Signals North of Braecrest Drive:** The second alternative to accommodate pedestrians crossing 1st Street North is a half signal north of the intersection with Braecrest Drive. This alternative also includes relocating the existing transit stop on southbound 1st Street North from south of Braecrest Drive to north of Braecrest Drive at the proposed crossing location. The signal would be activated by pedestrian push buttons and vehicles on 1st Street North would stop at the red light to allow pedestrians to safely cross 1st Street North. A formal pedestrian connection on the west side of 1st Street North between Braecrest Drive and the proposed crossing and a formal pedestrian connection on the east side of 1st Street North leading to the ACC Campus would be part of the pedestrian crossing alternative.

7.6.2 BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMMODATION EVALUATION

The characteristics of the alternatives and a summary of public input received for each alternative are summarized in **Table 7.10**. The two alternatives were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each alternative was determined.

As shown in **Table 7.11**, Alternative 2: Half Signal North of Braecrest ranked highest with a weighted score of 265 and Alternative 1: Half Signal at Braecrest ranked second with a weighted score of 235.

Table 7.10: Braecrest Drive and 1st Street North Pedestrian Accommodation Alternatives

BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMMODATION ALTERNATIVES	
Alternative 1 Half Signal at Braecrest	<p>Technical Characteristics</p> <ul style="list-style-type: none"> ▪ Provide a half signal on the north side of Braecrest Drive. ▪ The signal would be activated by pedestrian push buttons and vehicles on 1st Street North would stop at a red light to allow pedestrians to safely cross 1st Street North. ▪ The north side of the intersection was selected so as not to conflict with the northbound left-turn movement on 1st Street North. ▪ A formal pathway connection on the east side of 1st Street North leading to the ACC Campus would be part of this alternative. ▪ Northbound vehicles on 1st Street North that get stopped by the half signal may queue back onto the steeper 6% grade during peak periods, which may be an issue during slippery winter conditions (however, the signal would only get triggered when pedestrians are wanting to cross 1st Street North, and there is less demand for the pedestrian crossing during winter months when this would be an issue). <p>Public Input</p> <ul style="list-style-type: none"> ▪ Comments suggest that it will be difficult for northbound left turning vehicles to see the half signal. This can result in pedestrian vehicle conflicts. ▪ Responses share that a half signal is a practical and safe option for pedestrians crossing 1st Street North. However, concerns exist about vehicles having to stop on the hill in icy/snowy conditions.
Alternative 2 Half Signal North of Braecrest	<p>Technical Characteristics</p> <ul style="list-style-type: none"> ▪ Provide a pedestrian activated half signal cross of 1st Street North, north of Braecrest Drive. ▪ The signal would be activated by pedestrian push buttons and vehicles on 1st Street North would stop at a red light to allow pedestrians to safely cross 1st Street North. ▪ The crossing is shifted further north to provide additional queuing distance for northbound vehicles that get stopped by the half signal before they queue back onto the steeper grade on 1st Street North. ▪ This alternative also includes relocating the existing transit stop on southbound 1st Street North from south of Braecrest Drive to north of Braecrest Drive at the proposed crossing location. ▪ A formal pedestrian connection on the west side of 1st Street North between Braecrest Drive and the proposed crossing and a formal pedestrian connection on the east side of 1st Street North leading to the ACC Campus would be part of the pedestrian crossing alternative. <p>Public Input</p> <ul style="list-style-type: none"> ▪ Responses suggest that Alternative 2 is preferred as it minimizes the risk of pedestrian and vehicle conflict as the half signal is more visible for northbound left turning vehicles. ▪ The North Brandon Gateway Secondary Plan includes commercial designated land where the half signal is located – comments suggest that the proposed half signal could fit well in the context of future development.

Table 7.11: Braecrest Drive and 1st Street North Pedestrian Accommodation Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)	
			Alternative 1: Half Signal at Braecrest	Alternative 2: Half Signal North of Braecrest
1	Engineering and Safety	30	2	3
2	Community and Environmental Impacts	15	3	3
3	Traffic Operations	20	2	3
4	Active Transportation and Transit	10	3	2
5	Construction Costs	10	3	2
6	Ease of Construction & Maintenance	15	2	2
Enhancement Weighted Total			235	265
Enhancement Rank			2	1

7.7 BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT

7.7.1 BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC ACCOMODATION ALTERNATIVES

There are existing concerns with traffic operations at the intersection of Braecrest Drive and 18th Street North. Initially, four possible traffic management alternatives were developed for the intersection of Braecrest Drive and 18th Street North to improve traffic operations and user safety and are described in detail in **Section 5.7**. Only one of the possible alternatives can be recommended for the intersection. The proposed alternatives for Braecrest Drive and 18th Street North include:

- **Alternative 1: Traffic Signals with Pedestrian Phase:** Adding a traffic signal at this intersection would allow vehicles on Braecrest Drive to easily and safely complete the left-turn and through movements, and the pedestrian phase would allow pedestrians to safely cross 18th Street North. The pedestrian crossing would be located on the south side of the intersection to connect directly to the existing pathways on Braecrest Drive and 18th Street North. The pedestrian phase would be activated by pedestrian push buttons. A formal pedestrian connection on the east side of 18th Street North leading to the existing multi-use pathway would be part of the traffic signal alternative;
- **Alternative 2: Restrict Left Turns (Permanent):** The major concern at the intersection of Braecrest Drive and 18th Street North is the westbound left-turn from Braecrest Drive onto southbound 18th Street North when traffic on 18th Street North is heavy. Permanently restricting eastbound and westbound left-turns and through movements would eliminate the main issue. Adding additional median on 18th Street North would force vehicles on Braecrest Drive to turn right onto 18th Street North. Vehicles

wanting to turn left could make a right turn and then use the adjacent signals to make a U-turn to travel in the opposite direction. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive;

- **Alternative 3: Restrict Left Turns (Peak Hour Only):** The major concern at the intersection of Braecrest Drive and 18th Street North is the westbound left-turn from Braecrest Drive onto southbound 18th Street North when traffic on 18th Street North is heavy. The primary concern is during weekday peak periods, which include the morning, noon and afternoon peak hours. Restricting left-turns and through movements during peak periods would address the concern. Signage would be used to identify the hours when left-turns are restricted, and police enforcement would be beneficial. Similar to Alternative 2, vehicles wanting to turn left could make a right turn and then use the adjacent signals to make a U-turn to travel in the opposite direction. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive; and
- **Alternative 4: New Roadway Connection from Quail Ridge to Mockingbird:** The adjacent intersection to the north on 18th Street North is Cumberland Avenue, which is signalized. Providing a new roadway connection from Quail Ridge Drive to Mockingbird Drive would allow westbound vehicles on Braecrest Drive to access the signals at 18th Street North and Cumberland Avenue and complete a safe left-turn movement. It should be noted that this option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive.

Alternatives 2, 3 and 4 restrict movements and divert traffic away from the intersection to other adjacent intersections. Alternatives 2 or 3 can be combined with Alternative 4 for further improvement. However, Alternatives 2, 3 and/or 4 should be considered short-term improvements. As traffic continues to grow, the demand for traffic entering and exiting 18th Street North to/from Braecrest Drive and the streets it serves will also continue to grow. It should also be noted that U-turns at signalized intersections are currently restricted in the City of Brandon Traffic By-law No. 5463/16/87 (Part III Section 20.). Although this restriction does not seem to be widely known (several members of the public indicated that they are currently making U-turns at adjacent intersections to avoid the left-turn movements from Braecrest Drive onto 18th Street North), it significantly impacts the feasibility of Alternatives 2 and 3. As well, the issues for safe pedestrian crossings of 18th Street North at Braecrest Drive will become greater over time. Ultimately, a long-term solution that accommodates traffic movements at the intersection will be needed.

Because of the concerns relating to a possible traffic signal at the intersection (i.e., the steep grade and winter/icy road concerns), a fifth alternative was developed for discussion purposes.

- **Alternative 5: Roundabout:** An alternative to a traffic signal at 18th Street North and Braecrest Drive to accommodate traffic in the long-term is construction of a roundabout in two phases. Traffic analysis indicates that a two-lane northbound and one-lane southbound roundabout configuration as shown in **Figure 7.1** will operate with acceptable level of service in the 2023 and 2028 horizon years. By 2038, the analysis indicates a two-lane northbound and two-lane southbound configuration would be required to accommodate the expected traffic volumes when southbound 18th Street North is upgraded to two lanes. This alternative includes pedestrian accommodation across Braecrest Drive and unrestricted access to the Hamilton Heights neighbourhood west of 18th Street North. A speed limit reduction on 18th Street North to 60 kilometres per hour adjacent to the proposed roundabout is also recommended. The roundabout was taken forward as an alternative for evaluation.

BRAECREST DR. & 18th STREET N. ROUNDABOUT OPTION A

Apr 04, 2019 - 10:22am
P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Figure Options\18M-01581-00 Braecrest Dr & 18th Street N Roundabout Option A.dwg - tab: Layout1

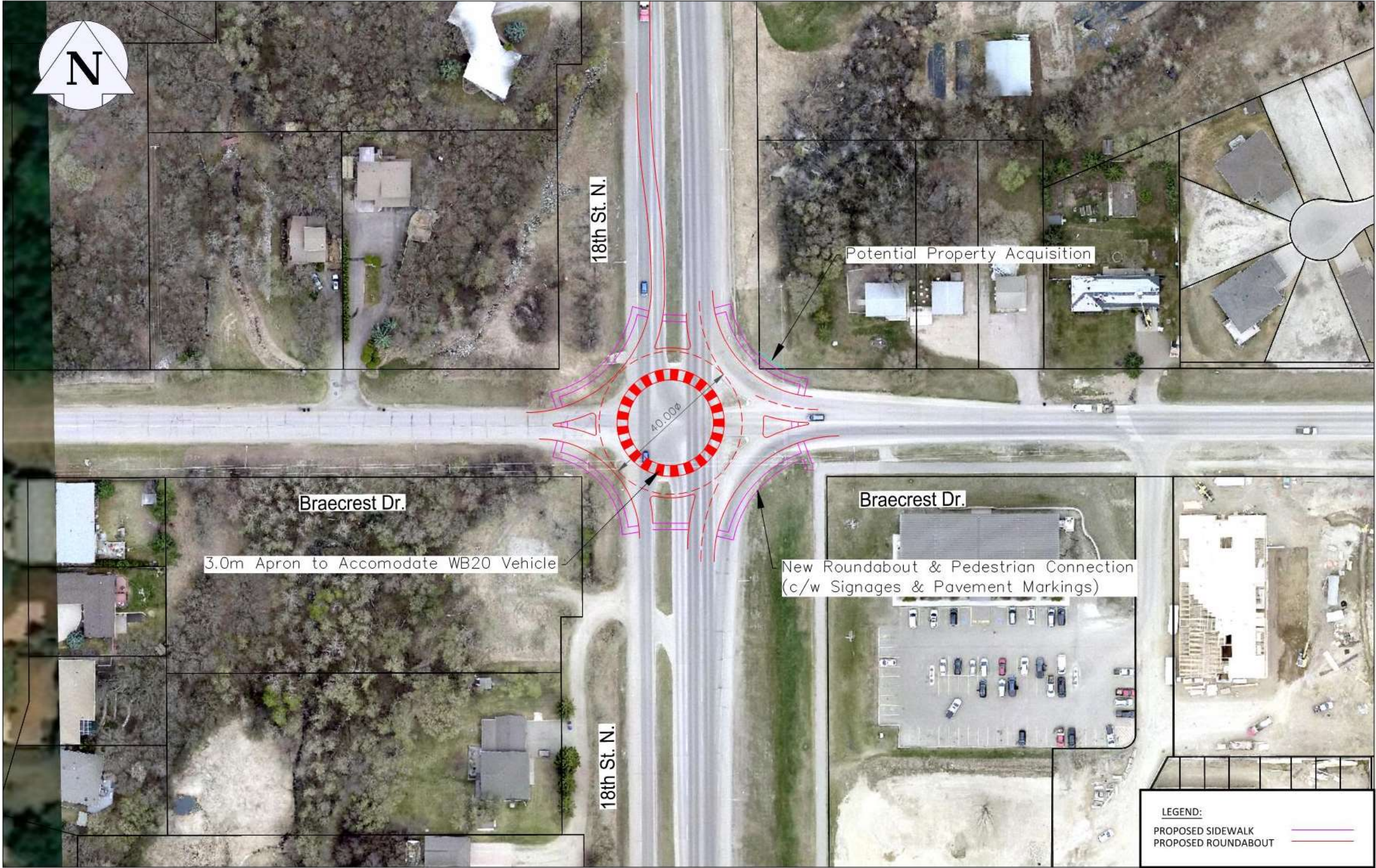


Figure 7.1: Braecrest Drive and 18th Street North Traffic Management Alternative 5

7.7.2 BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC ACCOMMODATION EVALUATION

The characteristics of the alternatives and a summary of public input received for each alternative are summarized in **Table 7.12**. The five alternatives were scored 0 (poor) to 3 (good) for each of the evaluation factors. Using the weightings for each evaluation factor, a total weighted score for each alternative was determined.

As shown in **Table 7.13**, Alternative 4: New Roadway Connection (Quail Ridge to Mockingbird) ranked highest with a weighted score of 227.5 with Alternative 5: Roundabout ranking a close second with a weighted score of 225. Alternative 1: Traffic Signals with Pedestrian Phase ranked third with a weighted score of 212.5, Alternative 2: Restrict Left-Turns (permanent) ranked fourth with a weighted score of 172.5 and Alternative 3: Restrict Left-Turns (peak hours only) ranked fifth with a weighted score of 167.5. The New Roadway Connection is therefore recommended in the short-term and the Roundabout is recommended in the long-term.

Table 7.12: Braecrest Drive and 18th Street North Traffic Management Alternatives

BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES	
Alternative 1 Traffic Signals with Pedestrian Phase	<p>Technical Characteristics</p> <ul style="list-style-type: none"> ▪ Add a traffic signal with pedestrian phase at Braecrest Drive and 18th Street North. ▪ A traffic signal would help alleviate movements that are challenging in the current configuration, especially during peak periods, including the westbound left-turn. ▪ The pedestrian phase would allow pedestrians to safely cross 18th Street North. ▪ The pedestrian crossing would be located on the south side of the intersection to connect directly to the existing pathways on Braecrest Drive and 18th Street North. ▪ A formal pedestrian connection on the east side of 18th Street North leading to the existing multi-use pathway would be part of this alternative. ▪ Northbound vehicles on 18th Street North that are stopped by the signal may queue back onto the steeper 6% grade during peak periods, which may be an issue during slippery winter conditions. ▪ The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS D or better when the intersection is signalized. ▪ The level of service for northbound and southbound traffic on 18th Street North is reduced as some vehicles are now required to stop at the signal when they were previously operating under free flow conditions. <p>Public Input</p> <ul style="list-style-type: none"> ▪ A common concern with Alternative 1 is its impact on queuing of large trucks in the northbound lane on 18th Street North in winter. The common question is whether trucks can get traction to get up the hill at the 6% grade. ▪ Comments indicate a desire for the City to find a workable solution for concerns regarding grade issues as it is believed that traffic signals are the best solution for the long-term. ▪ Responses suggest that traffic signals are warranted and will help address existing safety concerns for drivers, pedestrians, and cyclists.

BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

Alternative 2 Restrict Left Turns (Permanent)

Technical Characteristics

- Add an additional median on 18th Street North to restrict eastbound and westbound left turns and through movements, forcing vehicles on Braecrest Drive to turn right onto 18th Street North.
- Motorists wanting to turn left could make a right turn and then use the adjacent signals to make a U-turn to travel in the opposite direction – potential issue with current policy in Brandon Traffic By-law.
- This option does not address the demand for pedestrians to cross 18th Street North at Braecrest Drive.
- Braecrest Drive is the only access into the Hamilton Heights neighbourhood west of 18th so restricting left-turn and through movements at the intersection further restricts access to this neighbourhood.
- The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS E or better when eastbound and westbound left-turns and through movements are removed from the intersection.
- When eastbound and westbound left-turns and through movements are removed from the intersection, traffic signals are warranted based on the 2038 post development traffic volumes.

Public Input

- Responses share that Alternative 2 does not provide a solution for pedestrians.
- Comments indicate a general dislike for Alternative 2 as it requires traffic to go to the next signal and complete a U-turn on 18th Street North.
- Responses share that permanently restricting left turn movements is the best option for the intersection as it addresses concerns with the southbound left-turn movements and will not require northbound vehicles to queue.
- Comments suggest that Alternative 2 will likely result in increased traffic on Knowlton Drive – this is undesirable as there is a school zone.

Alternative 3 Restrict Left Turns (Peak Hours Only)

Technical Characteristics

- Restrict eastbound and westbound left-turns and through movements on Braecrest Drive at 18th Street North during peak periods.
- Signage would be used to identify the hours when left-turns and through movements are restricted
- Peak hour restrictions would address the primary concern of the westbound left-turn from Braecrest Drive onto southbound 18th Street North when the traffic flow is heavy during peak periods (morning, noon and afternoon peak hours).
- This option does not address the demand for pedestrians to cross 18th Street North at Braecrest.
- Braecrest Drive is the only access into the Hamilton Heights neighbourhood west of 18th so restricting left-turn and through movements at the intersection further restricts access to this neighbourhood.
- Assuming good driver compliance during peak periods would result in similar levels of service at the intersection as presented in Alternative 2.
- Police enforcement would be beneficial, especially immediately after the restrictions go into effect.

Public Input

- Responses suggest that peak-hour restrictions are a viable compromise to address traffic issues at Braecrest Drive and 18th Street North without creating too much impact on other streets/routes.
- Responses indicate that driver compliance will be an issue with peak hour restrictions and therefore may not have much of a positive impact.

BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

Alternative 4 New Roadway Connection (Quail Ridge – Mockingbird)

- Technical Characteristics
- Provide a new roadway connection from Quail Ridge Drive to Mockingbird Drive.
- Allows westbound vehicles on Braecrest Drive to access the existing traffic signals at 18th Street North and Cumberland Avenue and complete a safe left-turn movement.
- Addresses the major concern of the westbound left-turn from Braecrest Drive onto southbound 18th Street North when traffic on 18th Street North is heavy.
- Assuming eastbound and westbound left-turn and through movements at Braecrest Drive and 18th Street North are restricted during peak periods and traffic is redistributed.
- The level of service is significantly improved during the afternoon peak hour and all movements are forecast to operate at LOS E or better when a new roadway connection from Quail Ridge to Mockingbird is available to access the signalized intersection of 18th Street North and Cumberland.
- Public Input
- Responses suggest that Alternative 4 will negatively impact Monterey Estates as there will be more vehicles travelling near and/or through the community.
- Comments share that the right-of-way is used by local area residents as green space and as a pedestrian connection to the multi-use path on Braecrest Drive. This area is an important corridor for local residents and there are concerns that a new connection will impact how they use the space.
- Responses share that they like 18M- Alternative 4 as it provides a new route for vehicles who want to travel access southbound on 18th Street North but do not want to perform a left turn from Braecrest Drive or a U-turn on 18th Street North.

Alternative 5 Roundabout

Technical Characteristics

- Construct a roundabout at Braecrest Drive and 18th Street North in two phases.
- Traffic analysis indicates a two-lane NB and one-lane SB configuration operates with overall intersection LOS A in the 2023 and 2028 a.m. and p.m. peak periods and 2038 a.m. peak period.
- 2038 forecasted volumes result in an overall level of service of LOS E in the 2038 p.m. peak period in the two-lane northbound and one-lane southbound configuration.
- 2038 level of service improves to LOS A in the 2038 p.m. peak period with a two-lane northbound and two-lane southbound configuration.
- Additional right-of-way requirements would need to be investigated and confirmed during design.
- Pedestrian crossings are accommodated on all four approaches with signed and marked crosswalks.
- A speed limit reduction to 60 km/h on 18th Street North would be recommended.

Public Input

- This alternative has not been presented to the public.

Additional Notes

- The traffic analysis for the intersection indicates that the intersection is currently operating at LOS F during the afternoon peak hour.
- The westbound approach is currently experiencing significant delays, which are forecast to increase as traffic volumes increase and additional developments move forward.
- Traffic signals are currently warranted at the intersection based on existing 2018 traffic volumes.

Table 7.13: Braecrest Drive and 18th Street North Traffic Management Evaluation

EVALUATION FACTOR		WEIGHTING (% OF OVERALL SCORE)	SCORE SCALE: 0 (POOR) TO 3 (GOOD)				
			Alternative 1: Traffic Signals with Pedestrian Phase	Alternative 2: Restrict Left- Turns (permanent)	Alternative 3: Restrict Left- Turns (peak hours only)	Alternative 4: New Roadway Connection (Quail Ridge to Mockingbird)	Alternative 5: Roundabout
1	Engineering and Safety	30	2	2	1	3	2.5
2	Community and Environmental Impacts	15	3	1.5	2	2	2.5
3	Traffic Operations	20	2.5	2	2	2.5	3
4	Active Transportation and Transit	10	3	0	0	1	2
5	Construction Costs	10	2	2	3	1	1
6	Ease of Construction & Maintenance	15	0.5	2	2.5	2.5	1.5
Enhancement Weighted Total			212.5	172.5	167.5	227.5	225
Enhancement Rank			3	4	5	1	2

7.8 RECOMMENDED OPTIONS

The recommended options for the Braecrest Drive Corridor study area based on the evaluations are summarized in **Table 7.14**. Where more than one option is recommended, the order indicates the priority ranking of recommended options based on the weighted scores determined during the evaluation of options.

For Braecrest Drive, pedestrian crossings and sidewalk connections are recommended for the short-term. A sidewalk along the entire north side of Braecrest Drive from 18th Street North to 1st Street North is recommended for the future; however, the sections from Lark Street to Daly Crescent and from Bluebird Street to 1st Street North are recommended as the first sidewalk sections to construct in the short-term. All-way stops ranked higher than roundabouts due to the minimal costs associated with the all-way stops; however, roundabouts are the recommended enhancement if budget is available in the future. A pathway connection is recommended for the long-term if and when future redevelopment of the adjacent property occurs.

For 1st Street North, a transit connection was ranked first but has been dropped, as the recommended pedestrian accommodation for the intersection of Braecrest Drive and 1st Street North includes relocation of the existing transit stop and associated new pedestrian connections. The ACC bus turnaround is recommended in the short-term, and a pathway along 1st Street North is recommended for the long-term.

Table 7.14: Recommended Options for the Braecrest Drive Corridor

LOCATION		RECOMMENDED OPTION(S)	WEIGHTED SCORE
Braecrest Drive		1. Enhancement 2: Pedestrian Crossings	280
		2. Enhancement 4B: Sidewalk Connection – Lark to Daly	275
		3. Enhancement 4A: Sidewalk Connection – Bluebird to 1st	260
		4. Enhancement 1A: All-Way Stops	250
		5. Enhancement 1B: Roundabouts	210
		6. Enhancement 3: Pathway Connection	210
1st Street North		1. Enhancement 3: ACC Bus Turnaround	260
		2. Enhancement 2: Multi-Use Pathway	210
Braecrest Drive & 1st Street North Intersection	Traffic Management	1. Alternative 3: Limited Access to ACC	242.5
	Pedestrian Accommodation	1. Alternative 2: Half Signal North of Braecrest (including relocation of transit stop)	265
18th Street North		1. Enhancement 1: Transit Connection	240
Braecrest Drive & 18th Street North Intersection	Traffic Accommodation	1. Alternative 4: New Roadway Connection (Quail Ridge to Mockingbird)	227.5
		2. Alternative 5: Roundabout (including speed limit reduction on 18th Street North)	225

For the Braecrest Drive and 1st Street North intersection, limited access to ACC, which includes restricting eastbound and westbound left-turn and through movements, is recommended for traffic management along with half signal north of Braecrest Drive for pedestrian accommodation. As part of the limited access to ACC, a sidewalk on the west side of West Swan Street is also recommended to help address community concerns about additional vehicles using White Swan Street to access northbound 1st Street North.

For 18th Street North, a transit connection and associated transit stop relocation is recommended.

For the Braecrest Drive and 18th Street North intersection, a new roadway connection (Quail Ridge to Mockingbird) and a roundabout had weighted scores which were very close (227.5 and 225, respectively). The new roadway connection only (no changes to the intersection of Braecrest Drive and 18th Street North) is recommended in the short-term and the roundabout is recommended in the long-term.

8 RECOMMENDED PLAN

8.1 FUNCTIONAL DESIGN

A functional design was prepared for the recommended plan for the Braecrest Drive Corridor. The functional design drawings are included in **Figures 9.1** through **9.8** in **Section 9.0**.

Above ground and City owned sub surface utility conflicts have been reviewed as part of the functional design and impacts have been identified on the functional design drawings; however, private underground utility impacts will need to be reviewed and confirmed during the detailed design stage.

8.1.1 BRAECREST DRIVE

The recommended plan for Braecrest Drive includes a mix of pedestrian facilities and intersection modifications.

- **Pedestrian Crossings:** Pedestrian crossings of Braecrest Drive (signage and pavement markings) are recommended at Quail Ridge Drive and at Lark Street (**Figure 9.1**).
- **Sidewalk Connections:** Sidewalk connections on the north side of Braecrest Drive from Bluebird Street to 1st Street North and from Lark Street to Daly Crescent are recommended to be constructed first. A sidewalk along the entire north side of Braecrest Drive from 18th Street North to 1st Street North is recommended for the future (**Figure 9.1**).
- **Intersection Modifications:** Roundabouts are recommended at the intersections of Braecrest Drive and Daly Crescent and at Braecrest Drive and Knowlton Drive/Bluebird Street; however, all-way stop control could be implemented at the intersections in the short-term to address any operational issues if required prior to the construction of the roundabouts. (**Figure 9.2** and **Figure 9.3**).
- **Pathway Connection:** A pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North is recommended if and when future redevelopment of the adjacent property occurs (**Figure 9.1**).

DESIGN, UTILITY, AND DRAINAGE CONSIDERATIONS

- **Sidewalk Connections:** It is recommended that the new sidewalk connection on Braecrest Drive between 1st Street North and White Swan Street be constructed adjacent to the back of curb to minimize negative impacts on the existing trees located on this block. Due to the proximity to travel lanes, it is recommended that the sidewalk in this area be constructed to a width of 2.0 metres. Markers for buried Westman fiberoptic cable are located near the proposed sidewalk alignment and the impacts should be further investigated during detailed design (**Figure 8.1**).

The remainder of the sidewalk on the north side of Braecrest Drive is to be constructed to a width of 1.5 metres at a recommended offset of 1.0 metre from the north property line. Drainage for the short-term sidewalk improvements should be designed to utilize the existing swale system along the north side of Braecrest Drive. The medium-term sidewalk connections are to be constructed in concert with redevelopment of adjacent vacant parcels and the drainage design in these areas should be developed as a part of those redevelopment plans.



Figure 8.1: North Side of Braecrest Drive – White Swan Street to 1st Street North

- **Intersection Modifications:** The future roundabout at Braecrest Drive and Daly Crescent uses a conventional design with a 37-metre inscribed diameter and can comfortably accommodate a city transit bus. Occasional use by larger vehicles is accommodated by the truck apron. During the detailed design stage, the desired width of the truck apron can be reviewed against the selected design vehicle. The alignment of Braecrest Drive at this location has been shifted to the north to avoid impacting existing residential properties to the south, resulting in the need to acquire land from two properties on the north side. The proposed alignment of the north leg of the roundabout is based on the City of Brandon's long-term road network plan; however, if the roundabout is constructed prior to the future road network this leg of the interchange can connect to the existing Golf Course access. Existing trees and a fire hydrant located in the northeast quadrant of this intersection will be impacted by construction (**Figure 8.2**).

The design of the future roundabout at Braecrest Drive and Knowlton Drive/Bluebird Street was constrained by adjacent property development which precluded land acquisition. The resulting design is an oblong mini-roundabout with an inscribed diameter of 20 metres, a fully traversable center median, and splitter islands and right-turn cut-offs in the northeast and southwest quadrants. Due to the small size of this roundabout, transit buses will be required to travel over the central island when passing through the intersection resulting in some jostling of passengers. Drainage at these two intersections should be accommodated using the existing ditch/swale system.



Figure 8.2: Northeast Quadrant of Braecrest Drive and Daly Crescent

- **Pathway Connection:** The proposed pathway connection on the south side of Braecrest Drive between Kensington Crescent and 1st Street North is located on right-of-way currently occupied by the parking lot of an adjacent business. As a result, it is recommended that construction of this pathway extension be deferred until the future redevelopment of this property. Design challenges associated with the existing grade differential between the roadway and adjacent property and potential utility conflicts should be addressed in concert with those future redevelopment plans.

8.1.2 BRAECREST DRIVE AND 1ST STREET NORTH

The recommended plan for Braecrest Drive and 1st Street North includes intersection modifications, new pedestrian amenities and transit facilities.

- **Permanent Restriction on Left Turns:** A permanent left turn restriction for eastbound traffic on Braecrest Drive is recommended to help address existing safety concerns (**Figure 9.4**). The median on 1st Street North will be extended to force eastbound vehicles on Braecrest Drive to turn right onto southbound 1st Street North. Northbound vehicles on 1st Street North will still be able to make a left turn onto westbound Braecrest Drive. A sidewalk on the west side of White Swan Street is recommended to help address community concerns about additional vehicles using White Swan Street to access northbound 1st Street North as a result of the permanent left-turn restriction.
- **Limited Access to ACC:** A northbound right turn into campus from 1st Street North is recommended to provide an additional entrance for vehicles wanting to enter ACC from the south (**Figure 9.4**). A separate right-turn lane that allows for traffic to decelerate out of the through traffic lanes is recommended. A westbound right turn exiting campus onto 1st Street North could be considered as well.

- **ACC Bus Turnaround:** A bus turnaround off the ACC Service Road is recommended to help improve transit service to the campus and provide a safe place for students to wait for the bus. The turnaround is proposed to be located on ACC property (**Figure 9.5**).
- **Pedestrian Half Signal:** A half signal north of Braecrest Drive is recommended to improve pedestrian safety (**Figure 9.4**). The signal will be activated by pedestrian push buttons. Vehicles on 1st Street North will stop at a red light to allow pedestrians to safely cross. The crossing will be located north of Braecrest Drive to provide space for vehicles to queue off of the steeper grade on 1st Street North. Pathway connections on both sides of 1st Street North will also be constructed.
- **Transit Stop Relocation:** Relocating the existing southbound transit stop north of Braecrest Drive to the half signal crossing location north of Braecrest Drive is recommended. A formal pathway connection on the east side of 1st Street North will lead to the ACC Campus (**Figure 9.4**).
- **Multi-use Pathway:** A multi-use pathway on the east side of 1st Street North from Kirkcaldy to Braecrest Drive is recommended for the long-term as further investigations are required to determine accessibility and drainage requirements. Alignment of the pathway will be determined in the future.

DESIGN, UTILITY, AND DRAINAGE CONSIDERATIONS

- **Permanent Restriction on Left Turns:** The permanent left-turn restriction at 1st Street North and Braecrest Drive is accomplished through the modification of the central raised median on 1st Street North and the introduction of a right-turn island on Braecrest Drive. An aerial firetruck was used as the design vehicle in the development of the functional design geometry. It was assumed that larger design vehicles do not need to regularly access Braecrest Drive (Braecrest Drive is not a truck route), and when required, they can use the 18th Street North intersection to do so. In conjunction with the introduction of the left-turn restrictions, it is suggested that advance signage be placed west of White Swan Street to allow unfamiliar drivers the opportunity to access the signalized intersection at Centre Avenue and 1st Street North via White Swan Street.

The sidewalk construction on White Swan Street is proposed as a 1.5-metre wide sidewalk located 1.0 metres from the west property line. This aligns with the short section of existing sidewalk immediately north of Braecrest Drive; however, it may require fire hydrant relocations further north (**Figure 8.3**). These enhancements can be accommodated within the existing right-of way and existing drainage patterns should not be impacted.

- **Limited Access to ACC:** The introduction of limited access to ACC is accomplished through the construction of a northbound right-turn deceleration lane and a northbound to eastbound right-in driveway. A right-out movement exiting the ACC Campus could also be added at the proposed access. The implementation of this enhancement will need to be coordinated with Assiniboine Community College. Several street light standards on the east side of 1st Street North will have to be relocated to permit construction of these enhancements; however, existing drainage patterns should not be impacted.



Figure 8.3: Existing Sidewalk on West Side of White Swan Street

- **ACC Bus Turnaround:** The ACC bus turnaround has been designed to accommodate a city transit bus. The turnaround is located on the plateau of the north hill, so minimal grading work will be required; however, several trees on the plateau will have to be removed prior to construction. It is recommended that the existing radii at the intersection with 1st Street North be improved to facilitate the easy entrance and exit of buses. To avoid traffic conflicts, it is recommended that a stop sign be installed to control westbound ACC Access Road traffic entering the bus loop. The implementation of this enhancement will need to be coordinated with Assiniboine Community College. Existing drainage patterns should not be impacted by this enhancement.

- **Pedestrian Half Signal:** A half signal to facilitate pedestrian movements across 1st Street North is proposed to be located approximately 70 metres north of Braecrest Drive. The location was selected to avoid stopping vehicles on the steep six percent grade on 1st Street North during winter months and to avoid the operational problems associated with placing half signals at existing intersection locations. The detailed design for the installation of a pedestrian half signal will need to consider the design and location of the traffic signal poles to ensure they meet MI, Manual of Uniform Traffic Control Devices in Canada, roadside safety, and accessibility requirements.

The detailed design of the pathway on the west side of 1st Street North between Braecrest Drive and the proposed half signal location will be challenging due to the existing deep ditch along First Street North and the resulting grade differential between the highway and the property line. Possible options to investigate at the detailed design stage include locating the pathway at the property line and installing a section of underground drainage or locating the pathway adjacent to the highway shoulder and regrading the existing side slopes. Depending on the detailed design option selected, an existing fire hydrant on the northwest quadrant of the intersection may need to be relocated. Markers for buried Westman fiberoptic cable are also located near the proposed pathway and the impacts should be further investigated during detailed design (**Figure 8.4**).



Figure 8.4: Northwest Quadrant of Braecrest Drive at 1st Street North

The proposed pathway on the east side of 1st Street North is located at the top of the ditch back slope and can be easily accommodated by installing a culvert where the pathway crosses the existing east ditch. The construction of the pathway on the east side will need to be coordinated with Assiniboine Community College.

8.1.3 BRAECREST DRIVE AND 18TH STREET NORTH

The recommended plan for Braecrest Drive and 18th Street North includes a new roadway connection, intersection modifications, and transit facilities.

- **New Roadway Connection:** A new roadway connection from Mockingbird Drive to Quail Ridge Drive is recommended to help address the major concern of the westbound left-turn from Braecrest Drive onto southbound 18th Street North. The new connection will allow westbound vehicles on Braecrest Drive to access the signalized intersection at 18th Street North and Cumberland Avenue (**Figure 9.6**).
- **Transit Stop Relocation:** Relocating the existing transit stop on the east side of 18th Street North to north of Braecrest Drive is recommended to make the stop more accessible to all pedestrians. Buses would pull out of the northbound through lane on 18th Street North into the acceleration lane to pick up or drop off passengers at the stop (**Figure 9.7**). Sidewalk connections will also be constructed.
- **Roundabout:** A roundabout is recommended in the long-term at the intersection of Braecrest Drive and 18th Street North. The roundabout will initially include two northbound lanes and one southbound lane to align with the lanes on 18th Street North (**Figure 9.8**). The roundabout has been designed to accommodate WB-20 semi-trailers. Pedestrian crossings are provided on three approaches (west, north and east) with signed and marked crosswalks. A pedestrian crossing was not included on the south approach so northbound traffic would not back up on the steep slope on 18th Street North. A speed limit reduction to 60 km/hr on 18th Street North is also recommended with the roundabout. The roundabout can be upgraded to two lanes when a second southbound lane is added on 18th Street North (**Figure 9.9**).

DESIGN, UTILITY, AND DRAINAGE CONSIDERATIONS

- **New Roadway Connection:** The proposed connection of Quail Ridge Drive and Mockingbird Drive is accomplished by extending the existing tangent section of Quail Ridge Drive to the north through the back of the former Patmore Nursery property and constructing a 100-metre radius connecting curve. This will require the acquisition of additional property. The proposed alignment will pull the roadway away from the existing houses in Monterey Estates to minimize impacts to these properties. The existing access to Monterey Estates will be converted to a stop controlled T-intersection located on the outside of the 100-metre radius horizontal curve. It is proposed that the existing driveways to Kelleher Ford and the former Patmore Nursery property be relocated to minimize conflicts with the new Monterey Estates intersection. The exact location of these driveway relocations shall be determined in consultation with the impacted land owners during the detailed design stage.

The existing multi-use path on the east side of Quail Ridge Drive is to be extended north to Monterey Estates. The alignment illustrated on the functional design drawing is adjacent to the existing east right-of-way; however, this pathway could also be located adjacent to the new roadway alignment if that is found to be preferable by stakeholders.

The construction of the new roadway connection will result in increased volumes of turning traffic at the Mockingbird Drive / Cumberland Avenue intersection. The operational impact on this intersection should be investigated at the detailed design stage and any required modifications should be considered for implementation in concert with the construction of this enhancement.

It is proposed that existing ditch/swale drainage patterns be maintained with the installation of a through-grade culvert on the roadway extension. The required size of the culvert shall be determined during the detailed design.

- **Roundabout:** The proposed roundabout at Braecrest Drive and 18th Street North uses a conventional design with a 50-metre inscribed diameter and can comfortably accommodate a WB-20 design vehicle with a truck apron. A roundabout of similar dimensions was recently constructed by Manitoba Infrastructure at the PTH 2/PTH 3 intersection and has operated well with significant truck traffic. During the detailed design stage, the desired width of the truck apron can be reviewed against the selected design vehicle.

Initially, this roundabout would be constructed with two lanes in the northbound direction and one lane in the southbound direction to match the existing cross-section on 18th Street North. The westbound approach on Braecrest Drive would consist of two lanes including an exclusive right-turn lane. The eastbound approach would be a single lane. The existing median opening located south of the proposed roundabout would be closed as it falls within the functional area of the intersection. Residents who currently use this median opening would be able to make a 180 degree turn at the roundabout to access their properties.

Pedestrian crossings will be provided on the north, east, and west legs of the roundabout. It is recommended that pedestrian access not be provided on the south leg as it is undesirable to stop northbound 18th Street North traffic on the steep six percent grade to the south of the intersection under slippery conditions.

Property acquisition will be required in the northwest, northeast, and southwest quadrants of the intersection to construct the roundabout. Notional property requirements have been illustrated on the functional design plans; however, the presence of steep embankments to the west of the intersection will likely demand geotechnical analysis during the detailed design stage to develop an appropriate embankment design and to identify the actual property requirements at this location.

Several existing hydro poles and street lighting poles will require relocation to facilitate construction of the roundabout. It is recommended that an enhanced streetlighting plan be developed as a part of the detailed roundabout design. It is proposed that the existing above ground drainage patterns be retained.

In the long-term, provision has been made in the functional design to upgrade the roundabout to a full multi-lane configuration when 18th Street North is twinned in the southbound direction. These modifications can be made within the footprint of the Stage 1 roundabout design by shrinking the central island. In this stage it is recommended that the additional southbound through lane be constructed on top of the existing paved shoulder with a concrete roll curb to minimize the extent of grade work required in this area due to the steep embankments.

It is recommended that the existing posted speed limit on 18th Street North be reduced to 60 kilometres per hour with the introduction of a roundabout at this location.

8.2 IMPLEMENTATION PLAN

The timing for the improvements was reviewed and an implementation plan was recommended for the Braecrest Drive Corridor. The proposed implementation plan is summarized in **Table 8.1**.

8.3 COST ESTIMATE

A Class 4 cost estimate for the functional design of the recommended plan for the Braecrest Drive Corridor was prepared and is summarized in **Table 8.2**.

Table 8.1: Recommended Options

TIME FRAME	RECOMMENDED OPTION(S)
Short-Term	<ul style="list-style-type: none"> ▪ Pedestrian crossings of Braecrest Drive at Quail Ridge Drive and Lark Street. ▪ Sidewalk connections on the north side of Braecrest Drive (Lark Street to Daly Crescent and Bluebird Street to 1st Street North). ▪ Roundabout at Braecrest Drive and Knowlton Drive / Bluebird Street. ▪ Pedestrian half signal crossing of 1st Street North and relocation of transit stop on southbound 1st Street North, north of Braecrest Drive. ▪ Bus turnaround on the ACC service road off 1st Street North. ▪ New roadway connection from Quail Ridge Drive to Mockingbird Drive. ▪ Relocation of transit stop on northbound 18th Street North, north of Braecrest Drive.
Medium-Term	<ul style="list-style-type: none"> ▪ Sidewalk connections on the north side of Braecrest Drive (remaining portion from 18th Street North to 1st Street North). ▪ Roundabout at Braecrest Drive and Daly Crescent. ▪ Restricted left-turns and access to ACC at Braecrest Drive and 1st Street North.
Long-Term	<ul style="list-style-type: none"> ▪ Roundabout at Braecrest Drive and 18th Street North and reduced speed limit on 18th Street North. ▪ Pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North. ▪ Multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive.

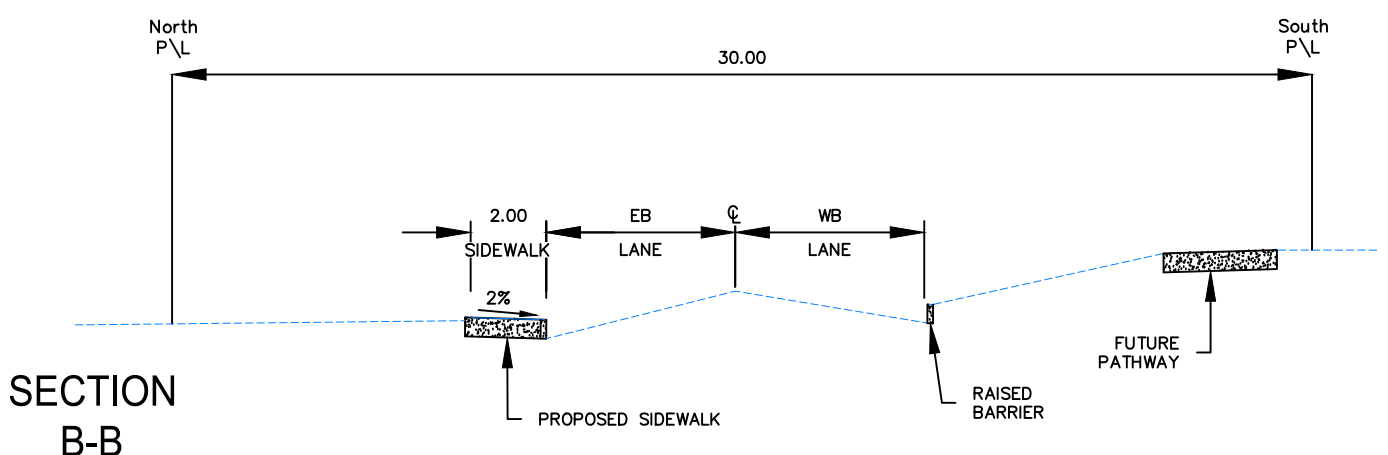
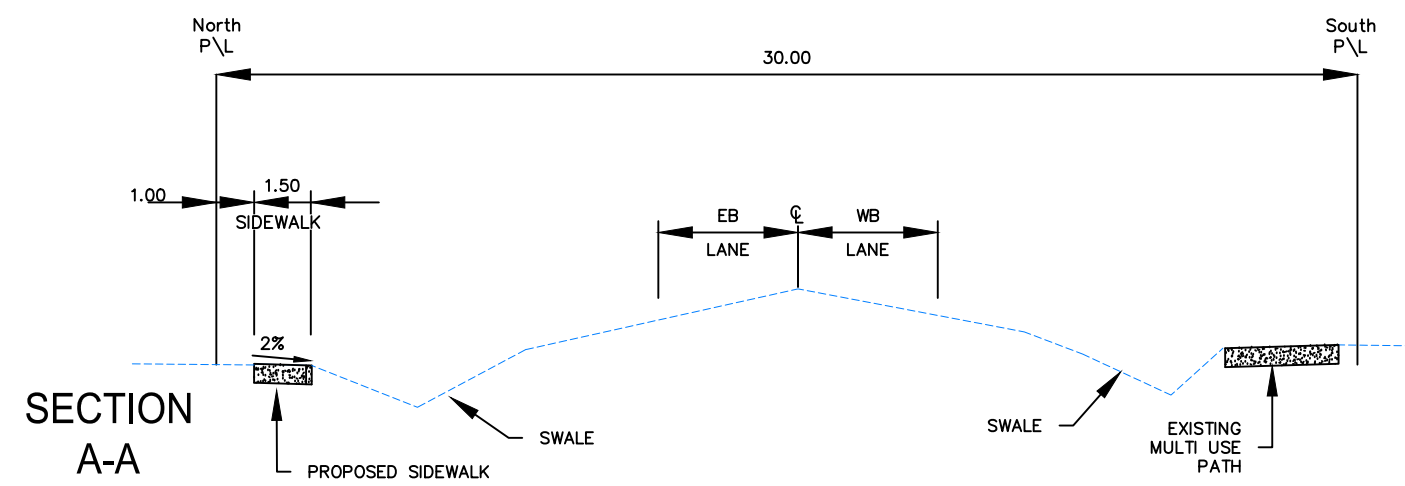
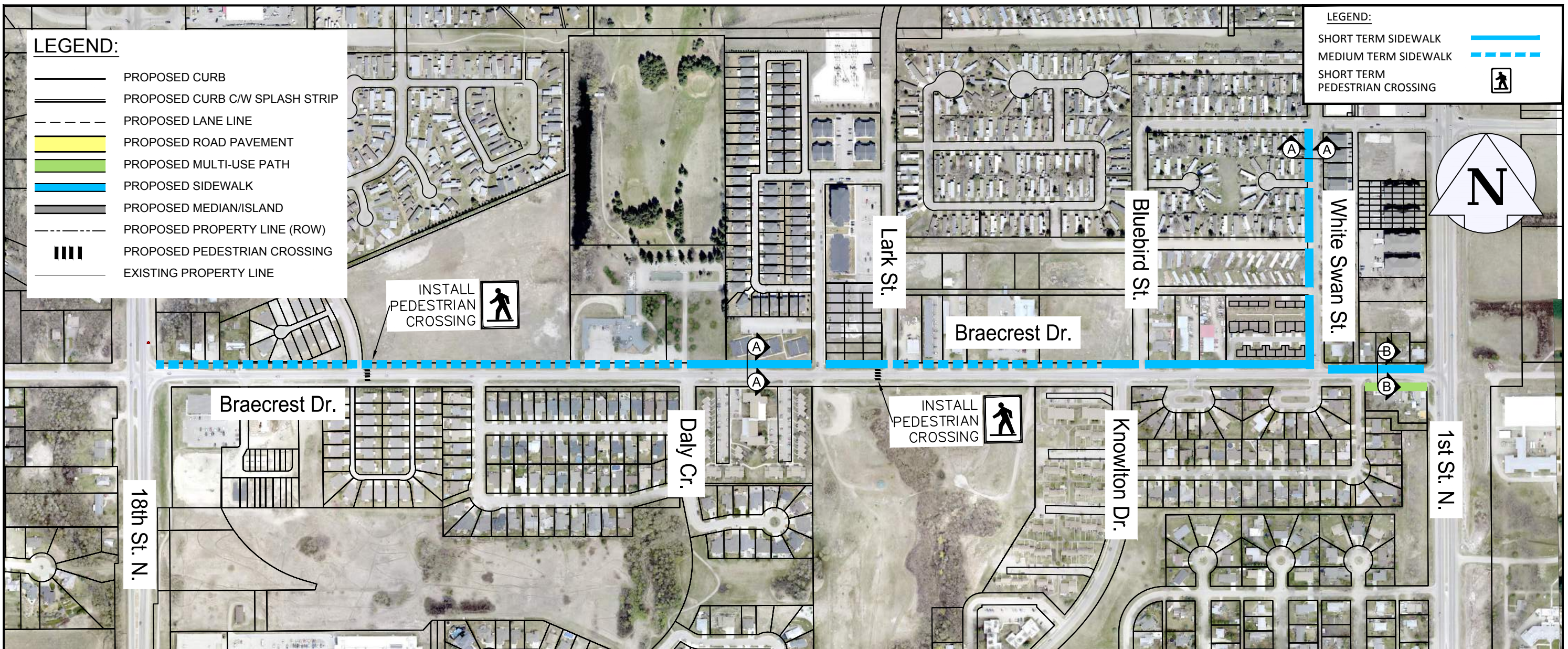
Table 8.2: Class 4 Cost Estimate for the Braecrest Drive Corridor

ITEM	ESTIMATED COST
Braecrest Drive	
Pedestrian Crossings	\$4,000
Sidewalk Connection (Lark to Daly)	\$87,000
Sidewalk Connection (Bluebird to 1st)	\$132,000
Roundabouts (Braecrest & Daly and Braecrest & Knowlton)	\$1,332,000
Pathway Connection (Braecrest from Kensington to 1st)	\$36,000
1st Street North	
ACC Bus Turnaround	\$360,000
Left-Turn Restrictions & White Swan Sidewalk	\$57,000
Multi-Use Pathway	TBD
Braecrest Drive & 1st Street North Intersection	
Limited Access to ACC	\$257,000
Half Signal North of Braecrest (including relocation of transit stop)	\$366,000
18th Street North	

ITEM	ESTIMATED COST
Transit Connection (sidewalk)	\$7,000
Braecrest Drive & 18th Street North Intersection	
New Roadway Connection (Quail Ridge to Mockingbird)	\$722,000
Roundabout	\$1,346,000
Sub-Total	\$4,706,000
Utility Costs (10%)	\$470,600
Contingencies Costs (25%)	\$1,176,500
BRAECREST DRIVE CORRIDOR TOTAL	\$6,353,100

9 FUNCTIONAL DESIGN DRAWINGS

Jun 25, 2019 - 3:48pm
P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Functional Drawings\18M-01581-01.dwg - tab: Fig. 9.1



NOTE:
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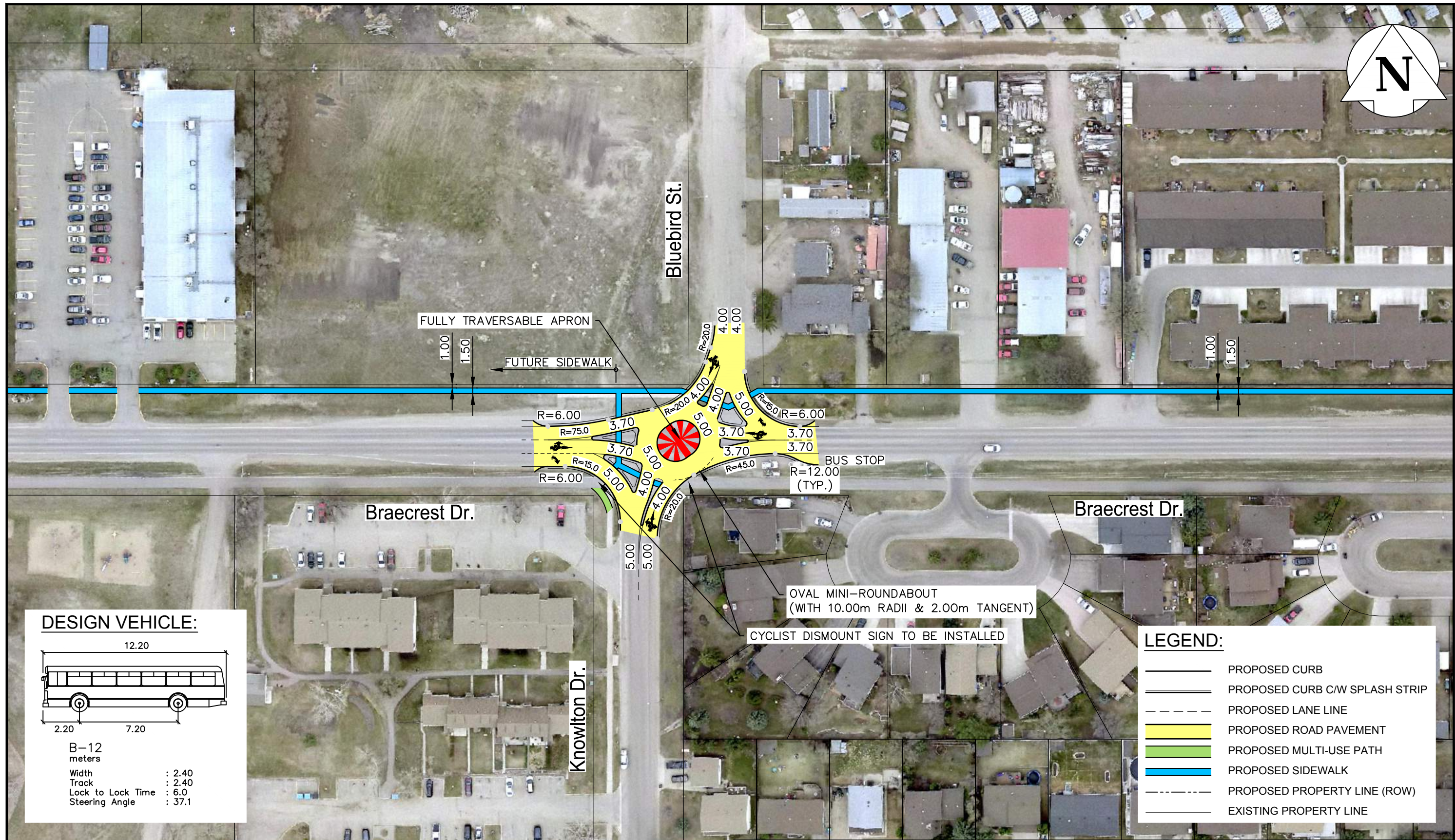
PRELIMINARY
NOT FOR CONSTRUCTION



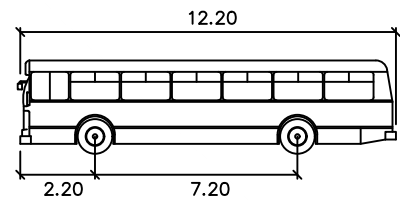
WSP Canada Group Limited
Suite 111 - 93 Lombard Ave
Winnipeg, MB R3B 3B1
t. 204.943.3178
f. 204.943.4948
www.wsp.com

Recommended Sidewalks, Pedestrian Crossings
& Pathway Connection For Braecrest Drive

SCALE: 1:5000	DATE: May 23, 2019	DWG. No. Fig. 9.1
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DESIGN VEHICLE:



B-12
meters
Width : 2.40
Track : 2.40
Lock to Lock Time : 6.0
Steering Angle : 37.1

LEGEND:

- PROPOSED CURB
- PROPOSED CURB C/W SPLASH STRIP
- PROPOSED LANE LINE
- PROPOSED ROAD PAVEMENT
- PROPOSED MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PROPERTY LINE (ROW)
- EXISTING PROPERTY LINE

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METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



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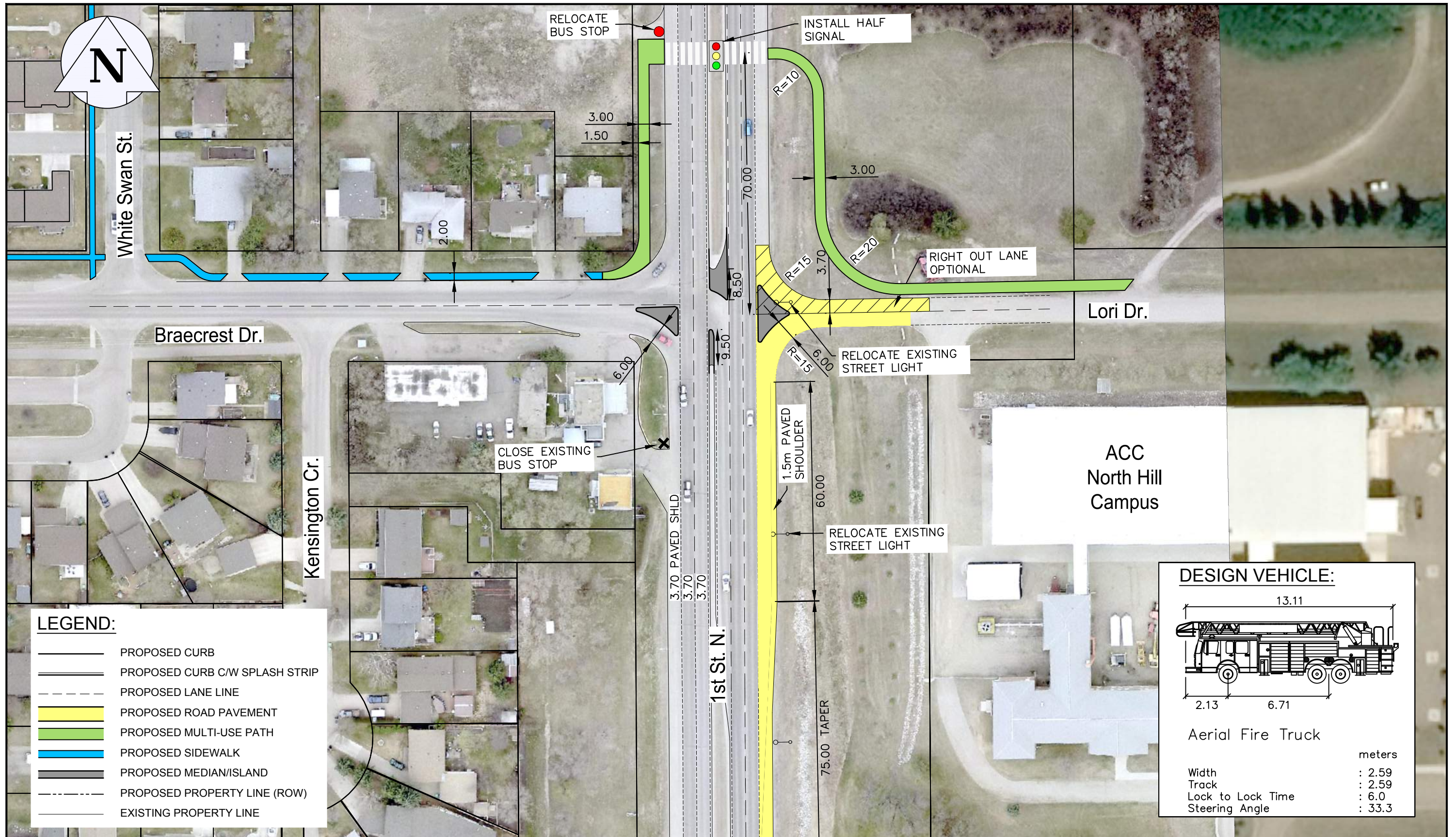
Recommended Mini-Roundabout at
Braecrest Drive and Knowlton
Drive/Bluebird Street

SCALE:
1:1000

DATE:
May 23, 2019

DWG. No.
FIGURE 9.3

May 23, 2019 - 10:30am
P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Functional Drawings\18M-01581-01.dwg -tab: Fig. 9.4



LEGEND:

- PROPOSED CURB
- PROPOSED CURB C/W SPLASH STRIP
- PROPOSED LANE LINE
- PROPOSED ROAD PAVEMENT
- PROPOSED MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED MEDIAN/ISLAND
- PROPOSED PROPERTY LINE (ROW)
- EXISTING PROPERTY LINE

DESIGN VEHICLE:

Aerial Fire Truck

Width	: 2.59	meters
Track	: 2.59	
Lock to Lock Time	: 6.0	
Steering Angle	: 33.3	

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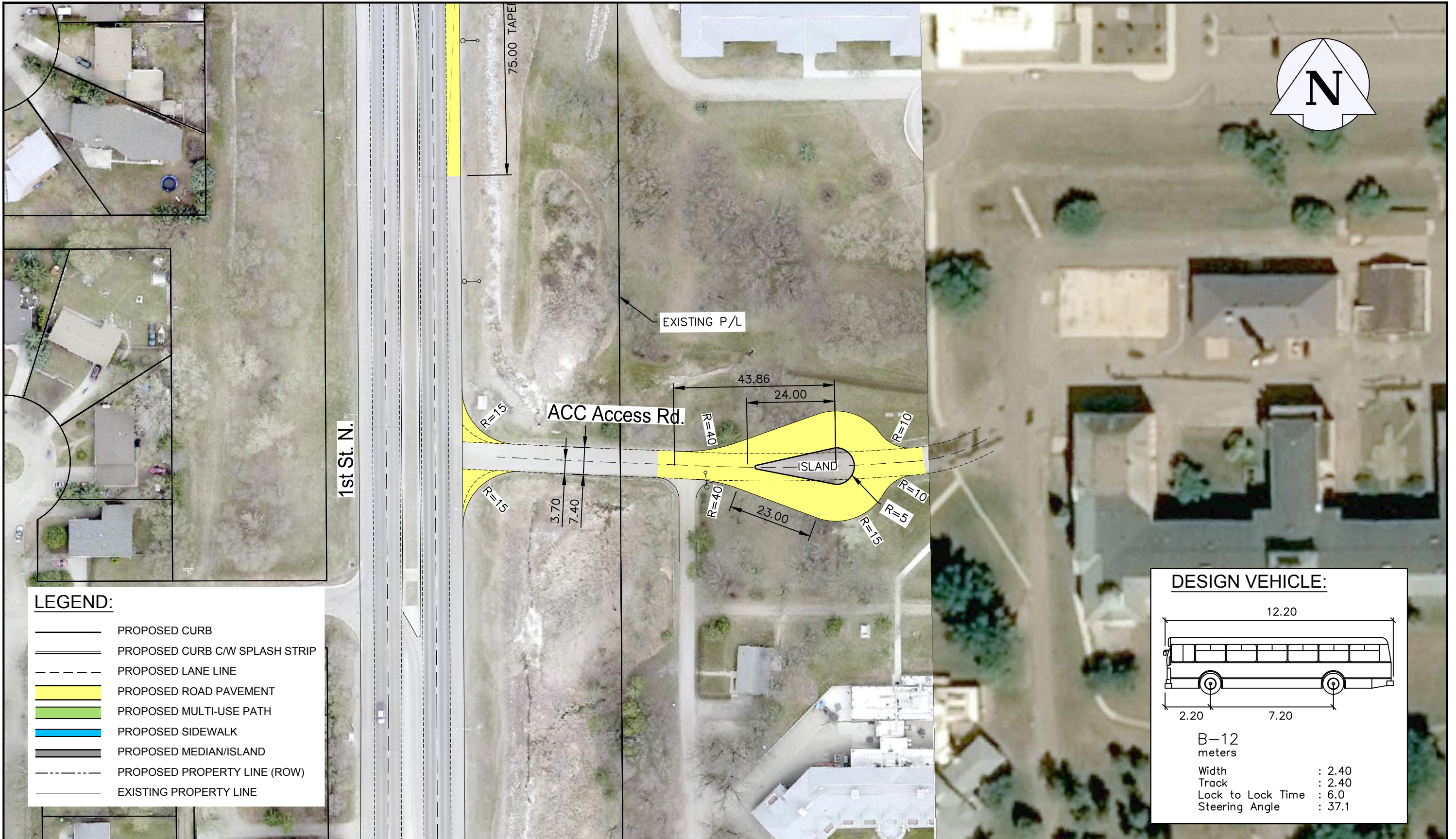
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Recommended Intersection Modifications, Pedestrian Half-Signal and Transit Stop Relocation at 1st Street North and Braecrest Drive		
SCALE: 1:1000	DATE: May 23, 2019	DWG. No. Fig. 9.4

May 23, 2019 - 10:31am
P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Functional Drawings\18M-01581-01.dwg -tab: Fig. 9.5



LEGEND:

- PROPOSED CURB
- PROPOSED CURB C/W SPLASH STRIP
- PROPOSED LANE LINE
- PROPOSED ROAD PAVEMENT
- PROPOSED MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED MEDIAN/ISLAND
- PROPOSED PROPERTY LINE (ROW)
- EXISTING PROPERTY LINE

NOTE:

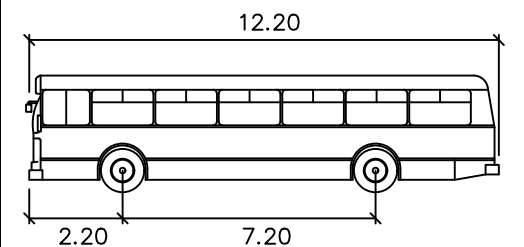
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f. 204.943.4948
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DESIGN VEHICLE:



B-12
meters

Width : 2.40
Track : 2.40
Lock to Lock Time : 6.0
Steering Angle : 37.1

Recommended
Assiniboine Community College
Bus Turn-Around

SCALE:
1:1000

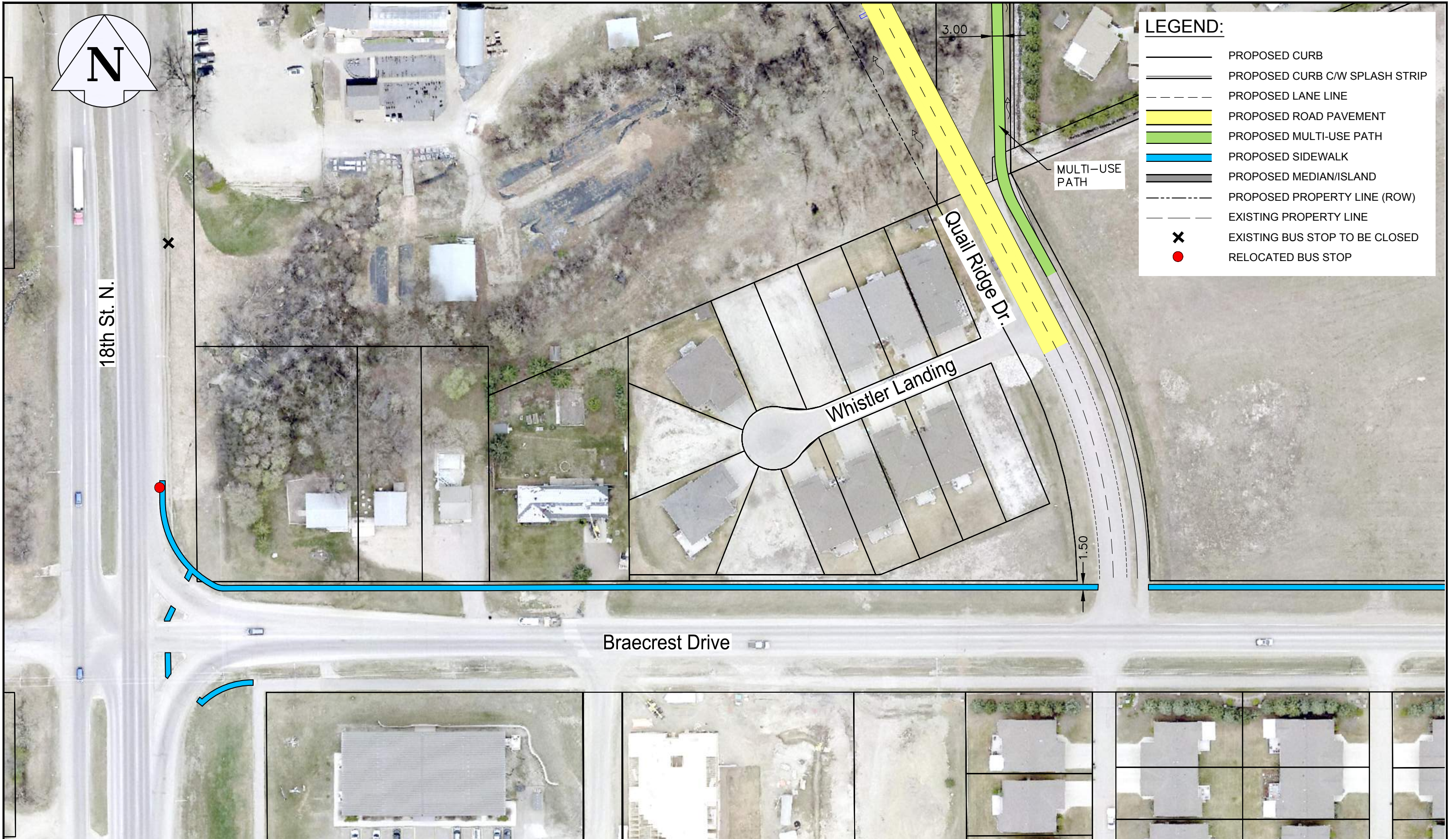
DATE:
May 23, 2019

DWG. No.
Fig. 9.5

May 23, 2019 - 11:00am
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May 23, 2019 - 3:03pm
P:\2018\18M-01581-00 - Braecrest Drive Corridor\WSP Drawings\Functional Drawings\18M-01581-01.dwg -tab: Fig. 9.7



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Winnipeg, MB R3B 3B1
t. 204.943.3178
f. 204.943.4948
www.wsp.com

Recommended Transit Stop Relocation on
18th Street North at Braecrest Drive

SCALE:
1:1000

DATE:
May 23, 2019

DWG. No.
Fig. 9.7

10 PHASE THREE PUBLIC & STAKEHOLDER ENGAGEMENT

The goal of Phase Three Public and Stakeholder Engagement was to share what the Project Team learned from Phase Two and share the preferred design enhancements and alternatives, as well as seek feedback from affected landowners regarding impacts to their properties.

Phase Three Public and Stakeholder Engagement included three public engagement activities; a public open house, discussions with affected landowners (some of which attended the public open house), and a comment sheet (paper and online version) (See Table 10.1).

Table 10.1: Phase Three Public Engagement Activities

ENGAGEMENT ACTIVITY	PUBLIC PARTICIPATION
Public Open House	136 attendees
Landowner Discussions	6 attendees
Comment Sheet (paper and online)	36 completed comment sheets

The following points briefly summarize stakeholder and public feedback from Phase Three Stakeholder and Public Engagement:

- **Braecrest Drive Recommended Design**
 - The proposed crosswalks and sidewalk connections along the north side of Braecrest Drive were viewed as a good recommendation for the project and were well liked by members of the public.
 - The proposed roundabouts at Daly Crescent and Bluebird Street are also viewed as a good suggestion to control traffic along Braecrest Drive. Both landowners in the area and members of the public showed broad approval for these recommendations.
 - Landowners affected by the proposed designs did not indicate any concerns about the design.
- **Braecrest Drive and 1st Street North Recommended Design**
 - The recommended designs for Braecrest Drive and 1st Street North, which included a permanent restriction on left turns and limited access to Assiniboine Community College (ACC), pedestrian half signal north of Braecrest Drive, transit stop relocation, ACC turnaround and multi-use pathway, received broad approval from respondents.
- **Braecrest Drive and 18th Street North Recommended Design**
 - The majority of comments regarding the new roadway connection from Mockingbird Drive to Quail Ridge Drive indicate it was generally accepted as a good idea. A minority of comments indicated some concern over the potential for added traffic coming into the Monterey Estates housing development.
 - There was broad support for the conceptual roundabout at the intersection of Braecrest Drive and 18th Street North and many comments believe this to be a suitable option to control traffic and provide a safe pedestrian access for the location.
 - Impacted landowners affected by the conceptual designs for the intersection did not express significant concerns and generally liked the suggestions.

Additional stakeholder and public comments from Phase Three Public Engagement can be reviewed in the Phase 3 Public Engagement Report (**Appendix D**).

11 CONCLUSIONS

The following conclusions are offered for the Braecrest Drive Corridor:

- Land use within the Braecrest Drive study area is largely directed by the Brandon and Area Planning District Development Plan, the North Brandon Gateway Secondary Plan, and the City of Brandon's Zoning By-Law. The BAPD Development Plan and North Brandon Gateway Secondary Plan both influence long-range land-use in the study area, and the Zoning By-Law regulates the use and development of land and buildings in the study area;
- Recent development in the study area includes a multi-family development located southeast of 18th Street North and Braecrest Drive that is currently under construction and a proposed multi-family development at 501 Braecrest Drive. Additional residential development is expected along Braecrest Drive in the future, as well as north of the study area;
- The functional plan for the upgrading of PTH 1 West to an expressway classification through the Brandon area includes the construction of Parclo AB interchanges at the relocated intersections of PTH 1 West with PTH 10 and PTH 1A. The construction of the two interchanges would require the realignment of PTH 10 to the west of its current location beginning north of Braecrest Drive and the realignment of PTH 1A to the east of its current location beginning just south of Braecrest Drive;
- The ACC North Hill Campus is located east of 1st Street North between Veteran's Way and Lori Road. The primary vehicular access into the North Hill Campus is currently via the signalized intersection of 1st Street North and Lori Road / Centre Avenue at the north end of the site, and there is a secondary access via Lori Road from the east. There is also a restricted right-in/right-out service entrance located on 1st Street North just north of Kirkham Crescent. Pedestrians and cyclists also access the campus at 1st Street North and Braecrest Drive and connect to the internal campus street and pathway system;
- Historical traffic data indicates that traffic volumes are growing at a rate of approximately three percent per year on 18th Street North, approximately two percent per year on 1st Street North, and approximately one percent per year on Braecrest Drive;
- Collision data indicates that a very high percentage of the reported collisions within the study area occurred at the intersections of 18th Street North and Braecrest Drive (65 percent of all reported collisions) and 1st Street North and Braecrest Drive (14 percent of all reported collisions). Together, these two locations account for 79 percent of the total reported collisions within the study area from 2008 to 2017;
- Brandon Transit operates two routes within the study area: (1) Route 4 – TransCanada and (2) Route 5 – Assiniboine. Both routes operate seven days per week with the exception of certain statutory holidays. Brandon Transit has indicated that they have no plans to adjust service in the study area in the future;
- There is an off-street multi-use trail that runs along the south side of Braecrest Drive from 18th Street North to Kensington Crescent, and an existing pedestrian crosswalk of Braecrest Drive at Knowlton Drive;
- There are existing land drainage facilities on Hanbury Place south of Braecrest Drive as well as on Braecrest Drive between Kelly Place and Kensington Crescent. Water and sewer infrastructure is currently located within the Braecrest Drive right-of-way, with connections into the various residential neighbourhoods off Braecrest Drive. No changes to the existing drainage and utility infrastructure are planned at this time, other than new connections to proposed developments in the study area;
- Traffic signals at the intersection of Braecrest Drive and 1st Street North are expected to be warranted by 2028, and the intersection level of service is forecast to fall to LOS E during the afternoon peak hour by 2038; and
- Traffic signals are warranted at the intersection of Braecrest Drive and 18th Street North based on existing traffic volumes, and the intersection is currently operating at LOS F during the afternoon peak hour.

12 RECOMMENDATIONS

Short-term recommendations for the Braecrest Drive Corridor include:

- Pedestrian crossings of Braecrest Drive at Quail Ridge Drive and Lark Street;
- Sidewalk connections on the north side of Braecrest Drive (Lark Street to Daly Crescent and Bluebird Street to 1st Street North);
- Roundabout Braecrest Drive and Knowlton Drive / Bluebird Street;
- Pedestrian half signal crossing of 1st Street North and relocation of transit stop on southbound 1st Street North, north of Braecrest Drive;
- Bus turnaround on the ACC service road off 1st Street North;
- New roadway connection from Quail Ridge Drive to Mockingbird Drive; and
- Relocation of transit stop on northbound 18th Street North, north of Braecrest Drive.

Medium-term recommendations for the Braecrest Drive Corridor include:

- Sidewalk connections on the north side of Braecrest Drive (remaining portion from 18th Street North to 1st Street North);
- Roundabout at Braecrest Drive and Daly Crescent; and
- Restricted left-turns and access to ACC at Braecrest Drive and 1st Street North.

Long-term recommendations for the Braecrest Drive Corridor include:

- Roundabout at Braecrest Drive and 18th Street North and reduced speed limit on 18th Street North;
- Pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North; and
- Multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive.

APPENDIX

A TRAFFIC COUNTS



City of Brandon
Development Services Division
Turning Movement Counts - Field Sheet

Job No.:

Location:

PTH 10 & Braecrest Drive

Date:

22/11/2017

Wednesday

Recorder:

SvH

Interval (dd) :

15

(In Minutes)

Province:

MB

Town:

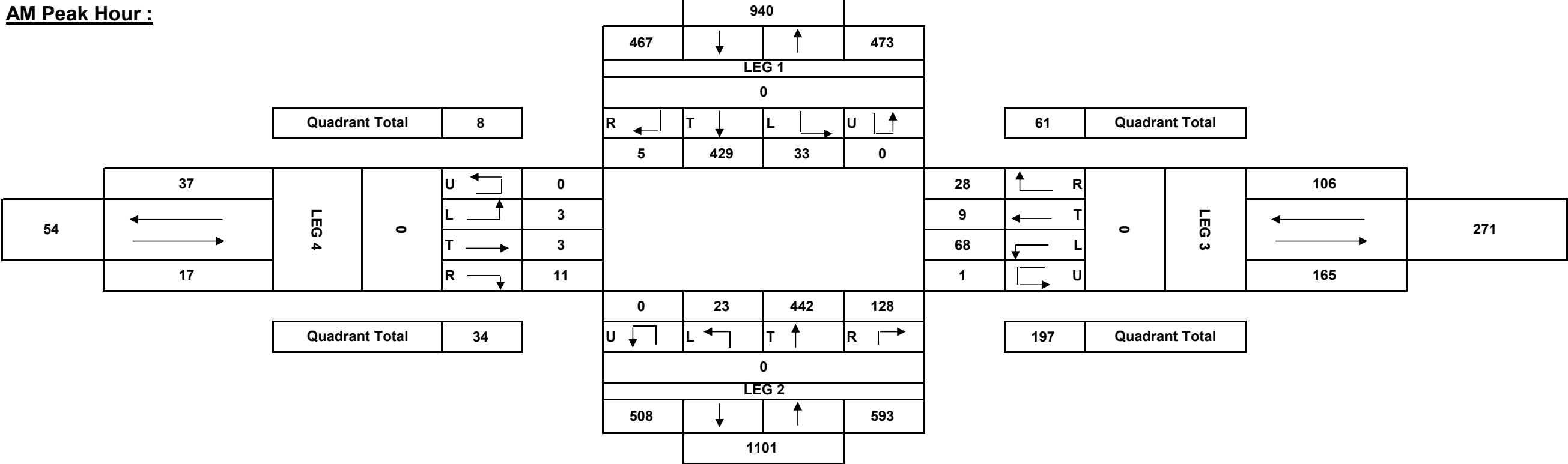
Brandon

Weather:

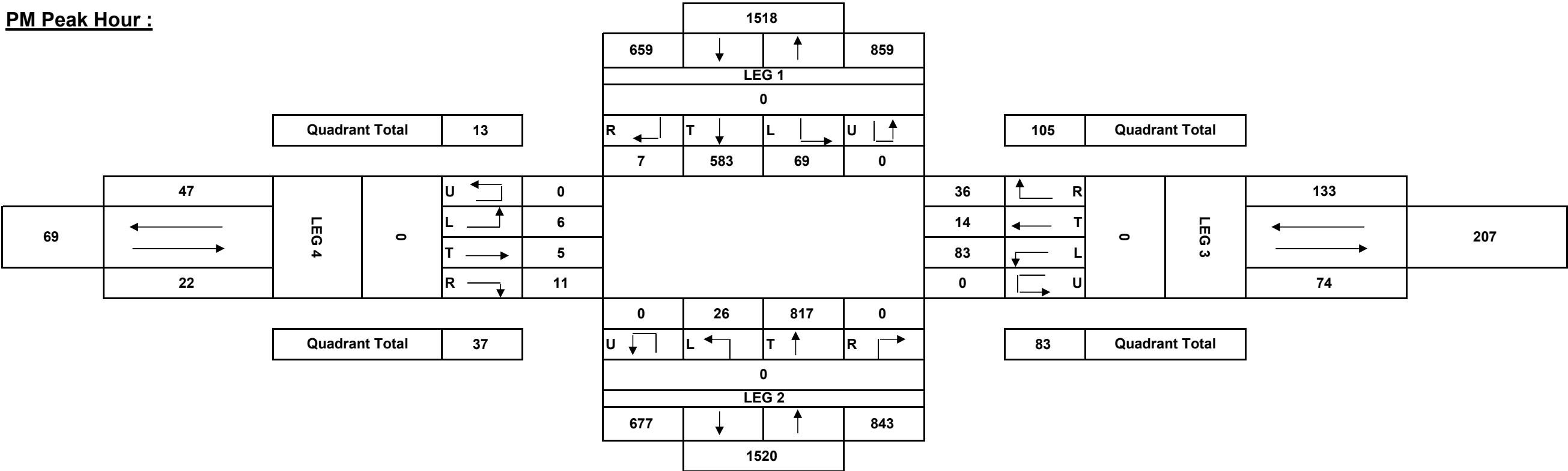
Light Snow

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start 11:00	End 12:00	Volume 1183	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start 16:45	End 17:45	Volume 1657	LOS	V/C
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AM Peak Hour :



PM Peak Hour :



City of Brandon
Development Services Division
Turning Movement Counts - Field Sheet

Job No.:

Location:

PTH 1A & Braecrest Drive

Date:

19/09/2018

Wednesday

Recorder:

SvH

Interval (dd) :

15

(In Minutes)

Province:

MB

Town:

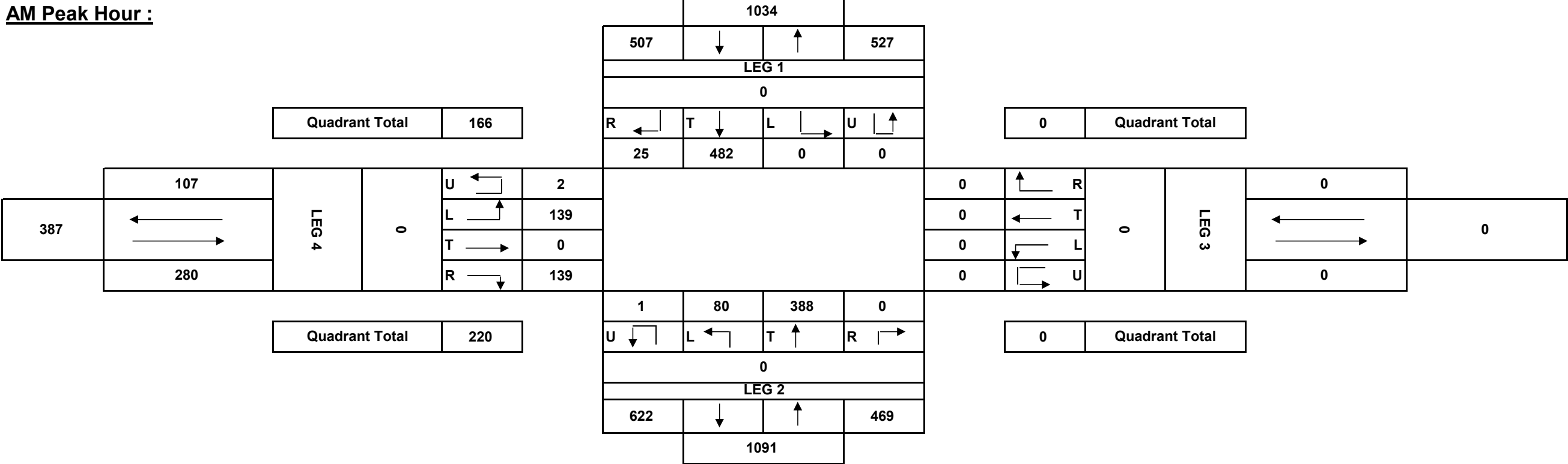
Brandon

Weather:

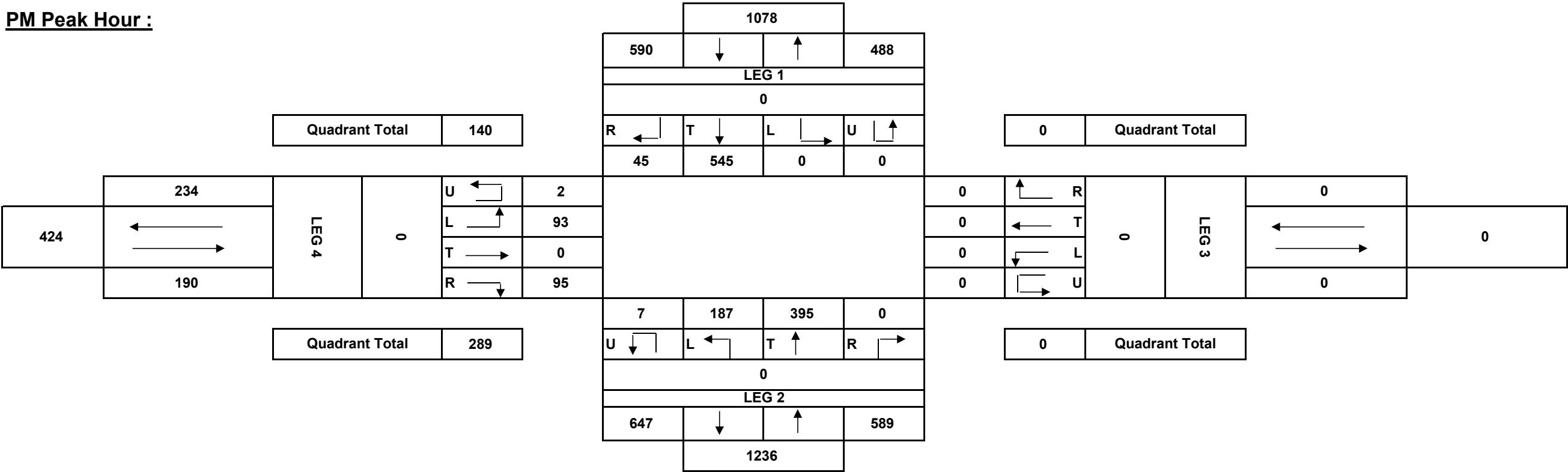
Clear

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start 07:30	End 08:30	Volume 1256	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start 16:00	End 17:00	Volume 1369	LOS	V/C
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AM Peak Hour :



PM Peak Hour :



City of Brandon
Development Services Division
Turning Movement Counts - Field Sheet

Job No.:

Location:

Date:

Recorder:

Interval (dd) :
(In Minutes)

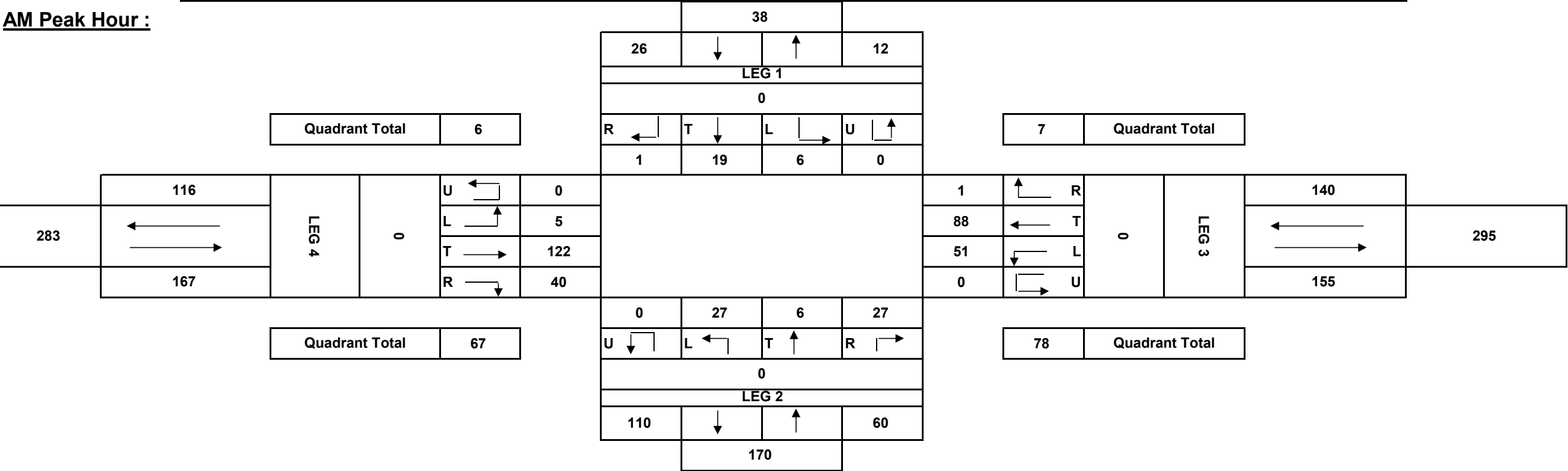
Province:

Town:

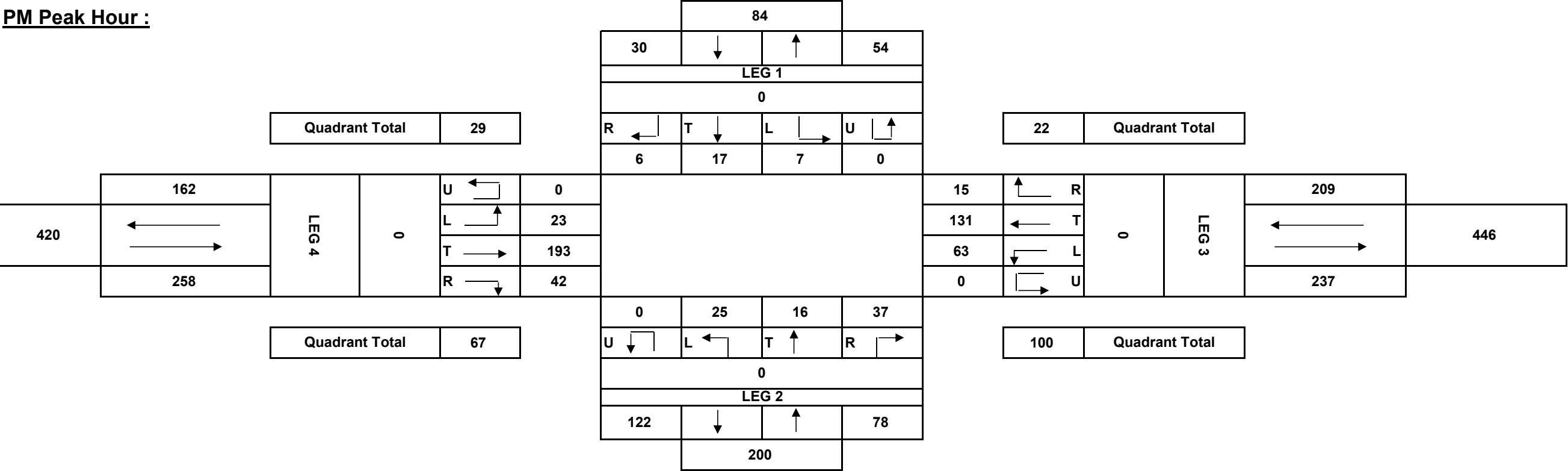
Weather:

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AM Peak Hour :



PM Peak Hour :





Manitoba Highway Traffic Information System
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Miovision turning movement count analysis
PTH 10 & BRAECREST DR
November 25, 2015

Requested by
Date

Report prepared by
Date

Comments
N/A

Note: These miovision counts are taken from 07:00-21:00 for two days in 15 minutes intervals. The Miovision count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2015 Traffic on Manitoba Highways report*) as follows:

Miovision Class	Equivalent FHWA Scheme F
Lights	FHWA Classes 2 and 3*
Mediums	FHWA Classes 4 to 7
Articulated Trucks	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: PTH 10 & BRAECREST DR

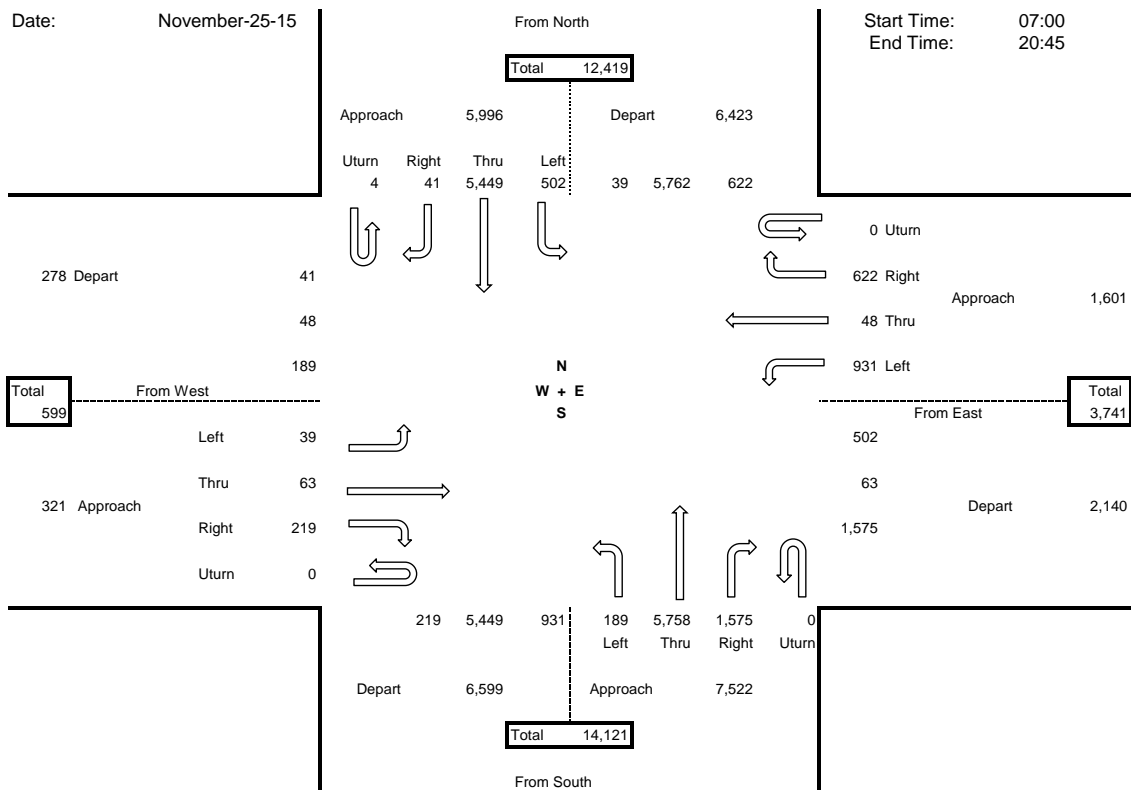
DATE: Mon Day Year Start Time
Start: Nov 25 2015 07:00
End: Nov 25 2015 20:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

14 Hour Count Summary

	Southbound					Westbound					Northbound					Eastbound					Interval
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Auto	37	5313	492	4	5846	600	47	900	0	1547	1551	5578	184	0	7313	214	58	37	0	309	15015
%	0.2	34.4	3.2	0.0	37.9	3.9	0.3	5.8	0.0	10.0	10.0	36.1	1.2	0.0	47.4	1.4	0.4	0.2	0.0	2.0	97
Sm truck	4	83	9	0	96	15	1	26	0	42	23	122	4	0	149	5	5	2	0	12	299
%	0.0	0.5	0.1	0.0	0.6	0.1	0.0	0.2	0.0	0.3	0.1	0.8	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	2
Lg truck	0	53	1	0	54	7	0	5	0	12	1	58	1	0	60	0	0	0	0	0	126
%	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1
All	41	5449	502	4	5996	622	48	931	0	1601	1575	5758	189	0	7522	219	63	39	0	321	15440
% ALL	0.3	35.3	3.3	0.0	38.8	4.0	0.3	6.0	0.0	10.4	10.2	37.3	1.2	0.0	48.7	1.4	0.4	0.3	0.0	2.1	100

First 14 Hour Count

Turning Movement for Total Intersection



Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

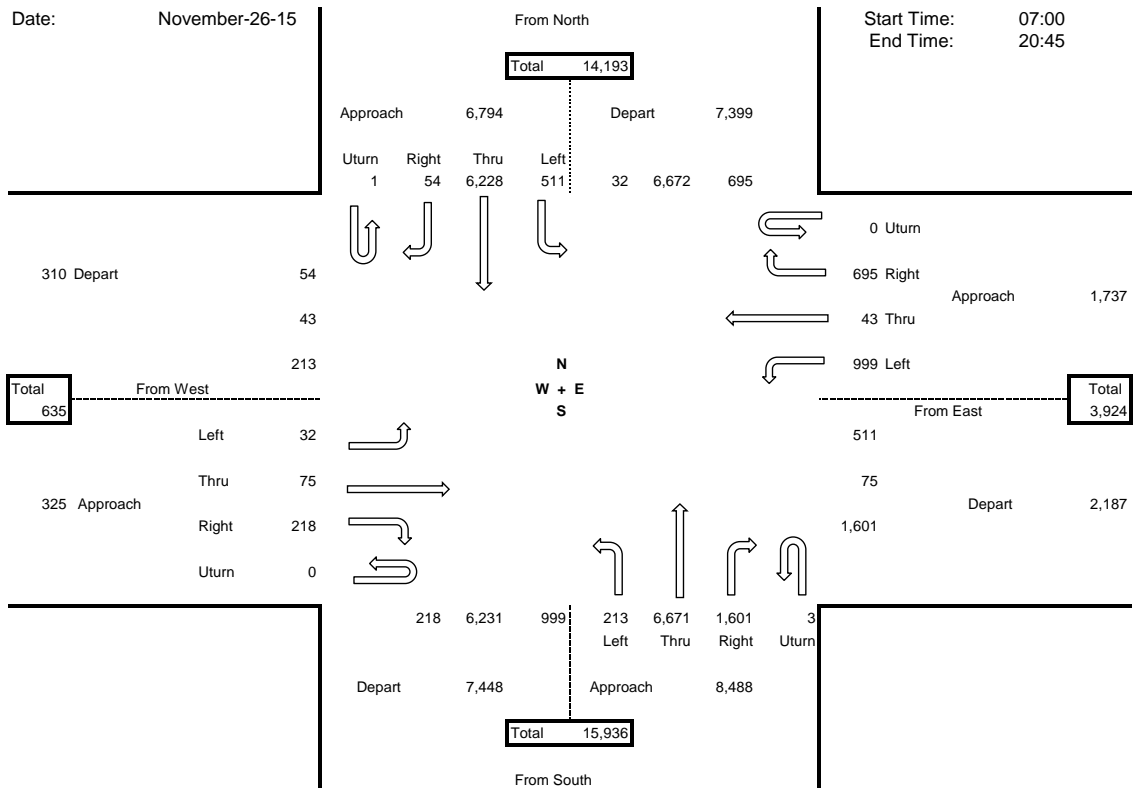
DATE: Mon Day Year Start Time
Day 1: Nov 26 2015 07:00
Day 2: Nov 26 2015 20:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

14 Hour Count Summary

	Southbound					Westbound					Northbound					Eastbound					Interval
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	total
Auto	47	6054	502	1	6604	679	42	975	0	1696	1587	6477	213	3	8280	215	70	32	0	317	16897
%	0.3	34.9	2.9	0.0	38.1	3.9	0.2	5.6	0.0	9.8	9.2	37.3	1.2	0.0	47.7	1.2	0.4	0.2	0.0	1.8	97
Sm truck	7	95	7	0	109	14	1	23	0	38	13	126	0	0	139	3	5	0	0	8	294
%	0.0	0.5	0.0	0.0	0.6	0.1	0.0	0.1	0.0	0.2	0.1	0.7	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	2
Lg truck	0	79	2	0	81	2	0	1	0	3	1	68	0	0	69	0	0	0	0	0	153
%	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1
All	54	6228	511	1	6794	695	43	999	0	1737	1601	6671	213	3	8488	218	75	32	0	325	17344
% ALL	0.3	35.9	2.9	0.0	39.2	4.0	0.2	5.8	0.0	10.0	9.2	38.5	1.2	0.0	48.9	1.3	0.4	0.2	0.0	1.9	100

Second 14 Hour Count

Turning Movement for Total Intersection



Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

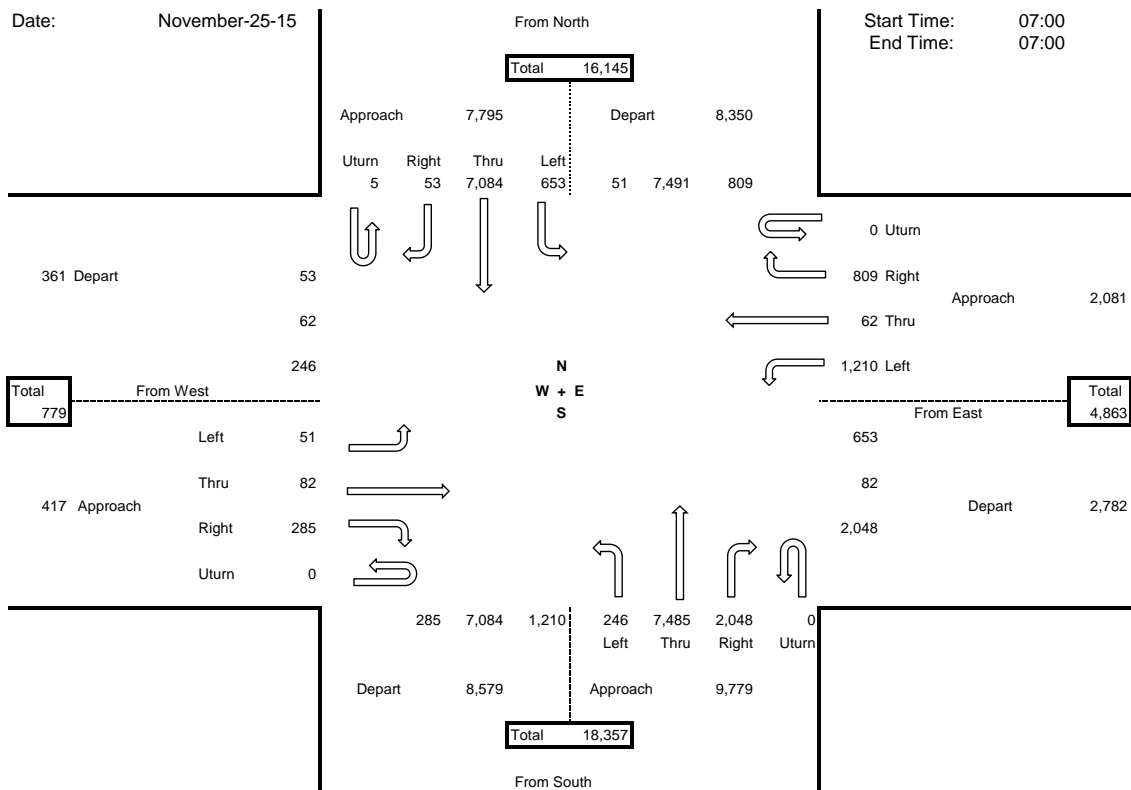
DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.3

24 Hour Count Summary

	Southbound					Westbound					Northbound					Eastbound					Interval
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	total
Auto	48	6907	640	5	7600	780	61	1170	0	2011	2016	7251	239	0	9507	278	75	48	0	402	19520
%	0.2	34.4	3.2	0.0	37.9	3.9	0.3	5.8	0.0	10.0	10.0	36.1	1.2	0.0	47.4	1.4	0.4	0.2	0.0	2.0	97
Sm truck	5	108	12	0	125	20	1	34	0	55	30	159	5	0	194	7	7	3	0	16	389
%	0.0	0.5	0.1	0.0	0.6	0.1	0.0	0.2	0.0	0.3	0.1	0.8	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	2
Lg truck	0	69	1	0	70	9	0	7	0	16	1	75	1	0	78	0	0	0	0	0	164
%	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1
All	53	7084	653	5	7795	809	62	1210	0	2081	2048	7485	246	0	9779	285	82	51	0	417	20072
% ALL	0.3	35.3	3.3	0.0	38.8	4.0	0.3	6.0	0.0	10.4	10.2	37.3	1.2	0.0	48.7	1.4	0.4	0.3	0.0	2.1	100

First 14 Hour Count

Turning Movement for Total Intersection



Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

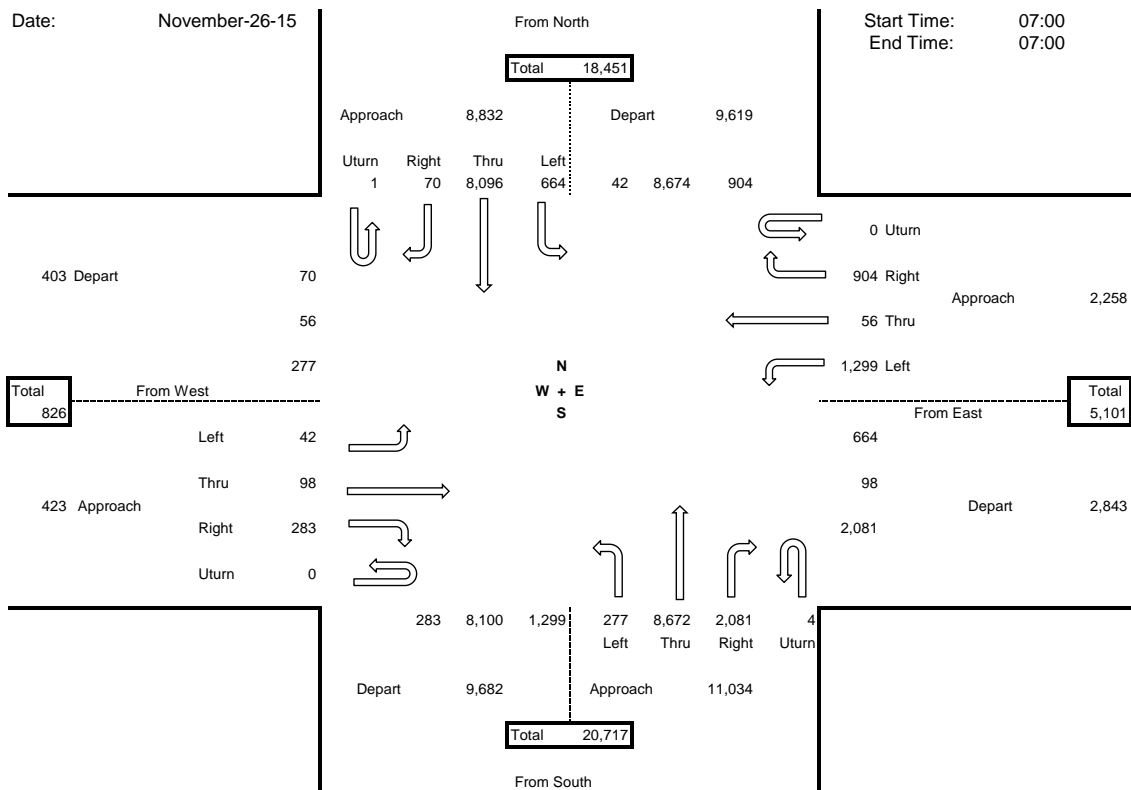
DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.3

24 Hour Count Summary

	Southbound					Westbound					Northbound					Eastbound					Interval
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	total
Auto	61	7870	653	1	8585	883	55	1268	0	2205	2063	8420	277	4	10764	280	91	42	0	412	21966
%	0.3	34.9	2.9	0.0	38.1	3.9	0.2	5.6	0.0	9.8	9.2	37.3	1.2	0.0	47.7	1.2	0.4	0.2	0.0	1.8	97
Sm truck	9	124	9	0	142	18	1	30	0	49	17	164	0	0	181	4	7	0	0	10	382
%	0.0	0.5	0.0	0.0	0.6	0.1	0.0	0.1	0.0	0.2	0.1	0.7	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	2
Lg truck	0	103	3	0	105	3	0	1	0	4	1	88	0	0	90	0	0	0	0	0	199
%	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1
All	70	8096	664	1	8832	904	56	1299	0	2258	2081	8672	277	4	11034	283	98	42	0	423	22547
% ALL	0.3	35.9	2.9	0.0	39.2	4.0	0.2	5.8	0.0	10.0	9.2	38.5	1.2	0.0	48.9	1.3	0.4	0.2	0.0	1.9	100

Second 14 Hour Count

Turning Movement for Total Intersection



Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
07:00	Total	0	30	10	0	40	7	0	10	0	17	5	46	1	0	52	0	1	1	0	2	111
	Auto	0	27	10	0	37	7	0	10	0	17	5	46	1	0	52	0	1	1	0	2	108
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	Total	1	43	13	0	57	12	0	10	0	22	4	74	0	0	78	4	2	1	0	7	164
	Auto	1	43	12	0	56	12	0	10	0	22	4	73	0	0	77	4	2	1	0	7	162
	Sm truck	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:30	Total	0	82	16	0	98	12	1	14	0	27	8	88	2	0	98	3	3	1	0	7	230
	Auto	0	80	15	0	95	12	0	14	0	26	8	87	2	0	97	3	3	1	0	7	225
	Sm truck	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45	Total	1	96	15	0	112	18	0	29	0	47	38	129	4	0	171	2	3	0	0	5	335
	Auto	1	93	15	0	109	18	0	27	0	45	37	129	4	0	170	2	2	0	0	4	328
	Sm truck	0	2	0	0	2	0	0	2	0	2	1	0	0	0	1	0	1	0	0	1	6
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Total	2	251	54	0	307	49	1	63	0	113	55	337	7	0	399	9	9	3	0	21	840
	Auto	2	243	52	0	297	49	0	61	0	110	54	335	7	0	396	9	8	3	0	20	823
	Sm truck	0	4	2	0	6	0	1	2	0	3	1	1	0	0	2	0	1	0	0	1	12
	Lg Truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
% ALL		0	30	6	0	37	6	0	8	0	13	7	40	1	0	48	1	1	0	0	3	100
08:00	Total	1	92	7	0	100	18	0	21	0	39	19	86	0	0	105	5	3	2	0	10	254
	Auto	0	87	7	0	94	16	0	21	0	37	19	82	0	0	101	4	3	2	0	9	241
	Sm truck	1	1	0	0	2	2	0	0	0	2	0	3	0	0	3	1	0	0	0	1	8
	Lg Truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
08:15	Total	2	134	6	0	142	23	1	25	0	49	22	70	0	0	92	7	1	0	0	8	291
	Auto	1	131	6	0	138	22	1	25	0	48	21	66	0	0	87	7	1	0	0	8	281
	Sm truck	1	3	0	0	4	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	Total	0	138	10	0	148	15	1	19	0	35	17	67	0	0	84	9	6	3	0	18	285
	Auto	0	137	10	0	147	12	1	19	0	32	16	64	0	0	80	9	5	3	0	17	276
	Sm truck	0	0	0	0	0	2	0	0	0	2	1	3	0	0	4	0	1	0	0	1	7
	Lg Truck	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
08:45	Total	2	129	13	0	144	17	0	19	0	36	24	65	0	0	89	3	3	0	0	6	275
	Auto	2	125	13	0	140	17	0	17	0	34	24	62	0	0	86	3	3	0	0	6	266
	Sm truck	0	4	0	0	4	0	0	2	0	2	0	2	0	0	2	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hour	Total	5	493	36	0	534	73	2	84	0	159	82	288	0	0	370	24	13	5	0	42	1105
	Auto	3	480	36	0	519	67	2	82	0	151	80	274	0	0	354	23	12	5	0	40	1064
	Sm truck	2	8	0	0	10	5	0	2	0	7	2	12	0	0	14	1	1	0	0	2	33
	Lg Truck	0	5	0	0	5	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	8
% ALL		0	45	3	0	48	7	0	8	0	14	7	26	0	0	33	2	1	0	0	4	100
09:00	Total	0	102	8	0	110	7	1	20	0	28	20	75	1	0	96	7	1	0	0	8	242
	Auto	0	101	8	0	109	7	1	19	0	27	19	72	1	0	92	7	1	0	0	8	236
	Sm truck	0	0	0	0	0	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:15	Total	0	107	6	0	113	7	1	9	0	17	17	66	3	0	86	2	0	0	0	2	218
	Auto	0	105	6	0	111	5	1	9	0	15	16	60	3	0	79	2	0	0	0	2	207
	Sm truck	0	0	0	0	0	2	0	0	0	2	1	5	0	0	6	0	0	0	0	0	8
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
09:30	Total	1	109	4	0	114	9	0	13	0	22	18	68	3	0	89	6	1	0	0	7	232
	Auto	1	108	3	0	112	8	0	13	0	21	18	63	3	0	84	6	1	0	0	7	224
	Sm truck	0	1	1	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
09:45	Total	0	80	6	0	86	16	0	18	0	34	17	61	1	0	79	4	1	0	0	5	204
	Auto	0	76	6	0	82	15	0	16	0	31	16	60	1	0	77	4	1	0	0	5	195
	Sm truck	0	3	0	0	3	1	0	1	0	2	1	1	0	0	2	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Hour	Total	1	398	24	0	423	39	2	60	0	101	72	270	8	0	350	19	3	0	0	22	896
	Auto	1	390	23	0	414	35	2	57	0	94	69	255	8	0	332	19	3	0	0	22	862
	Sm truck	0	4	1	0	5	3	0	2	0	5	3	13	0	0	16	0	0	0	0	0	26
	Lg Truck	0	4	0	0	4	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	8
% ALL		0	44	3	0	47	4	0	7	0	11	8	30	1	0	39	2	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
10:00	Total	1	98	5	0	104	11	0	17	0	28	21	77	2	0	100	2	0	3	0	5	237
	Auto	1	95	5	0	101	11	0	17	0	28	20	73	2	0	95	2	0	2	0	4	228
	Sm truck	0	1	0	0	1	0	0	0	0	0	1	4	0	0	5	0	0	1	0	1	7
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:15	Total	1	106	13	0	120	9	1	14	0	24	14	76	4	0	94	1	0	0	0	1	239
	Auto	1	104	13	0	118	8	1	11	0	20	14	71	4	0	89	1	0	0	0	1	228
	Sm truck	0	0	0	0	0	0	0	3	0	3	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	2	0	0	2	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	5
10:30	Total	0	88	7	0	95	13	2	19	0	34	19	81	2	0	102	4	0	0	0	4	235
	Auto	0	83	6	0	89	12	2	18	0	32	19	78	2	0	99	4	0	0	0	4	224
	Sm truck	0	3	1	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
	Lg Truck	0	2	0	0	2	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	5
10:45	Total	1	95	9	0	105	6	0	7	0	13	20	100	2	0	122	5	2	1	0	8	248
	Auto	1	93	9	0	103	5	0	6	0	11	20	92	2	0	114	5	2	1	0	8	236
	Sm truck	0	2	0	0	2	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	7
Hour	Total	3	387	34	0	424	39	3	57	0	99	74	334	10	0	418	12	2	4	0	18	959
	Auto	3	375	33	0	411	36	3	52	0	91	73	314	10	0	397	12	2	3	0	17	916
	Sm truck	0	6	1	0	7	1	0	4	0	5	1	10	0	0	11	0	0	1	0	1	24
	Lg Truck	0	6	0	0	6	2	0	1	0	3	0	10	0	0	10	0	0	0	0	0	19
% ALL		0	40	4	0	44	4	0	6	0	10	8	35	1	0	44	1	0	0	0	2	100
11:00	Total	0	117	6	0	123	5	1	13	0	19	26	78	6	0	110	3	1	0	0	4	256
	Auto	0	115	6	0	121	5	1	13	0	19	26	74	6	0	106	3	1	0	0	4	250
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
11:15	Total	0	89	8	0	97	13	1	15	0	29	29	81	3	0	113	1	4	1	0	6	245
	Auto	0	88	7	0	95	13	1	14	0	28	27	78	3	0	108	1	4	1	0	6	237
	Sm truck	0	0	1	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
11:30	Total	0	101	10	0	111	15	0	19	0	34	33	98	5	0	136	4	1	0	0	5	286
	Auto	0	98	9	0	107	15	0	17	0	32	32	93	5	0	130	4	1	0	0	5	274
	Sm truck	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	7
	Lg Truck	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	5
11:45	Total	1	115	7	0	123	11	0	12	0	23	27	88	5	0	120	11	0	1	0	12	278
	Auto	1	114	6	0	121	10	0	11	0	21	27	82	5	0	114	11	0	1	0	12	268
	Sm truck	0	0	1	0	1	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	5
Hour	Total	1	422	31	0	454	44	2	59	0	105	115	345	19	0	479	19	6	2	0	27	1065
	Auto	1	415	28	0	444	43	2	55	0	100	112	327	19	0	458	19	6	2	0	27	1029
	Sm truck	0	1	3	0	4	0	0	2	0	2	2	11	0	0	13	0	0	0	0	0	19
	Lg Truck	0	6	0	0	6	1	0	2	0	3	1	7	0	0	8	0	0	0	0	0	17
% ALL		0	40	3	0	43	4	0	6	0	10	11	32	2	0	45	2	1	0	0	3	100
12:00	Total	0	127	7	0	134	5	1	19	0	25	35	94	5	0	134	6	2	1	0	9	302
	Auto	0	122	7	0	129	5	1	19	0	25	34	89	5	0	128	6	2	1	0	9	291
	Sm truck	0	4	0	0	4	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
12:15	Total	2	122	11	0	135	6	4	18	0	28	29	122	6	0	157	2	2	1	0	5	325
	Auto	2	121	11	0	134	5	4	16	0	25	29	119	6	0	154	2	2	1	0	5	318
	Sm truck	0	0	0	0	0	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
12:30	Total	1	87	9	0	97	17	0	16	0	33	35	120	1	0	156	5	0	1	0	6	292
	Auto	1	84	9	0	94	17	0	16	0	33	35	115	1	0	151	5	0	1	0	6	284
	Sm truck	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:45	Total	2	94	11	1	108	20	1	29	0	50	35	144	3	0	182	6	1	0	0	7	347
	Auto	2	93	10	1	106	20	1	28	0	49	34	143	3	0	180	6	1	0	0	7	342
	Sm truck	0	0	0	0	0	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	3
	Lg Truck	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Total	5	430	38	1	474	48	6	82	0	136	134	480	15	0	629	19	5	3	0	27	1266
	Auto	5	420	37	1	463	47	6	79	0	132	132	466	15	0	613	19	5	3	0	27	1235
	Sm truck	0	7	0	0	7	1	0	3	0	4	2	8	0	0	10	0	0	0	0	0	21
	Lg Truck	0	3	1	0	4	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	10
% ALL		0	34	3	0	37	4	0	6	0	11	11	38	1	0	50	2	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
13:00	Total	0	126	13	0	139	9	1	19	0	29	29	133	3	0	165	4	1	1	0	6	339
	Auto	0	124	13	0	137	9	1	19	0	29	29	128	3	0	160	3	1	1	0	5	331
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	3
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
13:15	Total	0	114	8	0	122	11	1	16	0	28	36	119	6	0	161	3	1	0	0	4	315
	Auto	0	111	8	0	119	10	1	15	0	26	36	113	6	0	155	3	1	0	0	4	304
	Sm truck	0	3	0	0	3	1	0	1	0	2	0	5	0	0	5	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
13:30	Total	0	103	5	0	108	7	0	14	0	21	29	118	4	0	151	3	0	1	0	4	284
	Auto	0	96	5	0	101	7	0	14	0	21	26	114	4	0	144	3	0	1	0	4	270
	Sm truck	0	5	0	0	5	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	11
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
13:45	Total	1	103	9	0	113	17	1	17	0	35	22	121	3	0	146	8	0	0	0	8	302
	Auto	1	100	9	0	110	17	1	16	0	34	22	115	3	0	140	8	0	0	0	8	292
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Hour	Total	1	446	35	0	482	44	3	66	0	113	116	491	16	0	623	18	2	2	0	22	1240
	Auto	1	431	35	0	467	43	3	64	0	110	113	470	16	0	599	17	2	2	0	21	1197
	Sm truck	0	10	0	0	10	1	0	2	0	3	3	14	0	0	17	1	0	0	0	1	31
	Lg Truck	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
% ALL		0	36	3	0	39	4	0	5	0	9	9	40	1	0	50	1	0	0	0	2	100
14:00	Total	0	117	8	0	125	3	1	17	0	21	33	109	3	0	145	1	0	2	0	3	294
	Auto	0	113	8	0	121	3	1	17	0	21	32	103	3	0	138	1	0	2	0	3	283
	Sm truck	0	4	0	0	4	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
14:15	Total	0	93	9	0	102	12	0	23	0	35	27	111	4	0	142	2	0	0	0	2	281
	Auto	0	91	9	0	100	12	0	23	0	35	27	102	4	0	133	2	0	0	0	2	270
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
14:30	Total	0	120	8	0	128	12	0	13	0	25	25	124	3	0	152	5	0	0	0	5	310
	Auto	0	115	8	0	123	12	0	13	0	25	24	118	3	0	145	5	0	0	0	5	298
	Sm truck	0	4	0	0	4	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	10
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
14:45	Total	0	121	12	0	133	11	0	22	0	33	24	129	6	0	159	3	1	1	0	5	330
	Auto	0	119	11	0	130	11	0	20	0	31	23	127	6	0	156	3	1	1	0	5	322
	Sm truck	0	2	1	0	3	0	0	2	0	2	1	1	0	0	2	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hour	Total	0	451	37	0	488	38	1	75	0	114	109	473	16	0	598	11	1	3	0	15	1215
	Auto	0	438	36	0	474	38	1	73	0	112	106	450	16	0	572	11	1	3	0	15	1173
	Sm truck	0	12	1	0	13	0	0	2	0	2	3	16	0	0	19	0	0	0	0	0	34
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	8
% ALL		0	37	3	0	40	3	0	6	0	9	9	39	1	0	49	1	0	0	0	1	100
15:00	Total	0	101	9	0	110	6	0	18	0	24	23	157	0	0	180	4	2	0	0	6	320
	Auto	0	98	9	0	107	6	0	18	0	24	23	151	0	0	174	4	2	0	0	6	311
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
15:15	Total	1	99	13	0	113	10	3	17	0	30	35	184	4	0	223	3	2	0	0	5	371
	Auto	1	91	13	0	105	10	3	17	0	30	34	176	4	0	214	3	2	0	0	5	354
	Sm truck	0	6	0	0	6	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	11
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
15:30	Total	0	119	11	0	130	14	1	23	0	38	35	177	4	0	216	1	1	0	0	2	386
	Auto	0	117	11	0	128	13	1	23	0	37	35	169	4	0	208	1	1	0	0	2	375
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	4
15:45	Total	3	104	8	0	115	27	2	17	0	46	45	175	5	0	225	3	0	2	0	5	391
	Auto	2	101	8	0	111	25	2	16	0	43	45	171	5	0	221	3	0	2	0	5	380
	Sm truck	1	2	0	0	3	2	0	1	0	3	0	3	0	0	3	0	0	0	0	0	9
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hour	Total	4	423	41	0	468	57	6	75	0	138	138	693	13	0	844	11	5	2	0	18	1468
	Auto	3	407	41	0	451	54	6	74	0	134	137	667	13	0	817	11	5	2	0	18	1420
	Sm truck	1	12	0	0	13	2	0	1	0	3	1	17	0	0	18	0	0	0	0	0	34
	Lg Truck	0	4	0	0	4	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	14
% ALL		0	29	3	0	32	4	0	5	0	9	9	47	1	0	57	1	0	0	0	1	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
16:00	Total	1	132	13	0	146	16	1	19	0	36	46	175	9	0	230	4	1	1	0	6	418
	Auto	1	128	12	0	141	16	1	19	0	36	46	173	9	0	228	4	0	1	0	5	410
	Sm truck	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	5
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
16:15	Total	2	102	11	0	115	10	0	30	0	40	55	162	6	0	223	3	3	1	0	7	385
	Auto	1	102	11	0	114	9	0	30	0	39	54	159	5	0	218	3	1	1	0	5	376
	Sm truck	1	0	0	0	1	1	0	0	0	1	1	3	1	0	5	0	2	0	0	2	9
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	Total	4	125	14	0	143	18	0	25	0	43	39	160	9	0	208	5	2	1	0	8	402
	Auto	4	123	14	0	141	18	0	25	0	43	39	157	9	0	205	5	2	1	0	8	397
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
16:45	Total	1	120	14	0	135	34	3	16	0	53	36	158	7	0	201	4	1	2	0	7	396
	Auto	1	116	14	0	131	33	3	16	0	52	36	158	6	0	200	4	1	2	0	7	390
	Sm truck	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	3
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour	Total	8	479	52	0	539	78	4	90	0	172	176	655	31	0	862	16	7	5	0	28	1601
	Auto	7	469	51	0	527	76	4	90	0	170	175	647	29	0	851	16	4	5	0	25	1573
	Sm truck	1	4	1	0	6	2	0	0	0	2	1	6	2	0	9	0	3	0	0	3	20
	Lg Truck	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	8
% ALL		0	30	3	0	34	5	0	6	0	11	11	41	2	0	54	1	0	0	0	2	100
17:00	Total	2	187	25	1	215	19	3	10	0	32	45	146	2	0	193	4	0	0	0	4	444
	Auto	2	182	25	1	210	19	3	10	0	32	45	144	2	0	191	4	0	0	0	4	437
	Sm truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
17:15	Total	0	125	13	0	138	12	1	13	0	26	42	124	0	0	166	4	0	1	0	5	335
	Auto	0	124	13	0	137	12	1	13	0	26	42	123	0	0	165	4	0	1	0	5	333
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:30	Total	0	150	9	0	159	11	0	14	0	25	46	132	0	0	178	3	0	0	0	3	365
	Auto	0	148	9	0	157	10	0	14	0	24	45	130	0	0	175	2	0	0	0	2	358
	Sm truck	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	1	0	0	0	1	5
	Lg Truck	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
17:45	Total	0	105	7	1	113	9	2	24	0	35	38	121	0	0	159	3	0	1	0	4	311
	Auto	0	103	7	1	111	9	2	23	0	34	38	117	0	0	155	2	0	1	0	3	303
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	1	0	0	0	1	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Hour	Total	2	567	54	2	625	51	6	61	0	118	171	523	2	0	696	14	0	2	0	16	1455
	Auto	2	557	54	2	615	50	6	60	0	116	170	514	2	0	686	12	0	2	0	14	1431
	Sm truck	0	7	0	0	7	0	0	1	0	1	1	6	0	0	7	2	0	0	0	2	17
	Lg Truck	0	3	0	0	3	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	7
% ALL		0	39	4	0	43	4	0	4	0	8	12	36	0	0	48	1	0	0	0	1	100
18:00	Total	1	123	11	0	135	4	0	12	0	16	35	103	7	0	145	3	3	0	0	6	302
	Auto	1	122	11	0	134	4	0	12	0	16	35	102	7	0	144	3	3	0	0	6	300
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	Total	0	81	7	0	88	9	1	12	0	22	33	91	4	0	128	4	0	0	0	4	242
	Auto	0	77	7	0	84	9	1	11	0	21	31	89	3	0	123	4	0	0	0	4	232
	Sm truck	0	2	0	0	2	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	6
	Lg Truck	0	2	0	0	2	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	4
18:30	Total	0	85	7	0	92	6	2	11	0	19	35	77	7	0	119	4	0	1	0	5	235
	Auto	0	84	7	0	91	6	2	10	0	18	35	76	7	0	118	4	0	1	0	5	232
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Total	1	70	10	0	81	7	1	15	0	23	39	80	2	0	121	6	1	2	0	9	234
	Auto	1	69	10	0	80	7	1	14	0	22	39	79	2	0	120	6	1	2	0	9	231
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hour	Total	2	359	35	0	396	26	4	50	0	80	142	351	20	0	513	17	4	3	0	24	1013
	Auto	2	352	35	0	389	26	4	47	0	77	140	346	19	0	505	17	4	3	0	24	995
	Sm truck	0	5	0	0	5	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	13
	Lg Truck	0	2	0	0	2	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	5
% ALL		0	35	3	0	39	3	0	5	0	8	14	35	2	0	51	2	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
19:00	Total	2	52	6	0	60	10	0	19	0	29	38	70	3	0	111	3	1	0	0	4	204
	Auto	2	51	6	0	59	10	0	19	0	29	38	70	3	0	111	3	1	0	0	4	203
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:15	Total	0	52	9	0	61	3	0	19	0	22	25	70	6	0	101	8	2	1	0	11	195
	Auto	0	50	9	0	59	3	0	19	0	22	25	70	5	0	100	8	2	1	0	11	192
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	Total	0	40	0	0	40	8	1	13	0	22	25	63	4	0	92	1	0	1	0	2	156
	Auto	0	40	0	0	40	8	1	12	0	21	25	61	4	0	90	1	0	1	0	2	153
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
19:45	Total	1	56	4	0	61	5	2	15	0	22	18	60	3	0	81	4	1	0	0	5	169
	Auto	1	56	4	0	61	5	2	14	0	21	17	60	3	0	80	3	1	0	0	4	166
	Sm truck	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1	0	0	0	1	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	3	200	19	0	222	26	3	66	0	95	106	263	16	0	385	16	4	2	0	22	724
	Auto	3	197	19	0	219	26	3	64	0	93	105	261	15	0	381	15	4	2	0	21	714
	Sm truck	0	1	0	0	1	0	0	2	0	2	1	1	1	0	3	1	0	0	0	1	7
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% ALL		0	28	3	0	31	4	0	9	0	13	15	36	2	0	53	2	1	0	0	3	100
20:00	Total	0	36	1	0	37	1	1	14	0	16	28	76	4	0	108	4	0	0	0	4	165
	Auto	0	36	1	0	37	1	1	14	0	16	28	76	3	0	107	4	0	0	0	4	164
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	Total	1	45	3	0	49	3	1	10	0	14	18	55	6	0	79	5	1	0	0	6	148
	Auto	1	41	3	0	45	3	1	10	0	14	18	55	6	0	79	5	1	0	0	6	144
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:30	Total	2	27	4	1	34	2	2	10	0	14	22	62	4	0	88	4	1	2	0	7	143
	Auto	2	27	4	1	34	2	2	10	0	14	22	62	4	0	88	4	1	1	0	6	142
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	Total	1	35	4	0	40	4	1	9	0	14	17	62	2	0	81	1	0	1	0	2	137
	Auto	1	35	4	0	40	4	1	8	0	13	17	59	2	0	78	1	0	1	0	2	133
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	4	143	12	1	160	10	5	43	0	58	85	255	16	0	356	14	2	3	0	19	593
	Auto	4	139	12	1	156	10	5	42	0	57	85	252	15	0	352	14	2	2	0	18	583
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	3	1	0	4	0	0	1	0	1	8
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% ALL		1	24	2	0	27	2	1	7	0	10	14	43	3	0	60	2	0	1	0	3	100
07:00	Total	1	42	8	0	51	6	0	9	0	15	6	58	2	0	66	1	1	2	0	4	136
	Auto	1	42	8	0	51	6	0	9	0	15	6	57	2	0	65	1	1	2	0	4	135
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:15	Total	0	68	7	0	75	16	0	12	0	28	10	85	0	0	95	1	1	1	0	3	201
	Auto	0	66	6	0	72	15	0	12	0	27	10	82	0	0	92	1	1	1	0	3	194
	Sm truck	0	0	1	0	1	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	4
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
07:30	Total	0	86	19	0	105	16	1	17	0	34	12	111	0	0	123	4	3	3	0	10	272
	Auto	0	83	19	0	102	15	1	16	0	32	12	108	0	0	120	4	3	3	0	10	264
	Sm truck	0	2	0	0	2	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
07:45	Total	1	105	17	0	123	28	0	20	0	48	35	135	2	0	172	5	3	1	0	9	352
	Auto	0	99	16	0	115	28	0	18	0	46	34	133	2	0	169	5	2	1	0	8	338
	Sm truck	1	2	0	0	3	0	0	2	0	2	1	2	0	0	3	0	1	0	0	1	9
	Lg Truck	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour	Total	2	301	51	0	354	66	1	58	0	125	63	389	4	0	456	11	8	7	0	26	961
	Auto	1	290	49	0	340	64	1	55	0	120	62	380	4	0	446	11	7	7	0	25	931
	Sm truck	1	4	1	0	6	2	0	2	0	4	1	7	0	0	8	0	1	0	0	1	19
	Lg Truck	0	7	1	0	8	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	11
% ALL		0	31	5	0	37	7	0	6	0	13	7	40	0	0	47	1	1	1	0	3	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
08:00	Total	2	100	9	0	111	18	0	30	0	48	21	89	2	0	112	11	2	0	0	13	284
	Auto	1	100	9	0	110	17	0	30	0	47	21	86	2	0	109	10	2	0	0	12	278
	Sm truck	1	0	0	0	1	1	0	0	0	1	0	2	0	0	2	1	0	0	0	1	5
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
08:15	Total	2	119	15	0	136	18	0	28	0	46	24	92	3	0	119	3	2	0	0	5	306
	Auto	1	116	15	0	132	17	0	28	0	45	24	89	3	0	116	3	2	0	0	5	298
	Sm truck	1	2	0	0	3	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
08:30	Total	0	113	6	0	119	7	3	25	0	35	25	79	0	0	104	4	5	2	0	11	269
	Auto	0	111	6	0	117	7	3	25	0	35	24	77	0	0	101	4	4	2	0	10	263
	Sm truck	0	2	0	0	2	0	0	0	0	0	1	2	0	0	3	0	1	0	0	1	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	Total	0	108	9	0	117	13	0	28	0	41	21	98	0	0	119	3	3	0	0	6	283
	Auto	0	104	9	0	113	13	0	26	0	39	21	95	0	0	116	3	3	0	0	6	274
	Sm truck	0	3	0	0	3	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	6
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Hour	Total	4	440	39	0	483	56	3	111	0	170	91	358	5	0	454	21	12	2	0	35	1142
	Auto	2	431	39	0	472	54	3	109	0	166	90	347	5	0	442	20	11	2	0	33	1113
	Sm truck	2	7	0	0	9	2	0	2	0	4	1	6	0	0	7	1	1	0	0	2	22
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% ALL		0	39	3	0	42	5	0	10	0	15	8	31	0	0	40	2	1	0	0	3	100
09:00	Total	0	100	8	0	108	10	0	19	0	29	16	96	7	0	119	7	4	2	0	13	269
	Auto	0	98	8	0	106	9	0	19	0	28	16	91	7	0	114	7	4	2	0	13	261
	Sm truck	0	2	0	0	2	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
09:15	Total	2	105	5	0	112	8	0	11	0	19	20	96	2	0	118	2	0	1	0	3	252
	Auto	2	102	5	0	109	8	0	11	0	19	20	89	2	0	111	2	0	1	0	3	242
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
09:30	Total	1	132	4	0	137	4	0	15	0	19	16	76	2	0	94	3	0	2	0	5	255
	Auto	1	120	4	0	125	4	0	15	0	19	16	72	2	0	90	3	0	2	0	5	239
	Sm truck	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
	Lg Truck	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	9
09:45	Total	0	129	4	0	133	18	0	21	0	39	22	102	3	0	127	5	0	2	0	7	306
	Auto	0	126	3	0	129	17	0	20	0	37	22	100	3	0	125	5	0	2	0	7	298
	Sm truck	0	2	1	0	3	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	6
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hour	Total	3	466	21	0	490	40	0	66	0	106	74	370	14	0	458	17	4	7	0	28	1082
	Auto	3	446	20	0	469	38	0	65	0	103	74	352	14	0	440	17	4	7	0	28	1040
	Sm truck	0	11	1	0	12	2	0	1	0	3	0	11	0	0	11	0	0	0	0	0	26
	Lg Truck	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	16
% ALL		0	43	2	0	45	4	0	6	0	10	7	34	1	0	42	2	0	1	0	3	100
10:00	Total	2	111	6	0	119	9	1	22	0	32	26	97	2	0	125	3	1	0	0	4	280
	Auto	2	109	6	0	117	9	1	22	0	32	25	95	2	0	122	3	1	0	0	4	275
	Sm truck	0	2	0	0	2	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	Total	1	139	7	0	147	12	4	14	0	30	19	85	4	0	108	3	0	0	0	3	288
	Auto	1	134	7	0	142	11	4	13	0	28	19	81	4	0	104	3	0	0	0	3	277
	Sm truck	0	1	0	0	1	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
10:30	Total	1	138	4	0	143	14	0	10	0	24	21	93	3	0	117	5	3	0	0	8	292
	Auto	1	137	4	0	142	14	0	10	0	24	20	88	3	0	111	5	3	0	0	8	285
	Sm truck	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
10:45	Total	0	97	8	0	105	10	1	22	0	33	20	108	2	0	130	4	0	0	0	4	272
	Auto	0	92	8	0	100	10	1	20	0	31	18	106	2	0	126	4	0	0	0	4	261
	Sm truck	0	2	0	0	2	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	7
	Lg Truck	0	3	0	0	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4
Hour	Total	4	485	25	0	514	45	6	68	0	119	86	383	11	0	480	15	4	0	0	19	1132
	Auto	4	472	25	0	501	44	6	65	0	115	82	370	11	0	463	15	4	0	0	19	1098
	Sm truck	0	5	0	0	5	1	0	3	0	4	3	10	0	0	13	0	0	0	0	0	22
	Lg Truck	0	8	0	0	8	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	12
% ALL		0	43	2	0	45	4	1	6	0	11	8	34	1	0	42	1	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00	Total	2	140	8	0	150	5	1	8	0	14	23	98	1	0	122	6	0	1	0	7	293
	Auto	2	133	8	0	143	5	1	8	0	14	23	90	1	0	114	6	0	1	0	7	278
	Sm truck	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
11:15	Total	0	150	8	0	158	16	3	26	0	45	37	125	1	0	163	3	1	0	0	4	370
	Auto	0	145	8	0	153	16	2	25	0	43	37	122	1	0	160	3	1	0	0	4	360
	Sm truck	0	3	0	0	3	0	1	1	0	2	0	3	0	0	3	0	0	0	0	0	8
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30	Total	1	120	7	0	128	25	1	29	0	55	29	130	9	0	168	6	5	0	0	11	362
	Auto	1	117	6	0	124	25	1	28	0	54	29	121	9	0	159	6	4	0	0	10	347
	Sm truck	0	3	1	0	4	0	0	1	0	1	0	5	0	0	5	0	1	0	0	1	11
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
11:45	Total	1	146	14	0	161	8	0	23	0	31	26	109	6	0	141	4	1	0	0	5	338
	Auto	1	141	14	0	156	8	0	22	0	30	26	104	6	0	136	4	1	0	0	5	327
	Sm truck	0	4	0	0	4	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	6
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Hour	Total	4	556	37	0	597	54	5	86	0	145	115	462	17	0	594	19	7	1	0	27	1363
	Auto	4	536	36	0	576	54	4	83	0	141	115	437	17	0	569	19	6	1	0	26	1312
	Sm truck	0	15	1	0	16	0	1	3	0	4	0	14	0	0	14	0	1	0	0	1	35
	Lg Truck	0	5	0	0	5	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	16
% ALL		0	41	3	0	44	4	0	6	0	11	8	34	1	0	44	1	1	0	0	2	100
12:00	Total	1	156	14	1	172	14	2	18	0	34	26	118	1	0	145	3	1	1	0	5	356
	Auto	1	153	14	1	169	13	2	18	0	33	26	115	1	0	142	3	1	1	0	5	349
	Sm truck	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
12:15	Total	0	112	17	0	129	11	0	19	0	30	25	133	2	0	160	2	0	1	0	3	322
	Auto	0	108	15	0	123	11	0	18	0	29	25	124	2	0	151	2	0	1	0	3	306
	Sm truck	0	2	1	0	3	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	10
	Lg Truck	0	2	1	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
12:30	Total	1	126	10	0	137	17	1	15	0	33	30	123	5	0	158	6	2	0	0	8	336
	Auto	0	122	10	0	132	17	1	15	0	33	30	118	5	0	153	5	2	0	0	7	325
	Sm truck	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	8
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
12:45	Total	1	138	9	0	148	20	2	23	0	45	39	151	6	0	196	4	2	1	0	7	396
	Auto	1	137	9	0	147	18	2	22	0	42	39	148	6	0	193	4	2	1	0	7	389
	Sm truck	0	1	0	0	1	2	0	1	0	3	0	3	0	0	3	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	3	532	50	1	586	62	5	75	0	142	120	525	14	0	659	15	5	3	0	23	1410
	Auto	2	520	48	1	571	59	5	73	0	137	120	505	14	0	639	14	5	3	0	22	1369
	Sm truck	1	6	1	0	8	3	0	2	0	5	0	14	0	0	14	1	0	0	0	1	28
	Lg Truck	0	6	1	0	7	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	13
% ALL		0	38	4	0	42	4	0	5	0	10	9	37	1	0	47	1	0	0	0	2	100
13:00	Total	2	146	14	0	162	13	0	15	0	28	30	146	1	0	177	3	1	1	0	5	372
	Auto	2	142	12	0	156	12	0	15	0	27	30	141	1	0	172	3	1	1	0	5	360
	Sm truck	0	1	2	0	3	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	7
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
13:15	Total	1	150	5	0	156	14	0	14	0	28	33	133	2	1	169	4	0	1	0	5	358
	Auto	1	142	5	0	148	13	0	13	0	26	33	132	2	1	168	4	0	1	0	5	347
	Sm truck	0	5	0	0	5	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
13:30	Total	1	123	13	0	137	9	1	16	0	26	18	148	2	0	168	2	0	1	0	3	334
	Auto	1	118	12	0	131	8	1	16	0	25	18	142	2	0	162	2	0	1	0	3	321
	Sm truck	0	2	1	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	3	0	0	3	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	7
13:45	Total	0	111	8	0	119	12	2	14	0	28	26	150	3	1	180	4	1	0	0	5	332
	Auto	0	108	8	0	116	12	2	13	0	27	26	142	3	1	172	4	1	0	0	5	320
	Sm truck	0	3	0	0	3	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Hour	Total	4	530	40	0	574	48	3	59	0	110	107	577	8	2	694	13	2	3	0	18	1396
	Auto	4	510	37	0	551	45	3	57	0	105	107	557	8	2	674	13	2	3	0	18	1348
	Sm truck	0	11	3	0	14	2	0	2	0	4	0	12	0	0	12	0	0	0	0	0	30
	Lg Truck	0	9	0	0	9	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	18
% ALL		0	38	3	0	41	3	0	4	0	8	8	41	1	0	50	1	0	0	0	1	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
14:00	Total	1	123	13	0	137	15	0	9	0	24	27	143	2	0	172	4	0	0	0	4	337
	Auto	1	120	13	0	134	15	0	9	0	24	24	136	2	0	162	4	0	0	0	4	324
	Sm truck	0	2	0	0	2	0	0	0	0	0	3	4	0	0	7	0	0	0	0	0	9
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
	Total	0	117	7	0	124	7	2	17	0	26	24	164	2	0	190	3	1	0	0	4	344
14:15	Auto	0	113	7	0	120	7	2	17	0	26	24	160	2	0	186	3	1	0	0	4	336
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
	Lg Truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
	Total	0	124	16	0	140	13	1	18	0	32	33	160	1	0	194	2	2	0	0	4	370
	Auto	0	119	16	0	135	13	1	18	0	32	33	151	1	0	185	2	2	0	0	4	356
14:30	Sm truck	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	10
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
	Total	0	123	4	0	127	13	0	15	0	28	32	137	9	0	178	5	0	0	0	5	338
	Auto	0	117	4	0	121	13	0	14	0	27	31	134	9	0	174	5	0	0	0	5	327
	Sm truck	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	7
14:45	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
	Hour	1	487	40	0	528	48	3	59	0	110	116	604	14	0	734	14	3	0	0	17	1389
	Auto	1	469	40	0	510	48	3	58	0	109	112	581	14	0	707	14	3	0	0	17	1343
	Sm truck	0	8	0	0	8	0	0	1	0	1	4	16	0	0	20	0	0	0	0	0	29
	Lg Truck	0	10	0	0	10	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	17
% ALL		0	35	3	0	38	3	0	4	0	8	8	43	1	0	53	1	0	0	0	1	100
15:00	Total	0	119	9	0	128	11	0	15	0	26	26	156	1	0	183	2	1	0	0	3	340
	Auto	0	115	9	0	124	11	0	15	0	26	26	155	1	0	182	2	1	0	0	3	335
	Sm truck	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Total	1	124	13	0	138	10	0	15	0	25	39	150	3	0	192	4	4	0	0	8	363
15:15	Auto	1	119	13	0	133	10	0	15	0	25	39	144	3	0	186	4	4	0	0	8	352
	Sm truck	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
	Total	0	122	7	0	129	26	0	19	0	45	34	160	5	0	199	4	3	0	0	7	380
	Auto	0	118	7	0	125	25	0	19	0	44	34	150	5	0	189	4	3	0	0	7	365
15:30	Sm truck	0	3	0	0	3	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	12
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
	Total	5	131	8	0	144	24	1	14	0	39	40	189	7	1	237	3	2	0	0	5	425
	Auto	4	126	8	0	138	23	1	13	0	37	39	185	7	1	232	3	1	0	0	4	411
	Sm truck	1	3	0	0	4	1	0	1	0	2	1	1	0	0	2	0	1	0	0	1	9
15:45	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
	Hour	6	496	37	0	539	71	1	63	0	135	139	655	16	1	811	13	10	0	0	23	1508
	Auto	5	478	37	0	520	69	1	62	0	132	138	634	16	1	789	13	9	0	0	22	1463
	Sm truck	1	12	0	0	13	2	0	1	0	3	1	13	0	0	14	0	1	0	0	1	31
	Lg Truck	0	6	0	0	6	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	14
% ALL		0	33	2	0	36	5	0	4	0	9	9	43	1	0	54	1	1	0	0	2	100
16:00	Total	0	137	12	0	149	24	0	11	0	35	37	164	5	0	206	3	0	1	0	4	394
	Auto	0	131	12	0	143	24	0	11	0	35	37	164	5	0	206	3	0	1	0	4	388
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	Total	5	118	9	0	132	28	0	20	0	48	38	173	8	0	219	6	2	0	0	8	407
16:15	Auto	3	116	9	0	128	28	0	20	0	48	38	167	8	0	213	5	1	0	0	6	395
	Sm truck	2	2	0	0	4	0	0	0	0	0	0	6	0	0	6	1	1	0	0	2	12
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	141	14	0	155	15	2	24	0	41	37	178	4	0	219	5	1	0	0	6	421
	Auto	0	139	14	0	153	15	2	24	0	41	36	175	4	0	215	5	1	0	0	6	415
16:30	Sm truck	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Total	3	138	24	0	165	27	1	27	0	55	45	179	5	0	229	6	3	0	0	9	458
	Auto	3	136	24	0	163	27	1	26	0	54	45	176	5	0	226	6	3	0	0	9	452
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	4
16:45	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Hour	8	534	59	0	601	94	3	82	0	179	157	694	22	0	873	20	6	1	0	27	1680
	Auto	6	522	59	0	587	94	3	81	0	178	156	682	22	0	860	19	5	1	0	25	1650
	Sm truck	2	4	0	0	6	0	0	1	0	1	1	12	0	0	13	1	1	0	0	2	22
	Lg Truck	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
% ALL		0	32	4	0	36	6	0	5	0	11	9	41	1	0	52	1	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
17:00	Total	2	191	16	0	209	20	3	20	0	43	53	144	10	0	207	4	1	2	0	7	466
	Auto	2	189	16	0	207	20	3	20	0	43	53	144	10	0	207	4	1	2	0	7	464
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	Total	3	125	10	0	138	20	0	23	0	43	35	154	8	0	197	3	0	1	0	4	382
	Auto	3	124	10	0	137	20	0	23	0	43	35	152	8	0	195	3	0	1	0	4	379
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
17:30	Total	2	144	6	0	152	8	0	8	0	16	57	139	6	0	202	5	0	1	0	6	376
	Auto	2	142	6	0	150	8	0	8	0	16	57	136	6	0	199	5	0	1	0	6	371
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
17:45	Total	0	112	7	0	119	11	0	24	0	35	33	121	4	0	158	4	1	0	0	5	317
	Auto	0	111	7	0	118	11	0	23	0	34	33	120	4	0	157	4	1	0	0	5	314
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	7	572	39	0	618	59	3	75	0	137	178	558	28	0	764	16	2	4	0	22	1541
	Auto	7	566	39	0	612	59	3	74	0	136	178	552	28	0	758	16	2	4	0	22	1528
	Sm truck	0	3	0	0	3	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	7
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
% ALL		0	37	3	0	40	4	0	5	0	9	12	36	2	0	50	1	0	0	0	1	100
18:00	Total	1	122	10	0	133	9	0	18	0	27	36	132	10	0	178	2	1	0	0	3	341
	Auto	1	120	10	0	131	8	0	18	0	26	36	132	10	0	178	2	1	0	0	3	338
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
18:15	Total	1	92	9	0	102	6	1	15	0	22	38	104	4	0	146	5	3	0	0	8	278
	Auto	1	91	9	0	101	6	1	14	0	21	38	104	4	0	146	5	3	0	0	8	276
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:30	Total	2	82	5	0	89	5	0	25	0	30	26	105	3	0	134	4	0	0	0	4	257
	Auto	2	82	5	0	89	5	0	25	0	30	26	103	3	0	132	4	0	0	0	4	255
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Total	2	99	4	0	105	7	0	23	0	30	31	100	4	0	135	6	3	1	0	10	280
	Auto	2	97	4	0	103	7	0	22	0	29	31	99	4	0	134	6	3	1	0	10	276
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	6	395	28	0	429	27	1	81	0	109	131	441	21	0	593	17	7	1	0	25	1156
	Auto	6	390	28	0	424	26	1	79	0	106	131	438	21	0	590	17	7	1	0	25	1145
	Sm truck	0	4	0	0	4	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	9
	Lg Truck	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% ALL		1	34	2	0	37	2	0	7	0	9	11	38	2	0	51	1	1	0	0	2	100
19:00	Total	1	89	10	0	100	2	1	16	0	19	33	82	2	0	117	3	2	0	0	5	241
	Auto	1	86	10	0	97	2	1	16	0	19	33	80	2	0	115	3	2	0	0	5	236
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
19:15	Total	1	61	4	0	66	6	0	12	0	18	34	83	5	0	122	6	0	0	0	6	212
	Auto	1	61	4	0	66	6	0	12	0	18	34	82	5	0	121	6	0	0	0	6	211
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
19:30	Total	0	56	4	0	60	3	1	24	0	28	25	94	6	0	125	4	0	0	0	4	217
	Auto	0	54	4	0	58	3	1	24	0	28	25	92	6	0	123	4	0	0	0	4	213
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
19:45	Total	0	57	3	0	60	4	1	20	0	25	22	77	5	0	104	5	0	1	0	6	195
	Auto	0	56	3	0	59	4	1	19	0	24	22	76	5	0	103	5	0	1	0	6	192
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hour	Total	2	263	21	0	286	15	3	72	0	90	114	336	18	0	468	18	2	1	0	21	865
	Auto	2	257	21	0	280	15	3	71	0	89	114	330	18	0	462	18	2	1	0	21	852
	Sm truck	0	3	0	0	3	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	6
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
% ALL		0	30	2	0	33	2	0	8	0	10	13	39	2	0	54	2	0	0	0	2	100

Comment: N/A



LOCATION: PTH 10 & BRAECREST DR

DATE: Mon Day Year Start Time
Day 1: Nov 25 2015 07:00
Day 2: Nov 26 2015 07:00Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
20:00	Total	0	44	10	0	54	0	2	13	0	15	30	81	3	0	114	2	1	0	0	3	186
	Auto	0	42	10	0	52	0	2	13	0	15	30	80	3	0	113	2	1	0	0	3	183
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
20:15	Total	0	44	4	0	48	7	2	10	0	19	32	85	7	0	124	1	1	1	0	3	194
	Auto	0	43	4	0	47	7	2	10	0	19	31	83	7	0	121	1	1	1	0	3	190
	Sm truck	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	3
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	Total	0	43	3	0	46	3	2	4	0	9	21	76	6	0	103	4	0	1	0	5	163
	Auto	0	42	3	0	45	3	2	4	0	9	20	74	6	0	100	4	0	1	0	5	159
	Sm truck	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
20:45	Total	0	40	7	0	47	0	0	17	0	17	27	77	5	0	109	2	1	0	0	3	176
	Auto	0	40	7	0	47	0	0	16	0	16	27	75	5	0	107	2	1	0	0	3	173
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Hour	Total	0	171	24	0	195	10	6	44	0	60	110	319	21	0	450	9	3	2	0	14	719
	Auto	0	167	24	0	191	10	6	43	0	59	108	312	21	0	441	9	3	2	0	14	705
	Sm truck	0	2	0	0	2	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	8
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
% ALL		0	24	3	0	27	1	1	6	0	8	15	44	3	0	63	1	0	0	0	2	100

Manitoba Transportation and Government Services
University of Manitoba Transport Information Group
Telephone: (204) 474-7367 Fax: (204) 474-7549

TO: Traffic Engineering
Traffic Monitoring
1510 215 Garry St.
Fax 948-2554

Titan turning movement count analysis
PTH 10 & BRAECREST DR IN BRANDON
Nov 9, 2006

Requested by
Date

Report prepared by
Date

Comments

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 9 2006

Interval: 15 min 56 intervals
Correction 1.0

		From North				From South				From East				From West				Interval
Begins		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
07:00	Peds	0				0				0				0				0
	Auto	0	2	19	1	0	0	45	5	0	4	0	7	0	2	1	2	88
	Sm truck	0	0	3	1	0	0	1	1	0	2	0	1	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	Peds	0				0				0				0				0
	Auto	0	4	37	0	0	1	43	4	0	9	0	5	0	0	2	3	108
	Sm truck	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
07:30	Peds	0				0				0				0				0
	Auto	0	4	48	0	0	0	48	7	0	13	0	11	0	0	1	3	135
	Sm truck	0	0	1	0	0	0	4	1	0	0	0	1	0	0	0	0	7
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
07:45	Peds	0				0				0				0				0
	Auto	0	5	66	0	0	1	92	11	0	17	0	17	0	1	3	3	216
	Sm truck	0	0	1	0	0	0	5	0	0	1	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	15	170	1	0	2	228	27	0	43	0	40	0	3	7	11	547
	Sm truck	0	0	5	1	0	0	12	3	0	3	0	2	0	0	0	0	26
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
	ALL	0	15	179	2	0	2	246	30	0	46	0	42	0	3	7	11	583
	% ALL	0.0	2.6	30.7	0.3	0.0	0.3	42.2	5.1	0.0	7.9	0.0	7.2	0.0	0.5	1.2	1.9	100.0
08:00	Peds	0				0				0				0				0
	Auto	0	6	54	0	0	1	62	17	0	19	1	11	0	2	4	2	179
	Sm truck	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	4
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08:15	Peds	0				0				0				0				0
	Auto	0	5	64	0	0	3	59	12	0	6	0	10	0	0	3	6	168
	Sm truck	0	0	3	0	0	0	8	1	0	0	1	0	0	0	0	1	14
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
08:30	Peds	0				0				0				0				0
	Auto	0	6	62	0	0	2	58	5	0	12	1	12	0	1	5	9	173
	Sm truck	0	0	3	0	0	0	2	2	0	0	0	1	0	0	0	0	8
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
08:45	Peds	0				0				0				0				0
	Auto	0	7	81	0	0	1	68	8	0	18	2	12	0	7	1	11	216
	Sm truck	0	0	4	0	0	0	2	1	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	24	261	0	0	7	247	42	0	55	4	45	0	10	13	28	736
	Sm truck	0	0	12	0	0	0	13	4	0	0	2	1	0	0	0	1	33
	Lg Truck	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10
	ALL	0	24	280	0	0	7	263	46	0	55	6	46	0	10	13	29	779
	% ALL	0.0	3.1	35.9	0.0	0.0	0.9	33.8	5.9	0.0	7.1	0.8	5.9	0.0	1.3	1.7	3.7	100.0
09:00	Peds	0				0				1				0				1
	Auto	0	6	50	4	0	3	64	21	0	8	2	9	0	3	0	3	173
	Sm truck	0	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
09:15	Peds	0				0				0				0				0
	Auto	0	5	68	0	0	6	51	12	0	9	1	9	0	1	1	3	166
	Sm truck	0	0	5	0	0	0	6	0	0	0	0	1	0	0	0	0	12
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	Peds	0				0				0				0				0
	Auto	0	0	4	0	0	0	4	0	0	1	0	0	0	0	0	0	9
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
09:45	Peds	0				0				0				0				0
	Auto	0	9	73	1	0	1	44	5	0	12	0	7	0	0	0	5	157
	Sm truck	0	2	4	0	0	0	1	1	0	0	0	1	0	1	0	0	10
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Auto	0	20	195	5	0	10	163	38	0	30	3	25	0	4	1	11	505
	Sm truck	0	2	10	0	0	0	10	3	0	0	0	2	0	1	0	0	28
	Lg Truck	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6
	ALL	0	22	206	5	0	10	178	41	0	30	3	27	0	5	1	11	539
	% ALL	0.0	4.1	38.2	0.9	0.0	1.9	33.0	7.6	0.0	5.6	0.6	5.0	0.0	0.9	0.2	2.0	100.0

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 9 2006

Interval: 15 min
Correction 1.0

56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	7	50	1	0	2	69	11	0	10	0	10	0	1	1	9	171
	Sm truck	0	1	2	0	0	0	1	1	0	1	0	1	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
10:15	Peds	0				0				0				0				0
	Auto	0	1	71	1	0	2	80	10	0	6	0	8	0	0	1	6	186
	Sm truck	0	1	0	0	0	0	2	2	0	2	1	0	0	0	0	0	8
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
10:30	Peds	0				0				0				0				0
	Auto	0	6	98	5	0	4	76	12	0	5	2	10	0	1	2	5	226
	Sm truck	0	0	2	0	0	0	2	1	0	0	0	3	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	Peds	0				0				0				0				0
	Auto	0	5	103	1	0	3	71	9	0	9	2	2	0	2	1	5	213
	Sm truck	0	0	3	0	0	0	5	0	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	19	322	8	0	11	296	42	0	30	4	30	0	4	5	25	796
	Sm truck	0	2	7	0	0	0	10	4	0	4	1	4	0	0	0	0	32
	Lg Truck	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	12
	ALL	0	21	337	8	0	11	310	46	0	34	5	34	0	4	5	25	840
	% ALL	0.0	2.5	40.1	1.0	0.0	1.3	36.9	5.5	0.0	4.0	0.6	4.0	0.0	0.5	0.6	3.0	100.0
11:00	Peds	0				1				0				0				1
	Auto	0	6	83	1	0	7	87	12	0	6	3	6	0	0	1	9	221
	Sm truck	0	2	3	0	0	0	2	1	0	1	0	1	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
11:15	Peds	0				0				0				0				0
	Auto	0	10	85	1	0	5	67	18	0	6	2	8	0	1	3	8	214
	Sm truck	0	1	5	0	0	1	5	2	0	0	0	0	0	1	0	0	15
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
11:30	Peds	0				0				0				0				0
	Auto	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	3
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	Peds	0				0				0				0				0
	Auto	0	7	98	1	0	10	87	20	0	11	0	9	0	1	1	7	252
	Sm truck	0	0	2	0	0	0	2	1	0	1	0	0	0	0	0	0	6
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	Auto	0	23	267	3	0	22	242	51	0	23	5	23	0	2	5	24	690
	Sm truck	0	3	10	0	0	1	9	4	0	2	0	1	0	1	0	0	31
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
	ALL	0	26	281	3	0	23	255	55	0	25	5	24	0	3	5	24	729
	% ALL	0.0	3.6	38.5	0.4	0.0	3.2	35.0	7.5	0.0	3.4	0.7	3.3	0.0	0.4	0.7	3.3	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	5	116	1	0	4	86	16	0	12	1	8	0	0	1	3	253
	Sm truck	0	0	6	0	0	0	5	0	0	0	0	1	0	0	0	0	12
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
12:15	Peds	0				0				0				0				0
	Auto	0	9	107	3	0	6	96	18	0	10	0	6	0	0	0	7	262
	Sm truck	0	0	8	0	0	0	6	1	0	0	0	0	0	0	0	0	15
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30	Peds	0				0				0				0				0
	Auto	0	6	90	0	0	4	89	17	0	17	2	14	0	1	2	12	254
	Sm truck	0	0	1	0	0	0	2	0	0	1	0	1	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
12:45	Peds	0				0				0				0				0
	Auto	0	9	113	2	0	5	117	20	0	12	0	19	0	1	1	7	306
	Sm truck	0	1	1	0	0	0	3	1	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	29	426	6	0	19	388	71	0	51	3	47	0	2	4	29	1075
	Sm truck	0	1	16	0	0	0	16	2	0	1	0	2	0	0	0	0	38
	Lg Truck	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13
	ALL	0	30	449	6	0	19	410	73	0	52	3	49	0	2	4	29	1126
	% ALL	0.0	2.7	39.9	0.5	0.0	1.7	36.4	6.5	0.0	4.6	0.3	4.4	0.0	0.2	0.4	2.6	100.0

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 9 2006

Interval: 15 min
Correction 1.0

56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	7	100	3	0	5	131	39	0	16	1	9	0	2	2	9	324
	Sm truck	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	Peds	0				0				0				0				0
	Auto	0	13	94	0	0	9	125	34	0	12	0	13	0	1	1	3	305
	Sm truck	0	0	1	1	0	0	4	1	0	0	0	1	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
16:30	Peds	0				0				0				0				0
	Auto	0	5	128	1	0	7	125	28	0	16	1	12	0	0	2	8	333
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	1	0	0	0	1	5
	Lg Truck	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
16:45	Peds	0				0				0				0				0
	Auto	0	11	105	3	0	9	139	32	0	19	0	12	0	2	1	0	333
	Sm truck	0	1	5	0	0	0	3	0	0	2	0	0	0	0	0	0	11
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	36	427	7	0	30	520	133	0	63	2	46	0	5	6	20	1295
	Sm truck	0	1	10	1	0	0	15	1	0	2	0	2	0	0	0	1	33
	Lg Truck	0	0	2	0	0	0	3	0	0	1	0	0	0	0	0	0	6
	ALL	0	37	439	8	0	30	538	134	0	66	2	48	0	5	6	21	1334
	% ALL	0.0	2.8	32.9	0.6	0.0	2.2	40.3	10.0	0.0	4.9	0.1	3.6	0.0	0.4	0.4	1.6	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	13	121	1	0	8	111	28	0	14	7	6	0	1	1	2	313
	Sm truck	0	0	1	0	0	1	3	1	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:15	Peds	0				0				1				0				1
	Auto	0	17	115	2	0	11	101	19	0	17	3	12	0	2	0	5	304
	Sm truck	0	0	3	0	0	0	5	0	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
17:30	Peds	0				0				0				0				0
	Auto	0	8	90	3	0	6	114	35	0	23	0	7	0	1	0	6	293
	Sm truck	0	0	6	0	0	0	5	0	0	0	0	1	0	0	0	0	12
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:45	Peds	0				0				0				0				0
	Auto	0	11	71	1	0	9	85	22	0	21	1	6	0	0	0	4	231
	Sm truck	0	1	2	0	0	0	4	1	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Auto	0	49	397	7	0	34	411	104	0	75	11	31	0	4	1	17	1141
	Sm truck	0	1	12	0	0	1	17	2	0	1	0	2	0	0	0	0	36
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
	ALL	0	50	411	7	0	35	432	106	0	76	11	33	0	4	1	17	1183
	% ALL	0.0	4.2	34.7	0.6	0.0	3.0	36.5	9.0	0.0	6.4	0.9	2.8	0.0	0.3	0.1	1.4	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	9	85	2	0	9	86	19	0	14	0	4	0	0	1	3	232
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
18:15	Peds	0				0				0				0				0
	Auto	0	3	62	0	0	4	86	22	0	19	0	3	0	0	3	8	210
	Sm truck	0	0	3	0	0	0	2	0	0	1	0	1	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
18:30	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Peds	0				0				0				0				0
	Auto	0	3	54	0	0	6	47	23	0	17	2	7	0	0	1	5	165
	Sm truck	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	15	201	2	0	19	219	64	0	50	2	14	0	0	5	16	607
	Sm truck	0	0	14	0	0	0	6	0	0	1	0	1	0	0	0	0	22
	Lg Truck	0	0	2	0	0	0	7	3	0	0	0	0	0	0	0	0	12
	ALL	0	15	217	2	0	19	232	67	0	51	2	15	0	0	5	16	641
	% ALL	0.0	2.3	33.9	0.3	0.0	3.0	36.2	10.5	0.0	8.0	0.3	2.3	0.0	0.0	0.8	2.5	100.0

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 9 2006

Interval: 15 min
Correction 1.0
56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	9	62	1	0	1	59	23	0	7	1	2	0	0	1	5	171
	Sm truck	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:15	Peds	0				0				0				0				0
	Auto	0	4	52	1	0	3	66	21	0	10	1	5	0	0	2	2	167
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19:30	Peds	0				0				0				0				0
	Auto	0	3	40	0	0	7	50	17	0	12	0	2	0	0	2	5	138
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	Peds	0				0				0				0				0
	Auto	0	3	45	1	0	3	52	10	0	6	1	6	0	0	3	2	132
	Sm truck	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	19	199	3	0	14	227	71	0	35	3	15	0	0	8	14	608
	Sm truck	0	0	5	0	0	0	4	0	0	0	0	2	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	ALL	0	19	207	3	0	14	232	71	0	35	3	17	0	0	8	14	623
	% ALL	0.0	3.0	33.2	0.5	0.0	2.2	37.2	11.4	0.0	5.6	0.5	2.7	0.0	0.0	1.3	2.2	100.0
20:00	Peds	0				3				0				0				3
	Auto	0	4	33	0	0	10	46	23	0	11	3	4	0	1	2	1	138
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
20:15	Peds	0				0				0				0				0
	Auto	0	4	24	1	0	1	48	12	0	4	0	2	0	0	2	3	101
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	Peds	0				0				0				0				0
	Auto	0	2	34	0	0	2	39	16	0	8	0	2	0	1	3	1	108
	Sm truck	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:45	Peds	0				0				0				0				0
	Auto	0	2	36	1	0	5	48	24	0	8	1	3	0	1	0	3	132
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	Auto	0	12	127	2	0	18	181	75	0	31	4	11	0	3	7	8	479
	Sm truck	0	0	1	0	0	0	6	0	0	1	0	3	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	ALL	0	12	131	2	0	18	188	75	0	32	4	14	0	3	7	8	494
	% ALL	0.0	2.4	26.5	0.4	0.0	3.6	38.1	15.2	0.0	6.5	0.8	2.8	0.0	0.6	1.4	1.6	100.0

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Nov 9 2006

Type: Cars/Trucks/Peds
Interval: 15 min **56 intervals**
Correction 1.0

AM Count Summary

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
Auto	0	101	1215	17	0	52	1176	200	0	181	16	163	0	23	31	99	3274
%	0.0	2.9	35.0	0.5	0.0	1.5	33.9	5.8	0.0	5.2	0.5	4.7	0.0	0.7	0.9	2.9	94.4
Sm truck	0	7	44	1	0	1	54	18	0	9	3	10	0	2	0	1	150
%	0.0	0.2	1.3	0.0	0.0	0.0	1.6	0.5	0.0	0.3	0.1	0.3	0.0	0.1	0.0	0.0	4.3
Lg truck	0	0	24	0	0	0	22	0	0	0	0	0	0	0	0	0	46
%	0.0	0.0	0.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
All	0	108	1283	18	0	53	1252	218	0	190	19	173	0	25	31	100	3470
% ALL	0.0	3.1	37.0	0.5	0.0	1.5	36.1	6.3	0.0	5.5	0.5	5.0	0.0	0.7	0.9	2.9	100.0

PM Count Summary

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	4
Auto	0	245	2745	35	0	188	3057	731	0	439	43	275	0	29	40	160	7987
%	0.0	2.9	32.8	0.4	0.0	2.2	36.6	8.7	0.0	5.2	0.5	3.3	0.0	0.3	0.5	1.9	95.5
Sm truck	0	5	113	2	0	2	125	13	0	10	0	17	0	0	1	2	290
%	0.0	0.1	1.4	0.0	0.0	0.0	1.5	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	3.5
Lg truck	0	0	36	0	0	0	46	3	0	1	0	0	0	0	0	0	86
%	0.0	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
All	0	250	2894	37	0	190	3228	747	0	450	43	292	0	29	41	162	8363
% ALL	0.0	3.0	34.6	0.4	0.0	2.3	38.6	8.9	0.0	5.4	0.5	3.5	0.0	0.3	0.5	1.9	100.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	6
Auto	0	346	3960	52	0	240	4233	931	0	620	59	438	0	52	71	259	11261
%	0.0	2.9	33.5	0.4	0.0	2.0	35.8	7.9	0.0	5.2	0.5	3.7	0.0	0.4	0.6	2.2	95.2
Sm truck	0	12	157	3	0	3	179	31	0	19	3	27	0	2	1	3	440
%	0.0	0.1	1.3	0.0	0.0	0.0	1.5	0.3	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	3.7
Lg truck	0	0	60	0	0	0	68	3	0	1	0	0	0	0	0	0	132
%	0.0	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
All	0	358	4177	55	0	243	4480	965	0	640	62	465	0	54	72	262	11833
% ALL	0.0	3.0	35.3	0.5	0.0	2.1	37.9	8.2	0.0	5.4	0.5	3.9	0.0	0.5	0.6	2.2	100.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	5	0	0	0	3	0	0	0	0	0	0	0	8
Auto	0	450	5148	68	0	312	5503	1210	0	806	77	569	0	68	92	337	14639
%	0.0	2.9	33.5	0.4	0.0	2.0	35.8	7.9	0.0	5.2	0.5	3.7	0.0	0.4	0.6	2.2	95.2
Sm truck	0	16	204	4	0	4	233	40	0	25	4	35	0	3	1	4	572
%	0.0	0.1	1.7	0.0	0.0	0.0	2.0	0.3	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	4.8
Lg truck	0	0	78	0	0	0	88	4	0	1	0	0	0	0	0	0	172
%	0.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	465	5430	72	0	316	5824	1255	0	832	81	605	0	70	94	341	15383
% ALL	0.0	3.0	35.3	0.5	0.0	2.1	37.9	8.2	0.0	5.4	0.5	3.9	0.0	0.5	0.6	2.2	100.0

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Nov 9 2006

Type: Cars/Trucks/Peds
Interval: 15 min **56 intervals**
Correction 1.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	6
Auto	0	346	3960	52	0	240	4233	931	0	620	59	438	0	52	71	259	11261
%	0.0	2.9	33.5	0.4	0.0	2.0	35.8	7.9	0.0	5.2	0.5	3.7	0.0	0.4	0.6	2.2	95.2
Sm truck	0	12	157	3	0	3	179	31	0	19	3	27	0	2	1	3	440
%	0.0	0.1	1.3	0.0	0.0	0.0	1.5	0.3	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	3.7
Lg truck	0	0	60	0	0	0	68	3	0	1	0	0	0	0	0	0	132
%	0.0	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
All	0	358	4177	55	0	243	4480	965	0	640	62	465	0	54	72	262	11833
% ALL	0.0	3.0	35.3	0.5	0.0	2.1	37.9	8.2	0.0	5.4	0.5	3.9	0.0	0.5	0.6	2.2	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period				TOTAL				9589											
From				Lg Truck %				1.3											
to:																			
MON DAY YEAR																			
From Nov 9 2006																			
to: Nov 9 2006																			
				Peds from North =				0											
				APPROACH				4590				DEPART				4999			
				RtRed Right Thru Left				0 55 4177 358				Left Thru Right RtRed				54 4480 465 0			
DEPART				RtRed				0				0 RtRed				APPROACH			
360																1167			
				Right				55				465 Right				Peds from East =			
				Thru				62				62 Thru				2			
TOTAL				Left				243				640 Left				TOTAL			
Lg Truck %				Left				54				358 Left				Lg Truck %			
Peds from West =				Thru				72				72 Thru							
0																			
				Right				262				965 Right							
APPROACH				RtRed				0				0 RtRed				DEPART			
388																1395			
				0 262 4177 640				243 4480 965 0				0 RtRed							
				RtRed Right Thru Left				Left Thru Right RtRed											
				DEPART				5079				APPROACH				5688			
				Peds from South =				4											
				TOTAL				10767											
				Lg Truck %				1.2											

LOCATION: PTH 10 & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Nov 9 2006

Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	5	0	0	0	3	0	0	0	0	0	0	0	8
Auto	0	450	5148	68	0	312	5503	1210	0	806	77	569	0	68	92	337	14639
%	0.0	2.9	33.5	0.4	0.0	2.0	35.8	7.9	0.0	5.2	0.5	3.7	0.0	0.4	0.6	2.2	95.2
Sm truck	0	16	204	4	0	4	233	40	0	25	4	35	0	3	1	4	572
%	0.0	0.1	1.7	0.0	0.0	0.0	2.0	0.3	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	4.8
Lg truck	0	0	78	0	0	0	88	4	0	1	0	0	0	0	0	0	172
%	0.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	465	5430	72	0	316	5824	1255	0	832	81	605	0	70	94	341	15383
% ALL	0.0	3.0	35.3	0.5	0.0	2.1	37.9	8.2	0.0	5.4	0.5	3.9	0.0	0.5	0.6	2.2	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period				TOTAL				Lg Truck %				North			
From	MON	DAY	YEAR												
to:	Nov	9	2006												
	Nov	9	2006												
Peds from North =				0											
APPROACH				5967				DEPART				6499			
RtRed				0				Left				Thru			
Right				72				Right				RtRed			
Thru				5430				Thru				605			
Left				465				Left				Thru			
DEPART				468				RtRed				0			
Right				72				Right				605			
Thru				81				Thru				81			
TOTAL				972				Left				316			
Lg Truck %				0.0				Left				70			
Peds from West =				0											
Thru				94											
Right				341											
APPROACH				504				RtRed				0			
RtRed				0				0				341			
Right				341				Thru				5430			
Thru				81				Left				832			
Left				465				Left				316			
DEPART				6603				Thru				5824			
APPROACH				7394				Right				1255			
RtRed				0				RtRed				0			
Right				341				Right				605			
Thru				81				Thru				94			
Left				465				Left				316			
TOTAL				3331				Lg Truck %				0.2			
Peds from East =				3											
Thru				94											
Right				341											
APPROACH				504				RtRed				0			
RtRed				0				0				341			
Right				341				Thru				5430			
Thru				81				Left				832			
Left				465				Left				316			
DEPART				1814				Thru				5824			
APPROACH				7394				Right				1255			
RtRed				0				RtRed				0			
Right				341				Right				605			
Thru				81				Thru				94			
Left				465				Left				316			
TOTAL				13997				Lg Truck %				1.2			
Peds from South =				5											

Manitoba Transportation and Government Services
University of Manitoba Transport Information Group
Telephone: (204) 474-7367 Fax: (204) 474-7549

TO: Traffic Engineering
Traffic Monitoring
1510 215 Garry St.
Fax 948-2554

Titan turning movement count analysis
PTH 10 & CORRAL CNTR ACC IN BRANDON
Nov 16, 2006

Requested by
Date

Report prepared by
Date

Comments

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 16 2006

Interval: 15 min 56 intervals
Correction 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0				0				0				0				0
	Auto	0	5	25	0	0	0	30	3	0	1	0	0	0	0	0	0	64
	Sm truck	0	1	2	0	0	0	3	0	0	1	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
07:15	Peds	0				0				0				0				0
	Auto	0	8	44	0	0	0	45	4	0	4	0	1	0	0	0	0	106
	Sm truck	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30	Peds	0				0				0				0				0
	Auto	0	5	70	0	0	0	68	9	0	3	0	2	0	0	0	0	157
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
07:45	Peds	0				0				0				0				0
	Auto	0	4	85	0	0	0	133	3	0	0	0	1	0	0	0	0	226
	Sm truck	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	22	224	0	0	0	276	19	0	8	0	4	0	0	0	0	553
	Sm truck	0	3	7	0	0	0	8	0	0	1	0	1	0	0	0	0	20
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
	ALL	0	25	235	0	0	0	288	19	0	9	0	5	0	0	0	0	581
	% ALL	0.0	4.3	40.4	0.0	0.0	0.0	49.6	3.3	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	100.0
08:00	Peds	0				0				0				0				0
	Auto	0	11	80	0	0	0	87	17	0	6	0	3	0	0	0	0	204
	Sm truck	0	0	4	0	0	0	4	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
08:15	Peds	0				0				0				0				0
	Auto	0	8	96	0	0	0	82	10	0	5	0	1	0	0	0	0	202
	Sm truck	0	0	4	0	0	0	1	0	0	0	0	1	0	0	0	0	6
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
08:30	Peds	0				0				0				0				0
	Auto	0	7	97	0	0	0	79	5	0	8	0	3	0	0	0	0	199
	Sm truck	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
08:45	Peds	0				0				0				0				0
	Auto	0	13	105	0	0	0	92	11	0	2	0	1	0	0	0	0	224
	Sm truck	0	1	5	0	0	0	3	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	39	378	0	0	0	340	43	0	21	0	8	0	0	0	0	829
	Sm truck	0	2	13	0	0	0	17	1	0	0	0	1	0	0	0	0	34
	Lg Truck	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13
	ALL	0	41	397	0	0	0	364	44	0	21	0	9	0	0	0	0	876
	% ALL	0.0	4.7	45.3	0.0	0.0	0.0	41.6	5.0	0.0	2.4	0.0	1.0	0.0	0.0	0.0	0.0	100.0
09:00	Peds	0				0				0				0				0
	Auto	0	15	58	0	0	0	73	7	0	7	0	1	0	0	0	0	161
	Sm truck	0	0	4	0	0	0	4	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
09:15	Peds	0				0				0				0				0
	Auto	0	20	75	0	0	0	81	11	0	9	0	2	0	0	0	0	198
	Sm truck	0	1	4	0	0	0	3	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
09:30	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	Peds	0				0				0				0				0
	Auto	0	15	71	0	0	0	82	13	0	15	0	4	0	0	0	0	200
	Sm truck	0	0	7	0	0	0	5	1	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	50	204	0	0	0	236	31	0	31	0	7	0	0	0	0	559
	Sm truck	0	1	15	0	0	0	12	3	0	0	0	0	0	0	0	0	31
	Lg Truck	0	0	7	0	0	0	8	0	0	0	0	1	0	0	0	0	16
	ALL	0	51	226	0	0	0	256	34	0	31	0	8	0	0	0	0	606
	% ALL	0.0	8.4	37.3	0.0	0.0	0.0	42.2	5.6	0.0	5.1	0.0	1.3	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 16 2006

Interval: 15 min 56 intervals
Correction 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	17	76	0	0	0	88	10	0	15	0	4	0	0	0	0	210
	Sm truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	3	0	0	0	3	1	0	0	0	0	0	0	0	0	7
10:15	Peds	0				0				0				0				0
	Auto	0	2	46	0	0	0	41	1	0	11	0	1	0	0	0	0	102
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	2	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	2	0	0	0	1	2	0	0	0	0	5
10:30	Peds	0				0				0				0				0
	Auto	0	9	101	0	0	0	108	0	0	20	0	1	0	0	0	0	239
	Sm truck	0	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	4	0	0	0	1	0	0	1	0	0	0	0	0	0	6
10:45	Peds	0				0				0				0				0
	Auto	0	7	99	0	0	0	126	0	0	20	0	9	0	0	0	0	261
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	35	322	0	0	0	363	11	0	66	0	15	0	0	0	0	812
	Sm truck	0	0	10	0	0	0	15	0	0	0	0	2	0	0	0	0	27
	Lg Truck	0	0	10	0	0	0	10	1	0	1	1	2	0	0	0	0	25
	ALL	0	35	342	0	0	0	388	12	0	67	1	19	0	0	0	0	864
	% ALL	0.0	4.1	39.6	0.0	0.0	0.0	44.9	1.4	0.0	7.8	0.1	2.2	0.0	0.0	0.0	0.0	100.0
11:00	Peds	0				0				0				0				0
	Auto	0	1	105	0	0	0	118	0	0	25	0	4	0	0	0	0	253
	Sm truck	0	0	6	0	0	0	11	0	0	1	0	1	0	0	0	0	19
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
11:15	Peds	0				0				0				0				0
	Auto	0	8	89	0	0	0	86	0	0	23	0	2	0	0	0	0	208
	Sm truck	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	14
	Lg Truck	0	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	4
11:30	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	Peds	0				0				0				0				0
	Auto	0	8	98	0	0	0	108	14	0	24	0	2	0	0	0	0	254
	Sm truck	0	1	7	0	0	0	9	0	0	0	0	0	0	0	0	0	17
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	17	292	0	0	0	312	14	0	72	0	8	0	0	0	0	715
	Sm truck	0	1	22	0	0	0	25	0	0	1	0	1	0	0	0	0	50
	Lg Truck	0	0	5	0	0	0	5	0	0	1	0	0	0	0	0	0	11
	ALL	0	18	319	0	0	0	342	14	0	74	0	9	0	0	0	0	776
	% ALL	0.0	2.3	41.1	0.0	0.0	0.0	44.1	1.8	0.0	9.5	0.0	1.2	0.0	0.0	0.0	0.0	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	19	109	0	0	0	128	27	0	35	0	4	0	0	0	0	322
	Sm truck	0	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15	Peds	0				0				0				0				0
	Auto	0	18	78	0	0	0	100	18	0	16	0	10	0	0	0	0	240
	Sm truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
12:30	Peds	0				0				0				0				0
	Auto	0	15	98	0	0	0	92	17	0	33	0	2	0	0	0	0	257
	Sm truck	0	0	3	0	0	0	5	0	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
12:45	Peds	0				0				0				0				0
	Auto	0	21	100	0	0	0	121	18	0	31	0	11	0	0	0	0	302
	Sm truck	0	1	1	0	0	0	3	1	0	0	0	0	0	0	0	0	6
	Lg Truck	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	73	385	0	0	0	441	80	0	115	0	27	0	0	0	0	1121
	Sm truck	0	1	16	0	0	0	13	1	0	1	0	0	0	0	0	0	32
	Lg Truck	0	1	3	0	0	0	9	0	0	0	0	0	0	0	0	0	13
	ALL	0	75	404	0	0	0	463	81	0	116	0	27	0	0	0	0	1166
	% ALL	0.0	6.4	34.6	0.0	0.0	0.0	39.7	6.9	0.0	9.9	0.0	2.3	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 16 2006

Interval: 15 min
Correction 1.0

56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
13:00	Peds	0				0				0				0				0
	Auto	0	19	110	0	0	0	103	33	0	24	0	10	0	0	0	0	299
	Sm truck	0	1	4	0	0	0	3	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6
13:15	Peds	0				0				0				0				0
	Auto	0	19	101	0	0	0	123	39	0	36	0	5	0	0	0	0	323
	Sm truck	0	0	3	0	0	0	5	0	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
13:30	Peds	0				0				0				0				0
	Auto	0	22	93	0	0	0	118	33	0	28	0	9	0	0	0	0	303
	Sm truck	0	0	4	0	0	0	8	0	0	1	0	2	0	0	0	0	15
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
13:45	Peds	0				0				0				0				0
	Auto	0	20	90	0	0	0	108	31	0	39	0	15	0	0	0	0	303
	Sm truck	0	3	1	0	0	0	3	0	0	0	0	1	0	0	0	0	8
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	80	394	0	0	0	452	136	0	127	0	39	0	0	0	0	1228
	Sm truck	0	4	12	0	0	0	19	1	0	1	0	4	0	0	0	0	41
	Lg Truck	0	0	7	0	0	0	19	0	0	0	0	0	0	0	0	0	26
	ALL	0	84	413	0	0	0	490	137	0	128	0	43	0	0	0	0	1295
	% ALL	0.0	6.5	31.9	0.0	0.0	0.0	37.8	10.6	0.0	9.9	0.0	3.3	0.0	0.0	0.0	0.0	100.0
14:00	Peds	0				0				0				0				0
	Auto	0	9	87	0	0	0	116	20	0	26	0	6	0	0	0	0	264
	Sm truck	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
14:15	Peds	0				0				0				0				0
	Auto	0	23	84	0	0	0	110	35	0	24	0	4	0	0	0	0	280
	Sm truck	0	0	2	0	0	0	1	0	0	1	0	1	0	0	0	0	5
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
14:30	Peds	0				0				0				0				0
	Auto	0	20	87	0	0	0	119	37	0	29	0	14	0	0	0	0	306
	Sm truck	0	2	8	0	0	0	5	0	0	0	0	0	0	0	0	0	15
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
14:45	Peds	0				0				0				0				0
	Auto	0	20	106	0	0	0	127	22	0	34	0	3	0	0	0	0	312
	Sm truck	0	0	2	0	0	0	6	0	0	2	0	1	0	0	0	0	11
	Lg Truck	0	1	2	0	0	0	4	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	72	364	0	0	0	472	114	0	113	0	27	0	0	0	0	1162
	Sm truck	0	2	18	0	0	0	19	0	0	3	0	2	0	0	0	0	44
	Lg Truck	0	1	10	0	0	0	13	0	0	0	0	0	0	0	0	0	24
	ALL	0	75	392	0	0	0	504	114	0	116	0	29	0	0	0	0	1230
	% ALL	0.0	6.1	31.9	0.0	0.0	0.0	41.0	9.3	0.0	9.4	0.0	2.4	0.0	0.0	0.0	0.0	100.0
15:00	Peds	0				0				0				0				0
	Auto	0	23	87	0	0	0	165	29	0	41	0	9	0	0	0	0	354
	Sm truck	0	0	4	0	0	0	10	0	0	0	0	1	0	0	0	0	15
	Lg Truck	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	4
15:15	Peds	0				0				0				0				0
	Auto	0	20	86	0	0	0	138	33	0	45	0	3	0	0	0	0	325
	Sm truck	0	1	8	0	0	0	2	2	0	1	0	0	0	0	0	0	14
	Lg Truck	0	1	2	0	0	0	1	0	0	1	0	0	0	0	0	0	5
15:30	Peds	0				0				0				0				0
	Auto	0	22	85	0	0	0	125	26	0	36	0	10	0	0	0	0	304
	Sm truck	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
15:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	65	258	0	0	0	428	89	0	122	0	22	0	0	0	0	984
	Sm truck	0	1	20	0	0	0	15	2	0	1	0	1	0	0	0	0	40
	Lg Truck	0	1	5	0	0	0	7	0	0	2	0	0	0	0	0	0	15
	ALL	0	67	283	0	0	0	450	91	0	125	0	23	0	0	0	0	1039
	% ALL	0.0	6.4	27.2	0.0	0.0	0.0	43.3	8.8	0.0	12.0	0.0	2.2	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 16 2006

Interval: 15 min
Correction 1.0
56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	18	92	0	0	0	164	31	0	37	0	2	0	0	0	0	344
	Sm truck	0	1	5	0	0	0	4	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
16:15	Peds	0				0				0				0				0
	Auto	0	12	99	0	0	0	136	25	0	29	0	6	0	0	0	0	307
	Sm truck	0	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
16:30	Peds	0				0				0				0				0
	Auto	0	15	98	0	0	0	150	27	0	40	0	10	0	0	0	0	340
	Sm truck	0	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
16:45	Peds	0				0				0				0				0
	Auto	0	19	112	0	0	0	147	44	0	40	0	6	0	0	0	0	368
	Sm truck	0	1	4	0	0	0	5	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	64	401	0	0	0	597	127	0	146	0	24	0	0	0	0	1359
	Sm truck	0	2	17	0	0	0	23	0	0	0	0	0	0	0	0	0	42
	Lg Truck	0	0	14	0	0	0	9	0	0	0	0	0	0	0	0	0	23
	ALL	0	66	432	0	0	0	629	127	0	146	0	24	0	0	0	0	1424
	% ALL	0.0	4.6	30.3	0.0	0.0	0.0	44.2	8.9	0.0	10.3	0.0	1.7	0.0	0.0	0.0	0.0	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	26	127	0	0	0	167	29	0	33	0	6	0	0	0	0	388
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
17:15	Peds	0				0				0				0				0
	Auto	0	23	122	0	0	0	139	20	0	46	0	10	0	0	0	0	360
	Sm truck	0	0	3	0	0	0	5	0	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
17:30	Peds	0				0				0				0				0
	Auto	0	11	88	0	0	0	98	25	0	41	0	8	0	0	0	0	271
	Sm truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:45	Peds	0				0				0				0				0
	Auto	0	18	95	0	0	0	107	22	0	44	0	8	0	0	0	0	294
	Sm truck	0	0	2	0	0	0	5	1	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	78	432	0	0	0	511	96	0	164	0	32	0	0	0	0	1313
	Sm truck	0	0	11	0	0	0	16	1	0	1	0	1	0	0	0	0	30
	Lg Truck	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11
	ALL	0	78	447	0	0	0	534	97	0	165	0	33	0	0	0	0	1354
	% ALL	0.0	5.8	33.0	0.0	0.0	0.0	39.4	7.2	0.0	12.2	0.0	2.4	0.0	0.0	0.0	0.0	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	8	92	0	0	0	73	36	0	21	0	2	0	0	0	0	232
	Sm truck	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
18:15	Peds	0				0				0				0				0
	Auto	0	6	77	0	0	0	97	31	0	28	0	6	0	0	0	0	245
	Sm truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
18:30	Peds	0				0				0				0				0
	Auto	0	1	9	0	0	0	15	2	0	4	0	0	0	0	0	0	31
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Peds	0				0				0				0				0
	Auto	0	13	60	0	0	0	77	23	0	43	0	7	0	0	0	0	223
	Sm truck	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	28	238	0	0	0	262	92	0	96	0	15	0	0	0	0	731
	Sm truck	0	0	8	0	0	0	3	2	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9
	ALL	0	28	249	0	0	0	271	94	0	96	0	15	0	0	0	0	753
	% ALL	0.0	3.7	33.1	0.0	0.0	0.0	36.0	12.5	0.0	12.7	0.0	2.0	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

Type: Cars/Trucks/Peds

DATE: Mon Nov 16 2006

Interval: 15 min
Correction 1.0
56 intervals

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	11	52	0	0	0	72	23	0	30	0	5	0	0	0	0	193
	Sm truck	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
19:15	Peds	0				0				0				0				0
	Auto	0	11	60	0	0	0	92	26	0	39	0	5	0	0	0	0	233
	Sm truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	Peds	0				0				0				0				0
	Auto	0	9	38	0	0	0	70	17	0	25	0	8	0	0	0	0	167
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
19:45	Peds	0				0				0				0				0
	Auto	0	10	44	0	0	0	83	21	0	28	0	5	0	0	0	0	191
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	41	194	0	0	0	317	87	0	122	0	23	0	0	0	0	784
	Sm truck	0	0	2	0	0	0	12	0	0	0	0	1	0	0	0	0	15
	Lg Truck	0	0	1	0	0	0	4	0	0	0	0	2	0	0	0	0	7
	ALL	0	41	197	0	0	0	333	87	0	122	0	26	0	0	0	0	806
	% ALL	0.0	5.1	24.4	0.0	0.0	0.0	41.3	10.8	0.0	15.1	0.0	3.2	0.0	0.0	0.0	0.0	100.0
20:00	Peds	0				0				0				0				0
	Auto	0	11	38	0	0	0	70	22	0	38	0	4	0	0	0	0	183
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:15	Peds	0				0				0				0				0
	Auto	0	9	36	0	0	0	60	9	0	25	0	3	0	0	0	0	142
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
20:30	Peds	0				0				0				0				0
	Auto	0	6	41	0	0	0	47	16	0	27	0	3	0	0	0	0	140
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	Peds	0				0				0				0				0
	Auto	0	4	37	0	0	0	49	18	0	26	0	3	0	0	0	0	137
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	30	152	0	0	0	226	65	0	116	0	13	0	0	0	0	602
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	ALL	0	30	155	0	0	0	229	65	0	116	0	13	0	0	0	0	608
	% ALL	0.0	4.9	25.5	0.0	0.0	0.0	37.7	10.7	0.0	19.1	0.0	2.1	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

DATE: Mon Day Year
Nov 16 2006

Type: Cars/Trucks/Peds
Interval: 15 min **56 intervals**
Correction 1.0

AM Count Summary

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	163	1420	0	0	0	1527	118	0	198	0	42	0	0	0	0	3468
%	0.0	4.4	38.3	0.0	0.0	0.0	41.2	3.2	0.0	5.3	0.0	1.1	0.0	0.0	0.0	0.0	93.7
Sm truck	0	7	67	0	0	0	77	4	0	2	0	5	0	0	0	0	162
%	0.0	0.2	1.8	0.0	0.0	0.0	2.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	4.4
Lg truck	0	0	32	0	0	0	34	1	0	2	1	3	0	0	0	0	73
%	0.0	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	2.0
All	0	170	1519	0	0	0	1638	123	0	202	1	50	0	0	0	0	3703
% ALL	0.0	4.6	41.0	0.0	0.0	0.0	44.2	3.3	0.0	5.5	0.0	1.4	0.0	0.0	0.0	0.0	100.0

PM Count Summary

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	531	2818	0	0	0	3706	886	0	1121	0	222	0	0	0	0	9284
%	0.0	5.5	29.1	0.0	0.0	0.0	38.3	9.2	0.0	11.6	0.0	2.3	0.0	0.0	0.0	0.0	96.0
Sm truck	0	10	106	0	0	0	121	7	0	7	0	9	0	0	0	0	260
%	0.0	0.1	1.1	0.0	0.0	0.0	1.3	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	2.7
Lg truck	0	3	48	0	0	0	76	0	0	2	0	2	0	0	0	0	131
%	0.0	0.0	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
All	0	544	2972	0	0	0	3903	893	0	1130	0	233	0	0	0	0	9675
% ALL	0.0	5.6	30.7	0.0	0.0	0.0	40.3	9.2	0.0	11.7	0.0	2.4	0.0	0.0	0.0	0.0	100.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	694	4238	0	0	0	5233	1004	0	1319	0	264	0	0	0	0	12752
%	0.0	5.2	31.7	0.0	0.0	0.0	39.1	7.5	0.0	9.9	0.0	2.0	0.0	0.0	0.0	0.0	95.3
Sm truck	0	17	173	0	0	0	198	11	0	9	0	14	0	0	0	0	422
%	0.0	0.1	1.3	0.0	0.0	0.0	1.5	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	3.2
Lg truck	0	3	80	0	0	0	110	1	0	4	1	5	0	0	0	0	204
%	0.0	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	714	4491	0	0	0	5541	1016	0	1332	1	283	0	0	0	0	13378
% ALL	0.0	5.3	33.6	0.0	0.0	0.0	41.4	7.6	0.0	10.0	0.0	2.1	0.0	0.0	0.0	0.0	100.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	902	5509	0	0	0	6803	1305	0	1715	0	343	0	0	0	0	16578
%	0.0	5.2	31.7	0.0	0.0	0.0	39.1	7.5	0.0	9.9	0.0	2.0	0.0	0.0	0.0	0.0	95.3
Sm truck	0	22	225	0	0	0	257	14	0	12	0	18	0	0	0	0	549
%	0.0	0.2	1.7	0.0	0.0	0.0	1.9	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	4.1
Lg truck	0	4	104	0	0	0	143	1	0	5	1	7	0	0	0	0	265
%	0.0	0.0	0.8	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
All	0	928	5838	0	0	0	7203	1321	0	1732	1	368	0	0	0	0	17391
% ALL	0.0	5.3	33.6	0.0	0.0	0.0	41.4	7.6	0.0	10.0	0.0	2.1	0.0	0.0	0.0	0.0	100.0

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

DATE: Mon Day Year
Nov 16 2006

Type: Cars/Trucks/Peds
Interval: 15 min **56 intervals**
Correction 1.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	694	4238	0	0	0	5233	1004	0	1319	0	264	0	0	0	0	12752
%	0.0	5.2	31.7	0.0	0.0	0.0	39.1	7.5	0.0	9.9	0.0	2.0	0.0	0.0	0.0	0.0	95.3
Sm truck	0	17	173	0	0	0	198	11	0	9	0	14	0	0	0	0	422
%	0.0	0.1	1.3	0.0	0.0	0.0	1.5	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	3.2
Lg truck	0	3	80	0	0	0	110	1	0	4	1	5	0	0	0	0	204
%	0.0	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	714	4491	0	0	0	5541	1016	0	1332	1	283	0	0	0	0	13378
% ALL	0.0	5.3	33.6	0.0	0.0	0.0	41.4	7.6	0.0	10.0	0.0	2.1	0.0	0.0	0.0	0.0	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period				TOTAL				Lg Truck %				North			
From				11029				1.8							
to: Nov 16 2006															
Peds from North =				0											
APPROACH				5205				DEPART				5824			
RtRed				0				Left				Thru			
Right				0				Thru				Right			
Thru				4491				Right				RtRed			
Left				714				RtRed				0			
DEPART				1				APPROACH				1616			
RtRed				0				Left				283			
Right				0				Thru				Right			
Thru				1				Right				Peds from East =			
Left				0				RtRed				0			
TOTAL				1				1332				TOTAL			
Lg Truck %				100.0				714				Lg Truck %			
Peds from West =				0				Thru				0			
APPROACH				0				Right				1016			
RtRed				0				DEPART				1730			
Right				0				Left				0			
Thru				0				Thru				0			
Left				0				Right				0			
DEPART				0				APPROACH				6557			
RtRed				0				Left				0			
Right				0				Thru				0			
Thru				4491				Right				Peds from South =			
Left				1332				RtRed				0			
DEPART				5823				TOTAL				12380			
RtRed				0				Lg Truck %				1.6			

LOCATION: PTH 10 & CORRAL CNTR ACC IN BRANDON

DATE: Mon Day Year
Nov 16 2006

Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	902	5509	0	0	0	6803	1305	0	1715	0	343	0	0	0	0	16578
%	0.0	5.2	31.7	0.0	0.0	0.0	39.1	7.5	0.0	9.9	0.0	2.0	0.0	0.0	0.0	0.0	95.3
Sm truck	0	22	225	0	0	0	257	14	0	12	0	18	0	0	0	0	549
%	0.0	0.2	1.7	0.0	0.0	0.0	1.9	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	4.1
Lg truck	0	4	104	0	0	0	143	1	0	5	1	7	0	0	0	0	265
%	0.0	0.0	0.8	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
All	0	928	5838	0	0	0	7203	1321	0	1732	1	368	0	0	0	0	17391
% ALL	0.0	5.3	33.6	0.0	0.0	0.0	41.4	7.6	0.0	10.0	0.0	2.1	0.0	0.0	0.0	0.0	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period				TOTAL				14338				North			
From				Lg Truck %				1.8							
to:															
MON DAY YEAR															
Nov 16 2006															
to: Nov 16 2006															
Peds from North =				0											
APPROACH				6767				DEPART				7571			
RtRed				Right				Thru				Left			
0				0				5838				928			
DEPART				RtRed				Left				Thru			
1				0				0				7203			
RtRed				Right				Thru				Right			
0				0				1				368			
Thru				1				APPROACH				2101			
TOTAL				1				Left				0			
Lg Truck %				100.0				Left				0			
Peds from West =				Thru				0				Peds from East =			
0				Right				0				0			
APPROACH				RtRed				0				1732			
0				0				0				928			
RtRed				Right				Thru				Left			
0				0				0				0			
Thru				0				1321				Right			
DEPART				RtRed				0				DEPART			
0				0				0				2249			
RtRed				Right				Thru				Left			
0				0				5838				1732			
Thru				0				0				0			
DEPART				RtRed				Left				Thru			
7570				0				7203				1321			
APPROACH				Right				Right				RtRed			
8524				0				0				0			
Peds from South =				0											
TOTAL				16094											
Lg Truck %				1.6											



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Titan turning movement count analysis
PTH 10 & CUMBERLAND AVE
Aug 10, 2012 & Aug 09, 2012

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.

Note: Count-4 counts (called CTPs for "car-truck-pedestrian") are taken over 14 hours in 15 minutes intervals. The CTP count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2012 Traffic on Manitoba Highways report*) as follows:

Count-4 (CTP)	Equivalent FHWA Scheme F
Pedestrians	N/A
Autos	FHWA Classes 2 and 3*
Small Trucks	FHWA Classes 4 to 7
Large Trucks	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	43	0	0	6	44	13	0	7	1	0	0	1	0	2	117
	Sm truck	0	0	2	0	0	0	5	1	0	0	0	0	0	1	0	0	9
	Lg Truck	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
7:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	59	1	0	9	62	11	0	4	0	1	0	0	1	6	155
	Sm truck	0	0	2	0	0	0	3	2	0	1	0	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	4
7:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	70	2	0	10	66	17	0	8	1	2	0	0	1	7	187
	Sm truck	0	0	3	0	0	1	6	1	0	2	0	0	0	0	0	0	13
	Lg Truck	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	3
7:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	52	0	0	23	77	33	0	7	1	0	0	0	0	4	200
	Sm truck	0	1	3	1	0	0	6	1	0	0	0	0	0	0	2	1	15
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	224	3	0	48	249	74	0	26	3	3	0	1	2	19	659
	Sm truck	0	1	10	1	0	1	20	5	0	3	0	0	0	1	2	1	45
	Lg Truck	0	0	3	0	0	2	4	1	0	0	1	0	0	0	0	1	12
	ALL	0	8	237	4	0	51	273	80	0	29	4	3	0	2	4	21	716
	% ALL	0	1	33	1	0	7	38	11	0	4	1	0	0	0	1	3	100.0
8:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	68	1	0	9	50	17	0	13	1	0	0	0	0	6	166
	Sm truck	0	0	2	0	0	1	4	1	0	1	0	0	0	0	0	3	12
	Lg Truck	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3
8:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	79	2	0	7	58	11	0	11	1	1	0	0	0	14	184
	Sm truck	0	0	4	0	0	1	5	1	0	1	0	0	0	0	0	2	14
	Lg Truck	0	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	4
8:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	66	2	0	12	76	13	0	18	0	1	0	0	2	10	203
	Sm truck	0	0	4	0	0	0	5	4	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	0	0	0	0	4	0	0	0	0	0	0	2	0	1	7
8:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	73	1	0	6	56	22	0	14	2	1	0	0	1	11	187
	Sm truck	0	0	1	0	0	0	2	1	0	2	0	0	0	0	0	1	7
	Lg Truck	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	1	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	286	6	0	34	240	63	0	56	4	3	0	0	3	41	740
	Sm truck	0	0	11	0	0	2	16	7	0	4	0	0	0	0	0	6	46
	Lg Truck	0	0	3	0	0	2	8	3	0	1	0	0	0	2	0	2	21
	ALL	0	4	300	6	0	38	264	73	0	61	4	3	0	2	3	49	807
	% ALL	0	0	37	1	0	5	33	9	0	8	0	0	0	0	0	6	100.0
9:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	59	1	0	12	75	15	0	10	3	1	0	0	0	10	187
	Sm truck	0	0	4	0	0	1	1	3	0	1	0	0	0	0	0	0	10
	Lg Truck	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	4
9:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	48	0	0	14	47	22	0	14	3	0	0	0	2	7	157
	Sm truck	0	0	3	0	0	0	2	3	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	3
9:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	11	0	0	0	5	0	0	1	0	1	0	0	1	5	24
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
9:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	64	2	0	15	79	24	0	15	0	3	0	1	2	16	223
	Sm truck	0	0	1	0	0	1	3	3	0	0	1	0	0	0	0	0	9
	Lg Truck	0	0	1	1	0	0	4	0	0	1	0	0	0	0	0	1	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	182	3	0	41	206	61	0	40	6	5	0	1	5	38	591
	Sm truck	0	0	8	0	0	2	6	9	0	2	1	0	0	0	0	0	28
	Lg Truck	0	0	3	1	0	3	4	1	0	1	1	0	0	0	1	2	17
	ALL	0	3	193	4	0	46	216	71	0	43	8	5	0	1	6	40	636
	% ALL	0	0	30	1	0	7	34	11	0	7	1	1	0	0	1	6	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
10:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	76	3	0	19	76	21	0	21	3	0	0	2	1	18	243
	Sm truck	0	0	4	0	0	3	7	3	0	5	0	2	0	0	0	0	24
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	85	2	0	15	63	23	0	20	0	2	0	1	1	21	237
	Sm truck	0	0	2	0	0	3	1	3	0	4	1	0	0	0	0	3	17
	Lg Truck	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	2	6
10:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	72	3	0	15	65	26	0	23	2	1	0	1	2	14	226
	Sm truck	0	0	5	1	0	2	2	4	0	2	0	0	0	0	0	1	17
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	1	5
10:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	86	1	0	17	70	22	0	21	6	1	0	1	2	29	257
	Sm truck	0	0	3	0	0	0	4	2	0	2	0	0	0	0	0	2	13
	Lg Truck	0	0	1	0	0	1	4	0	0	0	1	0	0	1	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	319	9	0	66	274	92	0	85	11	4	0	5	6	82	963
	Sm truck	0	0	14	1	0	8	14	12	0	13	1	2	0	0	0	6	71
	Lg Truck	0	1	3	0	0	1	8	1	0	0	1	0	0	1	0	3	19
	ALL	0	11	336	10	0	75	296	105	0	98	13	6	0	6	6	91	1053
	% ALL	0	1	32	1	0	7	28	10	0	9	1	1	0	1	1	9	100.0
11:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	97	4	0	22	79	28	0	29	3	0	0	0	3	16	288
	Sm truck	0	0	8	0	0	0	4	3	0	1	0	0	0	0	0	2	18
	Lg Truck	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	3
11:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	62	1	0	21	80	24	0	22	1	2	0	3	4	20	240
	Sm truck	0	0	2	0	0	1	4	1	0	1	1	1	0	0	1	0	12
	Lg Truck	0	0	6	0	0	0	3	0	0	0	0	0	0	1	0	0	10
11:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	15	1	0	5	13	4	0	5	0	0	0	1	1	7	53
	Sm truck	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	88	0	0	13	101	24	0	36	2	3	0	0	4	27	301
	Sm truck	0	0	4	0	0	3	7	3	0	1	0	0	0	0	1	1	20
	Lg Truck	0	0	1	0	0	0	3	1	0	0	0	0	0	0	0	1	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	11	262	6	0	61	273	80	0	92	6	5	0	4	12	70	882
	Sm truck	0	0	14	0	0	4	15	7	0	4	1	1	0	0	2	3	51
	Lg Truck	0	0	8	0	0	0	7	1	0	0	1	0	0	1	0	1	19
	ALL	0	11	284	6	0	65	295	88	0	96	8	6	0	5	14	74	952
	% ALL	0	1	30	1	0	7	31	9	0	10	1	1	0	1	1	8	100.0
12:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	99	3	0	16	87	35	0	39	1	3	0	1	5	25	317
	Sm truck	0	0	8	0	0	3	4	3	0	3	0	2	0	0	0	0	23
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	89	2	0	29	105	35	0	39	2	3	0	0	1	17	322
	Sm truck	0	0	2	0	0	0	6	1	0	1	0	0	0	0	0	0	10
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	87	2	0	22	94	37	0	28	4	3	0	4	2	22	308
	Sm truck	0	0	4	1	0	1	6	2	0	0	0	0	0	0	0	3	17
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
12:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	74	1	0	25	105	43	0	33	1	1	0	2	2	28	321
	Sm truck	0	0	7	0	0	1	8	6	0	0	0	0	0	0	0	0	22
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	12	349	8	0	92	391	150	0	139	8	10	0	7	10	92	1268
	Sm truck	0	0	21	1	0	5	24	12	0	4	0	2	0	0	0	3	72
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
	ALL	0	12	372	9	0	97	418	162	0	143	8	12	0	7	10	95	1345
	% ALL	0	1	28	1	0	7	31	12	0	11	1	1	0	1	1	7	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
13:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	79	3	0	22	96	37	0	41	2	4	0	0	2	24	312
	Sm truck	0	1	0	0	0	0	8	4	0	2	0	0	0	0	0	2	17
	Lg Truck	0	0	1	0	0	0	2	1	0	0	0	0	0	0	1	0	5
13:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	74	2	0	29	100	34	0	27	6	2	0	3	3	22	306
	Sm truck	0	0	4	0	0	0	9	3	0	2	0	1	0	0	1	3	23
	Lg Truck	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	0	5
13:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	90	3	0	23	104	34	0	29	0	5	0	1	3	23	317
	Sm truck	0	0	4	0	0	1	5	4	0	2	1	0	0	0	0	2	19
	Lg Truck	0	0	1	1	0	1	2	0	0	1	0	0	0	0	0	0	6
13:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	79	2	0	22	101	29	0	33	3	2	0	1	3	22	302
	Sm truck	0	0	4	0	0	2	5	0	0	0	0	0	0	0	0	1	12
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	13	322	10	0	96	401	134	0	130	11	13	0	5	11	91	1237
	Sm truck	0	1	12	0	0	3	27	11	0	6	1	1	0	0	1	8	71
	Lg Truck	0	0	2	1	0	1	9	2	0	2	0	0	0	1	1	0	19
	ALL	0	14	336	11	0	100	437	147	0	138	12	14	0	6	13	99	1327
	% ALL	0	1	25	1	0	8	33	11	0	10	1	1	0	0	1	7	100.0
14:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	81	1	0	16	95	38	0	19	5	3	0	0	4	22	284
	Sm truck	0	1	2	0	0	0	5	0	0	1	0	0	0	0	0	1	10
	Lg Truck	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
14:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	66	0	0	22	83	30	0	31	1	4	0	0	7	22	270
	Sm truck	0	0	4	0	0	1	9	1	0	2	0	0	0	0	0	1	18
	Lg Truck	0	0	2	0	0	2	0	1	0	0	0	0	0	0	0	0	5
14:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	94	0	0	24	89	27	0	26	3	1	0	3	0	28	296
	Sm truck	0	0	2	0	0	0	6	2	0	1	0	0	0	0	0	1	12
	Lg Truck	0	0	4	0	0	0	1	0	0	1	0	0	0	0	0	0	6
14:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	73	0	0	18	111	28	0	29	3	1	0	2	4	19	289
	Sm truck	0	0	3	0	0	0	4	1	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	3	0	0	0	2	0	0	1	0	0	0	0	0	0	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	314	1	0	80	378	123	0	105	12	9	0	5	15	91	1139
	Sm truck	0	1	11	0	0	1	24	4	0	5	0	0	0	0	0	3	49
	Lg Truck	0	0	9	0	0	2	3	3	0	2	0	1	0	0	0	0	20
	ALL	0	7	334	1	0	83	405	130	0	112	12	10	0	5	15	94	1208
	% ALL	0.0	0.6	27.6	0.1	0.0	6.9	33.5	10.8	0.0	9.3	1.0	0.8	0.0	0.4	1.2	7.8	100.0
15:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	62	1	0	24	87	27	0	25	1	1	0	2	4	24	260
	Sm truck	0	0	7	0	0	1	5	0	0	0	0	0	0	0	0	1	14
	Lg Truck	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	4
15:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	75	3	0	18	102	37	0	28	3	6	0	0	6	22	302
	Sm truck	0	0	2	0	0	0	3	3	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	4
15:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	92	0	0	23	100	38	0	18	6	7	0	2	5	21	313
	Sm truck	0	1	5	0	0	3	2	4	0	2	0	0	0	0	0	3	20
	Lg Truck	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	4
15:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	87	1	0	23	117	30	0	30	4	1	0	1	3	21	319
	Sm truck	0	0	2	0	0	3	3	1	0	2	0	0	0	0	0	0	11
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	316	5	0	88	406	132	0	101	14	15	0	5	18	88	1194
	Sm truck	0	1	16	0	0	7	13	8	0	5	0	0	0	0	0	4	54
	Lg Truck	0	0	6	1	0	1	4	1	0	0	0	1	0	1	0	0	15
	ALL	0	7	338	6	0	96	423	141	0	106	14	16	0	6	18	92	1263
	% ALL	0.0	0.6	26.8	0.5	0.0	7.6	33.5	11.2	0.0	8.4	1.1	1.3	0.0	0.5	1.4	7.3	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
16:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	96	3	0	29	129	35	0	29	3	2	0	2	2	21	352
	Sm truck	0	0	3	1	0	4	3	1	0	1	0	0	0	0	1	1	15
	Lg Truck	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	4
16:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	78	1	0	23	104	31	0	44	2	3	0	1	2	26	316
	Sm truck	0	0	6	0	0	0	5	2	0	3	0	0	0	0	0	2	18
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	3
16:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	5	0	0	3	14	9	0	0	0	1	0	0	0	1	34
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
16:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	79	2	0	21	120	38	0	43	2	4	0	2	1	32	345
	Sm truck	0	0	4	0	0	1	6	0	0	3	1	0	0	0	1	0	16
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	258	6	0	76	367	113	0	116	7	10	0	5	5	80	1047
	Sm truck	0	0	13	1	0	5	15	3	0	7	1	0	0	0	2	3	50
	Lg Truck	0	0	0	0	0	1	5	1	0	0	0	0	0	0	0	1	8
	ALL	0	4	271	7	0	82	387	117	0	123	8	10	0	5	7	84	1105
	% ALL	0.0	0.4	24.5	0.6	0.0	7.4	35.0	10.6	0.0	11.1	0.7	0.9	0.0	0.5	0.6	7.6	100.0
17:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	76	2	0	17	134	24	0	58	2	3	0	0	4	34	355
	Sm truck	0	0	8	1	0	1	7	1	0	0	0	0	0	0	0	1	19
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
17:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	78	1	0	14	132	29	0	38	1	5	0	1	3	26	331
	Sm truck	0	0	5	0	0	1	4	2	0	2	0	0	0	0	0	0	14
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
17:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	78	0	0	19	132	34	0	24	3	1	0	1	0	22	314
	Sm truck	0	0	9	0	0	1	3	2	0	2	0	0	0	0	0	1	18
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	84	1	0	12	97	19	0	20	1	4	0	0	1	19	260
	Sm truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	316	4	0	62	495	106	0	140	7	13	0	2	8	101	1260
	Sm truck	0	0	25	1	0	3	18	5	0	4	0	0	0	0	0	2	58
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	ALL	0	6	341	5	0	65	515	111	0	144	7	13	0	2	8	103	1320
	% ALL	0.0	0.5	25.8	0.4	0.0	4.9	39.0	8.4	0.0	10.9	0.5	1.0	0.0	0.2	0.6	7.8	100.0
18:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	79	0	0	15	127	12	0	22	2	2	0	1	5	22	290
	Sm truck	0	0	7	0	0	0	4	0	0	0	0	0	0	1	0	0	12
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
18:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	66	2	0	7	112	18	0	28	4	0	0	0	2	9	252
	Sm truck	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
18:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	81	2	0	8	89	15	0	23	1	1	0	0	0	12	235
	Sm truck	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
18:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	6	0	0	1	7	0	0	0	0	0	0	0	0	2	16
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	232	4	0	31	335	45	0	73	7	3	0	1	7	45	793
	Sm truck	0	0	16	0	0	0	10	1	0	0	1	0	0	1	0	0	29
	Lg Truck	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0	0	6
	ALL	0	10	248	4	0	31	350	46	0	73	8	3	0	3	7	45	828
	% ALL	0.0	1.2	30.0	0.5	0.0	3.7	42.3	5.6	0.0	8.8	1.0	0.4	0.0	0.4	0.8	5.4	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
19:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	68	0	0	14	93	14	0	8	2	0	0	1	2	11	213
	Sm truck	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	63	0	0	11	83	11	0	14	0	0	0	0	2	11	196
	Sm truck	0	0	2	0	0	1	4	1	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	66	0	0	16	82	17	0	12	1	2	0	0	1	10	207
	Sm truck	0	0	0	0	0	2	1	2	0	1	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	53	0	0	7	70	10	0	12	2	4	0	0	3	12	173
	Sm truck	0	0	6	0	0	0	2	0	0	3	0	0	0	0	0	0	11
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	250	0	0	48	328	52	0	46	5	6	0	1	8	44	789
	Sm truck	0	0	8	0	0	3	13	3	0	4	0	0	0	0	0	0	31
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	ALL	0	1	259	0	0	51	343	55	0	50	5	6	0	1	8	44	823
	% ALL	0.0	0.1	31.5	0.0	0.0	6.2	41.7	6.7	0.0	6.1	0.6	0.7	0.0	0.1	1.0	5.3	100.0
20:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	56	1	0	8	89	13	0	9	1	3	0	0	1	15	196
	Sm truck	0	0	4	0	0	1	3	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
20:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	41	0	0	13	65	8	0	7	2	0	0	1	0	7	146
	Sm truck	0	0	4	0	0	2	2	1	0	1	0	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
20:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	47	0	0	6	65	8	0	7	0	1	0	0	0	8	143
	Sm truck	0	0	2	0	0	1	1	1	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
20:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	42	1	0	2	50	8	0	3	0	1	0	0	0	10	118
	Sm truck	0	0	4	0	0	1	1	0	0	0	1	0	0	0	0	1	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	186	2	0	29	269	37	0	26	3	5	0	1	1	40	603
	Sm truck	0	0	14	0	0	5	7	3	0	1	1	0	0	0	0	1	32
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
	ALL	0	4	203	2	0	34	280	40	0	27	4	5	0	1	1	41	642
	% ALL	0.0	0.6	31.6	0.3	0.0	5.3	43.6	6.2	0.0	4.2	0.6	0.8	0.0	0.2	0.2	6.4	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Aug 10 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	35	1273	27	0	250	1242	370	0	299	30	20	0	11	28	250	3835
%	0	1	31	1	0	6	30	9	0	7	1	0	0	0	1	6	92.1
Sm truck	0	1	57	2	0	17	71	40	0	26	3	3	0	1	4	16	241
%	0	0	1	0	0	0	2	1	0	1	0	0	0	0	0	0	5.8
Lg truck	0	1	20	1	0	8	31	7	0	2	4	0	0	4	1	9	88
%	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2.1
All	0	37	1350	30	0	275	1344	417	0	327	37	23	0	16	33	275	4164
% ALL	0	1	32	1	0	7	32	10	0	8	1	1	0	0	1	7	100.0

PM Count Summary Date: Aug 09 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	62	2543	40	0	602	3370	892	0	876	74	84	0	32	83	672	9330
%	0.0	0.6	25.8	0.4	0.0	6.1	34.2	9.0	0.0	8.9	0.8	0.9	0.0	0.3	0.8	6.8	94.6
Sm truck	0	3	136	3	0	32	151	50	0	36	4	3	0	1	3	24	446
%	0.0	0.0	1.4	0.0	0.0	0.3	1.5	0.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	4.5
Lg truck	0	0	23	2	0	5	37	7	0	4	0	2	0	3	1	1	85
%	0.0	0.0	0.2	0.0	0.0	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
All	0	65	2702	45	0	639	3558	949	0	916	78	89	0	36	87	697	9861
% ALL	0.0	0.7	27.4	0.5	0.0	6.5	36.1	9.6	0.0	9.3	0.8	0.9	0.0	0.4	0.9	7.1	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	97	3816	67	0	852	4612	1262	0	1175	104	104	0	43	111	922	13165
%	0.0	0.7	27.2	0.5	0.0	6.1	32.9	9.0	0.0	8.4	0.7	0.7	0.0	0.3	0.8	6.6	93.9
Sm truck	0	4	193	5	0	49	222	90	0	62	7	6	0	2	7	40	687
%	0.0	0.0	1.4	0.0	0.0	0.3	1.6	0.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3	4.9
Lg truck	0	1	43	3	0	13	68	14	0	6	4	2	0	7	2	10	173
%	0.0	0.0	0.3	0.0	0.0	0.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
All	0	102	4052	75	0	914	4902	1366	0	1243	115	112	0	52	120	972	14025
% ALL	0.0	0.7	28.9	0.5	0.0	6.5	35.0	9.7	0.0	8.9	0.8	0.8	0.0	0.4	0.9	6.9	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	126	4961	87	0	1108	5996	1641	0	1528	135	135	0	56	144	1199	17115
%	0.0	0.7	27.2	0.5	0.0	6.1	32.9	9.0	0.0	8.4	0.7	0.7	0.0	0.3	0.8	6.6	93.9
Sm truck	0	5	251	7	0	64	289	117	0	81	9	8	0	3	9	52	893
%	0.0	0.0	1.8	0.0	0.0	0.5	2.1	0.8	0.0	0.6	0.1	0.1	0.0	0.0	0.1	0.4	6.4
Lg truck	0	1	56	4	0	17	88	18	0	8	5	3	0	9	3	13	225
%	0.0	0.0	0.4	0.0	0.0	0.1	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	1.6
All	0	133	5268	98	0	1188	6373	1776	0	1616	150	146	0	68	156	1264	18233
% ALL	0.0	0.7	28.9	0.5	0.0	6.5	35.0	9.7	0.0	8.9	0.8	0.8	0.0	0.4	0.9	6.9	100.0

Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



LOCATION: PTH 10 & CUMBERLAND AVE

DATE: Mon Day Year
Morning: Aug 10 2012
Afternoon: Aug 09 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

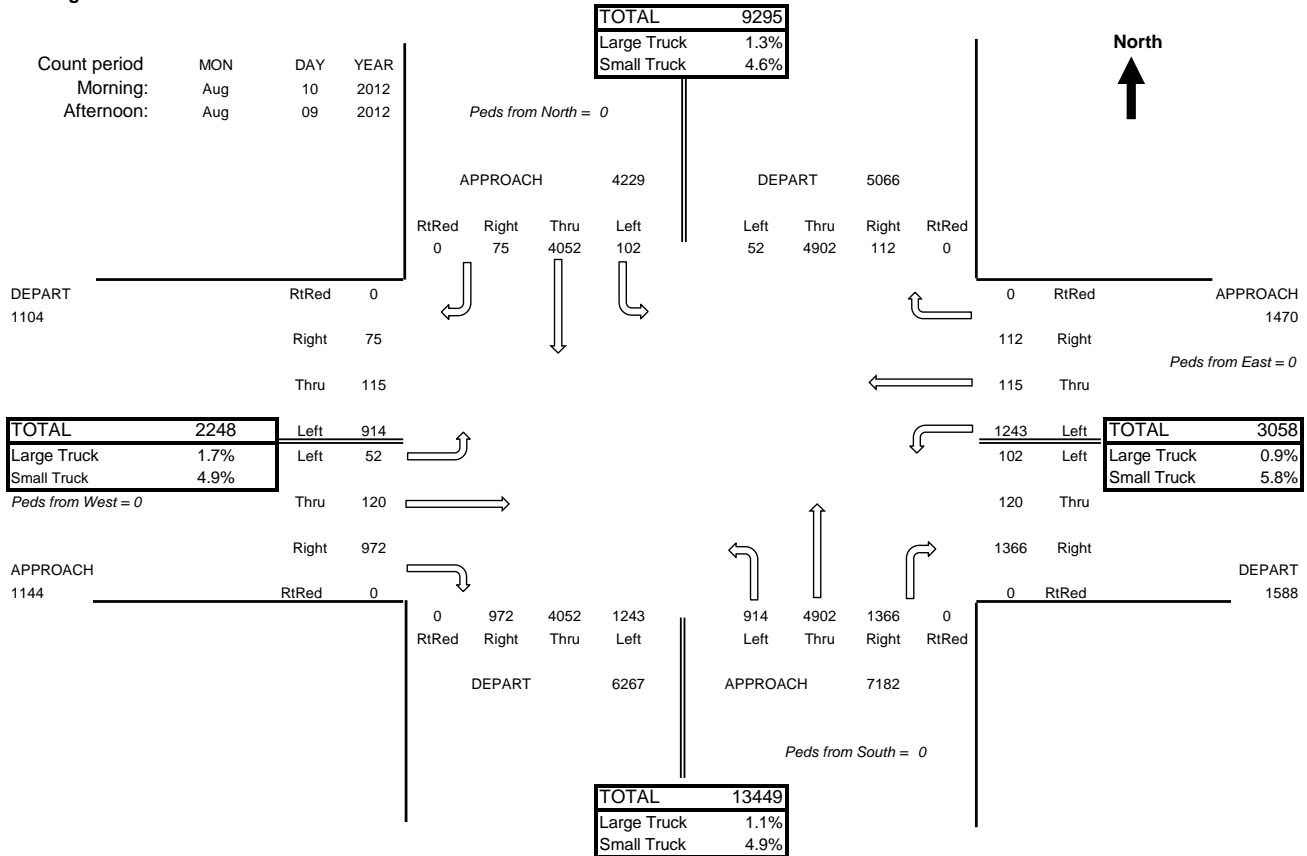
Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	97	3816	67	0	852	4612	1262	0	1175	104	104	0	43	111	922	13165
%	0.0	0.7	27.2	0.5	0.0	6.1	32.9	9.0	0.0	8.4	0.7	0.7	0.0	0.3	0.8	6.6	93.9
Sm truck	0	4	193	5	0	49	222	90	0	62	7	6	0	2	7	40	687
%	0.0	0.0	1.4	0.0	0.0	0.3	1.6	0.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3	4.9
Lg truck	0	1	43	3	0	13	68	14	0	6	4	2	0	7	2	10	173
%	0.0	0.0	0.3	0.0	0.0	0.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
All	0	102	4052	75	0	914	4902	1366	0	1243	115	112	0	52	120	972	14025
% ALL	0.0	0.7	28.9	0.5	0.0	6.5	35.0	9.7	0.0	8.9	0.8	0.8	0.0	0.4	0.9	6.9	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection



Comment: This file is merged from counts taken on the morning of Aug 10 and the afternoon of Aug 09, 2012.



Manitoba Highway Traffic Information System
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1510 215 Garry St.
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Titan turning movement count analysis
PTH 10 & KIRKALDY DR (PR 459) - BRANDON
Jun 5, 2008

Requested by
Date

Report prepared by
Date

Comments
This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.
Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
7:00	Peds	0				0				0				0				0
	Auto	0	8	46	0	0	5	40	11	0	4	1	5	0	4	9	15	148
	Sm truck	0	0	2	2	0	1	2	1	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15	Peds	0				0				0				0				0
	Auto	0	4	58	0	0	9	28	4	0	6	2	2	0	9	5	10	137
	Sm truck	0	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30	Peds	0				0				0				0				0
	Auto	0	9	78	0	0	12	52	8	0	12	3	1	0	1	8	20	204
	Sm truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	1	2	0	0	0	1	0	0	0	0	0	0	1	0	0	5
7:45	Peds	0				0				0				0				0
	Auto	0	7	108	2	0	22	73	4	0	8	5	5	0	3	7	35	279
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	28	290	2	0	48	193	27	0	30	11	13	0	17	29	80	768
	Sm truck	0	0	8	2	0	2	9	1	0	0	0	0	0	0	0	0	22
	Lg Truck	0	1	4	0	0	1	3	0	0	0	0	1	0	1	0	0	11
	ALL	0	29	302	4	0	51	205	28	0	30	11	14	0	18	29	80	801
	% ALL	0.0	3.6	37.7	0.5	0.0	6.4	25.6	3.5	0.0	3.7	1.4	1.7	0.0	2.2	3.6	10.0	100.0
8:00	Peds	0				0				0				0				0
	Auto	0	3	60	2	0	13	35	7	0	7	3	2	0	6	4	28	170
	Sm truck	0	1	3	1	0	2	5	0	0	0	0	0	0	0	1	2	15
	Lg Truck	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15	Peds	0				0				0				0				0
	Auto	0	2	97	3	0	18	55	6	0	10	4	2	0	5	1	29	232
	Sm truck	0	1	1	0	0	1	3	0	0	0	1	0	0	0	0	2	9
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
8:30	Peds	0				0				0				0				0
	Auto	0	4	78	2	0	21	44	3	0	11	2	2	0	0	6	43	216
	Sm truck	0	0	0	0	0	3	7	0	0	1	0	1	0	0	0	2	14
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	Peds	0				0				0				0				0
	Auto	0	3	84	5	0	19	53	1	0	17	0	2	0	5	1	29	219
	Sm truck	0	0	1	1	0	1	6	0	0	1	0	1	0	1	0	2	14
	Lg Truck	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	12	319	12	0	71	187	17	0	45	9	8	0	16	12	129	837
	Sm truck	0	2	5	2	0	7	21	0	0	2	1	2	0	1	1	8	52
	Lg Truck	0	1	5	0	0	0	4	1	0	0	0	0	0	0	0	0	11
	ALL	0	15	329	14	0	78	212	18	0	47	10	10	0	17	13	137	900
	% ALL	0.0	1.7	36.6	1.6	0.0	8.7	23.6	2.0	0.0	5.2	1.1	1.1	0.0	1.9	1.4	15.2	100.0
9:00	Peds	0				0				0				0				0
	Auto	0	2	57	2	0	9	44	4	0	4	3	3	0	3	4	20	155
	Sm truck	0	1	1	1	0	2	5	0	0	1	0	0	0	0	0	1	12
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	4
9:15	Peds	0				0				0				0				0
	Auto	0	0	54	0	0	10	49	3	0	6	2	3	0	10	3	16	156
	Sm truck	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	1	6
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3
9:30	Peds	0				0				0				0				0
	Auto	0	3	79	8	0	17	34	3	0	20	4	1	0	3	4	22	198
	Sm truck	0	1	1	0	0	1	1	0	0	1	0	0	0	0	0	1	6
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
9:45	Peds	0				0				0				0				0
	Auto	0	1	68	3	0	15	56	3	0	9	1	1	0	0	1	36	194
	Sm truck	0	1	3	1	0	0	0	0	0	0	0	0	0	1	1	0	7
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	1	0	0	0	1	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	258	13	0	51	183	13	0	39	10	8	0	16	12	94	703
	Sm truck	0	3	5	2	0	4	10	0	0	2	0	0	0	1	1	3	31
	Lg Truck	0	0	6	0	0	0	5	0	0	0	0	3	0	0	0	2	16
	ALL	0	9	269	15	0	55	198	13	0	41	10	11	0	17	13	99	750
	% ALL	0.0	1.2	35.9	2.0	0.0	7.3	26.4	1.7	0.0	5.5	1.3	1.5	0.0	2.3	1.7	13.2	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	3	73	10	0	19	39	1	0	10	2	5	0	6	1	27	196
	Sm truck	0	0	1	1	0	0	2	1	0	0	0	2	0	0	0	0	7
	Lg Truck	0	1	2	0	0	0	1	0	0	0	0	1	0	0	0	1	6
10:15	Peds	0				0				0				0				0
	Auto	0	1	70	3	0	17	52	5	0	8	3	2	0	5	0	22	188
	Sm truck	0	0	4	0	0	1	4	0	0	1	0	0	0	0	0	1	11
	Lg Truck	0	0	2	0	0	0	1	1	0	0	0	1	0	0	0	0	5
10:30	Peds	0				0				0				0				0
	Auto	0	3	67	4	0	21	65	5	0	10	1	6	0	3	2	27	214
	Sm truck	0	0	2	0	0	0	4	0	0	0	0	3	0	0	0	1	10
	Lg Truck	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
10:45	Peds	0				0				0				0				0
	Auto	0	5	71	6	0	11	60	8	0	12	4	3	0	3	5	26	214
	Sm truck	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	2	6
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	2	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	12	281	23	0	68	216	19	0	40	10	16	0	17	8	102	812
	Sm truck	0	2	7	1	0	2	11	1	0	1	0	5	0	0	0	4	34
	Lg Truck	0	3	6	0	0	1	3	1	0	0	0	4	0	0	0	1	19
	ALL	0	17	294	24	0	71	230	21	0	41	10	25	0	17	8	107	865
	% ALL	0.0	2.0	34.0	2.8	0.0	8.2	26.6	2.4	0.0	4.7	1.2	2.9	0.0	2.0	0.9	12.4	100.0
11:00	Peds	0				0				0				0				0
	Auto	0	2	36	1	0	5	29	3	0	7	1	1	0	2	1	5	93
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
11:15	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	Peds	0				0				0				0				0
	Auto	0	11	81	6	0	18	75	4	0	6	4	6	1	2	6	18	238
	Sm truck	0	0	1	0	0	0	3	1	0	0	0	1	0	0	1	0	7
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	4
11:45	Peds	0				0				0				0				0
	Auto	0	0	2	0	0	3	6	0	0	0	0	0	0	0	0	0	11
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	13	119	7	0	26	110	7	0	13	5	7	1	4	7	23	342
	Sm truck	0	0	1	0	0	0	3	1	0	0	0	1	0	0	1	0	7
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	1	0	0	0	1	5
	ALL	0	13	121	7	0	26	115	8	0	13	5	9	1	4	8	24	354
	% ALL	0.0	3.7	34.2	2.0	0.0	7.3	32.5	2.3	0.0	3.7	1.4	2.5	0.3	1.1	2.3	6.8	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	0	47	5	0	28	75	7	0	11	5	0	0	0	7	26	211
	Sm truck	0	0	3	1	0	0	4	0	0	0	0	0	0	0	1	1	10
	Lg Truck	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15	Peds	0				0				0				0				0
	Auto	0	3	67	5	0	32	48	4	0	11	4	2	0	8	6	16	206
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	3
	Lg Truck	0	2	5	0	0	0	1	0	0	0	0	0	0	0	0	0	8
12:30	Peds	0				0				0				0				0
	Auto	0	6	97	8	0	25	66	7	0	11	8	5	0	2	0	40	275
	Sm truck	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	1	4
	Lg Truck	0	2	1	0	0	1	3	0	0	0	0	0	0	0	0	0	7
12:45	Peds	0				0				0				0				0
	Auto	0	1	89	4	0	29	81	8	0	16	3	1	0	3	8	37	280
	Sm truck	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	300	22	0	114	270	26	0	49	20	8	0	13	21	119	972
	Sm truck	0	1	7	1	0	0	6	0	0	3	0	0	0	0	1	3	22
	Lg Truck	0	4	9	1	0	1	6	0	0	0	0	0	0	0	0	0	21
	ALL	0	15	316	24	0	115	282	26	0	52	20	8	0	13	22	122	1015
	% ALL	0.0	1.5	31.1	2.4	0.0	11.3	27.8	2.6	0.0	5.1	2.0	0.8	0.0	1.3	2.2	12.0	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
13:00	Peds	0				0				0				0				0
	Auto	0	2	69	11	0	29	58	3	0	7	8	1	0	15	11	28	242
	Sm truck	0	2	4	1	0	1	2	0	0	0	0	0	0	0	0	1	11
	Lg Truck	0	2	3	0	0	0	3	0	0	0	0	0	0	0	0	0	8
13:15	Peds	0				0				0				0				0
	Auto	0	2	76	4	0	34	71	1	0	9	0	0	0	6	7	48	258
	Sm truck	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	1	8
	Lg Truck	0	2	5	0	0	0	1	0	0	0	0	1	0	0	0	1	10
13:30	Peds	0				0				0				0				0
	Auto	0	8	86	2	0	29	83	6	0	10	5	2	0	3	1	20	255
	Sm truck	0	2	1	1	0	0	4	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	5
13:45	Peds	0				0				0				0				0
	Auto	0	5	94	3	0	18	102	0	0	5	4	3	0	0	5	22	261
	Sm truck	0	1	1	1	0	1	5	0	0	0	0	0	0	0	0	1	10
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	17	325	20	0	110	314	10	0	31	17	6	0	24	24	118	1016
	Sm truck	0	5	6	3	0	2	17	1	0	0	0	0	0	0	0	4	38
	Lg Truck	0	4	10	0	0	0	8	0	0	0	0	3	0	0	0	1	26
	ALL	0	26	341	23	0	112	339	11	0	31	17	9	0	24	24	123	1080
	% ALL	0.0	2.4	31.6	2.1	0.0	10.4	31.4	1.0	0.0	2.9	1.6	0.8	0.0	2.2	2.2	11.4	100.0
14:00	Peds	0				0				0				0				0
	Auto	0	5	82	7	0	40	61	4	0	6	9	3	0	3	5	29	254
	Sm truck	0	0	5	1	0	2	4	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3
14:15	Peds	0				0				0				0				0
	Auto	0	3	67	3	0	28	61	2	0	4	9	2	0	0	5	54	238
	Sm truck	0	1	6	0	0	0	2	0	0	0	0	1	0	0	2	0	12
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	3
14:30	Peds	0				0				0				0				0
	Auto	0	10	81	6	0	11	61	3	0	6	12	3	0	4	2	36	235
	Sm truck	0	0	3	0	0	1	1	0	0	1	0	0	0	0	0	0	6
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	1	0	0	1	0	9
14:45	Peds	0				0				0				0				0
	Auto	0	3	82	7	0	25	64	6	0	11	9	1	0	3	2	36	249
	Sm truck	0	0	3	2	0	0	3	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	21	312	23	0	104	247	15	0	27	39	9	0	10	14	155	976
	Sm truck	0	1	17	3	0	3	10	0	0	1	0	1	0	0	2	1	39
	Lg Truck	0	0	7	0	0	1	6	0	0	0	0	3	0	1	1	0	19
	ALL	0	22	336	26	0	108	263	15	0	28	39	13	0	11	17	156	1034
	% ALL	0.0	2.1	32.5	2.5	0.0	10.4	25.4	1.5	0.0	2.7	3.8	1.3	0.0	1.1	1.6	15.1	100.0
15:00	Peds	0				0				0				0				0
	Auto	0	5	73	5	0	26	69	3	0	7	7	2	0	3	9	48	257
	Sm truck	0	0	5	1	0	1	2	0	0	1	0	1	0	0	1	2	14
	Lg Truck	0	1	2	1	0	0	1	0	0	0	0	3	0	0	0	0	8
15:15	Peds	0				0				0				0				0
	Auto	0	5	86	9	0	29	81	4	0	18	12	3	0	6	11	43	307
	Sm truck	0	1	3	0	0	1	3	0	0	0	0	0	0	0	1	2	11
	Lg Truck	0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	6
15:30	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	Peds	0				0				0				0				0
	Auto	0	4	67	8	0	34	124	7	0	13	22	5	0	4	7	48	343
	Sm truck	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	3	0	0	0	7	0	0	0	0	1	0	0	0	0	11
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	14	226	22	0	89	274	14	0	38	41	10	0	13	27	139	907
	Sm truck	0	1	14	1	0	2	7	0	0	1	0	1	0	0	2	4	33
	Lg Truck	0	2	6	1	0	0	12	0	0	0	0	4	0	0	0	0	25
	ALL	0	17	246	24	0	91	293	14	0	39	41	15	0	13	29	143	965
	% ALL	0.0	1.8	25.5	2.5	0.0	9.4	30.4	1.5	0.0	4.0	4.2	1.6	0.0	1.3	3.0	14.8	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	3	95	5	0	36	133	6	0	12	26	10	0	6	4	50	386
	Sm truck	0	0	4	0	0	3	4	0	0	0	0	0	0	0	0	1	12
	Lg Truck	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16:15	Peds	0				0				0				0				0
	Auto	0	3	86	6	0	60	114	7	0	17	35	5	0	5	7	49	394
	Sm truck	0	0	4	0	0	0	1	0	0	0	1	0	0	0	1	0	7
	Lg Truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
16:30	Peds	0				0				0				0				0
	Auto	0	5	105	5	0	67	120	5	0	7	24	6	0	2	7	34	387
	Sm truck	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	2	9
	Lg Truck	0	1	3	0	0	0	3	1	0	0	1	0	0	0	0	0	9
16:45	Peds	0				0				0				0				0
	Auto	0	9	111	8	0	59	123	5	0	16	13	6	0	5	18	34	407
	Sm truck	0	0	1	1	0	0	4	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	20	397	24	0	222	490	23	0	52	98	27	0	18	36	167	1574
	Sm truck	0	0	15	1	0	4	9	0	0	0	1	0	0	0	1	3	34
	Lg Truck	0	5	9	0	0	0	10	1	0	0	1	0	0	0	0	0	26
	ALL	0	25	421	25	0	226	509	24	0	52	100	27	0	18	37	170	1634
	% ALL	0.0	1.5	25.8	1.5	0.0	13.8	31.2	1.5	0.0	3.2	6.1	1.7	0.0	1.1	2.3	10.4	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	3	68	4	0	40	142	4	0	6	8	1	0	4	18	36	334
	Sm truck	0	0	2	1	0	0	3	0	0	0	0	0	0	0	1	1	8
	Lg Truck	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17:15	Peds	0				0				0				0				0
	Auto	0	13	93	6	0	37	124	12	0	15	12	4	0	3	17	35	371
	Sm truck	0	0	2	0	0	1	4	0	0	0	1	0	0	1	0	1	10
	Lg Truck	0	1	2	0	0	4	3	0	0	0	0	0	0	0	0	1	11
17:30	Peds	0				0				0				0				0
	Auto	0	3	79	2	0	26	84	5	0	6	13	3	0	1	3	23	248
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	2	7
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
17:45	Peds	0				0				0				0				0
	Auto	0	10	82	4	0	34	65	4	0	14	10	2	0	1	8	33	267
	Sm truck	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	29	322	16	0	137	415	25	0	41	43	10	0	9	46	127	1220
	Sm truck	0	0	7	2	0	2	11	0	0	0	1	0	0	1	1	4	29
	Lg Truck	0	2	11	0	0	5	4	0	0	0	0	0	0	0	0	1	23
	ALL	0	31	340	18	0	144	430	25	0	41	44	10	0	10	47	132	1272
	% ALL	0.0	2.4	26.7	1.4	0.0	11.3	33.8	2.0	0.0	3.2	3.5	0.8	0.0	0.8	3.7	10.4	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	12	62	2	0	21	69	3	0	13	6	3	0	3	10	9	213
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	3
	Lg Truck	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
18:15	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	Peds	0				0				0				0				0
	Auto	0	6	66	12	0	37	59	4	0	10	9	3	0	3	9	12	230
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	3	0	0	5
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
18:45	Peds	0				0				0				0				0
	Auto	0	4	76	1	0	20	78	2	0	3	9	0	0	2	5	43	243
	Sm truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	22	204	15	0	78	206	9	0	26	24	6	0	8	24	64	686
	Sm truck	0	0	4	0	0	0	5	0	0	0	0	1	0	3	0	1	14
	Lg Truck	0	1	1	0	0	0	6	0	0	0	0	1	0	0	0	0	9
	ALL	0	23	209	15	0	78	217	9	0	26	24	8	0	11	24	65	709
	% ALL	0.0	3.2	29.5	2.1	0.0	11.0	30.6	1.3	0.0	3.7	3.4	1.1	0.0	1.6	3.4	9.2	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	2	82	4	0	32	45	5	0	12	11	2	0	3	5	55	258
	Sm truck	0	1	2	1	0	0	0	0	0	0	1	0	0	0	0	0	5
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	4
19:15	Peds	0				0				0				0				0
	Auto	0	3	62	2	0	23	75	2	0	10	2	1	0	9	9	40	238
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	4
19:30	Peds	0				0				0				0				0
	Auto	0	0	41	3	0	27	57	2	0	10	5	0	0	3	7	25	180
	Sm truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	Peds	0				0				0				0				0
	Auto	0	6	53	4	0	26	55	4	0	4	4	1	0	3	4	24	188
	Sm truck	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	11	238	13	0	108	232	13	0	36	22	4	0	18	25	144	864
	Sm truck	0	1	12	1	0	0	3	0	0	0	1	0	0	0	0	0	18
	Lg Truck	0	1	4	0	0	0	2	0	0	0	3	1	0	0	0	0	11
	ALL	0	13	254	14	0	108	237	13	0	36	26	5	0	18	25	144	893
	% ALL	0.0	1.5	28.4	1.6	0.0	12.1	26.5	1.5	0.0	4.0	2.9	0.6	0.0	2.0	2.8	16.1	100.0
20:00	Peds	0				0				0				0				0
	Auto	0	2	44	5	0	12	44	4	0	3	2	2	0	8	5	23	154
	Sm truck	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
20:15	Peds	0				0				0				0				0
	Auto	0	1	44	3	0	25	56	2	0	4	1	1	0	2	8	24	171
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
20:30	Peds	0				0				0				0				0
	Auto	0	2	54	3	0	20	81	3	0	5	2	0	0	3	7	28	208
	Sm truck	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	Peds	0				0				0				0				0
	Auto	0	5	74	3	0	17	68	2	0	3	2	2	0	3	2	19	200
	Sm truck	0	1	3	0	0	0	1	0	0	0	1	0	0	0	0	1	7
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	216	14	0	74	249	11	0	15	7	5	0	16	22	94	733
	Sm truck	0	1	10	1	0	0	4	0	0	0	1	0	0	0	0	1	18
	Lg Truck	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
	ALL	0	11	230	15	0	74	255	11	0	15	8	5	0	16	22	95	757
	% ALL	0.0	1.5	30.4	2.0	0.0	9.8	33.7	1.5	0.0	2.0	1.1	0.7	0.0	2.1	2.9	12.5	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Jun 5 2008

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	71	1267	57	0	264	889	83	0	167	45	52	1	70	68	428	3462
%	0.0	1.9	34.5	1.6	0.0	7.2	24.2	2.3	0.0	4.6	1.2	1.4	0.0	1.9	1.9	11.7	94.3
Sm truck	0	7	26	7	0	15	54	3	0	5	1	8	0	2	3	15	146
%	0.0	0.2	0.7	0.2	0.0	0.4	1.5	0.1	0.0	0.1	0.0	0.2	0.0	0.1	0.1	0.4	4.0
Lg truck	0	5	22	0	0	2	17	2	0	0	0	9	0	1	0	4	62
%	0.0	0.1	0.6	0.0	0.0	0.1	0.5	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	1.7
All	0	83	1315	64	0	281	960	88	0	172	46	69	1	73	71	447	3670
% ALL	0.0	2.3	35.8	1.7	0.0	7.7	26.2	2.4	0.0	4.7	1.3	1.9	0.0	2.0	1.9	12.2	100.0

PM Count Summary Date: Jun 5 2008

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	154	2540	169	0	1036	2697	146	0	315	311	85	0	129	239	1127	8948
%	0.0	1.6	27.1	1.8	0.0	11.1	28.8	1.6	0.0	3.4	3.3	0.9	0.0	1.4	2.6	12.0	95.6
Sm truck	0	10	92	13	0	13	72	1	0	5	4	3	0	4	7	21	245
%	0.0	0.1	1.0	0.1	0.0	0.1	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	2.6
Lg truck	0	19	61	2	0	7	56	1	0	0	4	12	0	1	1	2	166
%	0.0	0.2	0.7	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.8
All	0	183	2693	184	0	1056	2825	148	0	320	319	100	0	134	247	1150	9359
% ALL	0.0	2.0	28.8	2.0	0.0	11.3	30.2	1.6	0.0	3.4	3.4	1.1	0.0	1.4	2.6	12.3	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	225	3807	226	0	1300	3586	229	0	482	356	137	1	199	307	1555	12410
%	0.0	1.7	29.2	1.7	0.0	10.0	27.5	1.8	0.0	3.7	2.7	1.1	0.0	1.5	2.4	11.9	95.2
Sm truck	0	17	118	20	0	28	126	4	0	10	5	11	0	6	10	36	391
%	0.0	0.1	0.9	0.2	0.0	0.2	1.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.3	3.0
Lg truck	0	24	83	2	0	9	73	3	0	0	4	21	0	2	1	6	228
%	0.0	0.2	0.6	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.7
All	0	266	4008	248	0	1337	3785	236	0	492	365	169	1	207	318	1597	13029
% ALL	0.0	2.0	30.8	1.9	0.0	10.3	29.1	1.8	0.0	3.8	2.8	1.3	0.0	1.6	2.4	12.3	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	293	4949	294	0	1690	4662	298	0	627	463	178	1	259	399	2022	16133
%	0.0	1.7	29.2	1.7	0.0	10.0	27.5	1.8	0.0	3.7	2.7	1.1	0.0	1.5	2.4	11.9	95.2
Sm truck	0	22	153	26	0	36	164	5	0	13	7	14	0	8	13	47	508
%	0.0	0.2	1.2	0.2	0.0	0.3	1.3	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.4	3.9
Lg truck	0	31	108	3	0	12	95	4	0	0	5	27	0	3	1	8	296
%	0.0	0.2	0.8	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	2.3
All	0	346	5210	322	0	1738	4921	307	0	640	475	220	1	269	413	2076	16938
% ALL	0.0	2.0	30.8	1.9	0.0	10.3	29.1	1.8	0.0	3.8	2.8	1.3	0.0	1.6	2.4	12.3	100.0

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	225	3807	226	0	1300	3586	229	0	482	356	137	1	199	307	1555	12410
%	0.0	1.7	29.2	1.7	0.0	10.0	27.5	1.8	0.0	3.7	2.7	1.1	0.0	1.5	2.4	11.9	95.2
Sm truck	0	17	118	20	0	28	126	4	0	10	5	11	0	6	10	36	391
%	0.0	0.1	0.9	0.2	0.0	0.2	1.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.3	3.0
Lg truck	0	24	83	2	0	9	73	3	0	0	4	21	0	2	1	6	228
%	0.0	0.2	0.6	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.7
All	0	266	4008	248	0	1337	3785	236	0	492	365	169	1	207	318	1597	13029
% ALL	0.0	2.0	30.8	1.9	0.0	10.3	29.1	1.8	0.0	3.8	2.8	1.3	0.0	1.6	2.4	12.3	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period				TOTAL				8683				North ↑			
Morning:				Lg Truck %				2.4							
Afternoon:															
				Peds from North =				0							
				APPROACH				4522							
				DEPART				4161							
				RtRed Right Thru Left				Left Thru Right RtRed							
				0 248 4008 266				207 3785 169 0							
DEPART				RtRed				0				0 RtRed			
1950												APPROACH			
				Right				248				169 Right			
				Thru				365				365 Thru			
												Peds from East =			
												0			
TOTAL				4073				Left 1337				492 Left			
Lg Truck %				0.6				Left 207				266 Left			
Peds from West =				Thru				318				318 Thru			
0				Right				1597				236 Right			
APPROACH				RtRed				1				0 RtRed			
2123												DEPART			
				1 1597 4008 492				1337 3785 236 0				0 RtRed			
				RtRed Right Thru Left				Left Thru Right RtRed							
				DEPART				6098				APPROACH			
												5358			
												Peds from South =			
												0			
				TOTAL				11456							
				Lg Truck %				1.5							

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



LOCATION: PTH 10 & KIRKALDY DR (PR 459) - BRANDON

DATE: Mon Day Year
Morning: Jun 5 2008
Afternoon: Jun 5 2008Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	293	4949	294	0	1690	4662	298	0	627	463	178	1	259	399	2022	16133
%	0.0	1.7	29.2	1.7	0.0	10.0	27.5	1.8	0.0	3.7	2.7	1.1	0.0	1.5	2.4	11.9	95.2
Sm truck	0	22	153	26	0	36	164	5	0	13	7	14	0	8	13	47	508
%	0.0	0.2	1.2	0.2	0.0	0.3	1.3	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.4	3.9
Lg truck	0	31	108	3	0	12	95	4	0	0	5	27	0	3	1	8	296
%	0.0	0.2	0.8	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	2.3
All	0	346	5210	322	0	1738	4921	307	0	640	475	220	1	269	413	2076	16938
% ALL	0.0	2.0	30.8	1.9	0.0	10.3	29.1	1.8	0.0	3.8	2.8	1.3	0.0	1.6	2.4	12.3	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period MON DAY YEAR				TOTAL 11288				Lg Truck % 2.4				North			
Morning: Jun 5 2008				Peds from North = 0											
Afternoon: Jun 5 2008				APPROACH 5879				DEPART 5409							
				RtRed Right Thru Left				Left Thru Right RtRed							
				0 322 5210 346				269 4921 220 0							
DEPART 2535				RtRed 0				0 RtRed APPROACH 1334							
				Right 322				220 Right							
				Thru 475				475 Thru				Peds from East = 0			
TOTAL 5295				Left 1738				640 Left TOTAL 2400							
Lg Truck % 0.6				Left 269				346 Left Lg Truck % 2.9							
Peds from West = 0				Thru 413				413 Thru							
				Right 2076				307 Right							
APPROACH 2760				RtRed 1				0 RtRed DEPART 1066							
				1 2076 5210 640				1738 4921 307 0							
				RtRed Right Thru Left				Left Thru Right RtRed							
				DEPART 7927				APPROACH 6965							
				Peds from South = 0											
				TOTAL 14893				Lg Truck % 1.5							

Comment: This file is merged from counts taken on the morning of Jun 5 and the afternoon of Jun 5, 2008.



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Miovision turning movement count analysis
PTH 10 & KIRKALDY DR
Apr 30, 2013 & May 01, 2013

Requested by
Date

Report prepared by
Date

Comments
N/A

Note: These miovision counts are taken in 15 minutes intervals for a total of 24 hours in one count. The Miovision count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2015 Traffic on Manitoba Highways report*) as follows:

Miovision Class	Equivalent FHWA Scheme F
Car	FHWA Classes 2 and 3*
Medium	FHWA Classes 4 to 7
Heavy	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: PTH 10 & KIRKALDY DR

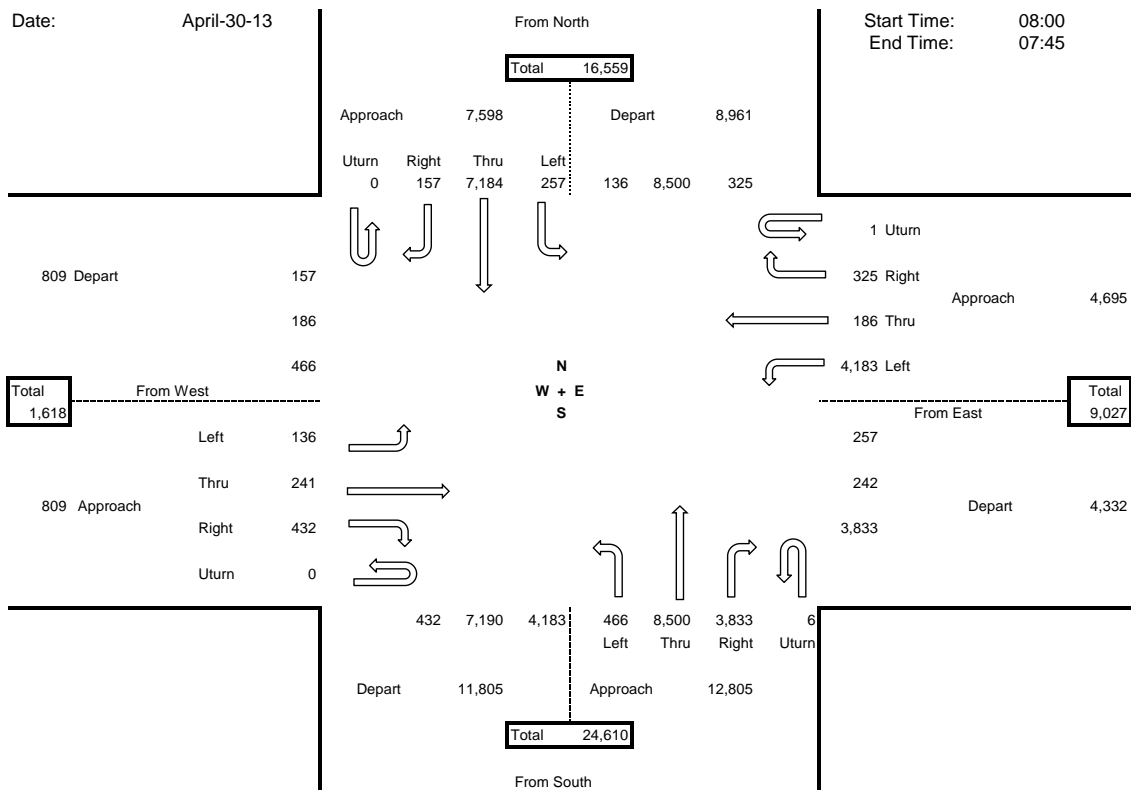
DATE: Mon Day Year Start Time
Start time: Apr 30 2013 08:00
End time: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

24 Hour Count Summary

	Southbound					Westbound					Northbound					Eastbound					Interval
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	total
Auto	156	6991	240	0	7387	307	183	4120	1	4611	3763	8272	462	6	12503	431	238	135	0	804	25305
%	0.6	27.0	0.9	0.0	28.5	1.2	0.7	15.9	0.0	17.8	14.5	31.9	1.8	0.0	48.3	1.7	0.9	0.5	0.0	3.1	98
Sm truck	1	117	4	0	122	7	2	30	0	39	34	138	3	0	175	1	0	1	0	2	338
%	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.2	0.1	0.5	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1
Lg truck	0	76	13	0	89	11	1	33	0	45	36	90	1	0	127	0	3	0	0	3	264
%	0.0	0.3	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.2	0.1	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1
All	157	7184	257	0	7598	325	186	4183	1	4695	3833	8500	466	6	12805	432	241	136	0	809	25907
% ALL	0.6	27.7	1.0	0.0	29.3	1.3	0.7	16.1	0.0	18.1	14.8	32.8	1.8	0.0	49.4	1.7	0.9	0.5	0.0	3.1	100

24 Hour Count

Turning Movement for Total Intersection



Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
08:00	Total	1	115	3	0	119	4	1	49	0	54	46	115	12	0	173	16	4	4	0	24	370
	Auto	1	112	2	0	115	4	1	45	0	50	46	109	12	0	167	16	3	4	0	23	355
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
	Lg Truck	0	2	1	0	3	0	0	4	0	4	0	2	0	0	2	0	1	0	0	1	10
08:15	Total	2	112	3	0	117	3	4	53	0	60	48	88	4	0	140	6	3	4	0	13	330
	Auto	2	109	3	0	114	3	4	52	0	59	48	86	4	0	138	6	3	4	0	13	324
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	4
08:30	Total	0	143	3	0	146	7	1	58	0	66	59	123	10	0	192	14	10	2	0	26	430
	Auto	0	141	2	0	143	7	1	57	0	65	56	113	10	0	179	14	10	2	0	26	413
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	9
	Lg Truck	0	1	1	0	2	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	8
08:45	Total	4	117	4	0	125	1	3	46	0	50	34	139	5	0	178	7	8	2	0	17	370
	Auto	4	115	4	0	123	1	3	45	0	49	32	134	5	0	171	7	8	2	0	17	360
	Sm truck	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	6
Hour	Total	7	487	13	0	507	15	9	206	0	230	187	465	31	0	683	43	25	12	0	80	1500
	Auto	7	477	11	0	495	15	9	199	0	223	182	442	31	0	655	43	24	12	0	79	1452
	Sm truck	0	4	0	0	4	0	0	1	0	1	1	14	0	0	15	0	0	0	0	0	20
	Lg Truck	0	6	2	0	8	0	0	6	0	6	4	9	0	0	13	0	1	0	0	1	28
% ALL		0	32	1	0	34	1	1	14	0	15	12	31	2	0	46	3	2	1	0	5	100
09:00	Total	3	94	3	0	100	4	2	33	0	39	47	117	4	0	168	6	1	0	0	7	314
	Auto	3	89	2	0	94	4	1	29	0	34	43	113	4	0	160	6	1	0	0	7	295
	Sm truck	0	2	1	0	3	0	1	3	0	4	3	2	0	0	5	0	0	0	0	0	12
	Lg Truck	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	7
09:15	Total	2	97	2	0	101	9	1	46	0	56	48	85	3	0	136	6	5	5	0	16	309
	Auto	2	91	1	0	94	8	1	46	0	55	48	81	3	0	132	6	5	4	0	15	296
	Sm truck	0	4	1	0	5	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	10
	Lg Truck	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
09:30	Total	1	110	7	0	118	4	1	44	0	49	42	98	5	0	145	9	7	2	0	18	330
	Auto	1	105	7	0	113	4	1	44	0	49	38	91	5	0	134	8	7	2	0	17	313
	Sm truck	0	4	0	0	4	0	0	0	0	0	2	6	0	0	8	1	0	0	0	1	13
	Lg Truck	0	1	0	0	1	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	4
09:45	Total	3	123	4	0	130	8	2	48	0	58	53	107	9	0	169	10	3	0	0	13	370
	Auto	3	118	4	0	125	7	2	47	0	56	51	105	8	0	164	10	3	0	0	13	358
	Sm truck	0	4	0	0	4	1	0	1	0	2	1	2	1	0	4	0	0	0	0	0	10
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Hour	Total	9	424	16	0	449	25	6	171	0	202	190	407	21	0	618	31	16	7	0	54	1323
	Auto	9	403	14	0	426	23	5	166	0	194	180	390	20	0	590	30	16	6	0	52	1262
	Sm truck	0	14	2	0	16	1	1	4	0	6	6	14	1	0	21	1	0	1	0	2	45
	Lg Truck	0	7	0	0	7	1	0	1	0	2	4	3	0	0	7	0	0	0	0	0	16
% ALL		1	32	1	0	34	2	0	13	0	15	14	31	2	0	47	2	1	1	0	4	100
10:00	Total	1	111	9	0	121	0	5	54	0	59	52	106	1	0	159	6	3	3	0	12	351
	Auto	1	107	8	0	116	0	5	53	0	58	49	103	1	0	153	6	3	3	0	12	339
	Sm truck	0	1	0	0	1	0	0	1	0	1	2	3	0	0	5	0	0	0	0	0	7
	Lg Truck	0	3	1	0	4	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5
10:15	Total	1	96	3	0	100	2	2	57	0	61	50	126	0	0	176	3	3	0	0	6	343
	Auto	1	95	3	0	99	2	2	56	0	60	49	123	0	0	172	3	3	0	0	6	337
	Sm truck	0	0	0	0	0	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
10:30	Total	0	113	3	0	116	1	1	68	0	70	46	118	3	0	167	3	7	4	0	14	367
	Auto	0	103	2	0	105	1	1	65	0	67	42	114	3	0	159	3	7	4	0	14	345
	Sm truck	0	5	0	0	5	0	0	0	0	0	2	4	0	0	6	0	0	0	0	0	11
	Lg Truck	0	5	1	0	6	0	0	3	0	3	2	0	0	0	2	0	0	0	0	0	11
10:45	Total	6	95	6	0	107	2	0	59	0	61	55	125	7	0	187	5	2	4	0	11	366
	Auto	6	93	6	0	105	2	0	59	0	61	55	121	7	0	183	5	2	4	0	11	360
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Hour	Total	8	415	21	0	444	5	8	238	0	251	203	475	11	0	689	17	15	11	0	43	1427
	Auto	8	398	19	0	425	5	8	233	0	246	195	461	11	0	667	17	15	11	0	43	1381
	Sm truck	0	6	0	0	6	0	0	2	0	2	5	12	0	0	17	0	0	0	0	0	25
	Lg Truck	0	11	2	0	13	0	0	3	0	3	3	2	0	0	5	0	0	0	0	0	21
% ALL		1	29	1	0	31	0	1	17	0	18	14	33	1	0	48	1	1	1	0	3	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00	Total	6	123	7	0	136	4	0	62	0	66	62	154	7	0	223	12	3	3	0	18	443
	Auto	6	119	6	0	131	4	0	60	0	64	60	149	7	0	216	12	3	3	0	18	429
	Sm truck	0	2	0	0	2	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	6
	Lg Truck	0	2	1	0	3	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	8
11:15	Total	2	132	3	0	137	3	1	82	0	86	74	127	5	1	207	5	3	2	0	10	440
	Auto	2	127	2	0	131	2	1	80	0	83	71	124	5	1	201	5	3	2	0	10	425
	Sm truck	0	3	1	0	4	0	0	2	0	2	3	3	0	0	6	0	0	0	0	0	12
	Lg Truck	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
11:30	Total	2	133	4	0	139	4	4	70	0	78	68	130	3	0	201	5	4	1	0	10	428
	Auto	2	132	4	0	138	3	4	67	0	74	66	126	3	0	195	5	4	1	0	10	417
	Sm truck	0	0	0	0	0	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	6
11:45	Total	2	142	4	0	148	7	1	59	0	67	69	171	7	0	247	7	5	0	0	12	474
	Auto	2	139	4	0	145	7	1	59	0	67	69	166	7	0	242	7	5	0	0	12	466
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Total	12	530	18	0	560	18	6	273	0	297	273	582	22	1	878	29	15	6	0	50	1785
	Auto	12	517	16	0	545	16	6	266	0	288	266	565	22	1	854	29	15	6	0	50	1737
	Sm truck	0	7	1	0	8	0	0	4	0	4	5	13	0	0	18	0	0	0	0	0	30
	Lg Truck	0	6	1	0	7	2	0	3	0	5	2	4	0	0	6	0	0	0	0	0	18
% ALL		1	30	1	0	31	1	0	15	0	17	15	33	1	0	49	2	1	0	0	3	100
12:00	Total	3	108	5	0	116	9	6	79	0	94	77	171	10	0	258	7	3	3	0	13	481
	Auto	3	106	5	0	114	9	6	78	0	93	75	167	10	0	252	7	3	3	0	13	472
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	3
12:15	Total	4	125	8	0	137	8	6	59	1	74	71	119	5	0	195	4	6	1	0	11	417
	Auto	4	124	8	0	136	8	6	57	1	72	70	116	5	0	191	4	6	1	0	11	410
	Sm truck	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	3
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
12:30	Total	6	149	1	0	156	18	1	90	0	109	71	108	7	0	186	9	6	4	0	19	470
	Auto	6	143	1	0	150	17	1	88	0	106	69	101	7	0	177	9	6	4	0	19	452
	Sm truck	0	5	0	0	5	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	8
	Lg Truck	0	1	0	0	1	0	0	2	0	2	1	6	0	0	7	0	0	0	0	0	10
12:45	Total	4	126	9	0	139	13	6	78	0	97	86	190	8	0	284	6	3	2	0	11	531
	Auto	4	123	8	0	135	13	6	78	0	97	86	188	8	0	282	6	3	2	0	11	525
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
	Lg Truck	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Total	17	508	23	0	548	48	19	306	1	374	305	588	30	0	923	26	18	10	0	54	1899
	Auto	17	496	22	0	535	47	19	301	1	368	300	572	30	0	902	26	18	10	0	54	1859
	Sm truck	0	9	0	0	9	1	0	3	0	4	2	6	0	0	8	0	0	0	0	0	21
	Lg Truck	0	3	1	0	4	0	0	2	0	2	3	10	0	0	13	0	0	0	0	0	19
% ALL		1	27	1	0	29	3	1	16	0	20	16	31	2	0	49	1	1	1	0	3	100
13:00	Total	1	141	2	0	144	8	5	85	0	98	73	191	9	0	273	7	7	1	0	15	530
	Auto	1	137	2	0	140	7	5	84	0	96	72	182	9	0	263	7	7	1	0	15	514
	Sm truck	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
	Lg Truck	0	1	0	0	1	1	0	1	0	2	1	6	0	0	7	0	0	0	0	0	10
13:15	Total	3	124	5	0	132	5	5	72	0	82	72	180	7	0	259	11	8	6	0	25	498
	Auto	3	119	5	0	127	4	4	71	0	79	71	177	7	0	255	11	8	6	0	25	486
	Sm truck	0	4	0	0	4	0	1	1	0	2	1	2	0	0	3	0	0	0	0	0	9
	Lg Truck	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
13:30	Total	2	124	3	0	129	4	7	79	0	90	74	151	4	0	229	7	6	1	0	14	462
	Auto	2	119	3	0	124	4	7	75	0	86	73	145	4	0	222	7	6	1	0	14	446
	Sm truck	0	4	0	0	4	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	9
	Lg Truck	0	1	0	0	1	0	0	3	0	3	1	2	0	0	3	0	0	0	0	0	7
13:45	Total	0	120	5	0	125	7	1	75	0	83	65	177	10	0	252	7	3	2	0	12	472
	Auto	0	119	5	0	124	7	1	74	0	82	65	176	10	0	251	7	3	2	0	12	469
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Total	6	509	15	0	530	24	18	311	0	353	284	699	30	0	1013	32	24	10	0	66	1962
	Auto	6	494	15	0	515	22	17	304	0	343	281	680	30	0	991	32	24	10	0	66	1915
	Sm truck	0	11	0	0	11	0	1	3	0	4	1	10	0	0	11	0	0	0	0	0	26
	Lg Truck	0	4	0	0	4	2	0	4	0	6	2	9	0	0	11	0	0	0	0	0	21
% ALL		0	26	1	0	27	1	1	16	0	18	14	36	2	0	52	2	1	1	0	3	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
14:00	Total	3	129	5	0	137	7	1	83	0	91	72	140	5	0	217	4	0	0	0	4	449
	Auto	3	125	5	0	133	6	1	81	0	88	71	134	5	0	210	4	0	0	0	4	435
	Sm truck	0	4	0	0	4	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	6
14:15	Total	1	121	5	0	127	12	1	72	0	85	55	142	5	0	202	5	3	0	0	8	422
	Auto	1	116	5	0	122	12	1	69	0	82	55	137	5	0	197	5	3	0	0	8	409
	Sm truck	0	4	0	0	4	0	0	3	0	3	0	3	0	0	3	0	0	0	0	0	10
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
14:30	Total	4	121	2	0	127	5	1	80	0	86	72	176	9	0	257	5	1	1	0	7	477
	Auto	4	121	2	0	127	5	1	79	0	85	71	171	9	0	251	5	1	1	0	7	470
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
14:45	Total	1	138	7	0	146	6	1	89	0	96	68	180	4	0	252	5	4	3	0	12	506
	Auto	1	138	7	0	146	6	1	89	0	96	67	177	4	0	248	5	4	3	0	12	502
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Hour	Total	9	509	19	0	537	30	4	324	0	358	267	638	23	0	928	19	8	4	0	31	1854
	Auto	9	500	19	0	528	29	4	318	0	351	264	619	23	0	906	19	8	4	0	31	1816
	Sm truck	0	8	0	0	8	1	0	5	0	6	0	13	0	0	13	0	0	0	0	0	27
	Lg Truck	0	1	0	0	1	0	0	1	0	1	3	6	0	0	9	0	0	0	0	0	11
% ALL		0	27	1	0	29	2	0	17	0	19	14	34	1	0	50	1	0	0	0	2	100
15:00	Total	1	161	5	0	167	9	6	109	0	124	74	163	5	0	242	5	1	0	0	6	539
	Auto	1	158	5	0	164	9	6	108	0	123	72	162	5	0	239	5	1	0	0	6	532
	Sm truck	0	3	0	0	3	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
15:15	Total	1	145	6	0	152	3	4	108	0	115	74	155	13	0	242	9	3	4	0	16	525
	Auto	1	139	5	0	145	2	4	108	0	114	72	151	12	0	235	9	3	4	0	16	510
	Sm truck	0	4	0	0	4	0	0	0	0	0	1	4	1	0	6	0	0	0	0	0	10
	Lg Truck	0	2	1	0	3	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	5
15:30	Total	4	144	8	0	156	10	2	83	0	95	77	162	14	0	253	10	4	6	0	20	524
	Auto	4	140	8	0	152	10	2	82	0	94	74	154	14	0	242	10	4	6	0	20	508
	Sm truck	0	2	0	0	2	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	7
	Lg Truck	0	2	0	0	2	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	9
15:45	Total	5	156	2	0	163	9	2	69	0	80	86	213	18	0	317	16	1	3	0	20	580
	Auto	4	154	2	0	160	9	2	69	0	80	86	206	18	0	310	16	1	3	0	20	570
	Sm truck	1	2	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Hour	Total	11	606	21	0	638	31	14	369	0	414	311	693	50	0	1054	40	9	13	0	62	2168
	Auto	10	591	20	0	621	30	14	367	0	411	304	673	49	0	1026	40	9	13	0	62	2120
	Sm truck	1	11	0	0	12	0	0	1	0	1	5	11	1	0	17	0	0	0	0	0	30
	Lg Truck	0	4	1	0	5	1	0	1	0	2	2	9	0	0	11	0	0	0	0	0	18
% ALL		1	28	1	0	29	1	1	17	0	19	14	32	2	0	49	2	0	1	0	3	100
16:00	Total	3	142	7	0	152	3	4	94	0	101	88	193	10	0	291	2	8	6	0	16	560
	Auto	3	141	7	0	151	1	3	93	0	97	87	189	10	0	286	2	8	6	0	16	550
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	2	1	0	0	3	1	4	0	0	5	0	0	0	0	0	9
16:15	Total	3	150	3	0	156	3	7	104	0	114	114	187	7	0	308	6	8	3	0	17	595
	Auto	3	145	3	0	151	3	7	104	0	114	114	185	7	0	306	6	8	3	0	17	588
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
16:30	Total	4	174	4	0	182	5	11	93	0	109	103	198	19	0	320	22	9	5	0	36	647
	Auto	4	168	4	0	176	5	11	93	0	109	101	194	19	0	314	22	7	5	0	34	633
	Sm truck	0	4	0	0	4	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	9
	Lg Truck	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	5
16:45	Total	3	165	6	0	174	4	8	92	0	104	91	207	12	0	310	9	4	2	0	15	603
	Auto	3	161	4	0	168	4	8	92	0	104	91	204	12	0	307	9	4	2	0	15	594
	Sm truck	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
	Lg Truck	0	0	2	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Hour	Total	13	631	20	0	664	15	30	383	0	428	396	785	48	0	1229	39	29	16	0	84	2405
	Auto	13	615	18	0	646	13	29	382	0	424	393	772	48	0	1213	39	27	16	0	82	2365
	Sm truck	0	10	0	0	10	0	0	1	0	1	1	6	0	0	7	0	0	0	0	0	18
	Lg Truck	0	6	2	0	8	2	1	0	0	3	2	7	0	0	9	0	2	0	0	2	22
% ALL		1	26	1	0	28	1	1	16	0	18	16	33	2	0	51	2	1	1	0	3	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
17:00	Total	4	190	9	0	203	8	4	91	0	103	95	223	14	0	332	11	6	2	0	19	657
	Auto	4	185	9	0	198	8	4	89	0	101	94	215	14	0	323	11	6	2	0	19	641
	Sm truck	0	5	0	0	5	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	6
17:15	Total	3	169	6	0	178	10	5	78	0	93	87	166	12	0	265	10	5	3	0	18	554
	Auto	3	164	5	0	172	8	5	78	0	91	87	161	12	0	260	10	5	3	0	18	541
	Sm truck	0	3	0	0	3	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	6
	Lg Truck	0	2	1	0	3	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	7
17:30	Total	2	162	4	0	168	5	3	96	0	104	86	177	8	0	271	9	3	2	0	14	557
	Auto	2	160	4	0	166	5	3	96	0	104	85	172	8	0	265	9	3	2	0	14	549
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
17:45	Total	2	120	9	0	131	8	3	85	0	96	82	128	11	0	221	7	3	1	0	11	459
	Auto	2	118	8	0	128	8	3	85	0	96	82	127	11	0	220	7	3	1	0	11	455
	Sm truck	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Total	11	641	28	0	680	31	15	350	0	396	350	694	45	0	1089	37	17	8	0	62	2227
	Auto	11	627	26	0	664	29	15	348	0	392	348	675	45	0	1068	37	17	8	0	62	2186
	Sm truck	0	9	1	0	10	1	0	1	0	2	1	10	0	0	11	0	0	0	0	0	23
	Lg Truck	0	5	1	0	6	1	0	1	0	2	1	9	0	0	10	0	0	0	0	0	18
% ALL		0	29	1	0	31	1	1	16	0	18	16	31	2	0	49	2	1	0	0	3	100
18:00	Total	5	114	5	0	124	6	4	88	0	98	84	135	6	0	225	5	5	2	0	12	459
	Auto	5	112	4	0	121	5	4	86	0	95	84	134	6	0	224	5	5	2	0	12	452
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	2
	Lg Truck	0	1	1	0	2	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	5
18:15	Total	0	89	2	0	91	2	2	77	0	81	63	112	8	1	184	3	2	4	0	9	365
	Auto	0	89	2	0	91	2	2	77	0	81	63	111	8	1	183	3	2	4	0	9	364
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	Total	3	106	4	0	113	6	4	72	0	82	60	118	8	0	186	8	4	2	0	14	395
	Auto	3	105	4	0	112	5	4	71	0	80	59	117	8	0	184	8	4	2	0	14	390
	Sm truck	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	3
18:45	Total	2	76	0	0	78	2	1	70	0	73	65	122	4	0	191	5	1	2	0	8	350
	Auto	2	74	0	0	76	2	1	70	0	73	65	120	4	0	189	5	1	2	0	8	346
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	10	385	11	0	406	16	11	307	0	334	272	487	26	1	786	21	12	10	0	43	1569
	Auto	10	380	10	0	400	14	11	304	0	329	271	482	26	1	780	21	12	10	0	43	1552
	Sm truck	0	4	0	0	4	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	9
	Lg Truck	0	1	1	0	2	1	0	2	0	3	1	2	0	0	3	0	0	0	0	0	8
% ALL		1	25	1	0	26	1	1	20	0	21	17	31	2	0	50	1	1	1	0	3	100
19:00	Total	2	81	5	0	88	7	3	89	0	99	60	115	6	1	182	4	0	0	0	4	373
	Auto	2	80	4	0	86	7	3	88	0	98	60	114	6	1	181	4	0	0	0	4	369
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
19:15	Total	1	87	4	0	92	1	3	72	0	76	55	106	3	0	164	4	1	3	0	8	340
	Auto	1	85	4	0	90	1	3	72	0	76	55	106	3	0	164	4	1	3	0	8	338
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	Total	3	79	3	0	85	1	2	69	0	72	71	99	7	0	177	4	5	1	0	10	344
	Auto	3	79	3	0	85	1	2	69	0	72	70	98	7	0	175	4	5	1	0	10	342
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
19:45	Total	0	86	2	0	88	4	1	61	0	66	36	87	0	0	123	6	2	3	0	11	288
	Auto	0	85	2	0	87	4	1	61	0	66	36	86	0	0	122	6	2	3	0	11	286
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hour	Total	6	333	14	0	353	13	9	291	0	313	222	407	16	1	646	18	8	7	0	33	1345
	Auto	6	329	13	0	348	13	9	290	0	312	221	404	16	1	642	18	8	7	0	33	1335
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	2	1	0	3	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	8
% ALL		0	25	1	0	26	1	1	22	0	23	17	30	1	0	48	1	1	1	0	2	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
20:00	Total	5	79	1	0	85	1	1	61	0	63	59	102	5	0	166	3	3	1	0	7	321
	Auto	5	79	1	0	85	1	1	60	0	62	57	101	5	0	163	3	3	1	0	7	317
	Sm truck	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
20:15	Total	0	54	2	0	56	5	2	43	0	50	53	87	4	0	144	5	1	1	0	7	257
	Auto	0	53	2	0	55	5	2	43	0	50	53	87	3	0	143	5	1	1	0	7	255
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	Total	0	61	1	0	62	2	3	61	0	66	39	89	5	1	134	6	1	0	0	7	269
	Auto	0	59	1	0	60	2	3	61	0	66	38	87	5	1	131	6	1	0	0	7	264
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
20:45	Total	4	70	3	0	77	3	2	56	0	61	43	94	2	0	139	1	2	0	0	3	280
	Auto	4	68	3	0	75	3	2	56	0	61	43	94	2	0	139	1	2	0	0	3	278
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	9	264	7	0	280	11	8	221	0	240	194	372	16	1	583	15	7	2	0	24	1127
	Auto	9	259	7	0	275	11	8	220	0	239	191	369	15	1	576	15	7	2	0	24	1114
	Sm truck	0	4	0	0	4	0	0	0	0	0	2	1	1	0	4	0	0	0	0	0	8
	Lg Truck	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	5
% ALL		1	23	1	0	25	1	1	20	0	21	17	33	1	0	52	1	1	0	0	2	100
21:00	Total	2	72	2	0	76	2	3	34	0	39	27	96	3	0	126	6	1	2	0	9	250
	Auto	2	72	2	0	76	2	3	32	0	37	27	91	3	0	121	6	1	2	0	9	243
	Sm truck	0	0	0	0	0	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	5
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
21:15	Total	1	48	1	0	50	1	1	33	0	35	23	72	3	0	98	2	2	1	0	5	188
	Auto	1	48	1	0	50	1	1	33	0	35	23	72	3	0	98	2	2	1	0	5	188
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	Total	4	48	0	0	52	1	2	39	0	42	33	50	5	0	88	3	2	1	0	6	188
	Auto	4	47	0	0	51	1	2	39	0	42	32	50	5	0	87	3	2	1	0	6	186
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
21:45	Total	2	34	0	0	36	1	0	28	0	29	22	56	0	0	78	3	0	1	0	4	147
	Auto	2	33	0	0	35	1	0	28	0	29	21	55	0	0	76	3	0	1	0	4	144
	Sm truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hour	Total	9	202	3	0	214	5	6	134	0	145	105	274	11	0	390	14	5	5	0	24	773
	Auto	9	200	3	0	212	5	6	132	0	143	103	268	11	0	382	14	5	5	0	24	761
	Sm truck	0	1	0	0	1	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	7
	Lg Truck	0	1	0	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	5
% ALL		1	26	0	0	28	1	1	17	0	19	14	35	1	0	50	2	1	1	0	3	100
22:00	Total	1	43	1	0	45	5	3	30	0	38	19	43	4	0	66	0	1	0	0	1	150
	Auto	1	41	1	0	43	4	3	29	0	36	19	42	4	0	65	0	1	0	0	1	145
	Sm truck	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
22:15	Total	0	27	0	0	27	3	1	10	0	14	14	41	2	0	57	0	2	0	0	2	100
	Auto	0	25	0	0	25	3	1	10	0	14	14	40	2	0	56	0	2	0	0	2	97
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
22:30	Total	0	29	0	0	29	0	1	19	0	20	17	41	3	1	62	1	0	0	0	1	112
	Auto	0	29	0	0	29	0	1	19	0	20	16	40	3	1	60	1	0	0	0	1	110
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
22:45	Total	0	22	1	0	23	3	0	10	0	13	12	35	3	0	50	1	0	0	0	1	87
	Auto	0	22	1	0	23	3	0	10	0	13	12	35	3	0	50	1	0	0	0	1	87
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	1	121	2	0	124	11	5	69	0	85	62	160	12	1	235	2	3	0	0	5	449
	Auto	1	117	2	0	120	10	5	68	0	83	61	157	12	1	231	2	3	0	0	5	439
	Sm truck	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	4
	Lg Truck	0	2	0	0	2	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	6
% ALL		0	27	0	0	28	2	1	15	0	19	14	36	3	0	52	0	1	0	0	1	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
23:00	Total	0	28	0	0	28	0	0	8	0	8	8	24	0	0	32	0	0	0	0	0	68
	Auto	0	28	0	0	28	0	0	7	0	7	8	22	0	0	30	0	0	0	0	0	65
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
23:15	Total	0	18	1	0	19	0	1	7	0	8	4	16	1	0	21	0	1	0	0	1	49
	Auto	0	18	1	0	19	0	1	7	0	8	4	15	1	0	20	0	1	0	0	1	48
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	Total	0	11	0	0	11	1	0	5	0	6	5	20	0	0	25	0	1	0	0	1	43
	Auto	0	11	0	0	11	1	0	5	0	6	4	20	0	0	24	0	1	0	0	1	42
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
23:45	Total	0	12	1	0	13	1	0	2	0	3	4	10	0	0	14	0	0	0	0	0	30
	Auto	0	12	1	0	13	1	0	2	0	3	4	10	0	0	14	0	0	0	0	0	30
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	0	69	2	0	71	2	1	22	0	25	21	70	1	0	92	0	2	0	0	2	190
	Auto	0	69	2	0	71	2	1	21	0	24	20	67	1	0	88	0	2	0	0	2	185
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	3
% ALL		0	36	1	0	37	1	1	12	0	13	11	37	1	0	48	0	1	0	0	1	100
00:00	Total	0	6	1	0	7	0	0	4	0	4	6	16	0	0	22	2	0	0	0	2	35
	Auto	0	5	1	0	6	0	0	4	0	4	6	15	0	0	21	2	0	0	0	2	33
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
00:15	Total	0	11	0	0	11	0	0	1	0	1	5	10	0	0	15	0	0	0	0	0	27
	Auto	0	11	0	0	11	0	0	1	0	1	5	10	0	0	15	0	0	0	0	0	27
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	Total	0	8	0	0	8	0	0	4	0	4	6	6	1	0	13	1	0	0	0	1	26
	Auto	0	7	0	0	7	0	0	4	0	4	6	5	1	0	12	1	0	0	0	1	24
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
00:45	Total	0	11	0	0	11	0	1	2	0	3	3	6	0	0	9	0	0	0	0	0	23
	Auto	0	11	0	0	11	0	1	2	0	3	3	5	0	0	8	0	0	0	0	0	22
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hour	Total	0	36	1	0	37	0	1	11	0	12	20	38	1	0	59	3	0	0	0	3	111
	Auto	0	34	1	0	35	0	1	11	0	12	20	35	1	0	56	3	0	0	0	3	106
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
% ALL		0	32	1	0	33	0	1	10	0	11	18	34	1	0	53	3	0	0	0	3	100
01:00	Total	1	4	0	0	5	0	0	2	0	2	0	3	1	0	4	0	0	0	0	0	11
	Auto	1	4	0	0	5	0	0	2	0	2	0	3	1	0	4	0	0	0	0	0	11
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	Total	0	6	0	0	6	1	0	2	0	3	1	5	0	0	6	0	0	0	0	0	15
	Auto	0	6	0	0	6	1	0	2	0	3	1	5	0	0	6	0	0	0	0	0	15
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	Total	0	7	0	0	7	0	0	0	0	0	2	10	0	1	13	0	0	0	0	0	20
	Auto	0	7	0	0	7	0	0	0	0	0	2	10	0	1	13	0	0	0	0	0	20
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	Total	0	5	0	0	5	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	8
	Auto	0	5	0	0	5	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	8
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	1	22	0	0	23	1	0	4	0	5	4	20	1	1	26	0	0	0	0	0	54
	Auto	1	22	0	0	23	1	0	4	0	5	4	20	1	1	26	0	0	0	0	0	54
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% ALL		2	41	0	0	43	2	0	7	0	9	7	37	2	2	48	0	0	0	0	0	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
02:00	Total	0	2	0	0	2	0	0	1	0	1	1	6	0	0	7	0	0	0	0	0	10
	Auto	0	2	0	0	2	0	0	1	0	1	1	6	0	0	7	0	0	0	0	0	10
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	Total	0	4	0	0	4	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	10
	Auto	0	3	0	0	3	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	9
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	Total	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	11
	Auto	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	10
	Sm truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	Total	0	5	0	0	5	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	8
	Auto	0	4	0	0	4	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	7
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Total	0	16	0	0	16	0	1	2	0	3	1	18	0	0	19	0	1	0	0	1	39
	Auto	0	13	0	0	13	0	1	2	0	3	1	18	0	0	19	0	1	0	0	1	36
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% ALL		0	41	0	0	41	0	3	5	0	8	3	46	0	0	49	0	3	0	0	3	100
03:00	Total	0	1	0	0	1	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	6
	Auto	0	1	0	0	1	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	6
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	Total	0	1	0	0	1	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	5
	Auto	0	1	0	0	1	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	5
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	Total	0	4	0	0	4	1	0	1	0	2	2	4	0	0	6	0	0	0	0	0	12
	Auto	0	4	0	0	4	1	0	1	0	2	2	4	0	0	6	0	0	0	0	0	12
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	Total	0	3	0	0	3	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	10
	Auto	0	3	0	0	3	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	10
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	0	9	0	0	9	2	0	3	0	5	7	12	0	0	19	0	0	0	0	0	33
	Auto	0	9	0	0	9	2	0	3	0	5	7	12	0	0	19	0	0	0	0	0	33
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% ALL		0	27	0	0	27	6	0	9	0	15	21	36	0	0	58	0	0	0	0	0	100
04:00	Total	0	1	0	0	1	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	6
	Auto	0	1	0	0	1	0	0	1	0	1	1	3	0	0	4	0	0	0	0	0	6
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	Total	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
	Auto	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	Total	0	4	0	0	4	1	0	1	0	2	0	5	0	0	5	0	0	0	0	0	11
	Auto	0	4	0	0	4	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	10
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	Total	0	5	1	0	6	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	14
	Auto	0	5	1	0	6	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	14
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	0	14	1	0	15	1	0	2	0	3	1	19	0	0	20	0	0	0	0	0	38
	Auto	0	14	1	0	15	1	0	2	0	3	1	18	0	0	19	0	0	0	0	0	37
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% ALL		0	37	3	0	39	3	0	5	0	8	3	50	0	0	53	0	0	0	0	0	100

Comment: N/A



LOCATION: PTH 10 & KIRKALDY DR

DATE: Mon Day Year Start Time
Day 1: Apr 30 2013 08:00
Day 2: May 01 2013 07:45Type: Cars/Trucks
Interval: 15 min
Correction: 1.0

Begins		Southbound					Westbound					Northbound					Eastbound					Interval
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
05:00	Total	0	5	0	0	5	0	0	0	0	0	3	9	0	0	12	0	0	1	0	1	18
	Auto	0	3	0	0	3	0	0	0	0	0	3	9	0	0	12	0	0	1	0	1	16
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15	Total	0	8	1	0	9	0	0	3	0	3	3	9	1	0	13	0	0	0	0	0	25
	Auto	0	6	1	0	7	0	0	3	0	3	3	9	1	0	13	0	0	0	0	0	23
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30	Total	0	12	0	0	12	1	2	7	0	10	5	15	1	0	21	1	0	0	0	1	44
	Auto	0	11	0	0	11	1	2	7	0	10	5	14	1	0	20	1	0	0	0	1	42
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45	Total	0	6	0	0	6	0	0	3	0	3	7	21	1	0	29	0	0	0	0	0	38
	Auto	0	6	0	0	6	0	0	3	0	3	7	19	1	0	27	0	0	0	0	0	36
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Total	0	31	1	0	32	1	2	13	0	16	18	54	3	0	75	1	0	1	0	2	125
	Auto	0	26	1	0	27	1	2	13	0	16	18	51	3	0	72	1	0	1	0	2	117
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
	Lg Truck	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
% ALL		0	25	1	0	26	1	2	10	0	13	14	43	2	0	60	1	0	1	0	2	100
06:00	Total	0	11	1	0	12	1	0	6	0	7	3	29	0	0	32	3	1	3	0	7	58
	Auto	0	9	1	0	10	1	0	5	0	6	3	28	0	0	31	3	1	3	0	7	54
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
06:15	Total	0	29	0	0	29	3	0	7	0	10	5	41	1	0	47	0	3	0	0	3	89
	Auto	0	27	0	0	27	3	0	6	0	9	5	37	1	0	43	0	3	0	0	3	82
	Sm truck	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	5
	Lg Truck	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
06:30	Total	0	36	0	0	36	0	1	9	0	10	13	54	0	0	67	3	1	0	0	4	117
	Auto	0	33	0	0	33	0	1	9	0	10	12	52	0	0	64	3	1	0	0	4	111
	Sm truck	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
06:45	Total	0	39	0	0	39	0	0	16	0	16	23	64	3	0	90	5	1	2	0	8	153
	Auto	0	38	0	0	38	0	0	15	0	15	21	63	3	0	87	5	1	2	0	8	148
	Sm truck	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
	Lg Truck	0	1	0	0	1	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	3
Hour	Total	0	115	1	0	116	4	1	38	0	43	44	188	4	0	236	11	6	5	0	22	417
	Auto	0	107	1	0	108	4	1	35	0	40	41	180	4	0	225	11	6	5	0	22	395
	Sm truck	0	5	0	0	5	0	0	1	0	1	1	5	0	0	6	0	0	0	0	0	12
	Lg Truck	0	3	0	0	3	0	0	2	0	2	2	3	0	0	5	0	0	0	0	0	10
% ALL		0	28	0	0	28	1	0	9	0	10	11	45	1	0	57	3	1	1	0	5	100
07:00	Total	3	43	2	0	48	0	2	28	0	30	14	48	3	0	65	2	2	2	0	6	149
	Auto	3	39	1	0	43	0	2	25	0	27	14	45	3	0	62	2	2	2	0	6	138
	Sm truck	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	5
	Lg Truck	0	2	1	0	3	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	6
07:15	Total	5	79	7	0	91	1	3	24	0	28	20	58	10	0	88	6	4	0	0	10	217
	Auto	5	76	7	0	88	1	3	24	0	28	18	57	10	0	85	6	4	0	0	10	211
	Sm truck	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
07:30	Total	3	84	2	0	89	5	1	39	0	45	29	128	23	0	180	14	7	3	0	24	338
	Auto	3	81	2	0	86	5	1	38	0	44	27	122	22	0	171	14	7	3	0	24	325
	Sm truck	0	2	0	0	2	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	8
	Lg Truck	0	1	0	0	1	0	0	0	0	0	1	2	1	0	4	0	0	0	0	0	5
07:45	Total	7	101	9	0	117	10	6	44	0	60	33	121	28	0	182	12	8	4	0	24	383
	Auto	7	98	9	0	114	8	6	44	0	58	32	118	28	0	178	12	8	4	0	24	374
	Sm truck	0	1	0	0	1	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	5
	Lg Truck	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	4
Hour	Total	18	307	20	0	345	16	12	135	0	163	96	355	64	0	515	34	21	9	0	64	1087
	Auto	18	294	19	0	331	14	12	131	0	157	91	342	63	0	496	34	21	9	0	64	1048
	Sm truck	0	7	0	0	7	1	0	2	0	3	3	9	0	0	12	0	0	0	0	0	22
	Lg Truck	0	6	1	0	7	1	0	2	0	3	2	4	1	0	7	0	0	0	0	0	17
% ALL		2	28	2	0	32	1	1	12	0	15	9	33	6	0	47	3	2	1	0	6	100

Comment: N/A



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Titan turning movement count analysis
PTH 10 & CORRAL ACC
Aug 16, 2012 & Aug 15, 2012

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.

Note: Count-4 counts (called CTPs for "car-truck-pedestrian") are taken over 14 hours in 15 minutes intervals. The CTP count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2012 Traffic on Manitoba Highways report*) as follows:

Count-4 (CTP)	Equivalent FHWA Scheme F
Pedestrians	N/A
Autos	FHWA Classes 2 and 3*
Small Trucks	FHWA Classes 4 to 7
Large Trucks	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	9	53	0	0	0	50	2	0	3	0	2	0	0	0	0	119
	Sm truck	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
7:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	68	0	0	0	82	3	0	2	0	4	0	0	0	0	169
	Sm truck	0	0	4	0	0	0	7	0	0	1	0	0	0	0	0	0	12
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
7:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	87	0	0	0	108	4	0	7	0	1	0	0	0	0	217
	Sm truck	0	1	8	0	0	0	7	0	0	0	0	0	0	0	0	0	16
	Lg Truck	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	4
7:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	110	0	0	0	138	8	0	11	0	1	0	0	0	0	278
	Sm truck	0	1	6	0	0	0	7	0	0	0	0	1	0	0	0	0	15
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	39	318	0	0	0	378	17	0	23	0	8	0	0	0	0	783
	Sm truck	0	2	18	0	0	0	28	0	0	1	0	1	0	0	0	0	50
	Lg Truck	0	0	7	0	0	0	6	0	0	1	0	0	0	0	0	0	14
	ALL	0	41	343	0	0	0	412	17	0	25	0	9	0	0	0	0	847
	% ALL	0	5	40	0	0	0	49	2	0	3	0	1	0	0	0	0	100.0
8:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	98	0	0	0	108	13	0	3	0	7	0	0	0	0	239
	Sm truck	0	1	5	0	0	0	6	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
8:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	23	106	0	0	0	70	4	0	5	0	3	0	0	0	0	211
	Sm truck	0	0	8	0	0	0	13	1	0	0	0	2	0	0	0	0	24
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
8:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	16	90	0	0	0	101	16	0	7	0	4	0	0	0	0	234
	Sm truck	0	2	7	0	0	0	5	0	0	0	0	1	0	0	0	0	15
	Lg Truck	0	2	3	0	0	0	2	0	0	0	0	0	0	0	0	0	7
8:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	19	108	0	0	0	132	17	0	12	0	4	0	0	0	0	292
	Sm truck	0	0	6	0	0	0	5	0	0	0	0	2	0	0	0	0	13
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	68	402	0	0	0	411	50	0	27	0	18	0	0	0	0	976
	Sm truck	0	3	26	0	0	0	29	1	0	0	0	5	0	0	0	0	64
	Lg Truck	0	2	5	0	0	0	10	0	0	0	0	0	0	0	0	0	17
	ALL	0	73	433	0	0	0	450	51	0	27	0	23	0	0	0	0	1057
	% ALL	0	7	41	0	0	0	43	5	0	3	0	2	0	0	0	0	100.0
9:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	16	92	0	0	0	100	8	0	16	0	10	0	0	0	0	242
	Sm truck	0	0	7	0	0	0	11	0	0	0	0	0	0	0	0	0	18
	Lg Truck	0	2	2	0	0	0	3	0	0	0	0	0	0	0	0	0	7
9:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	18	72	0	0	0	95	17	0	10	0	8	0	0	0	0	220
	Sm truck	0	1	4	0	0	0	11	0	0	1	0	1	0	0	0	0	18
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	16	0	0	0	12	3	0	1	0	1	0	0	0	0	36
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	22	86	0	0	0	92	20	0	15	0	13	0	0	0	0	248
	Sm truck	0	1	7	0	0	0	4	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	59	266	0	0	0	299	48	0	42	0	32	0	0	0	0	746
	Sm truck	0	2	18	0	0	0	26	0	0	1	0	1	0	0	0	0	48
	Lg Truck	0	4	3	0	0	0	3	0	0	0	0	0	0	0	0	0	10
	ALL	0	65	287	0	0	0	328	48	0	43	0	33	0	0	0	0	804
	% ALL	0	8	36	0	0	0	41	6	0	5	0	4	0	0	0	0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
10:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	23	94	0	0	0	136	23	0	30	0	6	0	0	0	0	312
	Sm truck	0	2	6	0	0	0	8	1	0	0	0	2	0	0	0	0	19
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
10:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	34	83	0	0	0	119	22	0	31	0	17	0	0	0	0	306
	Sm truck	0	2	6	0	0	0	6	2	0	1	0	0	0	0	0	0	17
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
10:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	36	83	0	0	0	123	22	0	25	0	11	0	0	0	0	300
	Sm truck	0	2	3	0	0	0	5	2	0	0	0	1	0	0	0	0	13
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
10:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	31	90	0	0	0	132	23	0	37	0	18	0	0	0	0	331
	Sm truck	0	0	8	0	0	0	8	1	0	0	0	0	0	0	0	0	17
	Lg Truck	0	2	2	0	0	0	3	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	124	350	0	0	0	510	90	0	123	0	52	0	0	0	0	1249
	Sm truck	0	6	23	0	0	0	27	6	0	1	0	3	0	0	0	0	66
	Lg Truck	0	2	7	0	0	0	8	0	0	0	0	0	0	0	0	0	17
	ALL	0	132	380	0	0	0	545	96	0	124	0	55	0	0	0	0	1332
	% ALL	0	10	29	0	0	0	41	7	0	9	0	4	0	0	0	0	100.0
11:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	28	107	0	0	0	137	32	0	38	0	11	0	0	0	0	353
	Sm truck	0	0	7	0	0	0	15	1	0	0	0	1	0	0	0	0	24
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
11:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	37	105	0	0	0	131	37	0	38	0	9	0	0	0	0	357
	Sm truck	0	3	9	0	0	0	4	1	0	1	0	1	0	0	0	0	19
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
11:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	10	0	0	0	13	2	0	9	0	2	0	0	0	0	38
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	39	99	0	0	0	99	32	0	47	0	9	0	0	0	0	325
	Sm truck	0	1	6	0	0	0	1	0	0	6	0	0	0	0	0	0	14
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	106	321	0	0	0	380	103	0	132	0	31	0	0	0	0	1073
	Sm truck	0	4	22	0	0	0	21	2	0	7	0	2	0	0	0	0	58
	Lg Truck	0	1	7	0	0	0	9	0	0	0	0	0	0	0	0	0	17
	ALL	0	111	350	0	0	0	410	105	0	139	0	33	0	0	0	0	1148
	% ALL	0	10	30	0	0	0	36	9	0	12	0	3	0	0	0	0	100.0
12:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	28	113	0	0	0	143	38	0	48	0	25	0	0	0	0	395
	Sm truck	0	1	7	0	0	0	4	0	0	0	0	1	0	0	0	0	13
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
12:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	32	111	0	0	0	152	22	0	41	0	14	0	0	0	0	372
	Sm truck	0	0	1	0	0	0	6	2	0	1	0	1	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
12:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	31	109	0	0	0	141	26	0	31	0	17	0	0	0	0	355
	Sm truck	0	3	8	0	0	0	7	0	0	2	0	0	0	0	0	0	20
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	35	120	0	0	0	172	45	0	50	0	18	0	0	0	0	440
	Sm truck	0	2	9	0	0	0	6	0	0	2	0	1	0	0	0	0	20
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	126	453	0	0	0	608	131	0	170	0	74	0	0	0	0	1562
	Sm truck	0	6	25	0	0	0	23	2	0	5	0	3	0	0	0	0	64
	Lg Truck	0	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0	15
	ALL	0	132	486	0	0	0	638	133	0	175	0	77	0	0	0	0	1641
	% ALL	0	8	30	0	0	0	39	8	0	11	0	5	0	0	0	0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
13:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	34	110	0	0	0	197	44	0	39	0	11	0	0	0	0	435
	Sm truck	0	0	8	0	0	0	7	0	0	1	0	0	0	0	0	0	16
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
13:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	46	104	0	0	0	162	59	0	41	0	19	0	0	0	0	431
	Sm truck	0	1	8	0	0	0	6	1	0	0	0	0	0	0	0	0	16
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
13:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	37	105	0	0	2	164	36	0	38	0	14	0	0	0	0	396
	Sm truck	0	1	11	0	0	0	6	1	0	1	0	0	0	0	0	0	20
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
13:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	34	110	0	0	0	207	45	0	44	0	10	0	0	0	0	450
	Sm truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	151	429	0	0	2	730	184	0	162	0	54	0	0	0	0	1712
	Sm truck	0	2	28	0	0	0	23	2	0	2	0	0	0	0	0	0	57
	Lg Truck	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	18
	ALL	0	153	466	0	0	2	762	186	0	164	0	54	0	0	0	0	1787
	% ALL	0	9	26	0	0	0	43	10	0	9	0	3	0	0	0	0	100.0
14:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	37	114	0	0	0	129	48	0	54	0	13	0	0	0	0	395
	Sm truck	0	0	3	0	0	0	8	0	0	0	0	1	0	0	0	0	12
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
14:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	44	95	0	0	0	132	52	0	52	0	25	0	0	0	0	400
	Sm truck	0	1	8	0	0	0	8	0	0	0	0	0	0	0	0	0	17
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
14:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	40	116	0	0	0	165	51	0	61	0	21	0	0	0	0	454
	Sm truck	0	1	5	0	0	0	2	0	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
14:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	42	114	0	0	0	174	41	0	48	0	18	0	0	0	0	437
	Sm truck	0	0	5	0	0	0	4	0	0	0	0	1	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	163	439	0	0	0	600	192	0	215	0	77	0	0	0	0	1686
	Sm truck	0	2	21	0	0	0	22	0	0	0	0	3	0	0	0	0	48
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
	ALL	0	165	464	0	0	0	627	192	0	215	0	80	0	0	0	0	1743
	% ALL	0.0	9.5	26.6	0.0	0.0	0.0	36.0	11.0	0.0	12.3	0.0	4.6	0.0	0.0	0.0	0.0	100.0
15:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	46	124	0	0	0	181	49	0	70	0	28	0	0	0	0	498
	Sm truck	0	1	8	0	0	0	5	0	0	0	0	1	0	0	0	0	15
	Lg Truck	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	4
15:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	41	99	0	0	4	168	55	0	66	0	12	0	0	0	0	445
	Sm truck	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
15:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	35	104	0	0	0	141	47	0	55	0	24	0	0	0	0	406
	Sm truck	0	1	4	0	0	0	5	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
15:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	43	118	0	0	0	163	52	0	55	0	23	0	0	0	0	454
	Sm truck	0	0	5	0	0	0	7	2	0	1	0	0	0	0	0	0	15
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	165	445	0	0	4	653	203	0	246	0	87	0	0	0	0	1803
	Sm truck	0	2	23	0	0	0	20	2	0	1	0	1	0	0	0	0	49
	Lg Truck	0	1	5	0	0	0	4	0	0	0	0	0	0	0	0	0	10
	ALL	0	168	473	0	0	4	677	205	0	247	0	88	0	0	0	0	1862
	% ALL	0.0	9.0	25.4	0.0	0.0	0.2	36.4	11.0	0.0	13.3	0.0	4.7	0.0	0.0	0.0	0.0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
16:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	41	132	0	0	0	155	56	0	58	0	23	0	0	0	0	465
	Sm truck	0	3	10	0	0	0	4	0	0	0	0	2	0	0	0	0	19
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
16:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	38	129	0	0	0	209	50	0	55	0	29	0	0	0	0	510
	Sm truck	0	1	6	0	0	0	4	0	0	1	0	0	0	0	0	0	12
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
16:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	10	0	0	0	6	2	0	7	0	1	0	0	0	0	28
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	40	135	0	0	0	203	62	0	67	0	25	0	0	0	0	532
	Sm truck	0	0	4	0	0	0	6	0	0	2	0	0	0	0	0	0	12
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	121	406	0	0	0	573	170	0	187	0	78	0	0	0	0	1535
	Sm truck	0	4	20	0	0	0	15	0	0	3	0	2	0	0	0	0	44
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
	ALL	0	125	430	0	0	0	594	170	0	190	0	80	0	0	0	0	1589
	% ALL	0.0	7.9	27.1	0.0	0.0	0.0	37.4	10.7	0.0	12.0	0.0	5.0	0.0	0.0	0.0	0.0	100.0
17:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	54	152	0	0	0	203	48	0	44	0	29	0	0	0	0	530
	Sm truck	0	6	4	0	0	0	4	1	0	0	0	1	0	0	0	0	16
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
17:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	48	146	0	0	0	194	68	0	61	0	30	0	0	0	0	547
	Sm truck	0	0	2	0	0	0	2	1	0	2	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
17:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	49	139	0	0	0	178	43	0	40	0	31	0	0	0	0	480
	Sm truck	0	0	2	0	0	0	5	1	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	38	103	0	0	0	195	61	0	68	0	24	0	0	0	0	489
	Sm truck	0	2	7	0	0	0	4	0	0	1	0	1	0	0	0	0	15
	Lg Truck	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	189	540	0	0	0	770	220	0	213	0	114	0	0	0	0	2046
	Sm truck	0	8	15	0	0	0	15	3	0	3	0	2	0	0	0	0	46
	Lg Truck	0	1	5	0	0	0	8	1	0	0	0	0	0	0	0	0	15
	ALL	0	198	560	0	0	0	793	224	0	216	0	116	0	0	0	0	2107
	% ALL	0.0	9.4	26.6	0.0	0.0	0.0	37.6	10.6	0.0	10.3	0.0	5.5	0.0	0.0	0.0	0.0	100.0
18:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	42	124	0	0	0	155	43	0	49	0	28	0	0	0	0	441
	Sm truck	0	0	3	0	0	0	1	0	0	2	0	0	0	0	0	0	6
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	45	91	0	0	0	126	53	0	38	0	22	0	0	0	0	375
	Sm truck	0	1	5	0	0	0	2	1	0	0	0	1	0	0	0	0	10
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	30	101	0	0	0	134	47	0	43	0	27	0	0	0	0	382
	Sm truck	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
18:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	8	0	0	0	21	2	0	4	0	1	0	0	0	0	38
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	119	324	0	0	0	436	145	0	134	0	78	0	0	0	0	1236
	Sm truck	0	2	11	0	0	0	6	1	0	2	0	1	0	0	0	0	23
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
	ALL	0	121	337	0	0	0	445	146	0	136	0	79	0	0	0	0	1264
	% ALL	0.0	9.6	26.7	0.0	0.0	0.0	35.2	11.6	0.0	10.8	0.0	6.3	0.0	0.0	0.0	0.0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	36	107	0	0	0	126	39	0	44	0	18	0	0	0	0	370
	Sm truck	0	0	2	0	0	0	2	0	0	1	0	1	0	0	0	0	6
	Lg Truck	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
19:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	28	93	0	0	0	119	31	0	49	0	16	0	0	0	0	336
	Sm truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
19:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	27	68	0	0	0	113	33	0	45	0	22	0	0	0	0	308
	Sm truck	0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	34	74	0	0	0	111	23	0	39	0	17	0	0	0	0	298
	Sm truck	0	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	125	342	0	0	0	469	126	0	177	0	73	0	0	0	0	1312
	Sm truck	0	2	5	0	0	0	10	0	0	2	0	1	0	0	0	0	20
	Lg Truck	0	0	1	0	0	0	4	0	0	1	0	0	0	0	0	0	6
	ALL	0	127	348	0	0	0	483	126	0	180	0	74	0	0	0	0	1338
	% ALL	0.0	9.5	26.0	0.0	0.0	0.0	36.1	9.4	0.0	13.5	0.0	5.5	0.0	0.0	0.0	0.0	100.0
20:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	22	66	0	0	0	119	30	0	33	0	11	0	0	0	0	281
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
20:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	20	64	0	0	0	103	25	0	37	0	22	0	0	0	0	271
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
20:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	20	66	0	0	0	115	15	0	24	0	19	0	0	0	0	259
	Sm truck	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
20:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	15	66	0	0	0	113	16	0	19	0	13	0	0	0	0	242
	Sm truck	0	0	1	0	0	0	4	0	0	0	0	1	0	0	0	0	6
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	77	262	0	0	0	450	86	0	113	0	65	0	0	0	0	1053
	Sm truck	0	1	4	0	0	0	8	0	0	0	0	1	0	0	0	0	14
	Lg Truck	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11
	ALL	0	78	270	0	0	0	465	86	0	113	0	66	0	0	0	0	1078
	% ALL	0.0	7.2	25.0	0.0	0.0	0.0	43.1	8.0	0.0	10.5	0.0	6.1	0.0	0.0	0.0	0.0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Aug 16 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	396	1657	0	0	0	1978	308	0	347	0	141	0	0	0	0	4827
%	0	8	32	0	0	0	38	6	0	7	0	3	0	0	0	0	93.0
Sm truck	0	17	107	0	0	0	131	9	0	10	0	12	0	0	0	0	286
%	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5.5
Lg truck	0	9	29	0	0	0	36	0	0	1	0	0	0	0	0	0	75
%	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1.4
All	0	422	1793	0	0	0	2145	317	0	358	0	153	0	0	0	0	5188
% ALL	0	8	35	0	0	0	41	6	0	7	0	3	0	0	0	0	100.0

PM Count Summary Date: Aug 15 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	1236	3640	0	0	6	5289	1457	0	1617	0	700	0	0	0	0	13945
%	0.0	8.6	25.3	0.0	0.0	0.0	36.7	10.1	0.0	11.2	0.0	4.9	0.0	0.0	0.0	0.0	96.8
Sm truck	0	29	152	0	0	0	142	10	0	18	0	14	0	0	0	0	365
%	0.0	0.2	1.1	0.0	0.0	0.0	1.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	2.5
Lg truck	0	2	42	0	0	0	53	1	0	1	0	0	0	0	0	0	99
%	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
All	0	1267	3834	0	0	6	5484	1468	0	1636	0	714	0	0	0	0	14409
% ALL	0.0	8.8	26.6	0.0	0.0	0.0	38.1	10.2	0.0	11.4	0.0	5.0	0.0	0.0	0.0	0.0	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	1632	5297	0	0	6	7267	1765	0	1964	0	841	0	0	0	0	18772
%	0.0	8.3	27.0	0.0	0.0	0.0	37.1	9.0	0.0	10.0	0.0	4.3	0.0	0.0	0.0	0.0	95.8
Sm truck	0	46	259	0	0	0	273	19	0	28	0	26	0	0	0	0	651
%	0.0	0.2	1.3	0.0	0.0	0.0	1.4	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	3.3
Lg truck	0	11	71	0	0	0	89	1	0	2	0	0	0	0	0	0	174
%	0.0	0.1	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
All	0	1689	5627	0	0	6	7629	1785	0	1994	0	867	0	0	0	0	19597
% ALL	0.0	8.6	28.7	0.0	0.0	0.0	38.9	9.1	0.0	10.2	0.0	4.4	0.0	0.0	0.0	0.0	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	2122	6886	0	0	8	9447	2295	0	2553	0	1093	0	0	0	0	24404
%	0.0	8.3	27.0	0.0	0.0	0.0	37.1	9.0	0.0	10.0	0.0	4.3	0.0	0.0	0.0	0.0	95.8
Sm truck	0	60	337	0	0	0	355	25	0	36	0	34	0	0	0	0	846
%	0.0	0.3	1.7	0.0	0.0	0.0	1.8	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	4.3
Lg truck	0	14	92	0	0	0	116	1	0	3	0	0	0	0	0	0	226
%	0.0	0.1	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
All	0	2196	7315	0	0	8	9918	2321	0	2592	0	1127	0	0	0	0	25476
% ALL	0.0	8.6	28.7	0.0	0.0	0.0	38.9	9.1	0.0	10.2	0.0	4.4	0.0	0.0	0.0	0.0	100.0

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



LOCATION: PTH 10 & CORRAL ACC

DATE: Mon Day Year
Morning: Aug 16 2012
Afternoon: Aug 15 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

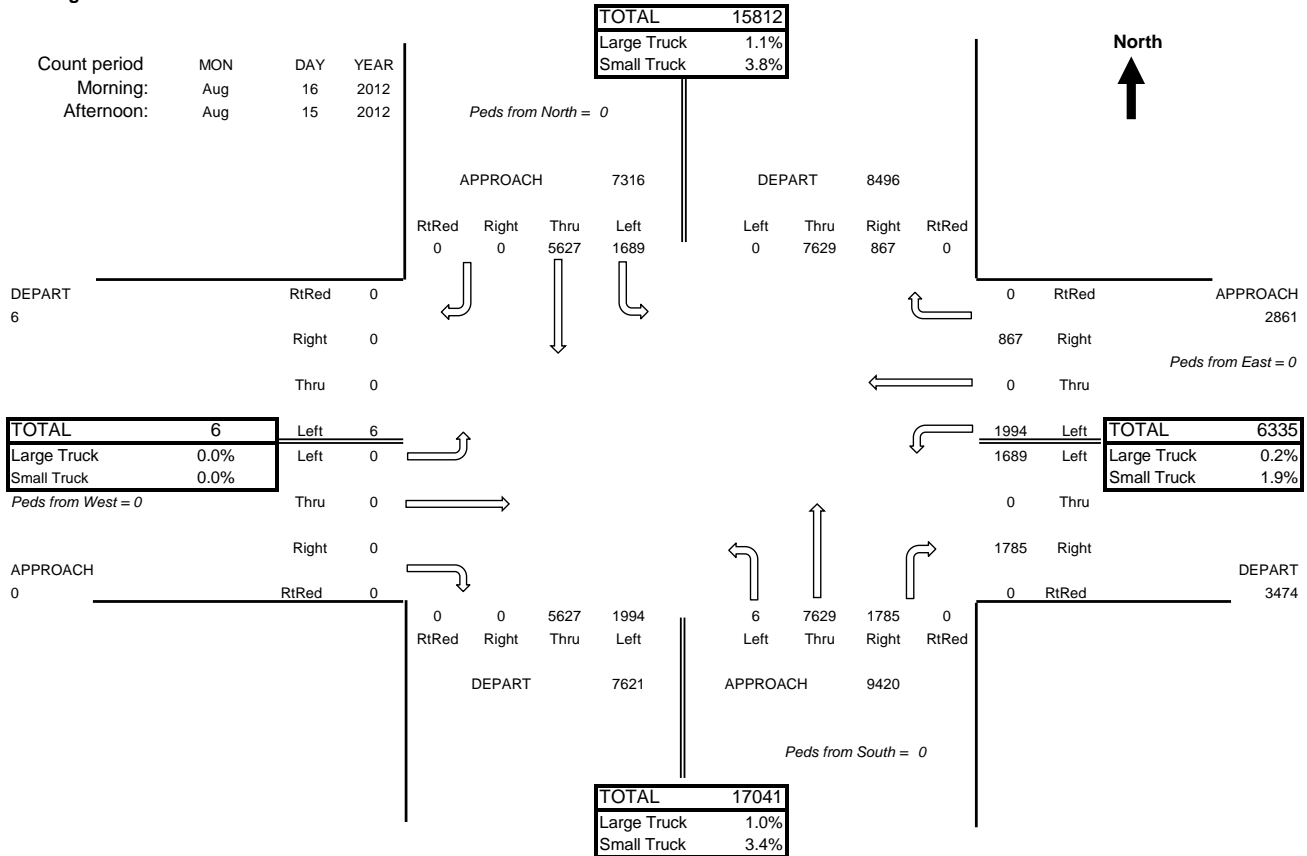
Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	1632	5297	0	0	6	7267	1765	0	1964	0	841	0	0	0	0	18772
%	0.0	8.3	27.0	0.0	0.0	0.0	37.1	9.0	0.0	10.0	0.0	4.3	0.0	0.0	0.0	0.0	95.8
Sm truck	0	46	259	0	0	0	273	19	0	28	0	26	0	0	0	0	651
%	0.0	0.2	1.3	0.0	0.0	0.0	1.4	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	3.3
Lg truck	0	11	71	0	0	0	89	1	0	2	0	0	0	0	0	0	174
%	0.0	0.1	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
All	0	1689	5627	0	0	6	7629	1785	0	1994	0	867	0	0	0	0	19597
% ALL	0.0	8.6	28.7	0.0	0.0	0.0	38.9	9.1	0.0	10.2	0.0	4.4	0.0	0.0	0.0	0.0	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection



Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.

LOCATION: PTH 10 & CORRAL ACC

DATE:	Mon	Day	Year
Morning:	Aug	16	2012
Afternoon:	Aug	15	2012

Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

Correction factor = 1.3

24-Hour Count Summary		Collection Date = 7/5															
	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	2122	6886	0	0	8	9447	2295	0	2553	0	1093	0	0	0	0	24404
%	0.0	8.3	27.0	0.0	0.0	0.0	37.1	9.0	0.0	10.0	0.0	4.3	0.0	0.0	0.0	0.0	95.8
Sm truck	0	60	337	0	0	0	355	25	0	36	0	34	0	0	0	0	846
%	0.0	0.3	1.7	0.0	0.0	0.0	1.8	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	4.3
Lg truck	0	14	92	0	0	0	116	1	0	3	0	0	0	0	0	0	226
%	0.0	0.1	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
All	0	2196	7315	0	0	8	9918	2321	0	2592	0	1127	0	0	0	0	25476
% ALL	0.0	8.6	28.7	0.0	0.0	0.0	38.9	9.1	0.0	10.2	0.0	4.4	0.0	0.0	0.0	0.0	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period	MON	DAY	YEAR
Morning:	Aug	16	2012
Afternoon:	Aug	15	2012

TOTAL	20556
Large Truck	1.1%
Small Truck	3.8%

Peds from North = 0

APPROACH 951




DEPART 11045

North



DEPART
8

RtRed	0
-------	---

RtRed	Right	Thru	Left
0	0	7315	2196
			



Left	Thru	Right	RtRed
0	9918	1127	0

APPROACH
3719

Peds from East = 0

TOTAL	8
Large Truck	0.0%
Small Truck	0.0%

Peds from West = 0

Left	8	
Left	0	
Thru	0	
Right	0	



2592	Left	TOTAL	8236
2196	Left	Large Truck	0.2%
		Small Truck	1.9%

0 Thru

APPROACH
0

RtRed	0
-------	---

0	0	7315	2592
RtRed	Right	Thru	Left
DEPART			9907

			
8	9918	2321	0
Left	Thru	Right	RtRed

DEPART
4516

Peds from South = 0

TOTAL	22153
Large Truck	1.0%
Small Truck	3.4%

Comment: This file is merged from counts taken on the morning of Aug 16 and the afternoon of Aug 15, 2012.



Manitoba Highway Traffic Information System
Manitoba Infrastructure and Transportation
University of Manitoba Transport Information Group

Telephone: (204) 474-7367

Fax: (204) 474-7549

TO: Traffic Engineering
Traffic Monitoring
1510 215 Garry St.
Fax 948-2554

Titan turning movement count analysis
PTH 1A & BRAECREST DR IN BRANDON
Jun 2, 2009

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
7:00	Peds	0				0				0				0				0
	Auto	0	2	68	1	0	9	51	1	0	1	0	0	0	5	1	13	152
	Sm truck	0	0	3	0	0	1	1	0	0	0	0	0	0	0	0	1	6
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
7:15	Peds	0				0				0				0				0
	Auto	0	1	55	3	0	5	62	3	0	1	2	1	0	3	0	16	152
	Sm truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	Peds	0				0				0				0				0
	Auto	0	1	107	5	0	10	51	0	0	2	0	0	0	2	0	32	210
	Sm truck	0	0	4	0	0	1	6	0	0	0	0	0	0	0	0	1	12
	Lg Truck	0	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	6
7:45	Peds	0				0				0				0				0
	Auto	0	0	91	3	0	31	83	2	0	3	1	0	0	7	0	44	265
	Sm truck	0	0	7	1	0	0	3	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	321	12	0	55	247	6	0	7	3	1	0	17	1	105	779
	Sm truck	0	0	17	1	0	2	15	0	0	0	0	0	0	0	0	2	37
	Lg Truck	0	0	5	0	0	1	8	0	0	0	0	0	0	0	0	0	14
	ALL	0	4	343	13	0	58	270	6	0	7	3	1	0	17	1	107	830
	% ALL	0.0	0.5	41.3	1.6	0.0	7.0	32.5	0.7	0.0	0.8	0.4	0.1	0.0	2.0	0.1	12.9	100.0
8:00	Peds	0				0				0				0				0
	Auto	0	0	93	6	0	8	74	1	0	0	1	1	0	1	1	32	218
	Sm truck	0	0	2	0	0	0	9	0	0	0	0	0	0	0	0	3	14
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15	Peds	0				0				0				0				0
	Auto	0	1	103	2	0	11	66	3	0	0	0	1	0	4	2	48	241
	Sm truck	0	0	5	0	0	1	4	0	0	0	0	0	0	0	0	1	11
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30	Peds	0				0				0				0				0
	Auto	0	0	91	6	0	17	64	5	0	1	3	0	0	4	0	38	229
	Sm truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	1	11
	Lg Truck	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	0	9
8:45	Peds	0				0				0				0				0
	Auto	0	1	65	3	0	27	67	0	0	1	2	0	0	4	0	28	198
	Sm truck	0	0	2	0	0	2	4	0	0	0	1	0	0	0	0	0	9
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	352	17	0	63	271	9	0	2	6	2	0	13	3	146	886
	Sm truck	0	0	13	0	0	3	23	0	0	0	1	0	0	0	0	5	45
	Lg Truck	0	0	13	0	0	0	4	0	0	0	0	0	0	0	0	0	17
	ALL	0	2	378	17	0	66	298	9	0	2	7	2	0	13	3	151	948
	% ALL	0.0	0.2	39.9	1.8	0.0	7.0	31.4	0.9	0.0	0.2	0.7	0.2	0.0	1.4	0.3	15.9	100.0
9:00	Peds	0				0				0				0				0
	Auto	0	0	47	3	0	23	53	1	0	1	2	0	0	3	1	16	150
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	3
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
9:15	Peds	0				0				0				0				0
	Auto	0	0	73	4	0	19	39	2	0	2	1	1	0	7	1	23	172
	Sm truck	0	0	4	0	0	2	1	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
9:30	Peds	0				0				0				0				0
	Auto	0	0	50	3	0	4	14	1	0	0	0	1	0	0	0	16	89
	Sm truck	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	4
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
9:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	170	10	0	46	107	4	0	3	3	2	0	10	2	55	412
	Sm truck	0	0	6	0	0	3	2	0	0	0	0	0	0	0	0	3	14
	Lg Truck	0	0	6	0	0	0	10	0	0	0	0	0	0	0	0	0	16
	ALL	0	0	182	10	0	49	119	4	0	3	3	2	0	10	2	58	442
	% ALL	0.0	0.0	41.2	2.3	0.0	11.1	26.9	0.9	0.0	0.7	0.7	0.5	0.0	2.3	0.5	13.1	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	0	63	6	0	20	51	1	0	1	2	1	0	1	1	17	164
	Sm truck	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
10:15	Peds	0				0				0				0				0
	Auto	0	3	70	3	0	15	35	2	0	1	0	0	0	4	0	23	156
	Sm truck	0	0	3	1	0	0	2	0	0	0	0	0	0	0	0	1	7
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
10:30	Peds	0				0				0				0				0
	Auto	0	0	62	6	0	16	44	3	0	3	0	0	0	6	0	25	165
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	3	8
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
10:45	Peds	0				0				0				0				0
	Auto	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	1	9
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	198	15	0	52	134	6	0	5	2	1	0	11	1	66	494
	Sm truck	0	0	6	1	0	1	7	0	0	0	0	0	0	0	0	4	19
	Lg Truck	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	18
	ALL	0	3	213	16	0	53	150	6	0	5	2	1	0	11	1	70	531
	% ALL	0.0	0.6	40.1	3.0	0.0	10.0	28.2	1.1	0.0	0.9	0.4	0.2	0.0	2.1	0.2	13.2	100.0
11:00	Peds	0				0				0				0				0
	Auto	0	0	55	2	0	22	54	1	0	1	1	1	0	3	0	16	156
	Sm truck	0	0	3	0	0	0	9	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	5
11:15	Peds	0				0				0				0				0
	Auto	0	1	67	5	0	25	52	2	0	2	1	1	0	5	1	21	183
	Sm truck	0	0	3	1	0	0	6	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	6
11:30	Peds	0				0				0				0				0
	Auto	0	0	85	2	0	22	51	3	0	0	0	0	0	1	0	19	183
	Sm truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	1	7
	Lg Truck	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
11:45	Peds	0				0				0				0				0
	Auto	0	3	87	2	0	29	55	2	0	2	2	2	0	2	0	21	207
	Sm truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	1	6
	Lg Truck	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	294	11	0	98	212	8	0	5	4	4	0	11	1	77	729
	Sm truck	0	0	15	1	0	0	17	0	0	0	0	0	0	0	0	2	35
	Lg Truck	0	0	7	1	0	1	17	0	0	0	0	0	0	0	0	0	26
	ALL	0	4	316	13	0	99	246	8	0	5	4	4	0	11	1	79	790
	% ALL	0.0	0.5	40.0	1.6	0.0	12.5	31.1	1.0	0.0	0.6	0.5	0.5	0.0	1.4	0.1	10.0	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	2	88	5	0	47	70	3	0	2	4	0	0	2	2	26	251
	Sm truck	0	0	0	0	0	0	5	0	0	3	0	0	0	0	0	2	10
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15	Peds	0				0				0				0				0
	Auto	0	1	64	7	0	26	53	3	0	2	2	1	0	5	2	18	184
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
12:30	Peds	0				0				0				0				0
	Auto	0	2	76	3	0	22	75	1	0	0	1	1	0	6	1	31	219
	Sm truck	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	1	8
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
12:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	228	15	0	95	198	7	0	4	7	2	0	13	5	75	654
	Sm truck	0	0	5	0	0	0	10	0	0	3	0	0	0	0	0	3	21
	Lg Truck	0	0	8	0	0	0	8	0	0	0	0	0	0	0	0	0	16
	ALL	0	5	241	15	0	95	216	7	0	7	7	2	0	13	5	78	691
	% ALL	0.0	0.7	34.9	2.2	0.0	13.7	31.3	1.0	0.0	1.0	1.0	0.3	0.0	1.9	0.7	11.3	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
13:00	Peds	0				0				0				0				0
	Auto	0	1	61	9	0	19	68	2	0	1	1	2	0	6	0	29	199
	Sm truck	0	1	4	0	0	0	3	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	8
13:15	Peds	0				0				0				0				0
	Auto	0	0	78	6	0	24	59	0	0	3	3	1	0	3	0	28	205
	Sm truck	0	0	4	0	0	2	3	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13
13:30	Peds	0				0				0				0				0
	Auto	0	2	74	1	0	23	74	0	0	2	1	1	0	3	0	19	200
	Sm truck	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	2	10
	Lg Truck	0	0	6	0	0	0	2	1	0	0	0	0	0	0	0	0	9
13:45	Peds	0				0				0				0				0
	Auto	0	1	81	3	0	30	86	4	0	2	5	0	0	3	2	24	241
	Sm truck	0	0	3	0	0	3	2	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	294	19	0	96	287	6	0	8	10	4	0	15	2	100	845
	Sm truck	0	1	11	0	0	7	14	0	0	0	0	0	0	0	0	4	37
	Lg Truck	0	0	19	0	0	0	12	1	0	0	0	0	0	0	0	0	32
	ALL	0	5	324	19	0	103	313	7	0	8	10	4	0	15	2	104	914
	% ALL	0.0	0.5	35.4	2.1	0.0	11.3	34.2	0.8	0.0	0.9	1.1	0.4	0.0	1.6	0.2	11.4	100.0
14:00	Peds	0				0				0				0				0
	Auto	0	1	78	3	0	8	72	5	0	2	2	1	0	3	1	23	199
	Sm truck	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	1	5
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
14:15	Peds	0				0				0				0				0
	Auto	0	0	86	2	0	25	49	2	0	1	1	0	0	2	1	28	197
	Sm truck	0	0	5	0	0	0	1	0	0	0	1	0	0	0	0	1	8
	Lg Truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
14:30	Peds	0				0				0				0				0
	Auto	0	1	75	5	0	17	54	2	0	3	2	0	0	7	1	28	195
	Sm truck	0	0	2	0	0	3	3	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
14:45	Peds	0				0				0				0				0
	Auto	0	0	72	6	0	18	71	2	0	2	1	2	0	8	0	17	199
	Sm truck	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	1	14
	Lg Truck	0	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	11
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	311	16	0	68	246	11	0	8	6	3	0	20	3	96	790
	Sm truck	0	0	15	0	0	4	12	0	0	0	1	0	0	0	0	4	36
	Lg Truck	0	0	13	0	0	0	22	0	0	0	0	0	0	0	0	0	35
	ALL	0	2	339	16	0	72	280	11	0	8	7	3	0	20	3	100	861
	% ALL	0.0	0.2	39.4	1.9	0.0	8.4	32.5	1.3	0.0	0.9	0.8	0.3	0.0	2.3	0.3	11.6	100.0
15:00	Peds	0				0				0				0				0
	Auto	0	2	71	4	0	26	78	7	0	1	0	2	0	5	1	26	223
	Sm truck	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	2	11
	Lg Truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
15:15	Peds	0				0				0				0				0
	Auto	0	1	68	8	0	20	74	1	0	3	0	0	0	4	3	19	201
	Sm truck	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11
15:30	Peds	0				0				0				0				0
	Auto	0	0	82	12	0	33	78	5	0	1	1	1	0	5	1	30	249
	Sm truck	0	0	5	0	0	1	3	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
15:45	Peds	0				0				0				0				0
	Auto	0	2	99	8	0	42	101	0	0	5	0	0	0	4	1	23	285
	Sm truck	0	0	5	0	0	0	2	0	0	0	0	1	0	0	0	0	8
	Lg Truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	320	32	0	121	331	13	0	10	1	3	0	18	6	98	958
	Sm truck	0	0	18	0	0	1	13	0	0	0	0	1	0	0	0	2	35
	Lg Truck	0	0	16	0	0	0	14	0	0	0	0	0	0	0	0	0	30
	ALL	0	5	354	32	0	122	358	13	0	10	1	4	0	18	6	100	1023
	% ALL	0.0	0.5	34.6	3.1	0.0	11.9	35.0	1.3	0.0	1.0	0.1	0.4	0.0	1.8	0.6	9.8	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	0	87	10	0	37	103	3	0	2	1	0	0	7	1	27	278
	Sm truck	0	0	5	0	0	1	3	0	0	0	0	0	0	0	0	2	11
	Lg Truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	9
16:15	Peds	0				0				0				0				0
	Auto	0	1	93	4	0	40	98	3	0	3	1	2	0	6	3	26	280
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
16:30	Peds	0				0				0				0				0
	Auto	0	2	105	7	0	37	122	2	0	1	1	1	0	1	1	40	320
	Sm truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	1	5
	Lg Truck	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7
16:45	Peds	0				0				0				0				0
	Auto	0	1	104	8	0	38	121	4	0	1	1	0	0	4	1	24	307
	Sm truck	0	0	4	0	0	2	3	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	389	29	0	152	444	12	0	7	4	3	0	18	6	117	1185
	Sm truck	0	0	12	0	0	3	12	0	0	0	0	0	0	0	0	3	30
	Lg Truck	0	0	16	0	0	0	10	0	0	0	0	0	0	0	0	0	26
	ALL	0	4	417	29	0	155	466	12	0	7	4	3	0	18	6	120	1241
	% ALL	0.0	0.3	33.6	2.3	0.0	12.5	37.6	1.0	0.0	0.6	0.3	0.2	0.0	1.5	0.5	9.7	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	1	96	10	0	47	131	5	0	6	1	2	0	6	3	28	336
	Sm truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	4
	Lg Truck	0	0	3	0	0	0	5	0	0	0	0	0	0	1	0	0	9
17:15	Peds	0				0				0				0				0
	Auto	0	0	86	11	0	29	101	3	0	3	5	0	0	1	1	19	259
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	10
17:30	Peds	0				0				0				0				0
	Auto	0	0	3	1	0	3	1	0	0	0	0	0	0	0	0	0	8
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
17:45	Peds	0				0				0				0				0
	Auto	0	1	71	3	0	22	57	1	0	2	1	2	0	5	2	17	184
	Sm truck	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	256	25	0	101	290	9	0	11	7	4	0	12	6	64	787
	Sm truck	0	0	10	0	0	0	2	0	0	0	0	0	0	0	0	1	13
	Lg Truck	0	0	6	0	0	0	15	0	0	0	0	0	0	1	0	0	22
	ALL	0	2	272	25	0	101	307	9	0	11	7	4	0	13	6	65	822
	% ALL	0.0	0.2	33.1	3.0	0.0	12.3	37.3	1.1	0.0	1.3	0.9	0.5	0.0	1.6	0.7	7.9	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	0	83	0	0	21	79	1	0	3	4	2	0	7	0	26	226
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
18:15	Peds	0				0				0				0				0
	Auto	0	2	57	6	0	16	48	8	0	1	4	1	0	7	2	11	163
	Sm truck	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
18:30	Peds	0				0				0				0				0
	Auto	0	4	51	10	0	16	63	41	0	1	0	2	0	7	16	21	232
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
18:45	Peds	0				0				0				0				0
	Auto	0	3	76	8	0	14	52	35	0	0	1	2	0	2	5	24	222
	Sm truck	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	9	267	24	0	67	242	85	0	5	9	7	0	23	23	82	843
	Sm truck	0	1	8	0	0	0	2	0	0	0	0	0	0	1	0	0	12
	Lg Truck	0	0	6	0	0	0	12	0	0	0	0	0	0	0	0	0	18
	ALL	0	10	281	24	0	67	256	85	0	5	9	7	0	24	23	82	873
	% ALL	0.0	1.1	32.2	2.7	0.0	7.7	29.3	9.7	0.0	0.6	1.0	0.8	0.0	2.7	2.6	9.4	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	0	54	3	0	18	52	9	0	4	1	0	0	4	2	24	171
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
19:15	Peds	0				0				0				0				0
	Auto	0	1	37	8	0	20	41	5	0	3	1	0	0	10	1	10	137
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:30	Peds	0				0				0				0				0
	Auto	0	2	42	3	0	20	48	3	0	8	3	3	0	8	1	20	161
	Sm truck	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
19:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	133	14	0	58	141	17	0	15	5	3	0	22	4	54	469
	Sm truck	0	0	3	0	0	0	3	0	0	1	0	0	0	0	0	1	8
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
	ALL	0	3	140	14	0	58	150	17	0	16	5	3	0	22	4	55	487
	% ALL	0.0	0.6	28.7	2.9	0.0	11.9	30.8	3.5	0.0	3.3	1.0	0.6	0.0	4.5	0.8	11.3	100.0
20:00	Peds	0				0				0				0				0
	Auto	0	0	44	5	0	21	43	1	0	2	2	1	0	0	2	13	134
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	4
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
20:15	Peds	0				0				0				0				0
	Auto	0	1	40	2	0	15	50	1	0	3	2	1	0	3	3	11	132
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
20:30	Peds	0				0				0				0				0
	Auto	0	0	48	8	0	13	45	4	0	29	4	2	0	6	0	14	173
	Sm truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
20:45	Peds	0				0				0				0				0
	Auto	0	1	52	4	0	14	24	1	0	16	6	2	0	3	1	5	129
	Sm truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	184	19	0	63	162	7	0	50	14	6	0	12	6	43	568
	Sm truck	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	20
	ALL	0	2	201	19	0	63	173	7	0	50	14	6	0	12	6	44	597
	% ALL	0.0	0.3	33.7	3.2	0.0	10.6	29.0	1.2	0.0	8.4	2.3	1.0	0.0	2.0	1.0	7.4	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Jun 2 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	13	1335	65	0	314	971	33	0	22	18	10	0	62	8	449	3300
%	0.0	0.4	37.7	1.8	0.0	8.9	27.4	0.9	0.0	0.6	0.5	0.3	0.0	1.8	0.2	12.7	93.2
Sm truck	0	0	57	3	0	9	64	0	0	0	1	0	0	0	0	16	150
%	0.0	0.0	1.6	0.1	0.0	0.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.2
Lg truck	0	0	40	1	0	2	48	0	0	0	0	0	0	0	0	0	91
%	0.0	0.0	1.1	0.0	0.0	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
All	0	13	1432	69	0	325	1083	33	0	22	19	10	0	62	8	465	3541
% ALL	0.0	0.4	40.4	1.9	0.0	9.2	30.6	0.9	0.0	0.6	0.5	0.3	0.0	1.8	0.2	13.1	100.0

PM Count Summary Date: Jun 2 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	36	2382	193	0	821	2341	167	0	118	63	35	0	153	61	729	7099
%	0.0	0.5	31.7	2.6	0.0	10.9	31.2	2.2	0.0	1.6	0.8	0.5	0.0	2.0	0.8	9.7	94.5
Sm truck	0	2	89	0	0	15	69	0	0	4	1	1	0	1	0	19	201
%	0.0	0.0	1.2	0.0	0.0	0.2	0.9	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	2.7
Lg truck	0	0	98	0	0	0	109	1	0	0	0	0	0	1	0	0	209
%	0.0	0.0	1.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
All	0	38	2569	193	0	836	2519	168	0	122	64	36	0	155	61	748	7509
% ALL	0.0	0.5	34.2	2.6	0.0	11.1	33.5	2.2	0.0	1.6	0.9	0.5	0.0	2.1	0.8	10.0	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	49	3717	258	0	1135	3312	200	0	140	81	45	0	215	69	1178	10399
%	0.0	0.4	33.6	2.3	0.0	10.3	30.0	1.8	0.0	1.3	0.7	0.4	0.0	1.9	0.6	10.7	94.1
Sm truck	0	2	146	3	0	24	133	0	0	4	2	1	0	1	0	35	351
%	0.0	0.0	1.3	0.0	0.0	0.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.2
Lg truck	0	0	138	1	0	2	157	1	0	0	0	0	0	1	0	0	300
%	0.0	0.0	1.2	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
All	0	51	4001	262	0	1161	3602	201	0	144	83	46	0	217	69	1213	11050
% ALL	0.0	0.5	36.2	2.4	0.0	10.5	32.6	1.8	0.0	1.3	0.8	0.4	0.0	2.0	0.6	11.0	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	64	4832	335	0	1476	4306	260	0	182	105	59	0	280	90	1531	13519
%	0.0	0.4	33.6	2.3	0.0	10.3	30.0	1.8	0.0	1.3	0.7	0.4	0.0	1.9	0.6	10.7	94.1
Sm truck	0	3	190	4	0	31	173	0	0	5	3	1	0	1	0	46	456
%	0.0	0.0	1.7	0.0	0.0	0.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.1
Lg truck	0	0	179	1	0	3	204	1	0	0	0	0	0	1	0	0	390
%	0.0	0.0	1.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
All	0	66	5201	341	0	1509	4683	261	0	187	108	60	0	282	90	1577	14365
% ALL	0.0	0.5	36.2	2.4	0.0	10.5	32.6	1.8	0.0	1.3	0.8	0.4	0.0	2.0	0.6	11.0	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	49	3717	258	0	1135	3312	200	0	140	81	45	0	215	69	1178	10399
%	0.0	0.4	33.6	2.3	0.0	10.3	30.0	1.8	0.0	1.3	0.7	0.4	0.0	1.9	0.6	10.7	94.1
Sm truck	0	2	146	3	0	24	133	0	0	4	2	1	0	1	0	35	351
%	0.0	0.0	1.3	0.0	0.0	0.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.2
Lg truck	0	0	138	1	0	2	157	1	0	0	0	0	0	1	0	0	300
%	0.0	0.0	1.2	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
All	0	51	4001	262	0	1161	3602	201	0	144	83	46	0	217	69	1213	11050
% ALL	0.0	0.5	36.2	2.4	0.0	10.5	32.6	1.8	0.0	1.3	0.8	0.4	0.0	2.0	0.6	11.0	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period	MON	DAY	YEAR	TOTAL 8179				Lg Truck % 3.6				North							
Morning:	Jun	2	2009	Peds from North = 0															
Afternoon:	Jun	2	2009																
				APPROACH 4314				DEPART 3865											
				RtRed	Right	Thru	Left	Left	Thru	Right	RtRed								
				0	262	4001	51	217	3602	46	0								
DEPART				RtRed				0				0	RtRed						
1506				Right									Right						
				Thru									Thru						



LOCATION: PTH 1A & BRAECREST DR IN BRANDON

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	64	4832	335	0	1476	4306	260	0	182	105	59	0	280	90	1531	13519
%	0.0	0.4	33.6	2.3	0.0	10.3	30.0	1.8	0.0	1.3	0.7	0.4	0.0	1.9	0.6	10.7	94.1
Sm truck	0	3	190	4	0	31	173	0	0	5	3	1	0	1	0	46	456
%	0.0	0.0	1.7	0.0	0.0	0.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.1
Lg truck	0	0	179	1	0	3	204	1	0	0	0	0	0	1	0	0	390
%	0.0	0.0	1.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
All	0	66	5201	341	0	1509	4683	261	0	187	108	60	0	282	90	1577	14365
% ALL	0.0	0.5	36.2	2.4	0.0	10.5	32.6	1.8	0.0	1.3	0.8	0.4	0.0	2.0	0.6	11.0	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period				TOTAL				10633				North				
MON				DAY				YEAR								
Morning: Jun				2				2009								
Afternoon: Jun				2				2009								
				Peds from North =				0								
				APPROACH				5608				DEPART 5025				
				RtRed	Right	Thru	Left	Left	Thru	Right	RtRed					
				0	341	5201	66	282	4683	60	0					
DEPART				RtRed	0							0	RtRed	APPROACH		
1958				Right	341							60	Right	355		
				Thru	108							108	Thru	Peds from East = 0		
TOTAL				Left	1509							187	Left	TOTAL 772		
Lg Truck %				Left	282							66	Left	Lg Truck % 0.2		
Peds from West =				Thru	90							90	Thru			
0				Right	1577							261	Right			
APPROACH				RtRed	0							0	RtRed	DEPART		
1949				0	1577	5201	187	1509	4683	261	0	417				
				RtRed	Right	Thru	Left	Left	Thru	Right	RtRed					
				DEPART 6965				APPROACH 6453								
								Peds from South =				0				
												TOTAL 13419				
												Lg Truck % 2.9				

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



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Titan turning movement count analysis
PTH 1A & CENTER AVE
Nov 01, 2012 & Oct 30, 2012

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.

Note: Count-4 counts (called CTPs for "car-truck-pedestrian") are taken over 14 hours in 15 minutes intervals. The CTP count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2012 Traffic on Manitoba Highways report*) as follows:

Count-4 (CTP)	Equivalent FHWA Scheme F
Pedestrians	N/A
Autos	FHWA Classes 2 and 3*
Small Trucks	FHWA Classes 4 to 7
Large Trucks	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	55	0	0	1	78	12	0	2	0	2	0	5	0	3	163
	Sm truck	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
7:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	73	3	0	3	39	13	0	4	0	0	0	1	1	3	148
	Sm truck	0	0	2	0	0	0	6	0	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
7:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	137	0	0	6	64	6	0	4	0	0	0	3	2	4	233
	Sm truck	0	2	4	0	0	0	7	0	0	1	0	0	0	0	0	0	14
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
7:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	9	132	1	0	12	91	9	0	7	1	0	0	6	5	5	278
	Sm truck	0	1	6	0	0	0	5	0	0	1	0	0	0	0	0	0	13
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	1	0	1	0	0	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	29	397	4	0	22	272	40	0	17	1	2	0	15	8	15	822
	Sm truck	0	3	15	0	0	0	24	0	0	2	0	1	0	0	0	0	45
	Lg Truck	0	0	8	0	0	0	8	0	0	0	0	1	0	1	0	0	18
	ALL	0	32	420	4	0	22	304	40	0	19	1	4	0	16	8	15	885
	% ALL	0	4	47	0	0	2	34	5	0	2	0	0	0	2	1	2	100.0
8:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	27	121	1	0	1	51	23	0	6	0	2	0	4	7	4	247
	Sm truck	0	0	3	1	0	0	7	0	0	1	0	0	0	1	0	0	13
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
8:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	13	115	0	0	3	50	20	0	5	0	1	0	3	5	11	226
	Sm truck	0	0	4	0	0	0	10	0	0	0	0	0	0	0	0	1	15
	Lg Truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5
8:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	118	2	0	4	44	7	0	3	0	4	0	7	0	2	196
	Sm truck	0	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	15
	Lg Truck	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
8:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	92	1	0	3	49	5	0	8	0	0	0	3	0	4	169
	Sm truck	0	0	6	0	0	0	6	1	0	2	0	0	0	0	0	0	15
	Lg Truck	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	49	446	4	0	11	194	55	0	22	0	7	0	17	12	21	838
	Sm truck	0	0	17	1	0	0	34	1	0	3	0	0	0	1	0	1	58
	Lg Truck	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	22
	ALL	0	49	474	5	0	11	239	56	0	25	0	7	0	18	12	22	918
	% ALL	0	5	52	1	0	1	26	6	0	3	0	1	0	2	1	2	100.0
9:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	69	0	0	8	48	0	0	6	0	5	0	1	0	4	143
	Sm truck	0	3	5	0	0	0	10	0	0	1	0	0	0	0	0	0	19
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
9:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	72	2	0	6	43	6	0	4	0	2	0	0	0	4	139
	Sm truck	0	2	4	0	0	0	6	0	0	1	0	4	0	0	0	0	17
	Lg Truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
9:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	71	1	0	9	46	3	0	4	0	5	0	1	0	4	145
	Sm truck	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	212	3	0	23	137	9	0	14	0	12	0	2	0	12	427
	Sm truck	0	5	17	0	0	0	21	0	0	2	0	4	0	0	0	0	49
	Lg Truck	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	20
	ALL	0	8	239	3	0	23	168	9	0	16	0	16	0	2	0	12	496
	% ALL	0	2	48	1	0	5	34	2	0	3	0	3	0	0	0	2	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	49	3	0	6	34	6	0	7	0	4	0	2	0	5	122
	Sm truck	0	1	4	0	0	0	5	1	0	1	0	1	0	0	0	0	13
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
10:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	72	0	0	4	34	3	0	9	0	2	0	2	0	5	132
	Sm truck	0	1	3	0	0	0	5	0	0	0	0	2	0	0	0	0	11
	Lg Truck	0	0	5	1	0	0	2	0	0	0	0	0	0	0	0	0	8
10:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	72	1	0	8	35	4	0	8	0	1	0	1	0	6	137
	Sm truck	0	0	8	0	0	0	3	0	0	1	0	2	0	0	0	0	14
	Lg Truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5
10:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	64	0	0	4	45	5	0	3	0	3	0	3	1	8	142
	Sm truck	0	0	4	0	0	0	4	0	0	0	0	1	0	0	0	0	9
	Lg Truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	9
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	14	257	4	0	22	148	18	0	27	0	10	0	8	1	24	533
	Sm truck	0	2	19	0	0	0	17	1	0	2	0	6	0	0	0	0	47
	Lg Truck	0	0	13	1	0	0	12	0	0	0	0	0	0	0	0	0	26
	ALL	0	16	289	5	0	22	177	19	0	29	0	16	0	8	1	24	606
	% ALL	0	3	48	1	0	4	29	3	0	5	0	3	0	1	0	4	100.0
11:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	66	2	0	11	36	6	0	11	0	2	0	4	1	5	147
	Sm truck	0	0	4	0	0	1	3	0	0	1	0	0	0	0	0	1	10
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
11:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	57	5	0	17	30	3	0	30	4	3	0	1	1	9	163
	Sm truck	0	1	9	0	0	0	7	0	0	1	0	1	0	0	0	0	19
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	58	1	0	11	48	4	0	17	0	8	0	4	1	11	170
	Sm truck	0	2	8	1	0	0	5	0	0	1	0	2	0	0	0	0	19
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	13	181	8	0	39	115	13	0	58	4	13	0	9	3	25	481
	Sm truck	0	3	21	1	0	1	15	0	0	3	0	3	0	0	0	1	48
	Lg Truck	0	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	16
	ALL	0	16	211	9	0	40	137	13	0	61	4	16	0	9	3	26	545
	% ALL	0	3	39	2	0	7	25	2	0	11	1	3	0	2	1	5	100.0
12:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	75	3	0	16	46	14	0	11	2	0	0	4	2	11	191
	Sm truck	0	0	6	0	0	0	4	1	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	53	3	0	10	31	10	0	14	0	5	0	6	3	8	149
	Sm truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	1	10
	Lg Truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
12:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	41	2	0	6	32	6	0	2	0	2	0	2	1	8	104
	Sm truck	0	1	3	0	0	0	2	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
12:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	80	1	0	9	53	8	0	2	1	2	0	3	3	10	177
	Sm truck	0	3	7	0	0	0	2	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	20	249	9	0	41	162	38	0	29	3	9	0	15	9	37	621
	Sm truck	0	4	21	0	0	0	12	1	0	0	0	0	0	0	0	1	39
	Lg Truck	0	0	15	0	0	0	8	0	0	0	0	0	0	0	0	0	23
	ALL	0	24	285	9	0	41	182	39	0	29	3	9	0	15	9	38	683
	% ALL	0	4	42	1	0	6	27	6	0	4	0	1	0	2	1	6	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
13:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	80	0	0	17	42	4	0	4	0	1	0	2	1	7	160
	Sm truck	0	0	8	0	0	0	5	0	0	1	0	2	0	0	0	0	16
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
13:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	59	4	0	14	38	6	0	6	0	0	0	2	1	8	143
	Sm truck	0	0	9	0	0	0	3	0	0	1	0	0	0	0	0	0	13
	Lg Truck	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11
13:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	59	3	0	10	48	2	0	8	0	5	0	4	0	10	153
	Sm truck	0	0	4	0	0	0	6	0	0	0	0	1	0	0	0	0	11
	Lg Truck	0	0	7	0	0	0	5	1	0	0	0	1	0	0	0	0	14
13:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	63	2	0	12	51	2	0	4	0	4	0	6	0	13	158
	Sm truck	0	0	9	0	0	0	6	0	0	1	0	0	0	0	0	0	16
	Lg Truck	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	12	261	9	0	53	179	14	0	22	0	10	0	14	2	38	614
	Sm truck	0	0	30	0	0	0	20	0	0	3	0	3	0	0	0	0	56
	Lg Truck	0	0	22	0	0	0	19	1	0	0	0	1	0	0	0	0	43
	ALL	0	12	313	9	0	53	218	15	0	25	0	14	0	14	2	38	713
	% ALL	0	2	44	1	0	7	31	2	0	4	0	2	0	2	0	5	100.0
14:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	53	4	0	13	62	3	0	4	0	4	0	3	0	9	156
	Sm truck	0	0	7	1	0	0	4	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
14:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	62	3	0	11	45	5	0	13	1	3	0	5	2	8	161
	Sm truck	0	0	2	0	0	0	4	0	0	1	0	0	0	0	0	0	7
	Lg Truck	0	1	6	0	0	0	2	0	0	1	0	0	0	0	0	0	10
14:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	71	2	0	28	73	2	0	17	0	2	0	9	0	9	215
	Sm truck	0	0	9	0	0	0	11	0	0	1	0	0	0	0	0	0	21
	Lg Truck	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
14:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	69	2	0	17	54	4	0	15	0	5	0	10	0	11	191
	Sm truck	0	0	3	0	0	0	5	0	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	6	0	0	0	5	0	0	0	0	0	0	0	0	0	11
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	255	11	0	69	234	14	0	49	1	14	0	27	2	37	723
	Sm truck	0	0	21	1	0	0	24	0	0	3	0	0	0	0	0	0	49
	Lg Truck	0	1	20	0	0	0	14	0	0	1	0	0	0	0	0	0	36
	ALL	0	11	296	12	0	69	272	14	0	53	1	14	0	27	2	37	808
	% ALL	0.0	1.4	36.6	1.5	0.0	8.5	33.7	1.7	0.0	6.6	0.1	1.7	0.0	3.3	0.2	4.6	100.0
15:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	58	2	0	12	70	0	0	32	3	10	0	4	2	15	209
	Sm truck	0	1	8	0	0	0	3	1	0	1	0	1	0	0	0	1	16
	Lg Truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
15:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	76	4	0	17	60	7	0	46	1	8	0	5	0	10	235
	Sm truck	0	0	12	0	0	2	6	1	0	0	0	1	0	0	0	0	22
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
15:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	74	6	0	17	73	2	0	20	2	3	0	4	1	15	218
	Sm truck	0	0	5	0	0	0	6	1	0	1	0	0	0	1	0	0	14
	Lg Truck	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	7
15:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	86	0	0	26	76	6	0	37	0	9	0	6	1	11	260
	Sm truck	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	294	12	0	72	279	15	0	135	6	30	0	19	4	51	922
	Sm truck	0	1	30	0	0	2	17	3	0	2	0	2	0	1	0	1	59
	Lg Truck	0	1	13	0	0	0	8	0	0	0	0	0	0	0	0	0	22
	ALL	0	7	337	12	0	74	304	18	0	137	6	32	0	20	4	52	1003
	% ALL	0.0	0.7	33.6	1.2	0.0	7.4	30.3	1.8	0.0	13.7	0.6	3.2	0.0	2.0	0.4	5.2	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
16:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	110	3	0	27	93	2	0	32	0	5	0	7	1	15	296
	Sm truck	0	0	8	0	0	0	2	0	0	1	0	0	0	1	0	0	12
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
16:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	52	3	0	19	54	3	0	24	1	3	0	4	1	8	172
	Sm truck	0	0	2	0	0	0	2	0	0	1	0	0	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	8
16:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	58	1	0	11	44	0	0	13	1	6	0	5	0	9	148
	Sm truck	0	0	4	0	0	0	3	0	0	1	0	0	0	0	0	0	8
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
16:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	105	1	0	19	113	5	0	7	1	1	0	7	1	24	285
	Sm truck	0	0	8	0	0	0	4	0	0	1	0	0	0	0	0	0	13
	Lg Truck	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	325	8	0	76	304	10	0	76	3	15	0	23	3	56	901
	Sm truck	0	0	22	0	0	0	11	0	0	4	0	0	0	1	0	0	38
	Lg Truck	0	0	12	0	0	0	14	0	0	0	0	0	0	0	0	0	26
	ALL	0	2	359	8	0	76	329	10	0	80	3	15	0	24	3	56	965
	% ALL	0.0	0.2	37.2	0.8	0.0	7.9	34.1	1.0	0.0	8.3	0.3	1.6	0.0	2.5	0.3	5.8	100.0
17:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	80	5	0	25	118	6	0	8	0	1	0	12	1	11	269
	Sm truck	0	1	10	0	0	0	6	0	0	2	0	0	0	0	0	0	19
	Lg Truck	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	0	8
17:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	90	4	0	30	81	4	0	4	1	2	0	11	3	6	238
	Sm truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
17:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	62	1	0	24	68	2	0	3	0	0	0	11	0	10	182
	Sm truck	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7
17:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	63	0	0	20	61	4	0	4	1	0	0	6	0	14	174
	Sm truck	0	0	6	0	0	1	2	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	295	10	0	99	328	16	0	19	2	3	0	40	4	41	863
	Sm truck	0	1	26	0	0	1	9	0	0	2	0	0	0	0	0	0	39
	Lg Truck	0	0	11	0	0	1	11	0	0	0	0	0	0	0	0	0	23
	ALL	0	7	332	10	0	101	348	16	0	21	2	3	0	40	4	41	925
	% ALL	0.0	0.8	35.9	1.1	0.0	10.9	37.6	1.7	0.0	2.3	0.2	0.3	0.0	4.3	0.4	4.4	100.0
18:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	68	2	0	13	63	0	0	1	0	0	0	3	1	7	158
	Sm truck	0	0	4	0	0	0	3	1	0	1	0	0	0	0	0	0	9
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	1	0	0	6
18:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	63	1	0	17	49	0	0	4	0	0	0	3	1	7	145
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
18:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	25	0	0	7	17	0	0	1	0	0	0	1	0	8	60
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	20	2	0	15	22	1	0	0	0	0	0	0	0	7	67
	Sm truck	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	4
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	176	5	0	52	151	1	0	6	0	0	0	7	2	29	430
	Sm truck	0	1	8	0	0	0	6	1	0	2	0	0	0	0	0	0	18
	Lg Truck	0	0	9	0	0	0	8	0	0	0	0	0	0	1	0	0	18
	ALL	0	2	193	5	0	52	165	2	0	8	0	0	0	8	2	29	466
	% ALL	0.0	0.4	41.4	1.1	0.0	11.2	35.4	0.4	0.0	1.7	0.0	0.0	0.0	1.7	0.4	6.2	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
19:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	54	2	0	11	37	2	0	2	0	0	0	2	0	10	120
	Sm truck	0	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
19:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	36	1	0	14	25	1	0	0	0	2	0	0	0	15	95
	Sm truck	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	6
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
19:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	33	1	0	13	34	1	0	3	0	0	0	2	0	4	91
	Sm truck	0	0	5	0	0	1	1	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
19:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	27	3	0	11	35	0	0	0	0	0	0	3	0	6	86
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	150	7	0	49	131	4	0	5	0	2	0	7	0	35	392
	Sm truck	0	0	11	0	0	1	5	0	0	1	0	0	0	1	0	0	19
	Lg Truck	0	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	16
	ALL	0	2	168	7	0	50	145	4	0	6	0	2	0	8	0	35	427
	% ALL	0.0	0.5	39.3	1.6	0.0	11.7	34.0	0.9	0.0	1.4	0.0	0.5	0.0	1.9	0.0	8.2	100.0
20:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	24	2	0	16	35	2	0	1	0	1	0	4	0	11	96
	Sm truck	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	18	2	0	7	25	4	0	2	0	1	0	2	0	10	72
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
20:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	28	1	0	8	27	2	0	1	0	0	0	2	0	5	74
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	8	0	0	1	12	1	0	0	0	0	0	2	0	6	30
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	78	5	0	32	99	9	0	4	0	2	0	10	0	32	272
	Sm truck	0	0	4	0	0	0	2	0	0	1	0	0	0	0	0	0	7
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	ALL	0	1	85	5	0	32	103	9	0	5	0	2	0	10	0	32	284
	% ALL	0.0	0.4	29.9	1.8	0.0	11.3	36.3	3.2	0.0	1.8	0.0	0.7	0.0	3.5	0.0	11.3	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Nov 01 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	108	1493	23	0	117	866	135	0	138	5	44	0	51	24	97	3101
%	0	3	43	1	0	3	25	4	0	4	0	1	0	1	1	3	89.9
Sm truck	0	13	89	2	0	1	111	2	0	12	0	14	0	1	0	2	247
%	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	7.2
Lg truck	0	0	51	1	0	0	48	0	0	0	0	1	0	1	0	0	102
%	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3.0
All	0	121	1633	26	0	118	1025	137	0	150	5	59	0	53	24	99	3450
% ALL	0	4	47	1	0	3	30	4	0	4	0	2	0	2	1	3	100.0

PM Count Summary Date: Oct 30 2012

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	59	2083	76	0	543	1867	121	0	345	15	85	0	162	26	356	5738
%	0.0	0.9	33.2	1.2	0.0	8.7	29.8	1.9	0.0	5.5	0.2	1.4	0.0	2.6	0.4	5.7	91.5
Sm truck	0	7	173	1	0	4	106	5	0	18	0	5	0	3	0	2	324
%	0.0	0.1	2.8	0.0	0.0	0.1	1.7	0.1	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	5.2
Lg truck	0	2	112	0	0	1	93	1	0	1	0	1	0	1	0	0	212
%	0.0	0.0	1.8	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
All	0	68	2368	77	0	548	2066	127	0	364	15	91	0	166	26	358	6274
% ALL	0.0	1.1	37.7	1.2	0.0	8.7	32.9	2.0	0.0	5.8	0.2	1.5	0.0	2.6	0.4	5.7	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	167	3576	99	0	660	2733	256	0	483	20	129	0	213	50	453	8839
%	0.0	1.7	36.8	1.0	0.0	6.8	28.1	2.6	0.0	5.0	0.2	1.3	0.0	2.2	0.5	4.7	90.9
Sm truck	0	20	262	3	0	5	217	7	0	30	0	19	0	4	0	4	571
%	0.0	0.2	2.7	0.0	0.0	0.1	2.2	0.1	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	5.9
Lg truck	0	2	163	1	0	1	141	1	0	1	0	2	0	2	0	0	314
%	0.0	0.0	1.7	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
All	0	189	4001	103	0	666	3091	264	0	514	20	150	0	219	50	457	9724
% ALL	0.0	1.9	41.1	1.1	0.0	6.8	31.8	2.7	0.0	5.3	0.2	1.5	0.0	2.3	0.5	4.7	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	217	4649	129	0	858	3553	333	0	628	26	168	0	277	65	589	11491
%	0.0	1.7	36.8	1.0	0.0	6.8	28.1	2.6	0.0	5.0	0.2	1.3	0.0	2.2	0.5	4.7	90.9
Sm truck	0	26	341	4	0	7	282	9	0	39	0	25	0	5	0	5	742
%	0.0	0.3	3.5	0.0	0.0	0.1	2.9	0.1	0.0	0.4	0.0	0.3	0.0	0.1	0.0	0.1	7.6
Lg truck	0	3	212	1	0	1	183	1	0	1	0	3	0	3	0	0	408
%	0.0	0.0	2.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
All	0	246	5201	134	0	866	4018	343	0	668	26	195	0	285	65	594	12641
% ALL	0.0	1.9	41.1	1.1	0.0	6.8	31.8	2.7	0.0	5.3	0.2	1.5	0.0	2.3	0.5	4.7	100.0

Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Nov 01 2012
Afternoon: Oct 30 2012Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

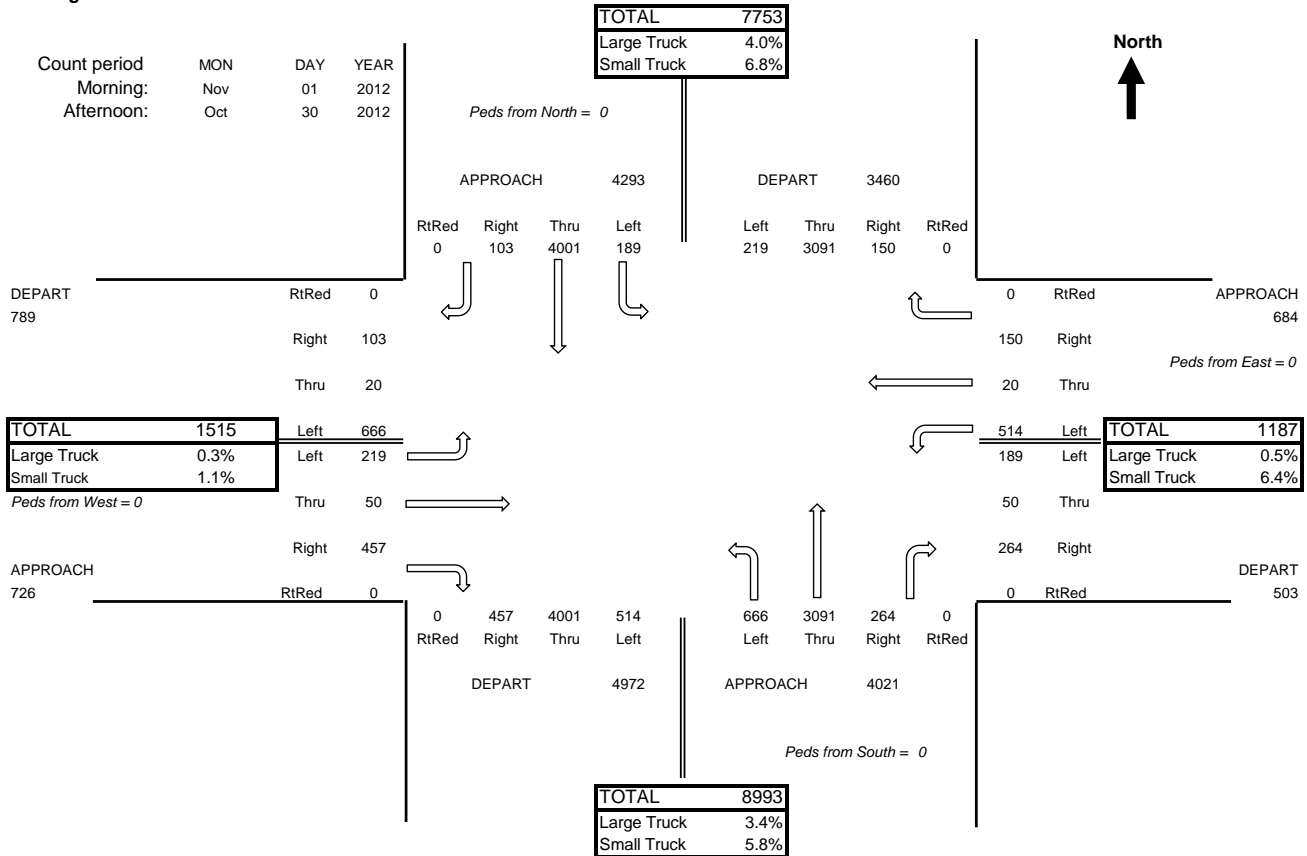
Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	167	3576	99	0	660	2733	256	0	483	20	129	0	213	50	453	8839
%	0.0	1.7	36.8	1.0	0.0	6.8	28.1	2.6	0.0	5.0	0.2	1.3	0.0	2.2	0.5	4.7	90.9
Sm truck	0	20	262	3	0	5	217	7	0	30	0	19	0	4	0	4	571
%	0.0	0.2	2.7	0.0	0.0	0.1	2.2	0.1	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	5.9
Lg truck	0	2	163	1	0	1	141	1	0	1	0	2	0	2	0	0	314
%	0.0	0.0	1.7	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
All	0	189	4001	103	0	666	3091	264	0	514	20	150	0	219	50	457	9724
% ALL	0.0	1.9	41.1	1.1	0.0	6.8	31.8	2.7	0.0	5.3	0.2	1.5	0.0	2.3	0.5	4.7	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection



Comment: This file is merged from counts taken on the morning of Nov 01 and the afternoon of Oct 30, 2012.



Manitoba Highway Traffic Information System
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1510 215 Garry St.
Fax 948-2554

Titan turning movement count analysis
PTH 1A & CENTER AVE
Apr 9, 2009

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0			0				0				0				0
	Auto	0	0	26	1	0	1	24	0	0	0	0	0	2	0	2	56
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	4
07:15	Peds	0			0				0				0				0
	Auto	0	0	62	0	0	0	35	0	0	0	0	0	0	0	1	98
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	5
07:30	Peds	0			0				0				0				0
	Auto	0	0	79	1	0	1	45	0	0	0	0	0	1	0	2	129
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	6
07:45	Peds	0			0				0				0				0
	Auto	0	0	118	0	0	1	59	0	0	0	0	0	2	0	2	182
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	285	2	0	3	163	0	0	0	0	0	5	0	7	465
	Sm truck	0	0	5	0	0	0	8	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	8	0	0	0	7	0	0	0	0	0	0	0	0	15
	ALL	0	0	298	2	0	3	178	0	0	0	0	0	5	0	7	493
	% ALL	0.0	0.0	60.4	0.4	0.0	0.6	36.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.4	100.0
08:00	Peds	0			0				0				0				0
	Auto	0	0	77	2	0	0	67	0	0	0	0	0	1	0	0	147
	Sm truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
08:15	Peds	0			0				0				0				0
	Auto	0	0	110	0	0	1	59	0	0	0	0	0	2	0	2	174
	Sm truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	5
08:30	Peds	0			0				0				0				0
	Auto	0	0	80	0	0	0	51	0	0	0	0	0	2	0	1	134
	Sm truck	0	0	3	0	0	0	7	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5
08:45	Peds	0			0				0				0				0
	Auto	0	0	77	3	0	3	45	0	0	0	0	0	2	0	4	134
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	344	5	0	4	222	0	0	0	0	0	7	0	7	589
	Sm truck	0	0	8	0	0	0	16	0	0	0	0	0	0	0	0	24
	Lg Truck	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	18
	ALL	0	0	361	5	0	4	247	0	0	0	0	0	7	0	7	631
	% ALL	0.0	0.0	57.2	0.8	0.0	0.6	39.1	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	100.0
09:00	Peds	0			0				0				0				0
	Auto	0	0	53	3	0	1	33	0	0	0	0	0	0	0	2	92
	Sm truck	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	6
09:15	Peds	0			0				0				0				0
	Auto	0	0	54	1	0	3	41	0	0	0	0	0	1	0	2	102
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	8
09:30	Peds	0			0				0				0				0
	Auto	0	0	55	2	0	4	44	0	0	0	0	0	0	0	2	107
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	5
09:45	Peds	0			0				0				0				0
	Auto	0	0	60	2	0	2	40	0	0	0	0	0	1	0	3	108
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	222	8	0	10	158	0	0	0	0	0	2	0	9	409
	Sm truck	0	0	11	0	0	0	7	0	0	0	0	0	0	0	0	18
	Lg Truck	0	0	10	0	0	0	12	0	0	0	0	0	0	0	0	22
	ALL	0	0	243	8	0	10	177	0	0	0	0	0	2	0	9	449
	% ALL	0.0	0.0	54.1	1.8	0.0	2.2	39.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.0	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	0	57	1	0	1	38	0	0	0	0	0	0	0	0	2	99
	Sm truck	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
10:15	Peds	0				0				0				0				0
	Auto	0	0	56	2	0	1	37	0	0	0	0	0	0	1	0	3	100
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
10:30	Peds	0				0				0				0				0
	Auto	0	0	64	2	0	1	22	0	0	0	0	0	0	1	0	3	93
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
10:45	Peds	0				0				0				0				0
	Auto	0	0	61	3	0	5	26	0	0	0	0	0	0	0	0	5	100
	Sm truck	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	1	15
	Lg Truck	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	238	8	0	8	123	0	0	0	0	0	0	2	0	13	392
	Sm truck	0	0	15	0	0	0	13	0	0	0	0	0	0	0	0	1	29
	Lg Truck	0	0	13	0	0	0	11	0	0	0	0	0	0	0	0	0	24
	ALL	0	0	266	8	0	8	147	0	0	0	0	0	0	2	0	14	445
	% ALL	0.0	0.0	59.8	1.8	0.0	1.8	33.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	3.1	100.0
11:00	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	Peds	0				0				0				0				0
	Auto	0	0	57	1	0	3	40	0	0	0	0	0	0	0	0	3	104
	Sm truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
11:30	Peds	0				0				0				0				0
	Auto	0	0	53	1	0	4	44	0	0	0	0	0	0	0	0	3	105
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
11:45	Peds	0				0				0				0				0
	Auto	0	0	75	1	0	4	39	0	0	0	0	0	0	0	0	3	122
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	185	3	0	11	123	0	0	0	0	0	0	0	0	9	331
	Sm truck	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	14
	Lg Truck	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	20
	ALL	0	0	202	3	0	11	140	0	0	0	0	0	0	0	0	9	365
	% ALL	0.0	0.0	55.3	0.8	0.0	3.0	38.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	0	69	0	0	6	60	0	0	0	0	0	0	0	0	3	138
	Sm truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
12:15	Peds	0				0				0				0				0
	Auto	0	0	66	3	0	3	55	0	0	0	0	0	0	0	1	3	131
	Sm truck	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
12:30	Peds	0				0				0				0				0
	Auto	0	0	51	2	0	4	51	0	0	0	0	0	0	2	0	5	115
	Sm truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45	Peds	0				0				0				0				0
	Auto	0	0	56	0	0	1	43	0	0	0	0	0	0	1	0	7	108
	Sm truck	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	242	5	0	14	209	0	0	0	0	0	0	3	1	18	492
	Sm truck	0	0	6	0	0	0	11	0	0	0	0	0	0	0	0	0	17
	Lg Truck	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13
	ALL	0	0	256	5	0	14	225	0	0	0	0	0	0	3	1	18	522
	% ALL	0.0	0.0	49.0	1.0	0.0	2.7	43.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	3.4	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
13:00	Peds	0				0				0				0				0
	Auto	0	0	56	3	0	6	56	0	0	0	0	0	0	2	0	6	129
	Sm truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	9
13:15	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	Peds	0				0				0				0				0
	Auto	0	0	57	3	0	5	54	0	0	0	0	0	0	2	0	5	126
	Sm truck	0	0	3	0	0	1	7	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
13:45	Peds	0				0				0				0				0
	Auto	0	0	62	0	0	7	59	0	0	0	0	0	0	2	0	8	138
	Sm truck	0	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	175	6	0	18	169	0	0	0	0	0	0	6	0	19	393
	Sm truck	0	0	7	0	0	1	19	0	0	0	0	0	0	0	0	0	27
	Lg Truck	0	0	12	0	0	0	8	0	0	0	0	0	0	0	0	0	20
	ALL	0	0	194	6	0	19	196	0	0	0	0	0	0	6	0	19	440
	% ALL	0.0	0.0	44.1	1.4	0.0	4.3	44.5	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	4.3	100.0
14:00	Peds	0				0				0				0				0
	Auto	0	0	67	1	0	5	49	0	0	0	0	0	0	2	0	2	126
	Sm truck	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
14:15	Peds	0				0				0				0				0
	Auto	0	0	56	1	0	3	49	0	0	0	0	0	0	0	0	6	115
	Sm truck	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
14:30	Peds	0				0				0				0				0
	Auto	0	0	56	2	0	6	57	0	0	0	0	0	1	0	0	2	124
	Sm truck	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
14:45	Peds	0				0				0				0				0
	Auto	0	0	59	1	0	8	53	0	0	0	0	0	0	2	0	6	129
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	238	5	0	22	208	0	0	0	0	0	1	4	0	16	494
	Sm truck	0	0	13	0	0	0	10	0	0	0	0	0	0	0	0	0	23
	Lg Truck	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14
	ALL	0	0	257	5	0	22	226	0	0	0	0	0	1	4	0	16	531
	% ALL	0.0	0.0	48.4	0.9	0.0	4.1	42.6	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0	3.0	100.0
15:00	Peds	0				0				0				0				0
	Auto	0	0	69	2	0	11	53	0	0	0	0	0	0	1	0	7	143
	Sm truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
15:15	Peds	0				0				0				0				0
	Auto	0	0	67	2	0	4	46	0	0	0	0	0	0	4	0	11	134
	Sm truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	5	0	0	1	4	0	0	0	0	0	0	0	0	0	10
15:30	Peds	0				0				0				0				0
	Auto	0	0	66	1	0	6	66	0	0	0	0	0	0	1	0	7	147
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
15:45	Peds	0				0				0				0				0
	Auto	0	0	81	1	0	0	48	0	0	0	0	0	0	3	0	4	137
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	283	6	0	21	213	0	0	0	0	0	0	9	0	29	561
	Sm truck	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18
	Lg Truck	0	0	13	0	0	1	7	0	0	0	0	0	0	0	0	0	21
	ALL	0	0	306	6	0	22	228	0	0	0	0	0	0	9	0	29	600
	% ALL	0.0	0.0	51.0	1.0	0.0	3.7	38.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	4.8	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	0	76	3	0	10	83	0	0	0	0	0	0	0	0	6	178
	Sm truck	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
16:15	Peds	0				0				0				0				0
	Auto	0	0	67	3	0	7	71	0	0	0	0	0	0	0	0	7	155
	Sm truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
16:30	Peds	0				0				0				0				0
	Auto	0	0	72	3	0	4	89	0	0	0	0	0	0	2	0	3	173
	Sm truck	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
16:45	Peds	0				0				0				0				0
	Auto	0	0	93	2	0	7	87	0	0	0	0	0	0	2	0	9	200
	Sm truck	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	308	11	0	28	330	0	0	0	0	0	0	4	0	25	706
	Sm truck	0	0	16	0	0	0	12	0	0	0	0	0	0	0	0	0	28
	Lg Truck	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13
	ALL	0	0	330	11	0	28	349	0	0	0	0	0	0	4	0	25	747
	% ALL	0.0	0.0	44.2	1.5	0.0	3.7	46.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	3.3	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	0	85	3	0	13	78	0	0	0	0	0	0	1	0	4	184
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	8
17:15	Peds	0				0				0				0				0
	Auto	0	0	104	2	0	4	115	0	0	0	0	0	0	2	0	6	233
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
17:30	Peds	0				0				0				0				0
	Auto	0	0	81	6	0	8	89	0	0	0	0	0	0	4	0	7	195
	Sm truck	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	1	9
	Lg Truck	0	0	6	0	0	2	4	0	0	0	0	0	0	0	0	0	12
17:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	270	11	0	25	282	0	0	0	0	0	0	7	0	17	612
	Sm truck	0	0	7	0	0	1	6	0	0	0	0	0	0	0	0	1	15
	Lg Truck	0	0	16	0	0	2	12	0	0	0	0	0	0	0	0	0	30
	ALL	0	0	293	11	0	28	300	0	0	0	0	0	0	7	0	18	657
	% ALL	0.0	0.0	44.6	1.7	0.0	4.3	45.7	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	2.7	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	0	45	1	0	4	52	0	0	0	0	0	0	0	0	4	106
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	9
18:15	Peds	0				0				0				0				0
	Auto	0	0	53	1	0	5	47	0	0	0	0	0	0	1	0	1	108
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	9
18:30	Peds	0				0				0				0				0
	Auto	0	0	48	0	0	6	48	0	0	0	0	0	0	0	0	3	105
	Sm truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
18:45	Peds	0				0				0				0				0
	Auto	0	0	51	0	0	1	42	0	0	0	0	0	0	1	0	2	97
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	1	5
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	197	2	0	16	189	0	0	0	0	0	0	2	0	10	416
	Sm truck	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	1	10
	Lg Truck	0	0	14	0	0	0	11	0	0	0	0	0	0	0	0	0	25
	ALL	0	0	214	2	0	16	206	0	0	0	0	0	0	2	0	11	451
	% ALL	0.0	0.0	47.5	0.4	0.0	3.5	45.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.4	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	0	44	2	0	3	41	0	0	0	0	0	0	0	0	2	92
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
19:15	Peds	0				0				0				0				0
	Auto	0	0	42	3	0	6	37	0	0	0	0	0	0	1	0	3	92
	Sm truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
19:30	Peds	0				0				0				0				0
	Auto	0	0	42	1	0	2	29	0	0	0	0	0	0	0	0	2	76
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
19:45	Peds	0				0				0				0				0
	Auto	0	0	41	0	0	5	29	0	0	0	0	0	0	0	0	1	76
	Sm truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	169	6	0	16	136	0	0	0	0	0	0	1	0	8	336
	Sm truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13
	ALL	0	0	179	6	0	16	147	0	0	0	0	0	0	1	0	8	357
	% ALL	0.0	0.0	50.1	1.7	0.0	4.5	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.2	100.0
20:00	Peds	0				0				0				0				0
	Auto	0	0	35	0	0	2	28	0	0	0	0	0	0	3	0	4	72
	Sm truck	0	0	4	0	0	1	4	0	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
20:15	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	Peds	0				0				0				0				0
	Auto	0	0	31	1	0	6	21	0	0	0	0	0	0	2	0	5	66
	Sm truck	0	0	3	0	0	1	3	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
20:45	Peds	0				0				0				0				0
	Auto	0	0	30	1	0	3	22	0	0	0	0	0	0	1	0	6	63
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	9
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	96	2	0	11	71	0	0	0	0	0	0	6	0	15	201
	Sm truck	0	0	7	0	0	2	10	0	0	0	0	0	0	0	0	0	19
	Lg Truck	0	0	13	0	0	0	13	0	0	0	0	0	0	0	0	0	26
	ALL	0	0	116	2	0	13	94	0	0	0	0	0	0	6	0	15	246
	% ALL	0.0	0.0	47.2	0.8	0.0	5.3	38.2	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	6.1	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Apr 9 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	1274	26	0	36	789	0	0	0	0	0	0	16	0	45	2186
%	0.0	0.0	53.5	1.1	0.0	1.5	33.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.9	91.7
Sm truck	0	0	46	0	0	0	51	0	0	0	0	0	0	0	0	1	98
%	0.0	0.0	1.9	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Lg truck	0	0	50	0	0	0	49	0	0	0	0	0	0	0	0	0	99
%	0.0	0.0	2.1	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
All	0	0	1370	26	0	36	889	0	0	0	0	0	0	16	0	46	2383
% ALL	0.0	0.0	57.5	1.1	0.0	1.5	37.3	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.9	100.0

PM Count Summary Date: Apr 9 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	1978	54	0	171	1807	0	0	0	0	0	1	42	1	157	4211
%	0.0	0.0	43.5	1.2	0.0	3.8	39.7	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	3.4	92.5
Sm truck	0	0	72	0	0	4	87	0	0	0	0	0	0	0	0	2	165
%	0.0	0.0	1.6	0.0	0.0	0.1	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Lg truck	0	0	95	0	0	3	77	0	0	0	0	0	0	0	0	0	175
%	0.0	0.0	2.1	0.0	0.0	0.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
All	0	0	2145	54	0	178	1971	0	0	0	0	0	1	42	1	159	4551
% ALL	0.0	0.0	47.1	1.2	0.0	3.9	43.3	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	3.5	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	3252	80	0	207	2596	0	0	0	0	0	1	58	1	202	6397
%	0.0	0.0	46.9	1.2	0.0	3.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.9	92.3
Sm truck	0	0	118	0	0	4	138	0	0	0	0	0	0	0	0	3	263
%	0.0	0.0	1.7	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
Lg truck	0	0	145	0	0	3	126	0	0	0	0	0	0	0	0	0	274
%	0.0	0.0	2.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
All	0	0	3515	80	0	214	2860	0	0	0	0	0	1	58	1	205	6934
% ALL	0.0	0.0	50.7	1.2	0.0	3.1	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	3.0	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	4228	104	0	269	3375	0	0	0	0	0	1	75	1	263	8316
%	0.0	0.0	46.9	1.2	0.0	3.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.9	92.3
Sm truck	0	0	153	0	0	5	179	0	0	0	0	0	0	0	0	4	342
%	0.0	0.0	2.2	0.0	0.0	0.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.9
Lg truck	0	0	189	0	0	4	164	0	0	0	0	0	0	0	0	0	356
%	0.0	0.0	2.7	0.0	0.0	0.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
All	0	0	4570	104	0	278	3718	0	0	0	0	0	1	75	1	267	9014
% ALL	0.0	0.0	50.7	1.2	0.0	3.1	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	3.0	100.0

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	3252	80	0	207	2596	0	0	0	0	0	1	58	1	202	6397
%	0.0	0.0	46.9	1.2	0.0	3.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.9	92.3
Sm truck	0	0	118	0	0	4	138	0	0	0	0	0	0	0	0	3	263
%	0.0	0.0	1.7	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8
Lg truck	0	0	145	0	0	3	126	0	0	0	0	0	0	0	0	0	274
%	0.0	0.0	2.1	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
All	0	0	3515	80	0	214	2860	0	0	0	0	0	1	58	1	205	6934
% ALL	0.0	0.0	50.7	1.2	0.0	3.1	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	3.0	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period	MON	DAY	YEAR	TOTAL		6513	Lg Truck %		4.2	North ↑							
Morning:	Apr	9	2009														
Afternoon:	Apr	9	2009														
Peds from North =				0													
APPROACH				3595		DEPART		2918									
RtRed				Right	Thru	Left	Left	Thru	Right	RtRed							
0				80	3515	0	58	2860	0	0							
DEPART				RtRed	0												
294				Right	80												
				Thru	0												
TOTAL				559	Left	214											
Lg Truck %				0.5	Left	58											
Peds from West =				Thru		1											
0				Right		205											
APPROACH				RtRed		1											
265				1	205	3515	0	214	2860	0	0						
				RtRed	Right	Thru	Left	Left	Thru	Right	RtRed						
DEPART				3721		APPROACH		3074									
Peds from South =				0													
						TOTAL		6795									
						Lg Truck %		4.0									



LOCATION: PTH 1A & CENTER AVE

DATE: Mon Day Year
Morning: Apr 9 2009
Afternoon: Apr 9 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	0	4228	104	0	269	3375	0	0	0	0	0	1	75	1	263	8316
%	0.0	0.0	46.9	1.2	0.0	3.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.9	92.3
Sm truck	0	0	153	0	0	5	179	0	0	0	0	0	0	0	0	4	342
%	0.0	0.0	2.2	0.0	0.0	0.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.9
Lg truck	0	0	189	0	0	4	164	0	0	0	0	0	0	0	0	0	356
%	0.0	0.0	2.7	0.0	0.0	0.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1
All	0	0	4570	104	0	278	3718	0	0	0	0	0	1	75	1	267	9014
% ALL	0.0	0.0	50.7	1.2	0.0	3.1	41.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	3.0	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period				TOTAL				8467				North																							
MON				DAY				YEAR																											
Morning:				Apr				9				2009																							
Afternoon:				Apr				9				2009																							
				Peds from North =				0																											
				APPROACH				4674				DEPART 3793																							
				RtRed				Right				Thru				Left				Left				Thru				Right				RtRed			
				0				104				4570				0				75				3718				0				0			
DEPART				RtRed				0												0				RtRed				APPROACH							
382								Right				104												0				Right				0			
				Thru				0																0				Thru				Peds from East =			
																												0							
TOTAL				727				Left				278								0				Left				TOTAL							
Lg Truck %				0.5				Left				75								0				Left				Lg Truck %							
																												1							
Peds from West =				Thru				1												1				Thru				0							
0																								0				Right				DEPART			
APPROACH				RtRed				1												0				RtRed				APPROACH							
345								1												0								1							
				1				267				4570				0				278				3718				0				0			
				RtRed				Right				Thru				Left				Left				Thru				Right				RtRed			
				DEPART				4837								APPROACH				3996															
																												Peds from South =				0			

Comment: This file is merged from counts taken on the morning of Apr 9 and the afternoon of Apr 9, 2009.



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Titan turning movement count analysis
PTH 1A & KIRKCALDY DR
Jun 2, 2009

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0				0				0				0				0
	Auto	0	6	65	5	0	12	50	14	0	0	0	3	0	6	8	13	182
	Sm truck	0	0	2	1	0	0	2	1	0	0	0	0	0	0	0	0	6
	Lg Truck	0	0	3	0	0	1	1	0	0	0	0	0	0	0	0	0	5
07:15	Peds	0				0				0				0				0
	Auto	0	3	73	1	0	7	54	5	0	1	3	2	0	4	6	31	190
	Sm truck	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	1	14
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
07:30	Peds	0				0				0				0				0
	Auto	0	7	120	4	0	9	56	5	0	3	4	7	0	2	7	49	273
	Sm truck	0	1	2	0	0	0	7	1	0	1	0	0	0	1	0	0	13
	Lg Truck	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6
07:45	Peds	0				0				0				0				0
	Auto	0	11	136	2	0	20	100	13	0	6	10	6	0	6	5	40	355
	Sm truck	0	0	5	0	0	0	3	0	0	0	1	1	0	0	1	1	12
	Lg Truck	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	27	394	12	0	48	260	37	0	10	17	18	0	18	26	133	1000
	Sm truck	0	1	17	1	0	0	17	2	0	1	1	1	0	1	1	2	45
	Lg Truck	0	1	7	0	0	1	10	0	0	0	0	0	0	0	0	0	19
	ALL	0	29	418	13	0	49	287	39	0	11	18	19	0	19	27	135	1064
	% ALL	0.0	2.7	39.3	1.2	0.0	4.6	27.0	3.7	0.0	1.0	1.7	1.8	0.0	1.8	2.5	12.7	100.0
08:00	Peds	0				0				0				0				0
	Auto	0	9	127	3	0	17	70	13	0	3	4	1	0	3	2	33	285
	Sm truck	0	1	3	1	0	0	5	0	0	0	1	0	0	2	0	1	14
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
08:15	Peds	0				0				0				0				0
	Auto	0	8	156	3	0	31	73	5	0	5	14	3	0	8	2	65	373
	Sm truck	0	1	4	0	0	0	5	0	0	0	0	0	0	0	0	1	11
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
08:30	Peds	0				0				0				0				0
	Auto	0	5	126	7	0	58	85	7	0	1	5	4	0	5	3	75	381
	Sm truck	0	0	4	0	0	2	5	0	0	0	1	0	0	0	0	0	12
	Lg Truck	0	2	6	0	0	1	1	0	0	0	0	0	0	0	0	0	10
08:45	Peds	0				0				0				0				0
	Auto	0	4	99	7	0	44	82	4	0	6	20	5	0	2	2	59	334
	Sm truck	0	1	0	2	0	3	5	0	0	0	1	0	0	0	0	2	14
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	26	508	20	0	150	310	29	0	15	43	13	0	18	9	232	1373
	Sm truck	0	3	11	3	0	5	20	0	0	0	3	0	0	2	0	4	51
	Lg Truck	0	2	13	0	0	1	5	0	0	0	0	0	0	0	0	0	21
	ALL	0	31	532	23	0	156	335	29	0	15	46	13	0	20	9	236	1445
	% ALL	0.0	2.1	36.8	1.6	0.0	10.8	23.2	2.0	0.0	1.0	3.2	0.9	0.0	1.4	0.6	16.3	100.0
09:00	Peds	0				0				0				0				0
	Auto	0	0	65	5	0	18	68	5	0	6	5	3	0	7	3	39	224
	Sm truck	0	1	0	1	0	1	3	0	0	0	0	1	0	0	1	0	8
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	1	0	1	0	0	8
09:15	Peds	0				0				0				0				0
	Auto	0	3	97	10	0	22	47	9	0	4	4	4	0	6	1	43	250
	Sm truck	0	1	4	1	0	0	1	0	0	0	0	2	0	0	0	0	9
	Lg Truck	0	2	1	0	0	0	3	0	0	0	0	2	0	0	0	1	9
09:30	Peds	0				0				0				0				0
	Auto	0	2	34	37	0	7	15	2	0	1	7	2	0	4	3	6	120
	Sm truck	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
09:45	Peds	0				0				0				0				0
	Auto	0	0	20	4	0	6	10	1	0	1	1	0	0	0	1	3	47
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	216	56	0	53	140	17	0	12	17	9	0	17	8	91	641
	Sm truck	0	2	4	3	0	2	6	0	0	0	0	3	0	0	1	0	21
	Lg Truck	0	2	4	0	0	1	6	0	0	0	0	4	0	1	0	1	19
	ALL	0	9	224	59	0	56	152	17	0	12	17	16	0	18	9	92	681
	% ALL	0.0	1.3	32.9	8.7	0.0	8.2	22.3	2.5	0.0	1.8	2.5	2.3	0.0	2.6	1.3	13.5	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
10:00	Peds	0				0				0				0				0
	Auto	0	3	79	6	0	32	57	4	0	2	4	3	0	13	4	37	244
	Sm truck	0	1	0	0	0	0	2	0	0	0	0	0	0	1	0	0	4
	Lg Truck	0	0	4	0	0	0	3	0	0	0	0	1	0	0	0	0	8
10:15	Peds	0				0				0				0				0
	Auto	0	5	94	5	0	20	47	5	0	3	2	5	0	2	4	19	211
	Sm truck	0	0	4	0	0	0	2	0	0	0	0	0	0	0	1	0	7
	Lg Truck	0	3	4	0	0	0	2	0	0	0	0	0	0	0	0	0	9
10:30	Peds	0				0				0				0				0
	Auto	0	8	65	2	0	23	50	3	0	4	3	7	0	3	4	36	208
	Sm truck	0	0	3	3	0	0	2	0	0	0	0	0	0	0	0	2	10
	Lg Truck	0	1	2	0	0	2	2	0	0	0	0	0	0	0	0	1	8
10:45	Peds	0				0				0				0				0
	Auto	0	8	70	5	0	15	53	2	0	10	5	3	0	1	2	20	194
	Sm truck	0	0	4	0	0	2	1	0	0	0	0	0	0	0	0	3	10
	Lg Truck	0	1	4	0	0	0	8	0	0	0	0	0	0	0	0	0	13
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	24	308	18	0	90	207	14	0	19	14	18	0	19	14	112	857
	Sm truck	0	1	11	3	0	2	7	0	0	0	0	0	0	1	1	5	31
	Lg Truck	0	5	14	0	0	2	15	0	0	0	0	1	0	0	0	1	38
	ALL	0	30	333	21	0	94	229	14	0	19	14	19	0	20	15	118	926
	% ALL	0.0	3.2	36.0	2.3	0.0	10.2	24.7	1.5	0.0	2.1	1.5	2.1	0.0	2.2	1.6	12.7	100.0
11:00	Peds	0				0				0				0				0
	Auto	0	0	7	0	0	4	4	0	0	1	0	0	0	1	0	9	26
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	Peds	0				0				0				0				0
	Auto	0	2	74	4	0	25	87	7	0	3	6	5	0	4	5	35	257
	Sm truck	0	2	3	1	0	0	2	0	0	0	0	2	0	0	0	0	10
	Lg Truck	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
11:30	Peds	0				0				0				0				0
	Auto	0	0	90	7	0	28	53	5	0	4	14	3	0	4	1	53	262
	Sm truck	0	0	6	1	0	0	1	0	0	0	2	2	0	0	0	1	13
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3
11:45	Peds	0				0				0				0				0
	Auto	0	8	89	9	0	31	74	0	0	5	10	5	0	16	1	41	289
	Sm truck	0	0	5	1	0	1	0	0	0	0	0	1	0	2	0	2	12
	Lg Truck	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	260	20	0	88	218	12	0	13	30	13	0	25	7	138	834
	Sm truck	0	2	14	3	0	1	3	0	0	0	2	5	0	2	0	3	35
	Lg Truck	0	0	6	0	0	0	9	0	0	0	0	1	0	0	0	0	16
	ALL	0	12	280	23	0	89	230	12	0	13	32	19	0	27	7	141	885
	% ALL	0.0	1.4	31.6	2.6	0.0	10.1	26.0	1.4	0.0	1.5	3.6	2.1	0.0	3.1	0.8	15.9	100.0
12:00	Peds	0				0				0				0				0
	Auto	0	2	105	18	0	50	112	1	0	5	11	3	0	2	0	42	351
	Sm truck	0	0	2	1	0	1	5	0	0	0	0	1	0	0	0	1	11
	Lg Truck	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15	Peds	0				0				0				0				0
	Auto	0	0	80	11	0	30	101	1	0	6	4	2	0	2	1	49	287
	Sm truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	2	0	0	1	2	0	0	0	0	0	0	0	0	0	5
12:30	Peds	0				0				0				0				0
	Auto	0	4	101	14	0	40	103	13	0	1	6	2	0	8	1	41	334
	Sm truck	0	0	4	3	0	2	4	0	0	0	0	0	0	0	0	0	13
	Lg Truck	0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	6
12:45	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	286	43	0	120	316	16	0	12	21	7	0	12	2	132	973
	Sm truck	0	0	9	4	0	3	11	0	0	0	0	1	0	0	0	1	29
	Lg Truck	0	2	6	0	0	1	6	0	0	0	0	0	0	0	0	0	15
	ALL	0	8	301	47	0	124	333	16	0	12	21	8	0	12	2	133	1017
	% ALL	0.0	0.8	29.6	4.6	0.0	12.2	32.7	1.6	0.0	1.2	2.1	0.8	0.0	1.2	0.2	13.1	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
13:00	Peds	0				0				0				0				0
	Auto	0	4	100	6	0	52	95	9	0	7	6	5	0	11	8	47	350
	Sm truck	0	1	5	0	0	1	5	0	0	0	0	0	0	0	0	0	12
	Lg Truck	0	1	6	0	0	0	1	0	0	0	0	1	0	0	0	0	9
13:15	Peds	0				0				0				0				0
	Auto	0	3	139	13	0	31	90	9	0	13	15	9	0	9	7	67	405
	Sm truck	0	0	4	1	0	0	2	0	0	0	1	2	0	0	0	0	10
	Lg Truck	0	2	5	1	0	0	6	0	0	0	0	1	0	0	0	0	15
13:30	Peds	0				0				0				0				0
	Auto	0	3	126	7	0	44	124	5	0	6	6	8	0	7	6	51	393
	Sm truck	0	0	3	0	0	0	8	0	0	0	0	1	0	0	0	0	12
	Lg Truck	0	0	6	0	0	1	3	0	0	0	0	0	0	1	0	0	11
13:45	Peds	0				0				0				0				0
	Auto	0	10	126	13	0	39	115	2	0	11	8	8	0	3	3	50	388
	Sm truck	0	0	3	0	0	2	4	0	0	2	0	0	0	2	0	0	13
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	1	0	0	4
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	20	491	39	0	166	424	25	0	37	35	30	0	30	24	215	1536
	Sm truck	0	1	15	1	0	3	19	0	0	2	1	3	0	2	0	0	47
	Lg Truck	0	3	18	1	0	1	12	0	0	0	0	2	0	2	0	0	39
	ALL	0	24	524	41	0	170	455	25	0	39	36	35	0	34	24	215	1622
	% ALL	0.0	1.5	32.3	2.5	0.0	10.5	28.1	1.5	0.0	2.4	2.2	2.2	0.0	2.1	1.5	13.3	100.0
14:00	Peds	0				0				0				0				0
	Auto	0	1	67	7	0	18	48	8	0	5	9	8	0	7	2	36	216
	Sm truck	0	0	3	2	0	2	3	0	0	0	1	0	0	0	0	0	11
	Lg Truck	0	1	0	0	0	0	3	0	0	0	0	1	0	0	1	0	6
14:15	Peds	0				0				0				0				0
	Auto	0	2	83	3	0	34	60	6	0	10	2	4	0	5	2	41	252
	Sm truck	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	Lg Truck	0	1	3	0	0	0	1	0	0	0	1	1	0	0	0	0	7
14:30	Peds	0				0				0				0				0
	Auto	0	4	67	13	0	17	59	3	0	6	7	3	0	4	3	34	220
	Sm truck	0	0	3	1	0	0	4	0	0	0	0	0	0	1	1	3	13
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	5
14:45	Peds	0				0				0				0				0
	Auto	0	1	67	5	0	34	79	6	0	6	0	2	0	11	10	38	259
	Sm truck	0	0	6	0	0	0	5	0	0	0	0	1	0	0	0	1	13
	Lg Truck	0	0	3	0	0	0	4	0	0	0	0	1	0	0	0	0	8
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	284	28	0	103	246	23	0	27	18	17	0	27	17	149	947
	Sm truck	0	0	14	3	0	2	12	0	0	1	1	1	0	1	1	4	40
	Lg Truck	0	2	8	0	0	0	10	0	0	0	1	4	0	0	1	0	26
	ALL	0	10	306	31	0	105	268	23	0	28	20	22	0	28	19	153	1013
	% ALL	0.0	1.0	30.2	3.1	0.0	10.4	26.5	2.3	0.0	2.8	2.0	2.2	0.0	2.8	1.9	15.1	100.0
15:00	Peds	0				0				0				0				0
	Auto	0	0	69	4	0	25	83	6	0	3	9	3	0	13	6	42	263
	Sm truck	0	0	1	1	0	0	4	0	0	0	0	0	0	0	0	2	8
	Lg Truck	0	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	8
15:15	Peds	0				0				0				0				0
	Auto	0	3	75	7	0	32	71	3	0	5	4	4	0	4	2	58	268
	Sm truck	0	0	4	0	0	1	1	0	0	1	0	0	0	0	0	2	9
	Lg Truck	0	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	12
15:30	Peds	0				0				0				0				0
	Auto	0	1	91	2	0	34	111	10	0	7	7	7	0	20	6	57	353
	Sm truck	0	0	5	0	0	1	2	0	0	0	0	0	0	1	0	0	9
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
15:45	Peds	0				0				0				0				0
	Auto	0	5	98	10	0	43	125	5	0	10	16	13	0	5	4	47	381
	Sm truck	0	0	5	0	0	1	0	0	0	0	0	0	0	1	1	0	8
	Lg Truck	0	1	4	0	0	0	2	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	9	333	23	0	134	390	24	0	25	36	27	0	42	18	204	1265
	Sm truck	0	0	15	1	0	3	7	0	0	1	0	0	0	2	1	4	34
	Lg Truck	0	2	14	0	0	0	14	0	0	0	0	0	0	0	0	0	30
	ALL	0	11	362	24	0	137	411	24	0	26	36	27	0	44	19	208	1329
	% ALL	0.0	0.8	27.2	1.8	0.0	10.3	30.9	1.8	0.0	2.0	2.7	2.0	0.0	3.3	1.4	15.7	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
16:00	Peds	0				0				0				0				0
	Auto	0	2	95	8	0	58	134	8	0	12	18	16	0	8	7	32	398
	Sm truck	0	2	2	1	0	4	4	0	0	0	0	0	0	0	0	0	13
	Lg Truck	0	3	5	0	0	0	3	0	0	0	0	0	0	0	0	0	11
16:15	Peds	0				0				0				0				0
	Auto	0	1	112	9	0	49	131	7	0	21	46	14	0	7	5	39	441
	Sm truck	0	0	2	0	0	0	3	0	0	0	1	0	0	1	0	0	7
	Lg Truck	0	1	6	0	0	1	1	0	0	0	0	0	0	0	0	0	9
16:30	Peds	0				0				0				0				0
	Auto	0	9	125	7	0	50	124	9	0	19	16	8	0	12	4	62	445
	Sm truck	0	0	2	0	0	0	3	0	0	0	1	1	0	0	0	0	7
	Lg Truck	0	0	5	0	0	0	4	0	0	0	0	0	0	0	0	0	9
16:45	Peds	0				0				0				0				0
	Auto	0	6	89	6	0	32	140	6	0	18	8	4	0	6	6	40	361
	Sm truck	0	1	5	1	0	0	4	0	0	0	0	0	0	0	1	1	13
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	18	421	30	0	189	529	30	0	70	88	42	0	33	22	173	1645
	Sm truck	0	3	11	2	0	4	14	0	0	0	2	1	0	1	1	1	40
	Lg Truck	0	4	18	0	0	1	9	0	0	0	0	0	0	0	0	0	32
	ALL	0	25	450	32	0	194	552	30	0	70	90	43	0	34	23	174	1717
	% ALL	0.0	1.5	26.2	1.9	0.0	11.3	32.1	1.7	0.0	4.1	5.2	2.5	0.0	2.0	1.3	10.1	100.0
17:00	Peds	0				0				0				0				0
	Auto	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	Peds	0				0				0				0				0
	Auto	0	1	81	9	0	44	107	6	0	5	5	12	0	5	5	30	310
	Sm truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	11
17:30	Peds	0				0				0				0				0
	Auto	0	1	104	5	0	35	93	6	0	9	12	2	0	7	6	47	327
	Sm truck	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	2	3	0	0	0	2	0	0	0	0	1	0	0	0	0	8
17:45	Peds	0				0				0				0				0
	Auto	0	4	73	10	0	34	73	8	0	21	11	7	0	15	6	42	304
	Sm truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	2	3	1	0	0	1	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	258	24	0	113	274	20	0	35	28	21	0	27	17	119	942
	Sm truck	0	0	5	0	0	0	9	0	0	0	0	0	0	0	0	0	14
	Lg Truck	0	4	9	1	0	0	11	0	0	0	0	1	0	0	0	0	26
	ALL	0	10	272	25	0	113	294	20	0	35	28	22	0	27	17	119	982
	% ALL	0.0	1.0	27.7	2.5	0.0	11.5	29.9	2.0	0.0	3.6	2.9	2.2	0.0	2.7	1.7	12.1	100.0
18:00	Peds	0				0				0				0				0
	Auto	0	8	76	6	0	26	54	2	0	7	7	3	0	9	3	43	244
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	2	1	0	0	0	6	0	0	1	0	1	0	0	0	0	11
18:15	Peds	0				0				0				0				0
	Auto	0	3	64	3	0	22	71	3	0	9	12	6	0	3	4	27	227
	Sm truck	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
18:30	Peds	0				0				0				0				0
	Auto	0	0	3	0	0	0	2	0	0	0	0	0	0	2	0	0	7
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Peds	0				0				0				0				0
	Auto	0	2	90	6	0	32	89	4	0	7	4	3	0	11	5	44	297
	Sm truck	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	3
	Lg Truck	0	0	5	0	0	0	1	0	0	0	0	1	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	13	233	15	0	80	216	9	0	23	23	12	0	25	12	114	775
	Sm truck	0	0	1	0	0	3	1	0	0	0	1	0	0	0	0	0	6
	Lg Truck	0	3	6	0	0	0	8	0	0	1	0	2	0	0	0	0	20
	ALL	0	16	240	15	0	83	225	9	0	24	24	14	0	25	12	114	801
	% ALL	0.0	2.0	30.0	1.9	0.0	10.4	28.1	1.1	0.0	3.0	3.0	1.7	0.0	3.1	1.5	14.2	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0				0				0				0				0
	Auto	0	2	70	3	0	51	70	8	0	8	1	3	0	8	3	48	275
	Sm truck	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
	Lg Truck	0	0	2	0	0	0	1	1	0	0	0	1	0	0	0	0	5
19:15	Peds	0				0				0				0				0
	Auto	0	1	43	2	0	45	67	7	0	7	4	3	0	1	1	40	221
	Sm truck	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:30	Peds	0				0				0				0				0
	Auto	0	1	61	13	0	38	66	9	0	6	7	0	0	9	5	43	258
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	1	0	0	0	2	0	0	0	0	1	0	0	0	0	5
19:45	Peds	0				0				0				0				0
	Auto	0	4	48	5	0	28	73	3	0	7	8	2	0	7	3	39	227
	Sm truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	222	23	0	162	276	27	0	28	20	8	0	25	12	170	981
	Sm truck	0	0	2	1	0	0	5	0	0	0	0	0	0	0	1	0	9
	Lg Truck	0	1	4	0	0	0	5	1	0	0	0	2	0	0	0	0	13
	ALL	0	9	228	24	0	162	286	28	0	28	20	10	0	25	13	170	1003
	% ALL	0.0	0.9	22.7	2.4	0.0	16.2	28.5	2.8	0.0	2.8	2.0	1.0	0.0	2.5	1.3	16.9	100.0
20:00	Peds	0				0				0				0				0
	Auto	0	2	46	9	0	34	68	3	0	6	8	5	0	13	6	40	240
	Sm truck	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	4	0	0	0	4	0	0	0	0	2	0	0	0	0	10
20:15	Peds	0				0				0				0				0
	Auto	0	4	41	7	0	32	52	2	0	9	8	2	0	2	4	25	188
	Sm truck	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3
	Lg Truck	0	1	2	0	0	0	1	0	0	0	0	1	0	0	0	0	5
20:30	Peds	0				0				0				0				0
	Auto	0	3	79	9	0	28	65	2	0	8	4	3	0	3	1	39	244
	Sm truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
20:45	Peds	0				0				0				0				0
	Auto	0	5	78	11	0	26	40	7	0	5	3	3	0	1	1	21	201
	Sm truck	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	1	3	1	0	0	2	0	0	0	0	0	0	0	0	0	7
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	14	244	36	0	120	225	14	0	28	23	13	0	19	12	125	873
	Sm truck	0	3	7	1	0	0	0	0	0	0	1	0	0	0	0	0	12
	Lg Truck	0	3	10	1	0	0	8	0	0	0	0	3	0	0	0	0	25
	ALL	0	20	261	38	0	120	233	14	0	28	24	16	0	19	12	125	910
	% ALL	0.0	2.2	28.7	4.2	0.0	13.2	25.6	1.5	0.0	3.1	2.6	1.8	0.0	2.1	1.3	13.7	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Jun 2 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	92	1686	126	0	429	1135	109	0	69	121	71	0	97	64	706	4705
%	0.0	1.8	33.7	2.5	0.0	8.6	22.7	2.2	0.0	1.4	2.4	1.4	0.0	1.9	1.3	14.1	94.1
Sm truck	0	9	57	13	0	10	53	2	0	1	6	9	0	6	3	14	183
%	0.0	0.2	1.1	0.3	0.0	0.2	1.1	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.3	3.7
Lg truck	0	10	44	0	0	5	45	0	0	0	0	6	0	1	0	2	113
%	0.0	0.2	0.9	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.3
All	0	111	1787	139	0	444	1233	111	0	70	127	86	0	104	67	722	5001
% ALL	0.0	2.2	35.7	2.8	0.0	8.9	24.7	2.2	0.0	1.4	2.5	1.7	0.0	2.1	1.3	14.4	100.0

PM Count Summary Date: Jun 2 2009

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	102	2772	261	0	1187	2896	188	0	285	292	177	0	240	136	1401	9937
%	0.0	1.0	26.7	2.5	0.0	11.4	27.9	1.8	0.0	2.7	2.8	1.7	0.0	2.3	1.3	13.5	95.6
Sm truck	0	7	79	13	0	18	78	0	0	4	6	6	0	6	4	10	231
%	0.0	0.1	0.8	0.1	0.0	0.2	0.8	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	2.2
Lg truck	0	24	93	3	0	3	83	1	0	1	1	14	0	2	1	0	226
%	0.0	0.2	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.2
All	0	133	2944	277	0	1208	3057	189	0	290	299	197	0	248	141	1411	10394
% ALL	0.0	1.3	28.3	2.7	0.0	11.6	29.4	1.8	0.0	2.8	2.9	1.9	0.0	2.4	1.4	13.6	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	194	4458	387	0	1616	4031	297	0	354	413	248	0	337	200	2107	14642
%	0.0	1.3	29.0	2.5	0.0	10.5	26.2	1.9	0.0	2.3	2.7	1.6	0.0	2.2	1.3	13.7	95.1
Sm truck	0	16	136	26	0	28	131	2	0	5	12	15	0	12	7	24	414
%	0.0	0.1	0.9	0.2	0.0	0.2	0.9	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.2	2.7
Lg truck	0	34	137	3	0	8	128	1	0	1	1	20	0	3	1	2	339
%	0.0	0.2	0.9	0.0	0.0	0.1	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.2
All	0	244	4731	416	0	1652	4290	300	0	360	426	283	0	352	208	2133	15395
% ALL	0.0	1.6	30.7	2.7	0.0	10.7	27.9	1.9	0.0	2.3	2.8	1.8	0.0	2.3	1.4	13.9	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	252	5795	503	0	2101	5240	386	0	460	537	322	0	438	260	2739	19035
%	0.0	1.3	29.0	2.5	0.0	10.5	26.2	1.9	0.0	2.3	2.7	1.6	0.0	2.2	1.3	13.7	95.1
Sm truck	0	21	177	34	0	36	170	3	0	7	16	20	0	16	9	31	538
%	0.0	0.1	1.1	0.2	0.0	0.2	1.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	3.5
Lg truck	0	44	178	4	0	10	166	1	0	1	1	26	0	4	1	3	441
%	0.0	0.3	1.2	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	2.9
All	0	317	6150	541	0	2148	5577	390	0	468	554	368	0	458	270	2773	20014
% ALL	0.0	1.6	30.7	2.7	0.0	10.7	27.9	1.9	0.0	2.3	2.8	1.8	0.0	2.3	1.4	13.9	100.0

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.

LOCATION: PTH 1A & KIRKCALDY DR

DATE:	Mon	Day	Year
Morning:	Jun	2	2009
Afternoon:	Jun	2	2009

Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

Correction factor = 1

Count Summary					Collection Factor = 1													
	From North				From South				From East				From West				Interval	
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right		total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Auto	0	194	4458	387	0	1616	4031	297	0	354	413	248	0	337	200	2107	14642	
%	0.0	1.3	29.0	2.5	0.0	10.5	26.2	1.9	0.0	2.3	2.7	1.6	0.0	2.2	1.3	13.7	95.1	
\$m truck	0	16	136	26	0	28	131	2	0	5	12	15	0	12	7	24	414	
% truck	0.0	0.1	0.9	0.2	0.0	0.2	0.9	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.2	2.7	
Lg truck	0	34	137	3	0	8	128	1	0	1	1	20	0	3	1	2	339	
%	0.0	0.2	0.9	0.0	0.0	0.1	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.2	
All	0	244	4731	416	0	1652	4290	300	0	360	426	283	0	352	208	2133	15395	
% ALL	0.0	1.6	30.7	2.7	0.0	10.7	27.9	1.9	0.0	2.3	2.8	1.8	0.0	2.3	1.4	13.9	100.0	

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection

Count period	MON	DAY	YEAR	TOTAL		Lg Truck %		North	
Morning:	Jun	2	2009	10316		3.2		↑	
Afternoon:	Jun	2	2009						
Peds from North =				0					
APPROACH				5391		DEPART		4925	
RtRed				0		Left		352	
Right				416		Thru		4290	
Thru				4731		Right		283	
Left				244		RtRed		0	
DEPART				2494		RtRed		0	
Right				416		APPROACH		1069	
Thru				426		283		Right	
TOTAL				5187		360		Left	
Lg Truck %				0.3		244		Left	
Peds from West =				0		TOTAL		1821	
Thru				208		Lg Truck %		3.2	
Right				2133		208		Thru	
APPROACH				2693		300		Right	
RtRed				0		DEPART		752	
0				2133		1652		4290	
RtRed				Right		Left		300	
Thru				4731		Thru		Right	
Left				360		RtRed		0	
DEPART				7224		APPROACH		6242	
Peds from South =				0		TOTAL		13466	
TOTAL				13466		Lg Truck %		2.1	
Lg Truck %				2.1					

Comment: This file is merged from counts taken on the morning of Jun 2 and the afternoon of Jun 2, 2009.



LOCATION: PTH 1A & KIRKCALDY DR

DATE: Mon Day Year
Morning: Jun 2 2009
Afternoon: Jun 2 2009Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	252	5795	503	0	2101	5240	386	0	460	537	322	0	438	260	2739	19035
%	0.0	1.3	29.0	2.5	0.0	10.5	26.2	1.9	0.0	2.3	2.7	1.6	0.0	2.2	1.3	13.7	95.1
Sm truck	0	21	177	34	0	36	170	3	0	7	16	20	0	16	9	31	538
%	0.0	0.1	1.1	0.2	0.0	0.2	1.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	3.5
Lg truck	0	44	178	4	0	10	166	1	0	1	1	26	0	4	1	3	441
%	0.0	0.3	1.2	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	2.9
All	0	317	6150	541	0	2148	5577	390	0	468	554	368	0	458	270	2773	20014
% ALL	0.0	1.6	30.7	2.7	0.0	10.7	27.9	1.9	0.0	2.3	2.8	1.8	0.0	2.3	1.4	13.9	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection

Count period				MON				DAY				YEAR			
Morning:				Jun				2				2009			
Afternoon:				Jun				2				2009			



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Titan turning movement count analysis
KIRKCALDY DR & 1ST ST
Apr 29, 2013 & Apr 30, 2013

Requested by
Date

Report prepared by
Date

Comments

This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.

Morning counts are taken from 7:00 to 14:00, and afternoon counts are taken from 14:00 to 21:00.

Note: Count-4 counts (called CTPs for "car-truck-pedestrian") are taken over 14 hours in 15 minutes intervals. The CTP count classes can be defined by the FHWA Vehicle Classification Scheme F (for further details, please refer to Section 2.2.2 Vehicle Class Distribution in the *2012 Traffic on Manitoba Highways report*) as follows:

Count-4 (CTP)	Equivalent FHWA Scheme F
Pedestrians	N/A
Autos	FHWA Classes 2 and 3*
Small Trucks	FHWA Classes 4 to 7
Large Trucks	FHWA Classes 8 to 13

*Class 3 vehicles are classified as small trucks if they are used for hauling.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

Begins		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
07:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	78	0	0	4	43	14	0	1	3	1	0	1	10	17	179
	Sm truck	0	0	2	1	0	1	0	0	0	1	0	0	0	1	0	0	6
	Lg Truck	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2
7:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	77	1	0	7	66	12	0	2	1	0	0	3	7	22	202
	Sm truck	0	1	1	0	0	0	6	0	0	0	0	0	0	1	0	1	10
	Lg Truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
7:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	10	109	6	0	11	76	12	0	4	4	4	0	6	6	33	281
	Sm truck	0	1	3	0	0	2	6	0	0	1	0	0	0	0	0	0	13
	Lg Truck	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	4
7:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	9	149	3	0	7	118	22	0	10	17	7	0	7	12	49	410
	Sm truck	0	0	4	0	0	0	3	1	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	30	413	10	0	29	303	60	0	17	25	12	0	17	35	121	1072
	Sm truck	0	2	10	1	0	3	15	1	0	2	0	0	0	2	0	1	37
	Lg Truck	0	0	9	0	0	1	4	2	0	0	0	0	0	0	0	0	16
	ALL	0	32	432	11	0	33	322	63	0	19	25	12	0	19	35	122	1125
	% ALL	0	3	38	1	0	3	29	6	0	2	2	1	0	2	3	11	100.0
8:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	120	7	0	11	130	13	0	6	5	1	0	13	8	44	361
	Sm truck	0	1	2	1	0	0	2	0	0	1	0	0	0	0	0	1	8
	Lg Truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	181	7	0	26	84	7	0	9	6	6	0	9	1	58	395
	Sm truck	0	0	6	0	0	2	5	0	0	0	0	0	0	0	0	4	17
	Lg Truck	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
8:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	124	7	0	24	63	6	0	9	7	0	0	6	1	52	306
	Sm truck	0	0	3	0	0	0	7	4	0	0	0	1	0	0	2	1	18
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
8:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	115	9	0	28	85	3	0	4	5	1	0	5	4	37	302
	Sm truck	0	0	7	1	0	1	8	0	0	0	0	0	0	0	0	1	18
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	17	540	30	0	89	362	29	0	28	23	8	0	33	14	191	1364
	Sm truck	0	1	18	2	0	3	22	4	0	1	0	1	0	0	2	7	61
	Lg Truck	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18
	ALL	0	18	568	32	0	92	392	33	0	29	23	9	0	33	16	198	1443
	% ALL	0	1	39	2	0	6	27	2	0	2	2	1	0	2	1	14	100.0
9:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	85	7	0	12	67	3	0	12	0	1	0	3	2	18	215
	Sm truck	0	0	7	1	0	2	7	1	0	0	0	0	0	0	0	3	21
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
9:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	99	8	0	28	45	1	0	6	6	1	0	5	3	16	221
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
9:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	109	7	0	35	62	6	0	6	3	3	0	0	3	33	274
	Sm truck	0	1	4	0	0	1	8	0	0	0	1	0	0	0	0	3	18
	Lg Truck	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	15	293	22	0	75	175	10	0	24	9	5	0	8	8	67	711
	Sm truck	0	1	13	1	0	3	17	1	0	0	1	0	0	0	0	6	43
	Lg Truck	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13
	ALL	0	16	313	23	0	78	198	11	0	24	10	5	0	8	8	73	767
	% ALL	0	2	41	3	0	10	26	1	0	3	1	1	0	1	1	10	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
10:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	91	8	0	13	53	4	0	7	3	2	0	0	4	17	204
	Sm truck	0	0	7	1	0	0	7	0	0	0	0	0	0	0	1	2	18
	Lg Truck	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
10:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	89	6	0	24	63	5	0	6	8	0	0	1	6	21	231
	Sm truck	0	0	5	0	0	1	5	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	8
10:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	85	18	0	20	49	6	0	7	7	6	0	1	4	24	229
	Sm truck	0	1	3	1	0	1	2	0	0	0	1	0	0	0	0	1	10
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
10:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	83	12	0	27	52	8	0	5	7	3	0	3	5	31	238
	Sm truck	0	1	8	1	0	1	6	0	0	0	0	1	0	0	0	2	20
	Lg Truck	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	348	44	0	84	217	23	0	25	25	11	0	5	19	93	902
	Sm truck	0	2	23	3	0	3	20	0	0	0	1	1	0	0	1	5	59
	Lg Truck	0	1	11	0	0	0	10	0	0	0	0	0	0	0	0	0	22
	ALL	0	11	382	47	0	87	247	23	0	25	26	12	0	5	20	98	983
	% ALL	0	1	39	5	0	9	25	2	0	3	3	1	0	1	2	10	100.0
11:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	70	8	0	26	76	4	0	9	2	0	0	5	3	31	237
	Sm truck	0	0	4	1	0	1	6	0	0	0	0	0	0	0	0	1	13
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	4
11:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	85	8	0	32	62	6	0	4	5	3	0	2	6	21	237
	Sm truck	0	1	7	0	0	0	4	0	0	0	0	0	0	0	0	1	13
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
11:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	84	8	0	36	82	4	0	7	4	3	0	4	11	41	284
	Sm truck	0	0	6	0	0	1	5	1	0	0	0	0	0	0	0	0	13
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	239	24	0	94	220	14	0	20	11	6	0	11	20	93	758
	Sm truck	0	1	17	1	0	2	15	1	0	0	0	0	0	0	0	2	39
	Lg Truck	0	0	6	0	0	0	2	0	0	0	0	0	0	1	0	0	9
	ALL	0	7	262	25	0	96	237	15	0	20	11	6	0	12	20	95	806
	% ALL	0	1	33	3	0	12	29	2	0	2	1	1	0	1	2	12	100.0
12:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	90	8	0	43	125	3	0	4	8	4	0	13	6	27	332
	Sm truck	0	0	2	2	0	0	7	0	0	0	1	0	0	0	0	1	13
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
12:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	96	7	0	33	82	7	0	6	7	3	0	5	6	30	283
	Sm truck	0	0	2	0	0	0	4	0	0	0	0	0	0	2	0	1	9
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	103	7	0	30	85	7	0	6	12	8	0	6	10	36	313
	Sm truck	0	0	5	1	0	0	4	0	0	0	0	0	0	0	0	0	10
	Lg Truck	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
12:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	105	10	0	15	98	7	0	4	2	2	0	10	2	54	315
	Sm truck	0	0	2	0	0	2	3	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	11	394	32	0	121	390	24	0	20	29	17	0	34	24	147	1243
	Sm truck	0	0	11	3	0	2	18	0	0	0	1	0	0	2	0	2	39
	Lg Truck	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	10
	ALL	0	11	411	35	0	123	412	24	0	20	30	17	0	36	24	149	1292
	% ALL	0	1	32	3	0	10	32	2	0	2	2	1	0	3	2	12	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
13:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	84	4	0	32	74	4	0	4	10	1	1	11	7	45	280
	Sm truck	0	0	3	1	0	1	2	1	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1	6
13:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	84	11	0	45	76	3	0	2	4	4	0	9	3	34	280
	Sm truck	0	1	7	0	0	0	2	0	0	0	1	0	0	0	0	2	13
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	3
13:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	86	6	0	25	56	5	0	9	5	1	0	4	3	35	237
	Sm truck	0	1	2	1	0	2	6	0	0	0	0	0	0	0	1	0	13
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	3
13:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	91	8	0	31	72	4	0	5	3	3	0	1	4	24	248
	Sm truck	0	1	2	1	0	0	3	0	0	0	0	0	0	0	0	0	7
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	12	345	29	0	133	278	16	0	20	22	9	1	25	17	138	1045
	Sm truck	0	3	14	3	0	3	13	1	0	0	1	0	0	0	1	2	41
	Lg Truck	0	0	7	0	0	0	5	0	0	0	0	0	0	0	1	2	15
	ALL	0	15	366	32	0	136	296	17	0	20	23	9	1	25	19	142	1101
	% ALL	0	1	33	3	0	12	27	2	0	2	2	1	0	2	2	13	100.0
14:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	66	9	0	35	64	8	0	6	5	3	0	4	6	32	241
	Sm truck	0	1	3	1	0	1	3	1	0	0	0	1	0	0	0	1	12
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
14:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	85	12	0	20	78	5	0	7	13	4	0	3	6	30	266
	Sm truck	0	0	3	1	0	3	4	0	0	1	0	0	0	0	0	0	12
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	4
14:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	87	12	0	27	73	9	0	14	4	5	0	2	8	37	281
	Sm truck	0	0	5	0	0	0	3	0	0	0	1	0	0	0	0	0	9
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
14:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	80	8	0	24	81	7	0	16	9	4	0	4	8	46	293
	Sm truck	0	0	7	0	0	0	2	0	0	1	0	1	0	0	0	2	13
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	15	318	41	0	106	296	29	0	43	31	16	0	13	28	145	1081
	Sm truck	0	1	18	2	0	4	12	1	0	2	1	2	0	0	0	3	46
	Lg Truck	0	0	6	0	0	0	6	0	0	0	0	1	0	0	0	0	13
	ALL	0	16	342	43	0	110	314	30	0	45	32	19	0	13	28	148	1140
	% ALL	0.0	1.4	30.0	3.8	0.0	9.6	27.5	2.6	0.0	3.9	2.8	1.7	0.0	1.1	2.5	13.0	100.0
15:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	96	20	0	39	70	3	0	6	16	5	0	5	5	43	311
	Sm truck	0	0	7	0	0	2	6	0	0	0	0	0	0	0	0	2	17
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
15:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	89	8	0	56	94	2	0	11	17	5	0	1	8	42	335
	Sm truck	0	2	6	0	0	0	5	0	0	1	0	0	0	0	0	4	18
	Lg Truck	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
15:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	100	12	0	55	112	8	0	9	12	7	0	6	12	64	399
	Sm truck	0	0	5	0	0	0	1	1	0	0	1	2	0	0	1	1	12
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
15:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	108	13	0	64	110	9	0	9	14	10	0	1	7	27	373
	Sm truck	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	1	14
	Lg Truck	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	393	53	0	214	386	22	0	35	59	27	0	13	32	176	1418
	Sm truck	0	2	29	0	0	2	14	1	0	1	1	2	0	0	1	8	61
	Lg Truck	0	0	6	1	0	1	5	0	0	0	0	0	0	0	0	0	13
	ALL	0	10	428	54	0	217	405	23	0	36	60	29	0	13	33	184	1492
	% ALL	0.0	0.7	28.7	3.6	0.0	14.5	27.1	1.5	0.0	2.4	4.0	1.9	0.0	0.9	2.2	12.3	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
16:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	108	22	0	57	124	2	0	23	15	9	0	2	9	32	403
	Sm truck	0	0	5	1	0	4	1	0	0	0	0	0	0	0	0	1	12
	Lg Truck	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
16:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	123	16	0	57	111	5	0	26	29	7	0	1	9	32	418
	Sm truck	0	0	4	0	0	1	2	0	0	0	0	0	0	0	0	1	8
	Lg Truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
16:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	114	8	0	64	147	8	0	6	7	6	0	2	6	34	406
	Sm truck	0	0	8	0	0	0	2	1	0	0	0	0	0	0	1	1	13
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	345	46	0	178	382	15	0	55	51	22	0	5	24	98	1227
	Sm truck	0	0	17	1	0	5	5	1	0	0	0	0	0	0	1	3	33
	Lg Truck	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
	ALL	0	6	365	47	0	183	392	16	0	55	51	22	0	5	25	101	1268
	% ALL	0.0	0.5	28.8	3.7	0.0	14.4	30.9	1.3	0.0	4.3	4.0	1.7	0.0	0.4	2.0	8.0	100.0
17:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	140	12	0	67	149	12	0	7	9	9	0	3	17	37	467
	Sm truck	0	0	6	1	0	0	5	0	0	1	0	1	0	0	0	0	14
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	94	11	0	61	118	15	0	5	11	6	0	2	9	23	361
	Sm truck	0	0	4	1	0	1	2	1	0	0	0	0	0	0	0	0	9
	Lg Truck	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
17:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	7	87	12	0	33	92	13	0	9	12	2	0	3	6	38	314
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	65	14	0	39	72	4	0	5	8	4	0	2	13	31	258
	Sm truck	0	0	5	0	0	1	2	0	0	0	0	0	0	0	0	0	8
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	19	386	49	0	200	431	44	0	26	40	21	0	10	45	129	1400
	Sm truck	0	0	16	2	0	2	9	1	0	1	0	1	0	0	0	0	32
	Lg Truck	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	0	8
	ALL	0	19	405	51	0	203	444	45	0	27	40	22	0	10	45	129	1440
	% ALL	0.0	1.3	28.1	3.5	0.0	14.1	30.8	3.1	0.0	1.9	2.8	1.5	0.0	0.7	3.1	9.0	100.0
18:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	5	50	10	0	21	45	3	0	3	7	3	0	3	9	26	185
	Sm truck	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
18:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	52	8	0	38	65	2	0	7	7	0	0	1	7	47	236
	Sm truck	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	4	49	6	0	32	53	9	0	5	6	2	0	0	5	33	204
	Sm truck	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	11	151	24	0	91	163	14	0	15	20	5	0	4	21	106	625
	Sm truck	0	0	6	1	0	0	4	0	0	0	0	0	0	0	0	0	11
	Lg Truck	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
	ALL	0	11	162	25	0	91	170	14	0	15	20	5	0	4	21	106	644
	% ALL	0.0	1.7	25.2	3.9	0.0	14.1	26.4	2.2	0.0	2.3	3.1	0.8	0.0	0.6	3.3	16.5	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

		From North				From South				From East				From West				Interval total
		RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
19:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	45	5	0	24	64	9	0	6	7	3	0	1	3	43	213
	Sm truck	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	4
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
19:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	51	3	0	24	36	5	0	1	2	1	0	2	7	32	164
	Sm truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lg Truck	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
19:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	39	3	0	17	43	6	0	2	2	1	0	0	7	24	147
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	17	1	0	17	39	6	0	1	4	0	0	2	8	30	127
	Sm truck	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	4
	Lg Truck	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	8	152	12	0	82	182	26	0	10	15	5	0	5	25	129	651
	Sm truck	0	0	5	1	0	0	2	0	0	0	0	0	0	1	0	0	9
	Lg Truck	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	11
	ALL	0	8	162	13	0	82	190	26	0	10	15	5	0	6	25	129	671
	% ALL	0.0	1.2	24.1	1.9	0.0	12.2	28.3	3.9	0.0	1.5	2.2	0.7	0.0	0.9	3.7	19.2	100.0
20:00	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	0	25	3	0	32	40	9	0	2	3	1	0	1	6	22	144
	Sm truck	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:15	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	2	33	2	0	29	44	2	0	4	2	1	0	1	1	26	147
	Sm truck	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
20:30	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	1	22	4	0	19	36	0	0	1	3	3	0	1	6	30	126
	Sm truck	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lg Truck	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4
20:45	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	3	35	5	0	14	27	1	0	2	4	0	0	2	5	27	125
	Sm truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lg Truck	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour	Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Auto	0	6	115	14	0	94	147	12	0	9	12	5	0	5	18	105	542
	Sm truck	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	5
	Lg Truck	0	1	4	0	0	0	4	0	0	0	0	0	0	0	0	0	9
	ALL	0	7	122	15	0	94	152	12	0	9	12	5	0	5	18	105	556
	% ALL	0.0	1.3	21.9	2.7	0.0	16.9	27.3	2.2	0.0	1.6	2.2	0.9	0.0	0.9	3.2	18.9	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

AM Count Summary Date: Apr 29 2013

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	76	1833	130	0	371	1277	136	0	114	93	42	0	74	96	565	4807
%	0	1	36	3	0	7	25	3	0	2	2	1	0	1	2	11	93.8
Sm truck	0	7	81	8	0	14	89	7	0	3	2	2	0	2	3	21	239
%	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4.7
Lg truck	0	1	43	0	0	1	30	2	0	0	0	0	0	1	0	0	78
%	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1.5
All	0	84	1957	138	0	386	1396	145	0	117	95	44	0	77	99	586	5124
% ALL	0	2	38	3	0	8	27	3	0	2	2	1	0	2	2	11	100.0

PM Count Summary Date: Apr 30 2013

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	96	2599	300	0	1219	2655	202	0	233	279	127	1	114	234	1173	9232
%	0.0	1.0	27.1	3.1	0.0	12.7	27.6	2.1	0.0	2.4	2.9	1.3	0.0	1.2	2.4	12.2	96.1
Sm truck	0	6	119	14	0	18	78	5	0	4	4	5	0	3	3	18	277
%	0.0	0.1	1.2	0.1	0.0	0.2	0.8	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	2.9
Lg truck	0	1	45	1	0	2	42	0	0	0	0	1	0	0	1	2	95
%	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
All	0	103	2763	315	0	1239	2775	207	0	237	283	133	1	117	238	1193	9604
% ALL	0.0	1.1	28.8	3.3	0.0	12.9	28.9	2.2	0.0	2.5	2.9	1.4	0.0	1.2	2.5	12.4	100.0

14 Hour Count Summary Correction factor = 1

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	172	4432	430	0	1590	3932	338	0	347	372	169	1	188	330	1738	14039
%	0.0	1.2	30.1	2.9	0.0	10.8	26.7	2.3	0.0	2.4	2.5	1.1	0.0	1.3	2.2	11.8	95.3
Sm truck	0	13	200	22	0	32	167	12	0	7	6	7	0	5	6	39	516
%	0.0	0.1	1.4	0.1	0.0	0.2	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.5
Lg truck	0	2	88	1	0	3	72	2	0	0	0	1	0	1	1	2	173
%	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
All	0	187	4720	453	0	1625	4171	352	0	354	378	177	1	194	337	1779	14728
% ALL	0.0	1.3	32.0	3.1	0.0	11.0	28.3	2.4	0.0	2.4	2.6	1.2	0.0	1.3	2.3	12.1	100.0

24 Hour Count Summary Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	224	5762	559	0	2067	5112	439	0	451	484	220	1	244	429	2259	18251
%	0.0	1.2	30.1	2.9	0.0	10.8	26.7	2.3	0.0	2.4	2.5	1.1	0.0	1.3	2.2	11.8	95.3
Sm truck	0	17	260	29	0	42	217	16	0	9	8	9	0	7	8	51	671
%	0.0	0.1	1.8	0.2	0.0	0.3	1.5	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.3	4.6
Lg truck	0	3	114	1	0	4	94	3	0	0	0	1	0	1	1	3	225
%	0.0	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	243	6136	589	0	2113	5422	458	0	460	491	230	1	252	438	2313	19146
% ALL	0.0	1.3	32.0	3.1	0.0	11.0	28.3	2.4	0.0	2.4	2.6	1.2	0.0	1.3	2.3	12.1	100.0

Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

14 Hour Count Summary

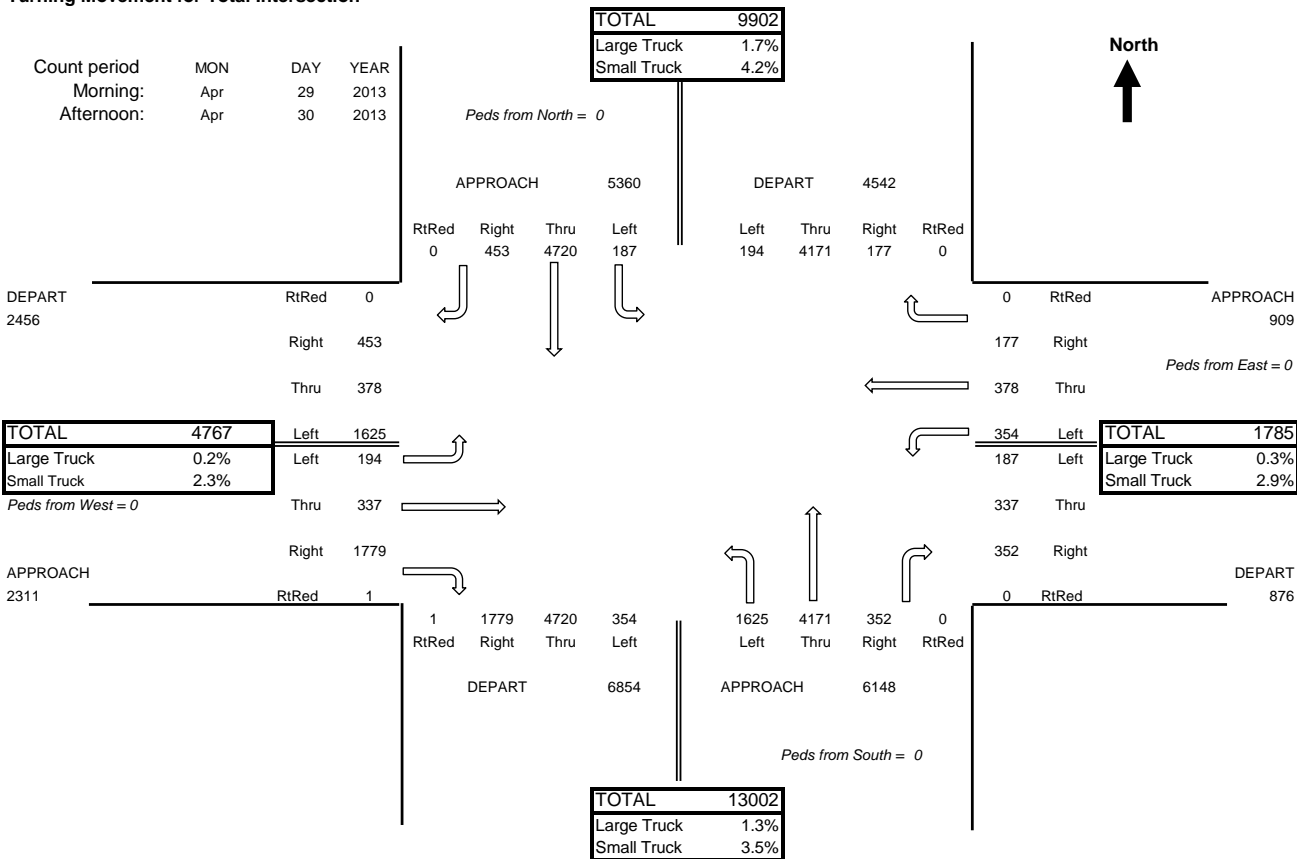
Correction factor = 1

	From North				From South				From East				From West				Interval
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	total
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	172	4432	430	0	1590	3932	338	0	347	372	169	1	188	330	1738	14039
%	0.0	1.2	30.1	2.9	0.0	10.8	26.7	2.3	0.0	2.4	2.5	1.1	0.0	1.3	2.2	11.8	95.3
Sm truck	0	13	200	22	0	32	167	12	0	7	6	7	0	5	6	39	516
%	0.0	0.1	1.4	0.1	0.0	0.2	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.5
Lg truck	0	2	88	1	0	3	72	2	0	0	0	1	0	1	1	2	173
%	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
All	0	187	4720	453	0	1625	4171	352	0	354	378	177	1	194	337	1779	14728
% ALL	0.0	1.3	32.0	3.1	0.0	11.0	28.3	2.4	0.0	2.4	2.6	1.2	0.0	1.3	2.3	12.1	100.0

14 Hour Count

Correction factor = 1

Turning Movement for Total Intersection



Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.



LOCATION: KIRKCALDY DR & 1ST ST

DATE: Mon Day Year
Morning: Apr 29 2013
Afternoon: Apr 30 2013Type: Cars/Trucks/Peds
Interval: 15 min 56 intervals
Correction: 1.0

24 Hour Count Summary

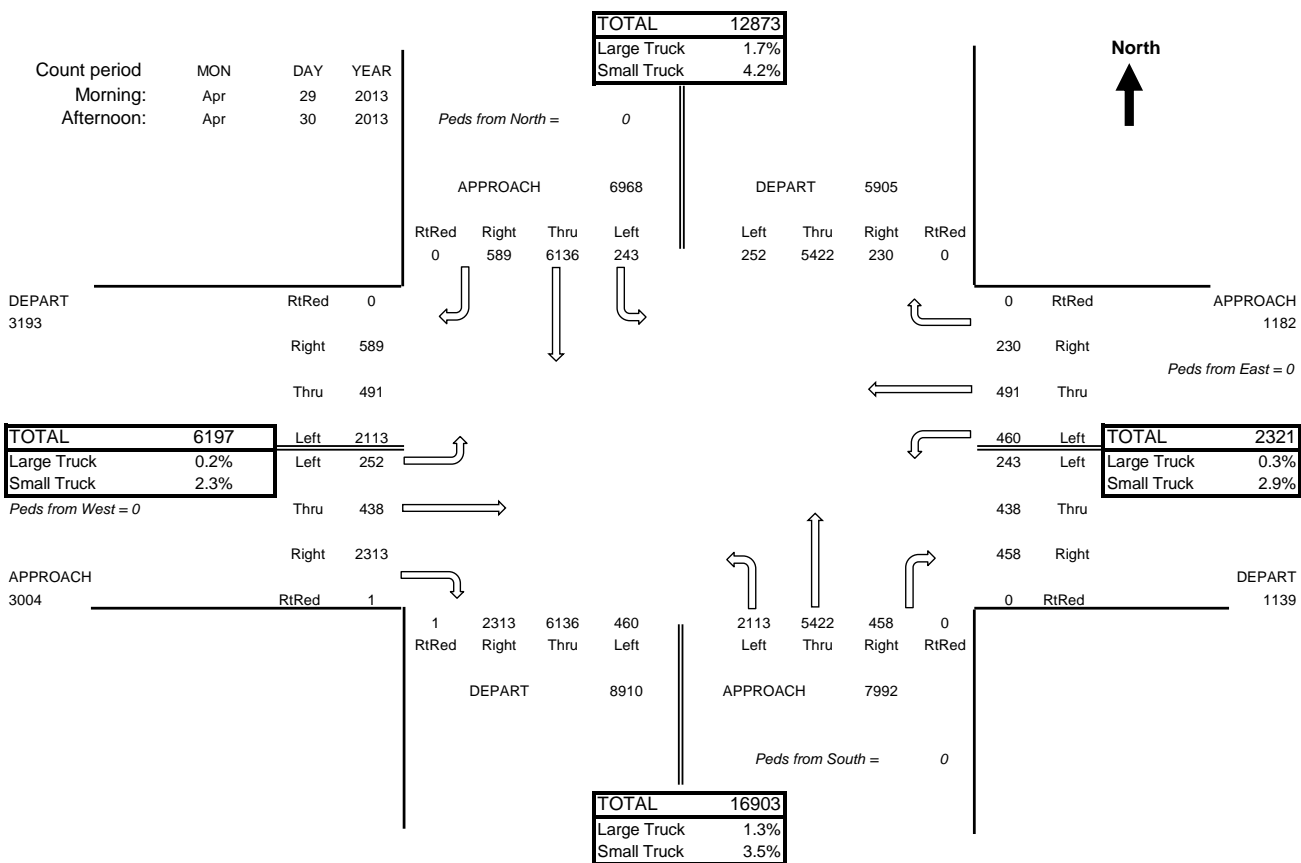
Correction factor = 1.3

	From North				From South				From East				From West				Interval total
	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	RtRed	Left	Thru	Right	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto	0	224	5762	559	0	2067	5112	439	0	451	484	220	1	244	429	2259	18251
%	0.0	1.2	30.1	2.9	0.0	10.8	26.7	2.3	0.0	2.4	2.5	1.1	0.0	1.3	2.2	11.8	95.3
Sm truck	0	17	260	29	0	42	217	16	0	9	8	9	0	7	8	51	671
%	0.0	0.1	1.8	0.2	0.0	0.3	1.5	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.3	4.6
Lg truck	0	3	114	1	0	4	94	3	0	0	0	1	0	1	1	3	225
%	0.0	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
All	0	243	6136	589	0	2113	5422	458	0	460	491	230	1	252	438	2313	19146
% ALL	0.0	1.3	32.0	3.1	0.0	11.0	28.3	2.4	0.0	2.4	2.6	1.2	0.0	1.3	2.3	12.1	100.0

24 Hour Count

Correction factor = 1.3

Turning Movement for Total Intersection



Comment: This file is merged from counts taken on the morning of Apr 29 and the afternoon of Apr 30, 2013.

APPENDIX

B SYNCHRO REPORTS



HCM 6th TWSC
10: PTH 10/18TH ST & BRAECREST DR







01/24/2019

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↕	↕	↔	↕	
Traffic Vol, veh/h	3	3	11	69	9	28	24	455	132	34	442	5
Future Vol, veh/h	3	3	11	69	9	28	24	455	132	34	442	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	3	3	12	75	10	30	26	495	143	37	480	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	862	1104	483	1111	1106	248	485	0	0	495	0	0
Stage 1	557	557	-	547	547	-	-	-	-	-	-	-
Stage 2	305	547	-	564	559	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	262	210	583	175	210	753	1052	-	-	1049	-	-
Stage 1	514	511	-	490	517	-	-	-	-	-	-	-
Stage 2	680	517	-	509	510	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	231	198	583	162	198	753	1052	-	-	1049	-	-
Mov Cap-2 Maneuver	231	198	-	162	198	-	-	-	-	-	-	-
Stage 1	501	493	-	478	504	-	-	-	-	-	-	-
Stage 2	624	504	-	478	492	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.5		37.9		0.3		0.6	
HCM LOS	C		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1052	-	-	362 165 753	1049	-	-
HCM Lane V/C Ratio	0.025	-	-	0.051 0.514 0.04	0.035	-	-
HCM Control Delay (s)	8.5	-	-	15.5 47.9 10	8.6	-	-
HCM Lane LOS	A	-	-	C E B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2 2.5 0.1	0.1	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	118	80	388	482	25
Future Vol, veh/h	21	118	80	388	482	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	23	128	87	422	524	27
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	923	276	551	0	-	0
Stage 1	538	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	269	721	1008	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	246	721	1008	-	-	-
Mov Cap-2 Maneuver	246	-	-	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.6	1.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1008	-	246	721	-	-
HCM Lane V/C Ratio	0.086	-	0.093	0.178	-	-
HCM Control Delay (s)	8.9	-	21.1	11.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	0.6	-	-

HCM 6th TWSC
10: PTH 10/18TH ST & BRAECREST DR

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Intersection

Int Delay, s/veh 39.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	
Traffic Vol, veh/h	6	5	11	84	14	36	27	842	227	71	600	7
Future Vol, veh/h	6	5	11	84	14	36	27	842	227	71	600	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	5	12	91	15	39	29	915	247	77	652	8







Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1333	1783	656	1792	1787	-	660	0	0	915	0	0
Stage 1	810	810	-	973	973	-	-	-	-	-	-	-
Stage 2	523	973	-	819	814	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	-	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	-	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	119	79	458	~ 56	81	0	926	-	-	743	-	-
Stage 1	367	387	-	271	329	0	-	-	-	-	-	-
Stage 2	500	324	-	369	391	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	89	69	458	~ 46	70	-	926	-	-	743	-	-
Mov Cap-2 Maneuver	89	69	-	~ 46	70	-	-	-	-	-	-	-
Stage 1	356	347	-	263	319	-	-	-	-	-	-	-
Stage 2	461	314	-	317	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.6	\$ 741.8	0.2	1.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	926	-	-	134 48	-	743	-
HCM Lane V/C Ratio	0.032	-	-	0.178 2.219	-	0.104	-
HCM Control Delay (s)	9	-	-	37.6 \$ 741.8	0	10.4	-
HCM Lane LOS	A	-	-	E F	A	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6 11	-	0.3	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	36	201	187	395	545	45
Future Vol, veh/h	36	201	187	395	545	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	39	218	203	429	592	49
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1238	321	641	0	-	0
Stage 1	617	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	168	675	933	-	-	-
Stage 1	501	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	131	675	933	-	-	-
Mov Cap-2 Maneuver	131	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.6	3.2		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	933	-	131	675	-	-
HCM Lane V/C Ratio	0.218	-	0.299	0.324	-	-
HCM Control Delay (s)	9.9	-	43.8	12.9	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.8	-	1.2	1.4	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	4	4	12	73	10	30	28	528	153	40	513	6
Future Vol, veh/h	4	4	12	73	10	30	28	528	153	40	513	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	13	79	11	33	30	574	166	43	558	7

Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1001	1282	562	1290	1285	287	565	0	0	574	0	0
Stage 1	648	648	-	634	634	-	-	-	-	-	-	-
Stage 2	353	634	-	656	651	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	209	165	526	130	164	710	981	-	-	979	-	-
Stage 1	458	465	-	435	472	-	-	-	-	-	-	-
Stage 2	638	472	-	454	464	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	178	153	526	117	152	710	981	-	-	979	-	-
Mov Cap-2 Maneuver	178	153	-	117	152	-	-	-	-	-	-	-
Stage 1	444	445	-	422	457	-	-	-	-	-	-	-
Stage 2	576	457	-	419	444	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.9		72		0.3		0.6	
HCM LOS	C		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	981	-	-	280 120 710	979	-	-
HCM Lane V/C Ratio	0.031	-	-	0.078 0.752 0.046	0.044	-	-
HCM Control Delay (s)	8.8	-	-	18.9 94.3 10.3	8.8	-	-
HCM Lane LOS	A	-	-	C F B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3 4.2 0.1	0.1	-	-

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	125	103	429	566	34
Future Vol, veh/h	22	125	103	429	566	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	24	136	112	466	615	37
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1091	326	652	0	-	0
Stage 1	634	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	209	670	924	-	-	-
Stage 1	491	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	670	924	-	-	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	432	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.1	1.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	924	-	184	670	-	-
HCM Lane V/C Ratio	0.121	-	0.13	0.203	-	-
HCM Control Delay (s)	9.4	-	27.5	11.7	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.4	0.8	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	85.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↕	↕	↕	↕	
Traffic Vol, veh/h	7	6	12	89	15	39	32	988	263	83	708	9
Future Vol, veh/h	7	6	12	89	15	39	32	988	263	83	708	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	7	13	97	16	42	35	1074	286	90	770	10

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1570	2099	775	2109	2104	537	780	0	0	1074	0	0
Stage 1	955	955	-	1144	1144	-	-	-	-	-	-	-
Stage 2	615	1144	-	965	960	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	80	50	391	~ 33	51	489	835	-	-	647	-	-
Stage 1	304	331	-	213	274	-	-	-	-	-	-	-
Stage 2	440	269	-	306	334	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	45	41	391	~ 24	42	489	835	-	-	647	-	-
Mov Cap-2 Maneuver	45	41	-	~ 24	42	-	-	-	-	-	-	-
Stage 1	291	285	-	204	262	-	-	-	-	-	-	-
Stage 2	361	258	-	249	288	-	-	-	-	-	-	-







Approach	EB	WB	NB	SB
HCM Control Delay, s	78.1	\$ 1321.6	0.2	1.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	75 26 489	647	-	-
HCM Lane V/C Ratio	0.042	-	-	0.362 4.348 0.087	0.139	-	-
HCM Control Delay (s)	9.5	-	-	78.1 1812.3 13.1	11.5	-	-
HCM Lane LOS	A	-	-	F F B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4 13.9 0.3	0.5	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	212	207	448	602	50
Future Vol, veh/h	38	212	207	448	602	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	41	230	225	487	654	54

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1375	354	708
Stage 1	681	-	-
Stage 2	694	-	-
Critical Hdwy	6.84	6.94	4.16
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.23
Pot Cap-1 Maneuver	136	642	880
Stage 1	464	-	-
Stage 2	457	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	101	642	880
Mov Cap-2 Maneuver	101	-	-
Stage 1	345	-	-
Stage 2	457	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	3.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	880	-	101	642	-	-
HCM Lane V/C Ratio	0.256	-	0.409	0.359	-	-
HCM Control Delay (s)	10.5	-	63.4	13.7	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	1	-	1.7	1.6	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	4	4	12	88	10	36	28	528	158	41	513	6
Future Vol, veh/h	4	4	12	88	10	36	28	528	158	41	513	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	13	96	11	39	30	574	172	45	558	7







Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1005	1286	562	1294	1289	287	565	0	0	574	0	0
Stage 1	652	652	-	634	634	-	-	-	-	-	-	-
Stage 2	353	634	-	660	655	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	208	164	526	129	163	710	981	-	-	979	-	-
Stage 1	456	463	-	435	472	-	-	-	-	-	-	-
Stage 2	638	472	-	451	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	175	152	526	116	151	710	981	-	-	979	-	-
Mov Cap-2 Maneuver	175	152	-	116	151	-	-	-	-	-	-	-
Stage 1	442	442	-	422	457	-	-	-	-	-	-	-
Stage 2	571	457	-	415	441	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	93.8	0.3	0.6
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	981	-	-	278 119 710	979	-	-
HCM Lane V/C Ratio	0.031	-	-	0.078 0.895 0.055	0.046	-	-
HCM Control Delay (s)	8.8	-	-	19 124.5 10.4	8.9	-	-
HCM Lane LOS	A	-	-	C F B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3 5.6 0.2	0.1	-	-

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	159	111	429	566	37
Future Vol, veh/h	28	159	111	429	566	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	30	173	121	466	615	40

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1110	328	655
Stage 1	635	-	-
Stage 2	475	-	-
Critical Hdwy	6.84	6.94	4.16
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.23
Pot Cap-1 Maneuver	203	668	921
Stage 1	490	-	-
Stage 2	592	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	176	668	921
Mov Cap-2 Maneuver	176	-	-
Stage 1	426	-	-
Stage 2	592	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.9	2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	921	-	176	668	-	-
HCM Lane V/C Ratio	0.131	-	0.173	0.259	-	-
HCM Control Delay (s)	9.5	-	29.7	12.3	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.6	1	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	109.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	
Traffic Vol, veh/h	7	6	12	98	15	43	32	988	279	88	708	9
Future Vol, veh/h	7	6	12	98	15	43	32	988	279	88	708	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	7	13	107	16	47	35	1074	303	96	770	10

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1582	2111	775	2121	2116	537	780	0	0	1074	0	0
Stage 1	967	967	-	1144	1144	-	-	-	-	-	-	-
Stage 2	615	1144	-	977	972	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	78	49	391	~ 32	50	489	835	-	-	647	-	-
Stage 1	300	326	-	213	274	-	-	-	-	-	-	-
Stage 2	440	269	-	301	330	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	42	40	391	~ 23	41	489	835	-	-	647	-	-
Mov Cap-2 Maneuver	42	40	-	~ 23	41	-	-	-	-	-	-	-
Stage 1	287	278	-	204	262	-	-	-	-	-	-	-
Stage 2	358	258	-	242	281	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	82.6	\$ 1581.8	0.2	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	72 24 489	647	-	-
HCM Lane V/C Ratio	0.042	-	-	0.377 5.118 0.096	0.148	-	-
HCM Control Delay (s)	9.5	-	-	82.6 2178.7 13.1	11.5	-	-
HCM Lane LOS	A	-	-	F F B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4 15.4 0.3	0.5	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	41	232	239	448	602	58
Future Vol, veh/h	41	232	239	448	602	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	45	252	260	487	654	63
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1450	359	717	0	-	0
Stage 1	686	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	122	638	873	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	86	638	873	-	-	-
Mov Cap-2 Maneuver	86	-	-	-	-	-
Stage 1	324	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	24.9	3.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	873	-	86	638	-	-
HCM Lane V/C Ratio	0.298	-	0.518	0.395	-	-
HCM Control Delay (s)	10.9	-	85.1	14.3	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	1.3	-	2.2	1.9	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	13.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	4	4	13	76	11	32	32	612	178	46	594	7
Future Vol, veh/h	4	4	13	76	11	32	32	612	178	46	594	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	14	83	12	35	35	665	193	50	646	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1159	1485	650	1494	1489	333	654	0	0	665	0	0
Stage 1	750	750	-	735	735	-	-	-	-	-	-	-
Stage 2	409	735	-	759	754	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	161	124	468	93	123	664	908	-	-	905	-	-
Stage 1	403	418	-	378	425	-	-	-	-	-	-	-
Stage 2	591	425	-	398	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	130	113	468	~ 81	112	664	908	-	-	905	-	-
Mov Cap-2 Maneuver	130	113	-	~ 81	112	-	-	-	-	-	-	-
Stage 1	387	395	-	363	408	-	-	-	-	-	-	-
Stage 2	523	408	-	361	393	-	-	-	-	-	-	-







Approach	EB		WB		NB		SB	
HCM Control Delay, s	22.9		168.3		0.4		0.7	
HCM LOS	C		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	908	-	-	224 84 664	905	-	-
HCM Lane V/C Ratio	0.038	-	-	0.102 1.126 0.052	0.055	-	-
HCM Control Delay (s)	9.1	-	-	22.9 226.2 10.7	9.2	-	-
HCM Lane LOS	A	-	-	C F B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3 6.7 0.2	0.2	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	131	114	473	625	37
Future Vol, veh/h	24	131	114	473	625	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	26	142	124	514	679	40

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1204	360	719
Stage 1	699	-	-
Stage 2	505	-	-
Critical Hdwy	6.84	6.94	4.16
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.23
Pot Cap-1 Maneuver	177	637	872
Stage 1	454	-	-
Stage 2	571	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	152	637	872
Mov Cap-2 Maneuver	152	-	-
Stage 1	390	-	-
Stage 2	571	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	872	-	152	637	-	-
HCM Lane V/C Ratio	0.142	-	0.172	0.224	-	-
HCM Control Delay (s)	9.8	-	33.5	12.3	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.6	0.9	-	-

HCM 6th TWSC
10: PTH 10/18TH ST & BRAECREST DR

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Intersection

Int Delay, s/veh 180.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	7	6	13	93	16	41	36	1145	305	96	821	10
Future Vol, veh/h	7	6	13	93	16	41	36	1145	305	96	821	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	7	14	101	17	45	39	1245	332	104	892	11







Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1815	2429	898	2439	2434	623	903	0	0	1245	0	0
Stage 1	1106	1106	-	1323	1323	-	-	-	-	-	-	-
Stage 2	709	1323	-	1116	1111	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	53	31	332	~ 19	32	430	751	-	-	557	-	-
Stage 1	250	280	-	165	225	-	-	-	-	-	-	-
Stage 2	386	220	-	251	284	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	18	24	332	~ 12	25	430	751	-	-	557	-	-
Mov Cap-2 Maneuver	18	24	-	~ 12	25	-	-	-	-	-	-	-
Stage 1	237	228	-	156	213	-	-	-	-	-	-	-
Stage 2	301	209	-	190	231	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	229.2	\$ 3071.5	0.2	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	751	-	-	38 13 430	557	-	-
HCM Lane V/C Ratio	0.052	-	-	0.744 9.114 0.104	0.187	-	-
HCM Control Delay (s)	10.1	-	-	229.2 4221.4 14.3	12.9	-	-
HCM Lane LOS	B	-	-	F F B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.7 16 0.3	0.7	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	223	228	494	665	55
Future Vol, veh/h	40	223	228	494	665	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	43	242	248	537	723	60
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1518	392	783	0	-	0
Stage 1	753	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	110	607	824	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	77	607	824	-	-	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	298	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	27.8	3.5		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	824	-	77	607	-	-
HCM Lane V/C Ratio	0.301	-	0.565	0.399	-	-
HCM Control Delay (s)	11.2	-	100.3	14.8	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	1.3	-	2.5	1.9	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	19.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	4	4	13	91	11	38	32	612	183	47	594	7
Future Vol, veh/h	4	4	13	91	11	38	32	612	183	47	594	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	14	99	12	41	35	665	199	51	646	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1161	1487	650	1496	1491	333	654	0	0	665	0	0
Stage 1	752	752	-	735	735	-	-	-	-	-	-	-
Stage 2	409	735	-	761	756	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	161	124	468	~ 93	123	664	908	-	-	905	-	-
Stage 1	401	417	-	378	425	-	-	-	-	-	-	-
Stage 2	591	425	-	397	415	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	129	112	468	~ 81	112	664	908	-	-	905	-	-
Mov Cap-2 Maneuver	129	112	-	~ 81	112	-	-	-	-	-	-	-
Stage 1	385	394	-	363	408	-	-	-	-	-	-	-
Stage 2	517	408	-	359	392	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.1	223.1	0.4	0.7
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	908	-	-	222 83 664	905	-	-
HCM Lane V/C Ratio	0.038	-	-	0.103 1.336 0.062	0.056	-	-
HCM Control Delay (s)	9.1	-	-	23.1\$ 302.2 10.8	9.2	-	-
HCM Lane LOS	A	-	-	C F B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3 8.4 0.2	0.2	-	-

Notes												
~: Volume exceeds capacity			\$: Delay exceeds 300s			+: Computation Not Defined			*: All major volume in platoon			

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	165	122	473	625	40
Future Vol, veh/h	30	165	122	473	625	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	33	179	133	514	679	43
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1224	361	722	0	-	0
Stage 1	701	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	171	636	869	-	-	-
Stage 1	453	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	145	636	869	-	-	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	384	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.6	2		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	869	-	145	636	-	-
HCM Lane V/C Ratio	0.153	-	0.225	0.282	-	-
HCM Control Delay (s)	9.9	-	36.9	12.9	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.8	1.2	-	-

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Intersection

Int Delay, s/veh 227.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	
Traffic Vol, veh/h	7	6	13	102	16	45	36	1145	322	100	821	10
Future Vol, veh/h	7	6	13	102	16	45	36	1145	322	100	821	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	7	14	111	17	49	39	1245	350	109	892	11







Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1825	2439	898	2449	2444	623	903	0	0	1245	0	0
Stage 1	1116	1116	-	1323	1323	-	-	-	-	-	-	-
Stage 2	709	1323	-	1126	1121	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	52	30	332	~ 18	31	430	751	-	-	557	-	-
Stage 1	247	277	-	165	225	-	-	-	-	-	-	-
Stage 2	386	220	-	248	281	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	16	23	332	~ 11	24	430	751	-	-	557	-	-
Mov Cap-2 Maneuver	16	23	-	~ 11	24	-	-	-	-	-	-	-
Stage 1	234	223	-	156	213	-	-	-	-	-	-	-
Stage 2	298	209	-	185	226	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	262.7	\$ 3604.6	0.2	1.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	751	-	-	35 12 430	557	-	-
HCM Lane V/C Ratio	0.052	-	-	0.807 10.688 0.114	0.195	-	-
HCM Control Delay (s)	10.1	-	-	262.7 4973.8 14.4	13	-	-
HCM Lane LOS	B	-	-	F F B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.9 17.3 0.4	0.7	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	7.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	43	243	258	494	665	65
Future Vol, veh/h	43	243	258	494	665	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	47	264	280	537	723	71
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1588	397	794	0	-	0
Stage 1	759	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	99	602	817	-	-	-
Stage 1	423	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	65	602	817	-	-	-
Mov Cap-2 Maneuver	65	-	-	-	-	-
Stage 1	278	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	35.1	4		0		
HCM LOS	E					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	817	-	65	602	-	-
HCM Lane V/C Ratio	0.343	-	0.719	0.439	-	-
HCM Control Delay (s)	11.7	-	145.2	15.6	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.5	-	3.2	2.2	-	-

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Intersection												
Int Delay, s/veh	56.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	4	4	14	84	12	35	43	823	239	62	799	10
Future Vol, veh/h	4	4	14	84	12	35	43	823	239	62	799	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	15	91	13	38	47	895	260	67	868	11

Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1556	1997	874	2006	2002	448	879	0	0	895	0	0
Stage 1	1008	1008	-	989	989	-	-	-	-	-	-	-
Stage 2	548	989	-	1017	1013	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	84	60	348	~39	59	559	746	-	-	740	-	-
Stage 1	289	317	-	265	324	-	-	-	-	-	-	-
Stage 2	489	324	-	286	316	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	56	51	348	~31	50	559	746	-	-	740	-	-
Mov Cap-2 Maneuver	56	51	-	~31	50	-	-	-	-	-	-	-
Stage 1	271	288	-	248	304	-	-	-	-	-	-	-
Stage 2	409	304	-	245	287	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43.9	\$ 902.1	0.4	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	746	-	-	116 33 559	740	-	-
HCM Lane V/C Ratio	0.063	-	-	0.206 3.162 0.068	0.091	-	-
HCM Control Delay (s)	10.1	-	-	43.9 1226.6 11.9	10.4	-	-
HCM Lane LOS	B	-	-	E F B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7 12.1 0.2	0.3	-	-

Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	145	139	577	761	45
Future Vol, veh/h	26	145	139	577	761	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	28	158	151	627	827	49
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1468	438	876	0	-	0
Stage 1	852	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	118	567	760	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	95	567	760	-	-	-
Mov Cap-2 Maneuver	95	-	-	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.6	2.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	760	-	95	567	-	-
HCM Lane V/C Ratio	0.199	-	0.297	0.278	-	-
HCM Control Delay (s)	10.9	-	58.2	13.8	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.7	-	1.1	1.1	-	-

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Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	8	7	14	103	18	45	49	1538	409	129	1103	14
Future Vol, veh/h	8	7	14	103	18	45	49	1538	409	129	1103	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	8	15	112	20	49	53	1672	445	140	1199	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2439	3265	1207	3276	3272	836	1214	0	0	1672	0	0
Stage 1	1487	1487	-	1778	1778	-	-	-	-	-	-	-
Stage 2	952	1778	-	1498	1494	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	18	9	218	~ 4	~ 9	311	572	-	-	382	-	-
Stage 1	151	183	-	~ 86	134	-	-	-	-	-	-	-
Stage 2	275	131	-	152	186	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	~ 5	218	-	~ 5	311	572	-	-	382	-	-
Mov Cap-2 Maneuver	-	~ 5	-	-	~ 5	-	-	-	-	-	-	-
Stage 1	137	116	-	~ 78	122	-	-	-	-	-	-	-
Stage 2	177	119	-	~ 84	118	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	572	-	-	-	311	382	-
HCM Lane V/C Ratio	0.093	-	-	-	0.157	0.367	-
HCM Control Delay (s)	11.9	-	-	-	18.7	19.8	-
HCM Lane LOS	B	-	-	-	C	C	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6	1.6	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection						
Int Delay, s/veh	12.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	246	278	602	810	67
Future Vol, veh/h	44	246	278	602	810	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	48	267	302	654	880	73
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1848	477	953	0	-	0
Stage 1	917	-	-	-	-	-
Stage 2	931	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.16	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.23	-	-	-
Pot Cap-1 Maneuver	66	534	711	-	-	-
Stage 1	350	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 38	534	711	-	-	-
Mov Cap-2 Maneuver	~ 38	-	-	-	-	-
Stage 1	201	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	75.7	4.3		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	711	-	38	534	-	-
HCM Lane V/C Ratio	0.425	-	1.259	0.501	-	-
HCM Control Delay (s)	13.8	-	\$ 396.7	18.3	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.1	-	4.9	2.8	-	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

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Intersection												
Int Delay, s/veh	170.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	
Traffic Vol, veh/h	4	4	14	150	12	63	43	823	264	68	799	10
Future Vol, veh/h	4	4	14	150	12	63	43	823	264	68	799	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	5	5	5
Mvmt Flow	4	4	15	163	13	68	47	895	287	74	868	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1570	2011	874	2020	2016	448	879	0	0	895	0	0
Stage 1	1022	1022	-	989	989	-	-	-	-	-	-	-
Stage 2	548	989	-	1031	1027	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.19	-	-	4.175	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.257	-	-	2.2475	-	-
Pot Cap-1 Maneuver	82	59	348	~ 38	58	559	746	-	-	740	-	-
Stage 1	284	312	-	265	324	-	-	-	-	-	-	-
Stage 2	489	324	-	281	311	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	51	50	348	~ 30	49	559	746	-	-	740	-	-
Mov Cap-2 Maneuver	51	50	-	~ 30	49	-	-	-	-	-	-	-
Stage 1	266	281	-	248	304	-	-	-	-	-	-	-
Stage 2	385	304	-	238	280	-	-	-	-	-	-	-







Approach	EB	WB	NB	SB
HCM Control Delay, s	46.1	\$ 1702.5	0.4	0.8
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	746	-	-	111 31 559	740	-	-
HCM Lane V/C Ratio	0.063	-	-	0.215 5.68 0.123	0.1	-	-
HCM Control Delay (s)	10.1	-	-	46.1 2359.8 12.3	10.4	-	-
HCM Lane LOS	B	-	-	E F B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8 21.2 0.4	0.3	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection

Int Delay, s/veh 3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	179	147	577	761	48
Future Vol, veh/h	32	179	147	577	761	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	35	195	160	627	827	52

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1487	440	879
Stage 1	853	-	-
Stage 2	634	-	-
Critical Hdwy	6.84	6.94	4.16
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.23
Pot Cap-1 Maneuver	115	565	758
Stage 1	378	-	-
Stage 2	491	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	91	565	758
Mov Cap-2 Maneuver	91	-	-
Stage 1	298	-	-
Stage 2	491	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.7	2.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	758	-	91	565	-	-
HCM Lane V/C Ratio	0.211	-	0.382	0.344	-	-
HCM Control Delay (s)	11	-	67.2	14.7	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.8	-	1.5	1.5	-	-

HCM 6th TWSC
10: PTH 10/18TH ST & BRAECREST DR

01/24/2019

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	
Traffic Vol, veh/h	8	7	14	146	18	64	49	1538	487	148	1103	14
Future Vol, veh/h	8	7	14	146	18	64	49	1538	487	148	1103	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	300	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	8	15	159	20	70	53	1672	529	161	1199	15

Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	2481	3307	1207	3318	3314	836	1214	0	0	1672	0	0
Stage 1	1529	1529	-	1778	1778	-	-	-	-	-	-	-
Stage 2	952	1778	-	1540	1536	-	-	-	-	-	-	-
Critical Hdwy	7.375	6.575	6.275	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.175	5.575	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.575	5.575	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5475	4.0475	3.3475	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	17	8	218	~ 4	~ 8	311	572	-	-	382	-	-
Stage 1	143	175	-	~ 86	134	-	-	-	-	-	-	-
Stage 2	275	131	-	~ 144	177	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	~ 4	218	-	~ 4	311	572	-	-	382	-	-
Mov Cap-2 Maneuver	-	~ 4	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	130	101	-	~ 78	122	-	-	-	-	-	-	-
Stage 2	163	119	-	~ 72	102	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	2.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	572	-	-	-	311	382	-
HCM Lane V/C Ratio	0.093	-	-	-	0.224	0.421	-
HCM Control Delay (s)	11.9	-	-	-	19.9	21.1	-
HCM Lane LOS	B	-	-	-	C	C	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0.8	2	-

Notes







~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
15: 1ST ST & BRAECREST DR

01/24/2019

Intersection

Int Delay, s/veh 17.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	266	308	602	810	77
Future Vol, veh/h	47	266	308	602	810	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	850	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	51	289	335	654	880	84

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1919	482	964
Stage 1	922	-	-
Stage 2	997	-	-
Critical Hdwy	6.84	6.94	4.16
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.23
Pot Cap-1 Maneuver	59	530	704
Stage 1	348	-	-
Stage 2	318	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	~ 31	530	704
Mov Cap-2 Maneuver	~ 31	-	-
Stage 1	182	-	-
Stage 2	318	-	-

Approach	EB	NB	SB
HCM Control Delay, s	105.9	5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	704	-	31	530	-	-
HCM Lane V/C Ratio	0.476	-	1.648	0.546	-	-
HCM Control Delay (s)	14.7	-	\$ 594.6	19.6	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.6	-	5.8	3.2	-	-










Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings

10: PTH 10/18TH ST & BRAECREST DR

01/24/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	4	14	150	12	63	43	823	264	68	799	10
Future Volume (vph)	4	4	14	150	12	63	43	823	264	68	799	10
Satd. Flow (prot)	0	1684	0	0	1781	1583	1703	3406	1524	1719	1806	0
Flt Permitted		0.939			0.725		0.185			0.294		
Satd. Flow (perm)	0	1595	0	0	1350	1583	332	3406	1524	532	1806	0
Satd. Flow (RTOR)		15				68			287		1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	0	0	176	68	47	895	287	74	879	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	44.0	44.0	44.0	44.0	44.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Act Effct Green (s)		13.7			13.7	13.7	40.9	40.9	40.9	40.9	40.9	
Actuated g/C Ratio		0.21			0.21	0.21	0.61	0.61	0.61	0.61	0.61	
v/c Ratio		0.07			0.63	0.18	0.23	0.43	0.27	0.23	0.79	
Control Delay		12.4			33.8	6.9	11.2	8.3	1.8	9.6	18.6	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		12.4			33.8	6.9	11.2	8.3	1.8	9.6	18.6	
LOS		B			C	A	B	A	A	A	B	
Approach Delay		12.4			26.3			6.9			17.9	
Approach LOS		B			C			A			B	
Queue Length 50th (m)		0.8			19.8	0.0	2.4	27.4	0.0	3.7	73.5	
Queue Length 95th (m)		5.8			37.7	8.4	10.2	51.0	9.7	13.0	#181.8	
Internal Link Dist (m)		443.1			1241.5			518.3			436.0	
Turn Bay Length (m)						30.0	100.0		50.0	100.0		
Base Capacity (vph)		490			406	524	203	2088	1045	326	1107	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.05			0.43	0.13	0.23	0.43	0.27	0.23	0.79	

Intersection Summary

Cycle Length: 70

Actuated Cycle Length: 66.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 13.2

Intersection LOS: B

Intersection Capacity Utilization 76.6%

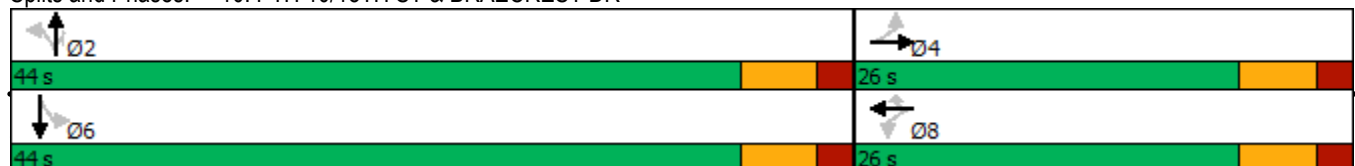
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 10: PTH 10/18TH ST & BRAECREST DR



Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

01/24/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	32	179	147	577	761	48
Future Volume (vph)	32	179	147	577	761	48
Satd. Flow (prot)	1770	1583	1752	3505	3440	0
Flt Permitted	0.950		0.315			
Satd. Flow (perm)	1770	1583	581	3505	3440	0
Satd. Flow (RTOR)		104			14	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	35	195	160	627	879	0
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Total Split (s)	26.0	26.0	34.0	34.0	34.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Act Effect Green (s)	8.7	8.7	32.6	32.6	32.6	
Actuated g/C Ratio	0.18	0.18	0.66	0.66	0.66	
v/c Ratio	0.11	0.54	0.42	0.27	0.39	
Control Delay	17.1	15.1	11.7	5.8	6.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	17.1	15.1	11.7	5.8	6.4	
LOS	B	B	B	A	A	
Approach Delay	15.4			7.0	6.4	
Approach LOS	B			A	A	
Queue Length 50th (m)	2.7	7.3	7.0	12.7	19.2	
Queue Length 95th (m)	8.3	21.6	26.3	26.1	38.4	
Internal Link Dist (m)	392.8			815.5	290.8	
Turn Bay Length (m)		25.0	85.0			
Base Capacity (vph)	712	699	381	2298	2260	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.05	0.28	0.42	0.27	0.39	

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 49.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 7.7

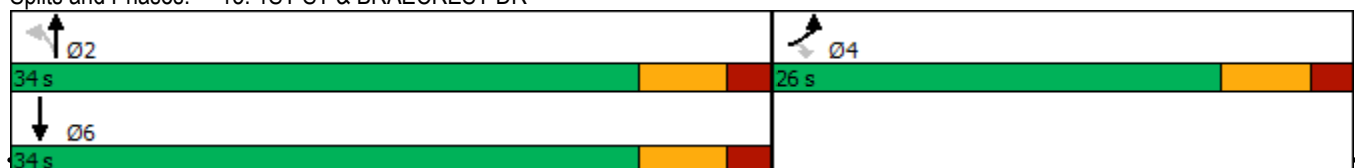
Intersection LOS: A

Intersection Capacity Utilization 49.0%

ICU Level of Service A

Analysis Period (min) 15






















Splits and Phases: 15: 1ST ST & BRAECREST DR



2038 AM Peak with signals 11/18/2013 Baseline

Lanes, Volumes, Timings
10: PTH 10/18TH ST & BRAECREST DR

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 				
Traffic Volume (vph)	0	0	22	0	0	144	43	823	264	68	874	16
Future Volume (vph)	0	0	22	0	0	144	43	823	264	68	874	16
Satd. Flow (prot)	0	0	1611	0	0	1611	1703	3406	1524	1719	1804	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	1703	3406	1524	1719	1804	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	24	0	0	157	47	895	287	74	967	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 57.0%						ICU Level of Service B						
Analysis Period (min) 15												

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

02/19/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	179	147	577	761	48
Future Volume (vph)	0	179	147	577	761	48
Satd. Flow (prot)	0	1611	1752	3505	3440	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1611	1752	3505	3440	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	195	160	627	879	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized

Intersection Capacity Utilization 40.3% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔			↔			↔	↔		↔	↔
Traffic Volume (vph)	4	5	43	65	4	4	81	131	619	192	22	631
Future Volume (vph)	4	5	43	65	4	4	81	131	619	192	22	631
Satd. Flow (prot)	0	1376	0	0	1625	0	0	1708	3200	0	1703	1788
Flt Permitted		0.974			0.707			0.194			0.322	
Satd. Flow (perm)	0	1346	0	0	1201	0	0	349	3200	0	577	1788
Satd. Flow (RTOR)		47			3				63			1
Confl. Peds. (#/hr)			5			5				5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	19%	19%	19%	11%	11%	11%	2%	8%	8%	8%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	79	0	0	230	882	0	24	696
Turn Type	Perm	NA		Perm	NA		custom	pm+pt	NA		pm+pt	NA
Protected Phases		8			8			1	6		5	2
Permitted Phases	8			8			1	6			2	
Total Split (s)	31.0	31.0		31.0	31.0		15.0	15.0	49.0		10.0	44.0
Total Lost Time (s)		6.0			6.0			6.0	6.0		6.0	6.0
Act Effect Green (s)		12.1			12.1			68.7	64.5		54.9	48.0
Actuated g/C Ratio		0.13			0.13			0.76	0.72		0.61	0.53
v/c Ratio		0.25			0.48			0.47	0.38		0.05	0.73
Control Delay		15.4			43.5			7.5	8.0		5.8	25.2
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay		15.4			43.5			7.5	8.0		5.8	25.2
LOS		B			D			A	A		A	C
Approach Delay		15.4			43.5				7.9			24.6
Approach LOS		B			D				A			C
Queue Length 50th (m)		1.5			13.0			10.6	23.1		1.0	99.0
Queue Length 95th (m)		11.7			25.8			22.5	64.2		3.7	#190.3
Internal Link Dist (m)		15.6			85.1				436.0			28.1
Turn Bay Length (m)								90.0			75.0	
Base Capacity (vph)		407			335			488	2312		438	953
Starvation Cap Reductn		0			0			0	0		0	0
Spillback Cap Reductn		0			0			0	0		0	0
Storage Cap Reductn		0			0			0	0		0	0
Reduced v/c Ratio		0.14			0.24			0.47	0.38		0.05	0.73

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 15.6

Intersection LOS: B

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

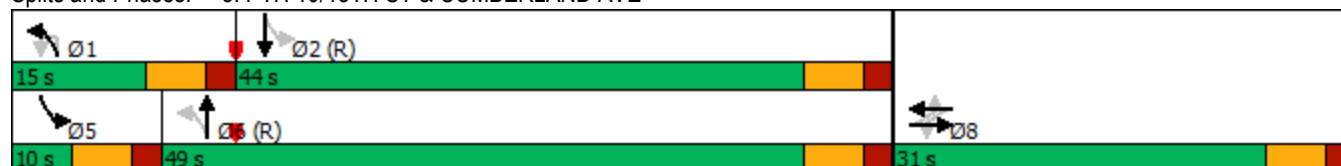
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019






















Splits and Phases: 3: PTH 10/18TH ST & CUMBERLAND AVE



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	9
Future Volume (vph)	9
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Confl. Peds. (#/hr)	5
Peak Hour Factor	0.92
Heavy Vehicles (%)	6%
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	
Total Lost Time (s)	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
10: PTH 10/18TH ST & BRAECREST DR

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 				
Traffic Volume (vph)	0	0	22	0	0	63	43	823	264	68	949	22
Future Volume (vph)	0	0	22	0	0	63	43	823	264	68	949	22
Satd. Flow (prot)	0	0	1611	0	0	1611	1703	3406	1524	1719	1804	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	1703	3406	1524	1719	1804	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	24	0	0	68	47	895	287	74	1056	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 61.3% ICU Level of Service B												
Analysis Period (min) 15												

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

02/19/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	179	147	577	761	48
Future Volume (vph)	0	179	147	577	761	48
Satd. Flow (prot)	0	1611	1752	3505	3440	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1611	1752	3505	3440	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	195	160	627	879	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized








Intersection Capacity Utilization 40.3% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	43	227	4	4	131	619	192	22	631	9
Future Volume (vph)	4	5	43	227	4	4	131	619	192	22	631	9
Satd. Flow (prot)	0	1378	0	0	1629	0	1671	3201	0	1703	1788	0
Flt Permitted		0.976			0.692		0.117			0.288		
Satd. Flow (perm)	0	1350	0	0	1182	0	206	3201	0	516	1788	0
Satd. Flow (RTOR)		47			1			63			1	
Confl. Peds. (#/hr)			5			5			5			5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	19%	19%	19%	11%	11%	11%	8%	8%	8%	6%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	255	0	142	882	0	24	696	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8			8			6			2		
Total Split (s)	31.0	31.0		31.0	31.0		10.0	39.0		10.0	39.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Act Effct Green (s)		21.5			21.5		44.1	42.5		39.6	34.2	
Actuated g/C Ratio		0.27			0.27		0.55	0.53		0.50	0.43	
v/c Ratio		0.14			0.80		0.62	0.51		0.07	0.91	
Control Delay		8.8			46.1		28.2	14.2		9.2	40.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		8.8			46.1		28.2	14.2		9.2	40.9	
LOS		A			D		C	B		A	D	
Approach Delay		8.8			46.1			16.2			39.8	
Approach LOS		A			D			B			D	
Queue Length 50th (m)		1.0			36.5		10.1	38.2		1.6	103.8	
Queue Length 95th (m)		9.0			#68.6		#33.5	73.8		5.0	#176.6	
Internal Link Dist (m)		15.6			85.1			436.0			28.1	
Turn Bay Length (m)							90.0			75.0		
Base Capacity (vph)		454			370		228	1729		334	765	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.12			0.69		0.62	0.51		0.07	0.91	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 58 (73%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 28.0

Intersection LOS: C

Intersection Capacity Utilization 75.9%

ICU Level of Service D

Analysis Period (min) 15

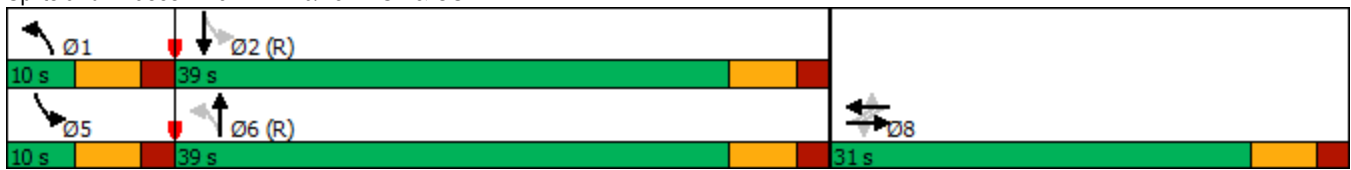
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019






















Splits and Phases: 3: PTH 10/18TH ST & CUMBERLAND AVE



Lanes, Volumes, Timings

10: PTH 10/18TH ST & BRAECREST DR

01/24/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	7	14	146	18	64	49	1538	487	148	1103	14
Future Volume (vph)	8	7	14	146	18	64	49	1538	487	148	1103	14
Satd. Flow (prot)	0	1672	0	0	1783	1583	1770	3539	1583	1770	1859	0
Flt Permitted		0.896			0.727		0.085			0.075		
Satd. Flow (perm)	0	1519	0	0	1354	1583	158	3539	1583	140	1859	0
Satd. Flow (RTOR)		15				109			365		1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	179	70	53	1672	529	161	1214	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	53.0	53.0	53.0	11.0	64.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Act Effct Green (s)		15.7			15.7	15.7	47.1	47.1	47.1	58.1	58.1	
Actuated g/C Ratio		0.18			0.18	0.18	0.55	0.55	0.55	0.68	0.68	
v/c Ratio		0.11			0.72	0.19	0.62	0.86	0.51	0.85	0.96	
Control Delay		19.8			50.2	3.4	51.3	23.4	5.8	52.7	34.0	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.8			50.2	3.4	51.3	23.4	5.8	52.7	34.0	
LOS		B			D	A	D	C	A	D	C	
Approach Delay		19.8			37.0			19.9			36.2	
Approach LOS		B			D			B			D	
Queue Length 50th (m)		2.5			29.3	0.0	5.9	124.2	13.7	11.6	174.9	
Queue Length 95th (m)		10.0			51.6	4.7	#28.6	#183.0	39.1	#50.6	#315.0	
Internal Link Dist (m)		443.1			1241.5			518.3			436.0	
Turn Bay Length (m)						30.0	100.0		50.0	100.0		
Base Capacity (vph)		366			316	453	86	1942	1033	189	1259	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.09			0.57	0.15	0.62	0.86	0.51	0.85	0.96	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 85.8

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 26.7

Intersection LOS: C

Intersection Capacity Utilization 92.9%

ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 10: PTH 10/18TH ST & BRAECREST DR

		
11 s	53 s	26 s
		
64 s	26 s	

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

01/24/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	266	308	602	810	77
Future Volume (vph)	47	266	308	602	810	77
Satd. Flow (prot)	1770	1583	1752	3505	3426	0
Flt Permitted	0.950		0.280			
Satd. Flow (perm)	1770	1583	517	3505	3426	0
Satd. Flow (RTOR)		182			22	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	289	335	654	964	0
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Total Split (s)	26.0	26.0	64.0	64.0	64.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Act Effect Green (s)	11.8	11.8	58.5	58.5	58.5	
Actuated g/C Ratio	0.14	0.14	0.71	0.71	0.71	
v/c Ratio	0.20	0.76	0.91	0.26	0.40	
Control Delay	31.7	26.0	45.6	5.2	5.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	31.7	26.0	45.6	5.2	5.9	
LOS	C	C	D	A	A	
Approach Delay	26.8			18.9	5.9	
Approach LOS	C			B	A	
Queue Length 50th (m)	7.5	16.3	36.9	16.3	26.5	
Queue Length 95th (m)	17.2	42.6	#117.2	33.0	52.0	
Internal Link Dist (m)	392.8			815.5	290.8	
Turn Bay Length (m)		25.0	85.0			
Base Capacity (vph)	431	523	367	2490	2440	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.12	0.55	0.91	0.26	0.40	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 82.3

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 14.6

Intersection LOS: B

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.






















Queue shown is maximum after two cycles.

Splits and Phases: 15: 1ST ST & BRAECREST DR



Lanes, Volumes, Timings
10: PTH 10/18TH ST & BRAECREST DR

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 				
Traffic Volume (vph)	0	0	29	0	0	146	49	1538	482	153	1176	23
Future Volume (vph)	0	0	29	0	0	146	49	1538	482	153	1176	23
Satd. Flow (prot)	0	0	1565	0	0	1611	1770	3539	1583	1770	1857	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	0	1565	0	0	1611	1770	3539	1583	1770	1857	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	32	0	0	159	53	1672	524	166	1303	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 73.3% ICU Level of Service D												
Analysis Period (min) 15												

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

02/19/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	266	310	602	810	75
Future Volume (vph)	0	266	310	602	810	75
Satd. Flow (prot)	0	1611	1752	3505	3426	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1611	1752	3505	3426	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	289	337	654	962	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized

Intersection Capacity Utilization 48.6% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔		↔	↔			↔	↔		↔	↔
Traffic Volume (vph)	8	13	139	194	12	12	82	186	1166	267	13	760
Future Volume (vph)	8	13	139	194	12	12	82	186	1166	267	13	760
Satd. Flow (prot)	0	1531	0	3303	1641	0	0	1734	3321	0	1719	1803
Flt Permitted		0.981		0.950				0.065			0.147	
Satd. Flow (perm)	0	1507	0	3303	1641	0	0	119	3321	0	266	1803
Satd. Flow (RTOR)		151			13				32			1
Confl. Peds. (#/hr)			5			5				5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	2%	5%	5%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	174	0	211	26	0	0	291	1557	0	14	842
Turn Type	Perm	NA		Prot	NA		custom	pm+pt	NA		pm+pt	NA
Protected Phases		4		3	8			1	6		5	2
Permitted Phases	4						1	6			2	
Total Split (s)	31.0	31.0		15.0	46.0		26.0	26.0	89.0		10.0	73.0
Total Lost Time (s)		6.0		6.0	6.0			6.0	6.0		6.0	6.0
Act Effect Green (s)		11.0		9.0	20.0			107.0	101.7		79.3	72.4
Actuated g/C Ratio		0.08		0.06	0.14			0.74	0.70		0.55	0.50
v/c Ratio		0.69		1.03	0.11			0.72	0.67		0.07	0.93
Control Delay		27.6		135.3	30.0			45.6	15.3		9.5	52.6
Queue Delay		0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay		27.6		135.3	30.0			45.6	15.3		9.5	52.6
LOS		C		F	C			D	B		A	D
Approach Delay		27.6			123.8				20.1			51.9
Approach LOS		C			F				C			D
Queue Length 50th (m)		6.8		~35.0	3.4			59.7	99.8		0.9	229.3
Queue Length 95th (m)		31.0		#62.8	11.7			#99.4	206.1		3.6	#349.1
Internal Link Dist (m)		15.6			85.1				345.3			28.1
Turn Bay Length (m)								90.0			75.0	
Base Capacity (vph)		384		205	462			406	2339		213	901
Starvation Cap Reductn		0		0	0			0	0		0	0
Spillback Cap Reductn		0		0	0			0	0		0	0
Storage Cap Reductn		0		0	0			0	0		0	0
Reduced v/c Ratio		0.45		1.03	0.06			0.72	0.67		0.07	0.93

Intersection Summary

Cycle Length: 145

Actuated Cycle Length: 145

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 37.2

Intersection LOS: D

Intersection Capacity Utilization 96.4%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019






















Splits and Phases: 3: PTH 10/18TH ST & CUMBERLAND AVE



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	15
Future Volume (vph)	15
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Confl. Peds. (#/hr)	5
Peak Hour Factor	0.92
Heavy Vehicles (%)	5%
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	
Total Lost Time (s)	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
10: PTH 10/18TH ST & BRAECREST DR

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 				
Traffic Volume (vph)	0	0	29	0	0	64	49	1538	482	153	1249	32
Future Volume (vph)	0	0	29	0	0	64	49	1538	482	153	1249	32
Satd. Flow (prot)	0	0	1565	0	0	1611	1770	3539	1583	1770	1855	0
Flt Permitted							0.950			0.950		
Satd. Flow (perm)	0	0	1565	0	0	1611	1770	3539	1583	1770	1855	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	32	0	0	70	53	1672	524	166	1393	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 77.7% ICU Level of Service D												
Analysis Period (min) 15												

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

02/19/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	266	310	602	810	75
Future Volume (vph)	0	266	310	602	810	75
Satd. Flow (prot)	0	1611	1752	3505	3426	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1611	1752	3505	3426	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	289	337	654	962	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized


Intersection Capacity Utilization 48.6% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

3: PTH 10/18TH ST & CUMBERLAND AVE

02/19/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Volume (vph)	8	13	139	358	12	12	186	1166	267	13	760	15
Future Volume (vph)	8	13	139	358	12	12	186	1166	267	13	760	15
Satd. Flow (prot)	0	1531	0	3303	1641	0	1719	3321	0	1719	1803	0
Flt Permitted		0.981		0.950			0.063			0.114		
Satd. Flow (perm)	0	1507	0	3303	1641	0	114	3321	0	206	1803	0
Satd. Flow (RTOR)		151			13			28			1	
Confl. Peds. (#/hr)			5			5			5			5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	174	0	389	26	0	202	1557	0	14	842	0
Turn Type	Perm	NA		Prot	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		1	6		5	2	
Permitted Phases	4						6			2		
Total Split (s)	31.0	31.0		23.0	54.0		19.0	81.0		10.0	72.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Act Effect Green (s)		11.0		17.0	24.8		99.0	93.7		79.1	72.2	
Actuated g/C Ratio		0.08		0.12	0.17		0.68	0.65		0.55	0.50	
v/c Ratio		0.69		1.01	0.09		0.66	0.72		0.08	0.94	
Control Delay		27.6		109.8	25.8		41.4	21.1		10.9	53.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		27.6		109.8	25.8		41.4	21.1		10.9	53.4	
LOS		C		F	C		D	C		B	D	
Approach Delay		27.6			104.5			23.4			52.7	
Approach LOS		C			F			C			D	
Queue Length 50th (m)		6.8		~61.9	3.1		36.8	127.0		1.2	230.5	
Queue Length 95th (m)		31.0		#97.7	10.8		68.6	238.7		4.4	#353.1	
Internal Link Dist (m)		15.6			85.1			345.3			28.1	
Turn Bay Length (m)							90.0			75.0		
Base Capacity (vph)		384		387	551		308	2155		184	897	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.45		1.01	0.05		0.66	0.72		0.08	0.94	

Intersection Summary

Cycle Length: 145

Actuated Cycle Length: 145

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 42.0

Intersection LOS: D

Intersection Capacity Utilization 94.9%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.























Splits and Phases: 3: PTH 10/18TH ST & CUMBERLAND AVE



Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↰			↰	↰	↰↱		↰	↰↱	
Traffic Vol, veh/h	0	0	313	0	0	4	308	626	23	6	810	77
Future Vol, veh/h	0	0	313	0	0	4	308	626	23	6	810	77
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	0	850	-	-	850	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	3	2	2	4	4
Mvmt Flow	0	0	340	0	0	4	335	680	25	7	880	84
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	482	-	-	353	880	0	0	680	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	530	0	0	643	757	-	-	908	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	530	-	-	643	757	-	-	908	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	23.2		10.6		4.3		0.1					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	757	-	-	530	643	908	-	-				
HCM Lane V/C Ratio	0.442	-	-	0.642	0.007	0.007	-	-				
HCM Control Delay (s)	13.5	-	-	23.2	10.6	9	-	-				
HCM Lane LOS	B	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	2.3	-	-	4.5	0	0	-	-				

Lanes, Volumes, Timings
15: 1ST ST & BRAECREST DR

02/15/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	3	266	23	1	2	308	602	23	6	810	77
Future Volume (vph)	47	3	266	23	1	2	308	602	23	6	810	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		25.0	0.0		0.0	85.0		50.0	85.0		0.0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (m)	7.0			7.0			7.0			7.0		
Satd. Flow (prot)	0	1779	1583	0	1777	1583	1752	3485	0	1770	3426	0
Flt Permitted		0.719			0.700		0.166			0.393		
Satd. Flow (perm)	0	1339	1583	0	1304	1583	306	3485	0	732	3426	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			236			218		6			14	
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		416.8			101.9			1108.0			314.8	
Travel Time (s)		30.0			7.3			57.0			16.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	2%	2%	4%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	289	0	26	2	335	679	0	7	964	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	18.0	39.0		10.0	31.0	
Total Lost Time (s)		6.0	6.0		6.0	6.0	6.0	6.0		6.0	6.0	
Act Effct Green (s)		10.7	10.7		10.7	10.7	43.2	41.4		29.1	25.1	
Actuated g/C Ratio		0.16	0.16		0.16	0.16	0.66	0.63		0.44	0.38	
v/c Ratio		0.25	0.64		0.12	0.00	0.72	0.31		0.02	0.73	
Control Delay		26.3	13.1		24.0	0.0	21.0	7.7		7.0	22.5	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		26.3	13.1		24.0	0.0	21.0	7.7		7.0	22.5	
LOS		C	B		C	A	C	A		A	C	
Approach Delay		15.1			22.2			12.1			22.4	
Approach LOS		B			C			B			C	
Queue Length 50th (m)		6.1	6.0		2.9	0.0	15.4	13.6		0.3	49.3	
Queue Length 95th (m)		14.9	25.6		8.8	0.0	#70.2	49.0		2.0	#100.7	
Internal Link Dist (m)		392.8			77.9			1084.0			290.8	
Turn Bay Length (m)			25.0				85.0			85.0		
Base Capacity (vph)		408	646		397	634	464	2191		386	1313	
Starvation Cap Reductn		0	0		0	0	0	0		0	0	
Spillback Cap Reductn		0	0		0	0	0	0		0	0	
Storage Cap Reductn		0	0		0	0	0	0		0	0	
Reduced v/c Ratio		0.13	0.45		0.07	0.00	0.72	0.31		0.02	0.73	
Intersection Summary												
Area Type:	Other											
Cycle Length: 75												
Actuated Cycle Length: 65.9												
Control Type: Actuated-Uncoordinated												
Maximum v/c Ratio: 0.73												

Lanes, Volumes, Timings 15: 1ST ST & BRAECREST DR

02/15/2019

Intersection Signal Delay: 16.9

Intersection LOS: B

Intersection Capacity Utilization 66.3%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 15: 1ST ST & BRAECREST DR










Intersection												
Int Delay, s/veh	37.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↕↗		↘	↕↗	
Traffic Vol, veh/h	47	3	266	23	1	2	308	602	23	6	810	77
Future Vol, veh/h	47	3	266	23	1	2	308	602	23	6	810	77
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	250	-	-	0	850	-	-	850	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	3	2	2	4	4
Mvmt Flow	51	3	289	25	1	2	335	654	25	7	880	84
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1934	2260	482	1793	2315	340	964	0	0	654	0	0
Stage 1	936	936	-	1337	1337	-	-	-	-	-	-	-
Stage 2	998	1324	-	456	978	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.23	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 40	40	530	51	37	656	704	-	-	929	-	-
Stage 1	285	342	-	162	220	-	-	-	-	-	-	-
Stage 2	261	224	-	554	327	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 24	21	530	~ 13	19	656	704	-	-	929	-	-
Mov Cap-2 Maneuver	~ 24	21	-	~ 13	19	-	-	-	-	-	-	-
Stage 1	149	339	-	85	115	-	-	-	-	-	-	-
Stage 2	135	117	-	247	324	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	162.5		\$ 976.9		4.8		0.1					
HCM LOS	F		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	704	-	-	24	530	13	656	929	-	-		
HCM Lane V/C Ratio	0.476	-	-	2.264	0.546	2.007	0.003	0.007	-	-		
HCM Control Delay (s)	14.7	-	-	\$ 923	19.5	\$ 1057.4	10.5	8.9	-	-		
HCM Lane LOS	B	-	-	F	C	F	B	A	-	-		
HCM 95th %tile Q(veh)	2.6	-	-	6.8	3.2	4.1	0	0	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗	↗	↗	↗	
Traffic Vol, veh/h	0	0	29	0	0	64	49	1538	482	153	1249	32
Future Vol, veh/h	0	0	29	0	0	64	49	1538	482	153	1249	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Free	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	0	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	32	0	0	70	53	1672	524	166	1358	35

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	697	-	-	-	1358	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7	-	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.35	-	-	-	2.22	-
Pot Cap-1 Maneuver	0	0	377	0	0	0	502	-
Stage 1	0	0	-	0	0	0	-	-
Stage 2	0	0	-	0	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	377	-	-	-	502	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.4	0	0.3	2.3
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	502	-	-	377	-	380	-
HCM Lane V/C Ratio	0.106	-	-	0.084	-	0.438	-
HCM Control Delay (s)	13	-	-	15.4	0	21.6	-
HCM Lane LOS	B	-	-	C	A	C	-
HCM 95th %tile Q(veh)	0.4	-	-	0.3	-	2.2	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	29	0	0	146	49	1538	482	153	1176	23
Future Vol, veh/h	0	0	29	0	0	146	49	1538	482	153	1176	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Free	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	0	1000	-	500	1000	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	32	0	0	159	53	1672	524	166	1278	25

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	652	-	-	-	1278	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7	-	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.35	-	-	-	2.22	-
Pot Cap-1 Maneuver	0	0	403	0	0	0	539	-
Stage 1	0	0	-	0	0	0	-	-
Stage 2	0	0	-	0	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	403	-	-	-	539	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-






















Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	0	0.3	2.4
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	539	-	-	403	-	380	-
HCM Lane V/C Ratio	0.099	-	-	0.078	-	0.438	-
HCM Control Delay (s)	12.4	-	-	14.7	0	21.6	-
HCM Lane LOS	B	-	-	B	A	C	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	-	2.2	-

Lanes, Volumes, Timings

10: PTH 10/18TH ST & BRAECREST DR

02/15/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	7	14	146	18	64	49	1538	487	148	1103	14
Future Volume (vph)	8	7	14	146	18	64	49	1538	487	148	1103	14
Satd. Flow (prot)	0	1672	0	0	1783	1583	1770	3539	1583	1770	3532	0
Flt Permitted		0.896			0.727		0.173			0.082		
Satd. Flow (perm)	0	1519	0	0	1354	1583	322	3539	1583	153	3532	0
Satd. Flow (RTOR)		15				109			365		2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	179	70	53	1672	529	161	1214	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	26.0	26.0		26.0	26.0	26.0	11.0	53.0	53.0	11.0	53.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Act Effct Green (s)		15.5			15.5	15.5	48.9	43.9	43.9	51.7	48.9	
Actuated g/C Ratio		0.19			0.19	0.19	0.59	0.53	0.53	0.63	0.59	
v/c Ratio		0.11			0.71	0.18	0.19	0.89	0.52	0.83	0.58	
Control Delay		19.7			48.0	3.4	7.3	25.3	6.0	50.9	13.7	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.7			48.0	3.4	7.3	25.3	6.0	50.9	13.7	
LOS		B			D	A	A	C	A	D	B	
Approach Delay		19.7			35.4			20.3			18.0	
Approach LOS		B			D			C			B	
Queue Length 50th (m)		2.5			29.3	0.0	2.7	124.2	13.7	12.1	72.4	
Queue Length 95th (m)		10.0			51.6	4.7	7.2	#183.0	39.1	#51.7	102.4	
Internal Link Dist (m)		443.1			1241.5			518.3			115.8	
Turn Bay Length (m)						30.0	100.0		50.0	100.0		
Base Capacity (vph)		384			332	470	279	2040	1067	194	2116	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.08			0.54	0.15	0.19	0.82	0.50	0.83	0.57	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 82.7

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 20.5

Intersection LOS: C

Intersection Capacity Utilization 81.4%




ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 10: PTH 10/18TH ST & BRAECREST DR

		
Ø1	Ø2	Ø4
11 s	53 s	26 s
		
Ø5	Ø6	Ø8
11 s	53 s	26 s

APPENDIX

C WARRANT ANALYSIS



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2018 analysis

Analysis Date:

2019 Jan 03, Thu

for Warrant Calculation
Results, please hit 'Page
Down'

CHECK SHEET

Count Date:

2017 Nov 22, Wed

Date Entry Format:

(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1				1		n	445	1			
Braecrest Dr	WB		1				1	y	2,000	1			
Braecrest Dr	EB				1			n	2,000	1			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)

n

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

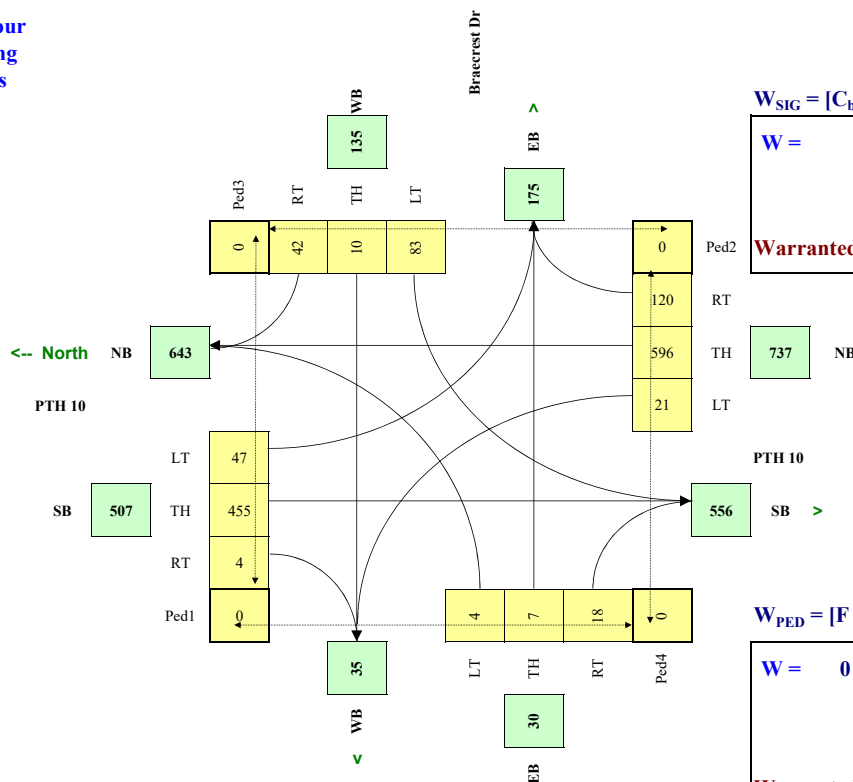
Set Peak Hours														Ped1	Ped2	Ped3	Ped4
Traffic Input	NB			SB			WB			EB			NS	NS	EW	EW	
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side	
press 'Set Peak Hours' Button to set the peak hour periods	7	373	171	36	388	1	104	9	52	3	19	28				1	
	24	455	132	34	442	5	69	9	28	3	3	11					
	14	550	106	43	423	4	96	11	41	1	4	22					
	20	627	55	47	427	3	71	3	41	6	5	20					
	32	730	33	53	447	6	75	11	55	6	6	17					
	27	842	226	71	600	7	84	14	36	6	5	11					
Total (6-hour peak)	124	3,577	723	284	2,728	27	498	58	254	25	42	110	0	0	0	1	
Average (6-hour peak)	21	596	120	47	455	4	83	10	42	4	7	18	0	0	0	0	
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Actual Pedestrian Crossing Distance (m)

$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	102	101	1
		Veh	Ped
Warranted			

RESET SHEET



$$W_{PED} = [F((X_{ped_m})d_m/K_2) + (X_{ped_s})d_s/K_3]$$

W =	0
Warranted - Complex Intersection	



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 1A
Side Street (name)	Braecrest Dr
Quadrant / Int #	
CHECK SHEET	

Direction (EW or NS)	NS
Direction (EW or NS)	EW
Comments	2018 analysis

Road Authority:	MI/City of Brandon
City:	Brandon
Analysis Date:	2019 Jan 15, Tue
Count Date:	2017 Nov 22, Wed
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1		2					805	2			
PTH 1A	SB			1		1		n	315	2			
Braecrest Dr	WB								2,000	0			
Braecrest Dr	EB				1			n	2,000	1			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)	n
Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)	y

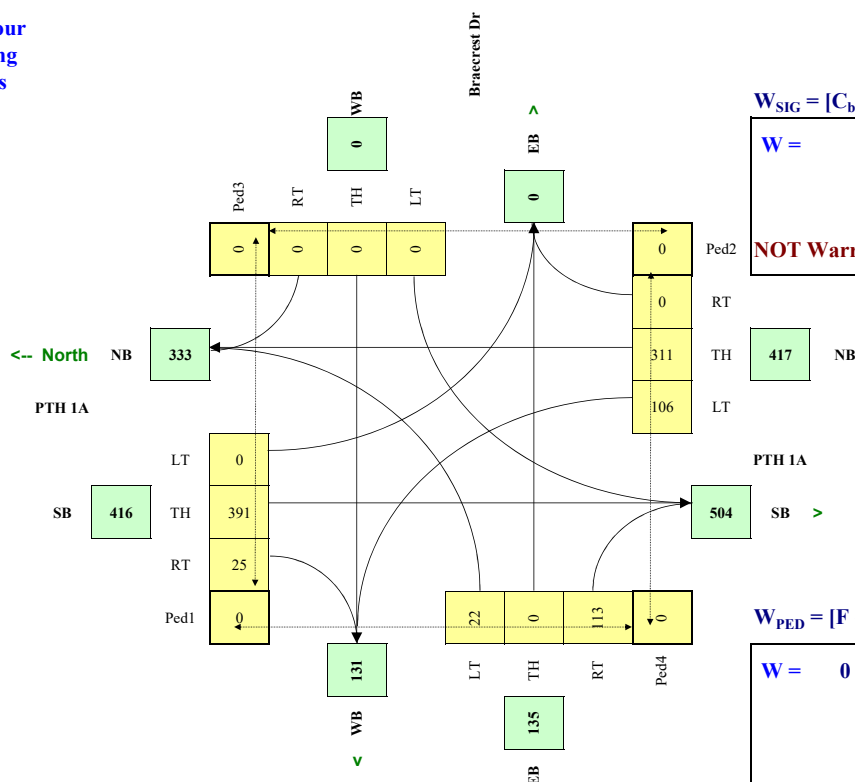
Other input		Speed (Km/h)	Truck % (y/n)	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Set Peak Hours													Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
Traffic Input		NB		SB		WB		EB					W Side	E Side	N Side	S Side
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT				
	80	388	0	0	482	25	0	0	0	21	0	118				
	61	236	0	0	339	15	0	0	0	16	0	88				
	92	268	0	0	366	20	0	0	0	14	0	56				
	94	272	0	0	315	24	0	0	0	21	0	83				
	187	395	0	0	482	25	0	0	0	36	0	201				
	119	309	0	0	361	42	0	0	0	23	0	130				
Total (6-hour peak)	633	1,868	0	0	2,345	151	0	0	0	131	0	676	0	0	0	0
Average (6-hour peak)	106	311	0	0	391	25	0	0	0	22	0	113	0	0	0	0

Actual Pedestrian Crossing Distance (m)

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	57	57	0
		Veh	Ped
NOT Warranted			

RESET SHEET

$$W_{PED} = [F((X_{ped_m})d_m/K_2) + (X_{ped_s})d_s/K_3]$$

W =	0
Warranted - Complex Intersection	



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 1A

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2023 post development analysis

Analysis Date:

2019 Jan 23, Wed

for Warrant Calculation Results, please hit 'Page Down'

CHECK SHEET

Count Date:

2017 Nov 22, Wed

Date Entry Format:

(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	Upstream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1		2					805	2			
PTH 1A	SB			1		1		n	315	2			
Braecrest Dr	WB									0			
Braecrest Dr	EB				1			n	2,000	1			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)

n

Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)

y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

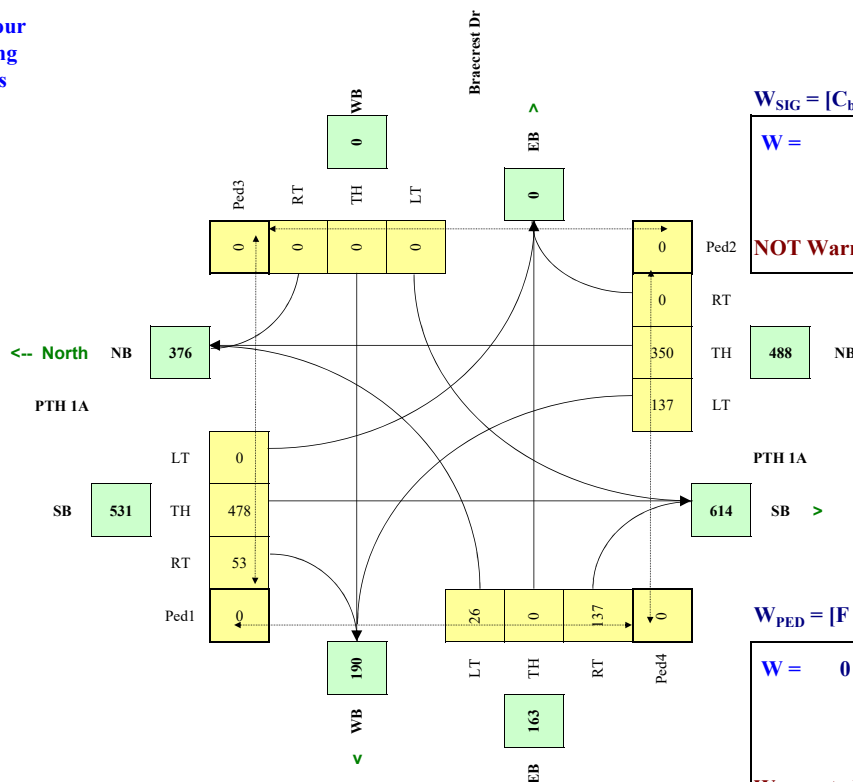
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Set Peak Hours													Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
Traffic Input		NB		SB		WB		EB					W Side	E Side	N Side	S Side
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT				
	111	429	0	0	566	37	0	0	0	28	0	159				
	85	261	0	0	398	22	0	0	0	21	0	119				
	118	304	0	0	457	46	0	0	0	16	0	65				
	120	308	0	0	393	56	0	0	0	24	0	96				
	239	448	0	0	602	58	0	0	0	41	0	232				
	152	350	0	0	451	97	0	0	0	26	0	150				
Total (6-hour peak)	825	2,101	0	0	2,867	316	0	0	0	158	0	819	0	0	0	0
Average (6-hour peak)	137	350	0	0	478	53	0	0	0	26	0	137	0	0	0	0

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	88	88	0
		Veh	Ped

NOT Warranted

RESET SHEET

$$W_{PED} = [F((X_{ped_m})d_m/K_2) + (X_{ped_s})d_s/K_3]$$

W =	0
-----	---

Warranted - Complex Intersection

MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 1A	Direction (EW or NS)	NS	Road Authority:	MI/City of Brandon
Side Street (name)	Braecrest Dr		EW	City:	Brandon
Quadrant / Int #			2028 post development analysis	Analysis Date:	2019 Jan 23, Wed
or Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2017 Nov 22, Wed
		Date Entry Format:		(yyyy-mm-dd)	

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT	Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1		2						805	2			
PTH 1A	SB			1		1		n		315	2			
Braecrest Dr	WB									2,000	0			
Braecrest Dr	EB				1			n		2,000	1			

Saturation Flow Rates (if not default) (vphpl)		Default Saturation Flow Rates (vphpl)
Left Turn		1,650
Through		1,800
Right Turn		1,500

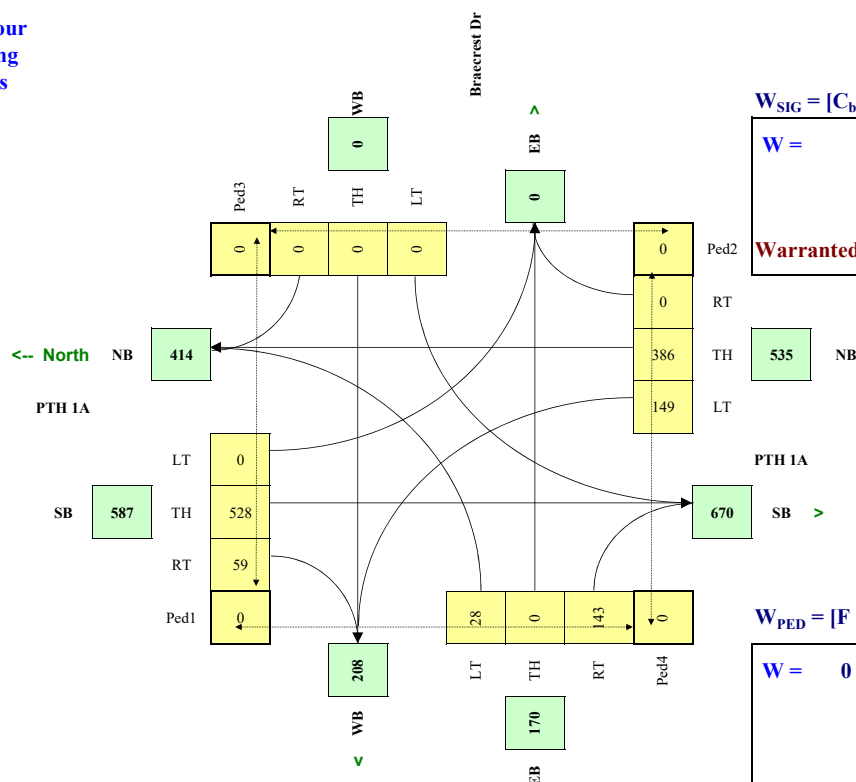
Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)	n
Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)	y

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Directest LT		EW		2.0%	y																
Set Peak Hours												Ped1		Ped2		Ped3		Ped4			
Traffic Input		NB			SB			WB			EB			NS		NS		EW		EW	
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side		E Side		N Side		S Side	
press 'Set Peak Hours' Button to set the peak hour periods		122	473	0	0	625	40	0	0	0	30	0	165								
		93	288	0	0	440	24	0	0	0	23	0	123								
		127	335	0	0	505	52	0	0	0	17	0	68								
		130	340	0	0	435	62	0	0	0	25	0	100								
		258	494	0	0	665	65	0	0	0	43	0	243								
		164	386	0	0	498	109	0	0	0	28	0	157								
Total (6-hour peak)		894	2,316	0	0	3,167	352	0	0	0	166	0	855	0	0	0	0	0	0	0	
Average (6-hour peak)		149	386	0	0	528	59	0	0	0	28	0	143	0	0	0	0	0	0	0	
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0				

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	103	103	0
		<i>Veh</i>	<i>Ped</i>
Warranted			

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

Warranted - Complex Intersection

MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 1A	<div> <div>Direction (EW or NS)</div> <div>NS</div> </div>	Road Authority:	MI/City of Brandon	
Side Street (name)	Braecrest Dr		<div> <div>Direction (EW or NS)</div> <div>EW</div> </div>	City:	Brandon
Quadrant / Int #			<div> <div>Comments</div> <div>2028 post development analysis</div> </div>	Analysis Date:	2019 Jan 23, Wed
or Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2017 Nov 22, Wed
		Date Entry Format:		(yyyy-mm-dd)	

Lane Configuration	Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT	Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1	2						805	2			
PTH 1A	SB		1		1		a		515	2			
Bracecrest Dr	WB								2,000	0			
Bracecrest Dr	EB			1			a		2,000				

Saturation Flow Rates (if not default) (vphpl)		Default Saturation Flow Rates (vphpl)
Left Turn		1,650
Through		1,800
Right Turn		1,500

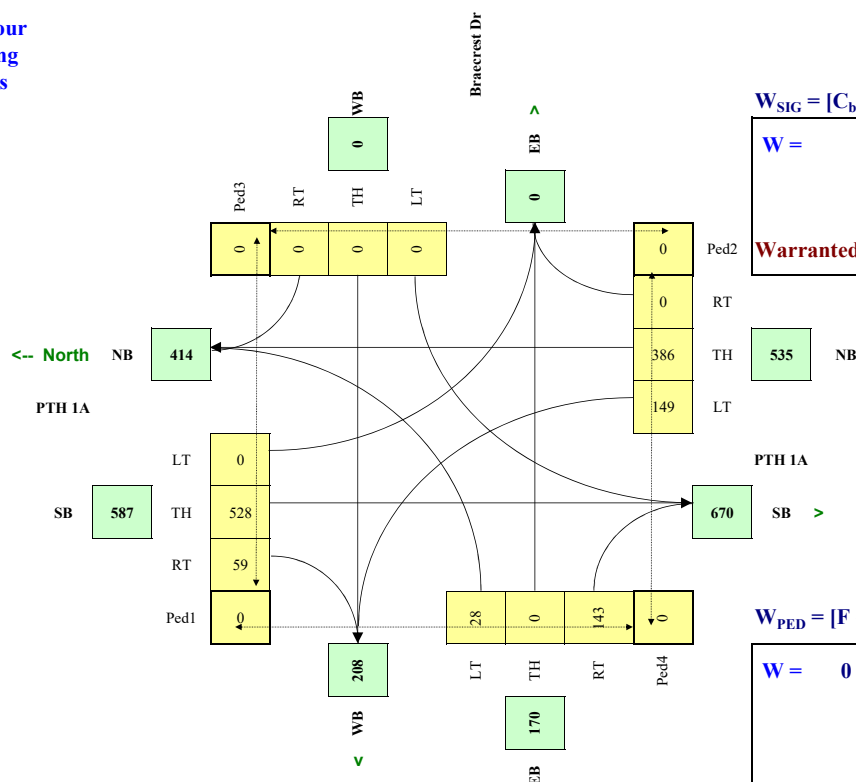
Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)	n
Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)	y

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Directest LT		EW		2.0%	y																
Set Peak Hours												Ped1		Ped2		Ped3		Ped4			
Traffic Input		NB			SB			WB			EB			NS		NS		EW		EW	
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side		E Side		N Side		S Side	
press 'Set Peak Hours' Button to set the peak hour periods		122	473	0	0	625	40	0	0	0	30	0	165								
		93	288	0	0	440	24	0	0	0	23	0	123								
		127	335	0	0	505	52	0	0	0	17	0	68								
		130	340	0	0	435	62	0	0	0	25	0	100								
		258	494	0	0	665	65	0	0	0	43	0	243								
		164	386	0	0	498	109	0	0	0	28	0	157								
Total (6-hour peak)		894	2,316	0	0	3,167	352	0	0	0	166	0	855	0	0	0	0	0	0	0	
Average (6-hour peak)		149	386	0	0	528	59	0	0	0	28	0	143	0	0	0	0	0	0	0	
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0				

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	103	103	0
		<i>Veh</i>	<i>Ped</i>
Warranted			

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

Warranted - Complex Intersection

MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 1A	<div> <div>Direction (EW or NS)</div> <div>NS</div> </div>	Road Authority:	MI/City of Brandon	
Side Street (name)	Braecrest Dr		<div> <div>Direction (EW or NS)</div> <div>EW</div> </div>	City:	Brandon
Quadrant / Int #			<div> <div>Comments</div> <div>2028 post development analysis with no EBL turns</div> </div>	Analysis Date:	2019 Jan 23, Wed
or Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2017 Nov 22, Wed
			Date Entry Format:	(yyyy-mm-dd)	

Lane Configuration	Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT	Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1	2						805	2			
PTH 1A	SB		1		1		a		515	2			
Braecest Dr	WB								2,000	0			
Braecest Dr	EB				1		a		2,000				

Saturation Flow Rates (if not default) (vphpl)		Default Saturation Flow Rates (vphpl)
Left Turn		1,650
Through		1,800
Right Turn		1,500

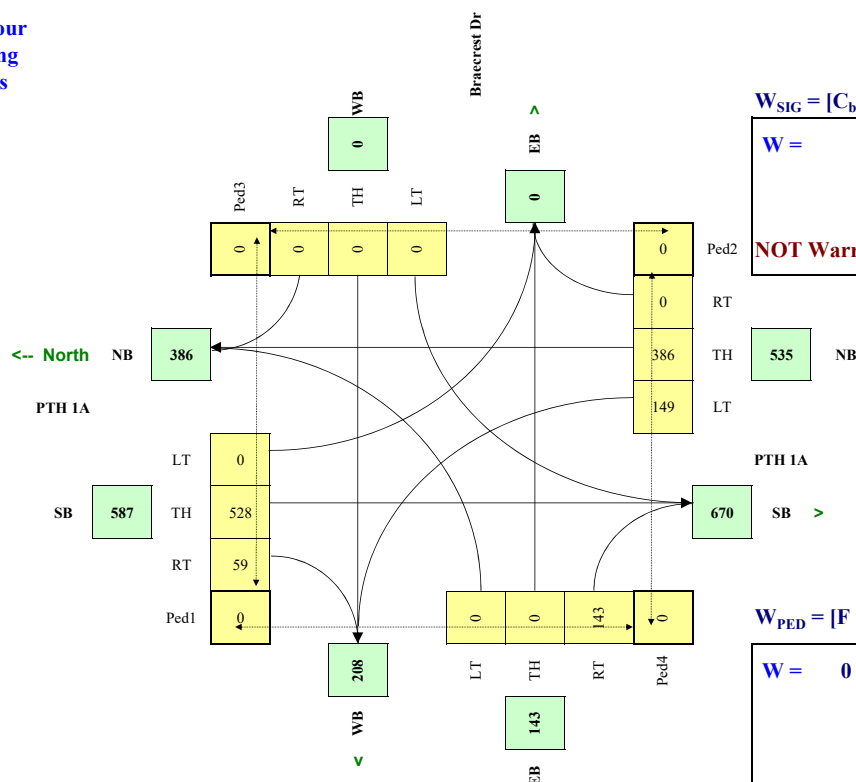
Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)	n
Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)	y

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Directest LT		EW		2.0%	y												
Set Peak Hours														Ped1	Ped2	Ped3	Ped4
Traffic Input		NB			SB			WB			EB			NS	NS	EW	EW
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
press 'Set Peak Hours' Button to set the peak hour periods		122	473	0	0	625	40	0	0	0	0	0	165				
		93	288	0	0	440	24	0	0	0	0	0	123				
		127	335	0	0	505	52	0	0	0	0	0	68				
		130	340	0	0	435	62	0	0	0	0	0	100				
		258	494	0	0	665	65	0	0	0	0	0	243				
		164	386	0	0	498	109	0	0	0	0	0	157				
Total (6-hour peak)		894	2,316	0	0	3,167	352	0	0	0	0	0	855	0	0	0	0
Average (6-hour peak)		149	386	0	0	528	59	0	0	0	0	0	143	0	0	0	0
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

	Warranted	Not Warranted	Total
W =	87	0	87
	Veh	Ped	
NOT Warranted			

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

Warranted - Complex Intersection

MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 1A	Direction (EW or NS) Direction (EW or NS) Comments	NS	Road Authority:	MI/City of Brandon
Side Street (name)	Braecrest Dr		EW	City:	Brandon
Quadrant / Int #			2038 post development analysis with no EBL turns	Analysis Date:	2019 Jan 23, Wed
or Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2017 Nov 22, Wed
			Date Entry Format:	(yyyy-mm-dd)	

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 1A	NB	1		2					805	2			
PTH 1A	SB			1		1		n	315	2			
Braecrest Dr	WB								2,000	0			
Braecrest Dr	EB					1		n	2,000	1			

Saturation Flow Rates (if not default) (vphpl)		Default Saturation Flow Rates (vphpl)
Left Turn		1,650
Through		1,800
Right Turn		1,500

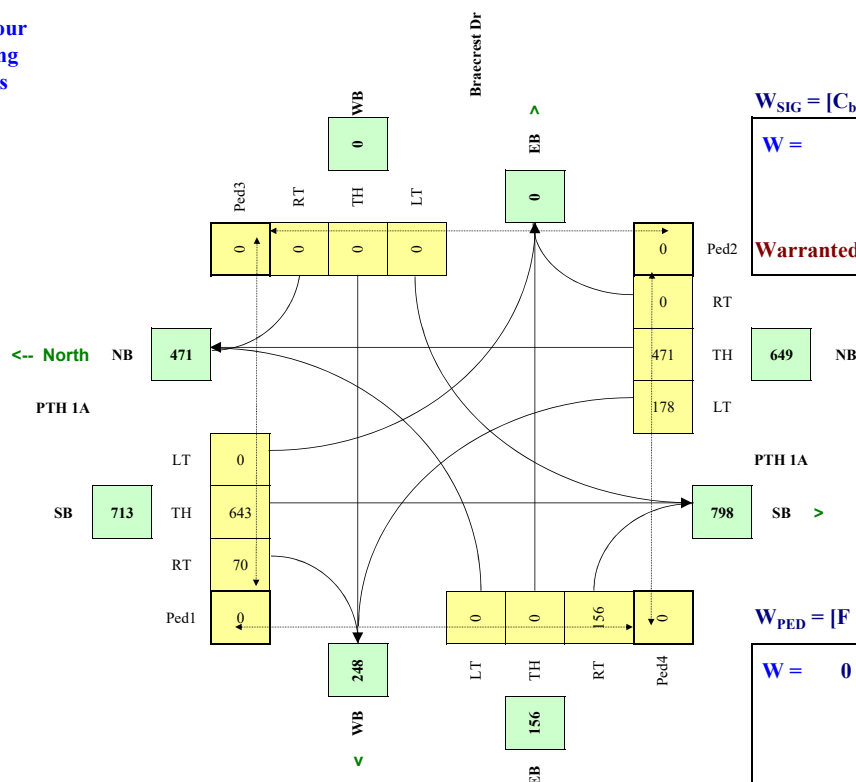
Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)	n
Are the PTH 1A SB right turns significantly impeded by through movements? (y/n)	y

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 1A	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Directest LT		EW		2.0%		Y											
Set Peak Hours												Ped1	Ped2	Ped3	Ped4		
Traffic Input		NB			SB			WB			EB			NS	NS	EW	EW
press 'Set Peak Hours' Button to set the peak hour periods	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side	
	147	577	0	0	761	48	0	0	0	0	0	179					
	112	351	0	0	535	29	0	0	0	0	0	133					
	152	408	0	0	615	62	0	0	0	0	0	74					
	155	415	0	0	529	74	0	0	0	0	0	110					
	308	602	0	0	810	77	0	0	0	0	0	266					
	196	471	0	0	607	129	0	0	0	0	0	172					
	Total (6-hour peak)	1,070	2,824	0	0	3,857	418	0	0	0	0	933	0	0	0	0	
Average (6-hour peak)	178	471	0	0	643	70	0	0	0	0	156	10.0	10.0	30.0	30.0		
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	122	122	0
		<i>Veh</i>	<i>Ped</i>
Warranted			

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

Warranted - Complex Intersection



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2018 analysis

Analysis Date:

2019 Jan 03, Thu

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CHECK SHEET

Count Date:

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Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1				1		n	445	1			
Braecrest Dr	WB		1				1	y	2,000	1			
Braecrest Dr	EB				1			n	2,000	1			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)

n

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

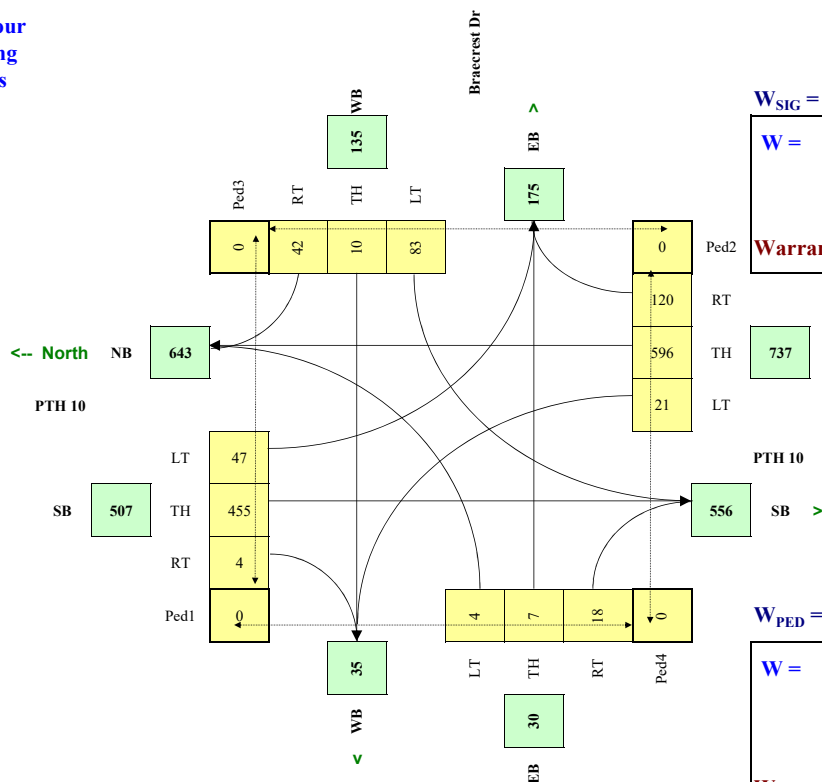
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Set Peak Hours														Ped1	Ped2	Ped3	Ped4
Traffic Input	NB			SB			WB			EB			NS	NS	EW	EW	
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side	
press 'Set Peak Hours' Button to set the peak hour periods	7	373	171	36	388	1	104	9	52	3	19	28				1	
	24	455	132	34	442	5	69	9	28	3	3	11					
	14	550	106	43	423	4	96	11	41	1	4	22					
	20	627	55	47	427	3	71	3	41	6	5	20					
	32	730	33	53	447	6	75	11	55	6	6	17					
	27	842	226	71	600	7	84	14	36	6	5	11					
Total (6-hour peak)	124	3,577	723	284	2,728	27	498	58	254	25	42	110	0	0	0	1	
Average (6-hour peak)	21	596	120	47	455	4	83	10	42	4	7	18	0	0	0	0	
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	102	101	1
		Veh	Ped

Warranted

RESET SHEET

$$W_{PED} = [F((X_{ped_m})d_m/K_2) + (X_{ped_s})d_s/K_3]$$

W =	0
-----	---

Warranted - Complex Intersection



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2023 analysis, restricted EB and WB LT and Thru, no connection to Cumberland

Analysis Date:

2019 Jan 03, Thu

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Count Date:

2017 Nov 22, Wed

Date Entry Format:

(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1				1		n	445	1			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Demographics

Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

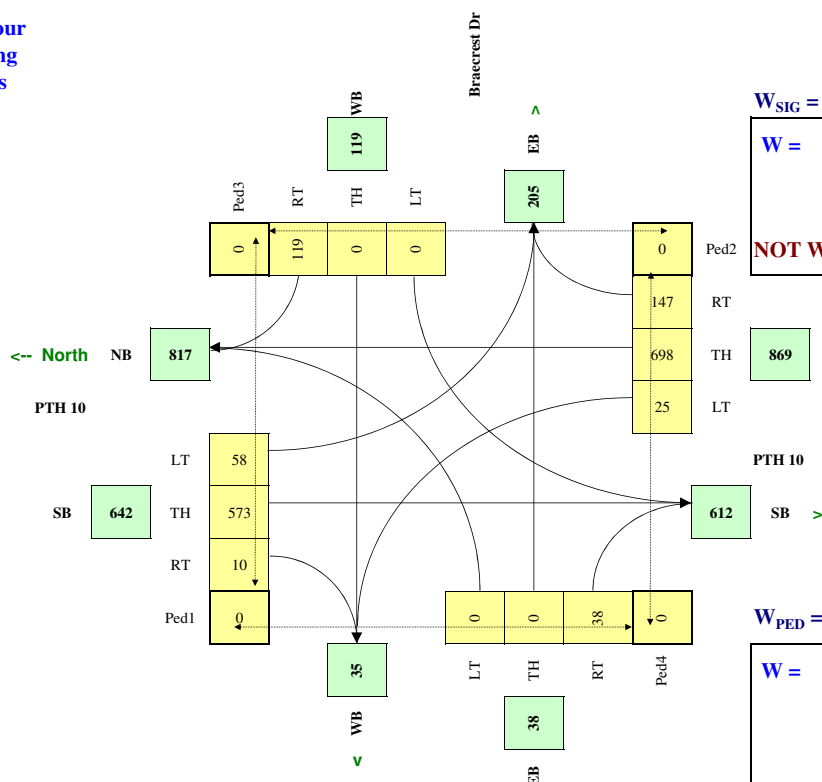
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Set Peak Hours														Ped1	Ped2	Ped3	Ped4
		NB			SB			WB			EB			NS	NS	EW	EW
Traffic Input		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
press 'Set Peak Hours' Button to set the peak hour periods	9	432	205	44	489	2				155			51				1
	28	528	158	41	557	11				85			20				
	17	646	131	54	534	10				113			50				
	23	736	67	59	539	7				113			45				
	38	857	41	65	564	15				149			39				
	32	988	279	88	757	17				99			25				
Total (6-hour peak)		147	4,188	880	351	3,439	62	0	0	713	0	0	230	0	0	0	1
Average (6-hour peak)		25	698	147	58	573	10	0	0	119	0	0	38	0	0	0	0
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W =	63	62	1
		Veh	Ped

NOT Warranted

RESET SHEET

$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W =	0
-----	---

Warranted - Complex Intersection



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name) **PTH 10**
Side Street (name) **Braecrest Dr**
Quadrant / Int #
CHECK SHEET

Comments

2028 analysis, restricted EB and WB LT and Thru, no connection to Cumberland

Road Authority: **MI/City of Brandon**
City: **Brandon**
Analysis Date: **2019 Jan 03, Thu**
Count Date: **2017 Nov 22, Wed**
Date Entry Format: (yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Tb+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1				1		n	445	1			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n) **y**

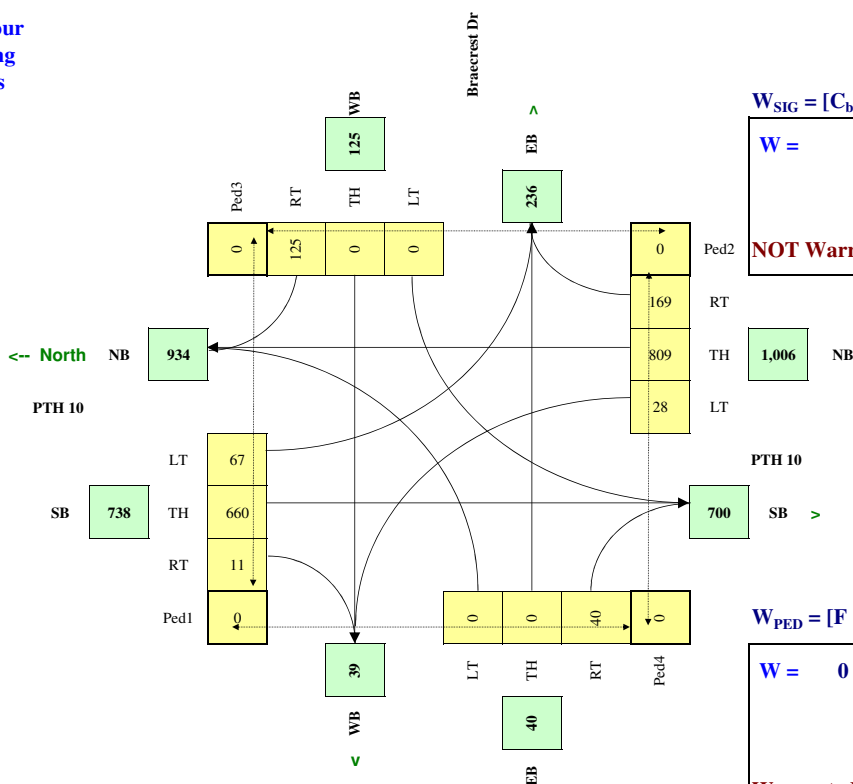
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Set Peak Hours												Ped1	Ped2	Ped3	Ped4		
Traffic Input	NB			SB			WB			EB			NS	NS	EW	EW	
press 'Set Peak Hours' Button to set the peak hour periods	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side	
	10	501	237	50	562	3			162			53				1	
	32	612	183	47	639	13			89			21					
	19	748	150	62	615	10			118			52					
	26	853	77	68	621	8			118			47					
	43	994	47	75	649	15			156			40					
	36	1145	321	101	872	18			104			26					
	Total (6-hour peak)	166	4,854	1,015	402	3,958	66	0	0	748	0	0	240	0	0	0	1
	Average (6-hour peak)	28	809	169	67	660	11	0	0	125	0	0	40	0	0	0	0
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Actual Pedestrian Crossing Distance (m)

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W = 84 84 0
Veh Ped
NOT Warranted

RESET SHEET

$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W = 0
Warranted - Complex Intersection



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2038 analysis, restricted EB and WB LT and Thru, no connection to Cumberland

Analysis Date:

2019 Jan 03, Thu

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Lane Configuration		Excl LT	Th & LT	Through	Tb+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1				1		n	445	1			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Demographics

Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

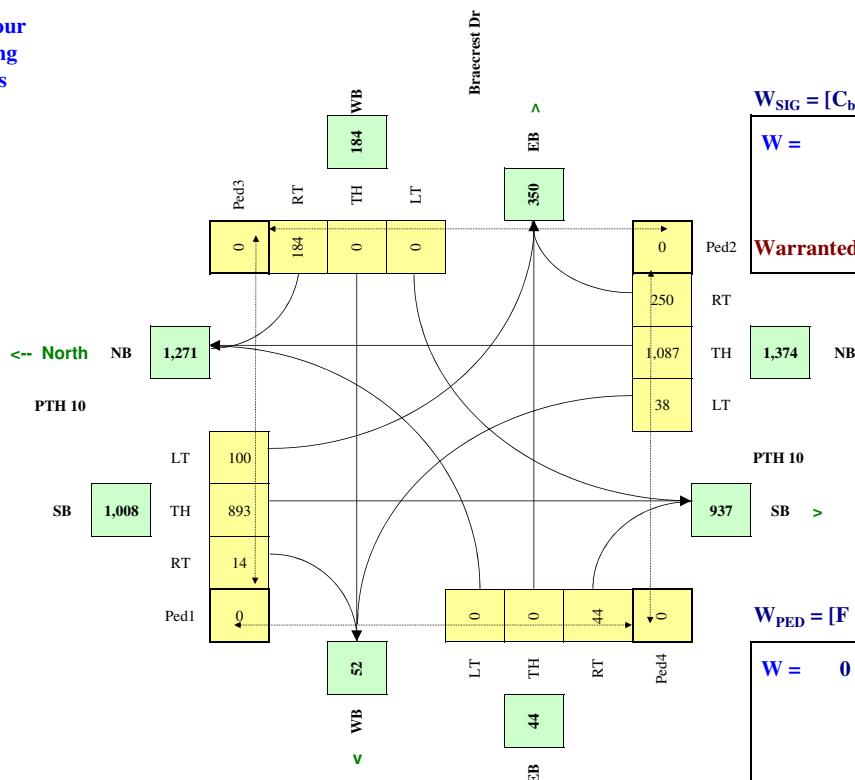
Set Peak Hours												Ped1	Ped2	Ped3	Ped4		
Traffic Input		NB			SB			WB			EB			NS	NS	EW	EW
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
press 'Set Peak Hours' Button to set the peak hour periods		13	674	342	72	768	3			262			56				1
		43	823	264	68	874	16			144			22				
		26	1005	226	93	829	13			166			58				
		36	1146	116	102	837	10			166			53				
		58	1335	70	113	876	20			219			45				
		49	1538	482	153	1176	23			146			29				
Total (6-hour peak)		226	6,521	1,500	603	5,360	85	0	0	1,104	0	0	263	0	0	0	1
Average (6-hour peak)		38	1,087	250	100	893	14	0	0	184	0	0	44	0	0	0	30.0
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0

Actual Pedestrian Crossing Distance (m)

$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W =	187	187	0
		Veh	Ped
Warranted			

RESET SHEET



$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W =	0
Warranted - Complex Intersection	



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2018 analysis with additional SB lane

Analysis Date:

2019 Jan 03, Thu

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Count Date:

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Lane Configuration

PTH 10

NB

Exc LT

1

Th & LT

2

Through

1

Th+RT+LT

1

Th & RT

1

Exc RT

1

RT

Channelization

(y/n)

y

Up-Stream

Signal (m)

680

of Thru

Lanes

2

LT Phase Type

LT

PTH 10

SB

Exc LT

1

Th & LT

1

Through

1

Th+RT+LT

1

Th & RT

1

Exc RT

1

RT

Channelization

(y/n)

n

Up-Stream

Signal (m)

445

of Thru

Lanes

2

LT Phase Type

LT

Braecrest Dr

WB

Exc LT

1

Th & LT

1

Through

1

Th+RT+LT

1

Th & RT

1

Exc RT

1

RT

Channelization

(y/n)

y

Up-Stream

Signal (m)

2,000

of Thru

Lanes

1

LT Phase Type

LT

Braecrest Dr

EB

Exc LT

1

Th & LT

1

Through

1

Th+RT+LT

1

Th & RT

1

Exc RT

1

RT

Channelization

(y/n)

n

Up-Stream

Signal (m)

2,000

of Thru

Lanes

1

LT Phase Type

LT

Are the Braecrest Dr EB right turns significantly impeded by through movements? (y/n)

n

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Other input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Braecrest Dr

EW

Speed

(Km/h)

70

Truck

%

3.0%

Bus Rt

(y/n)

y

Median

(m)

5.0

Set Peak Hours

Traffic Input

PTH 10

NS

Speed

(Km/h)

70

Truck



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2023 analysis, restricted EB and WB LT and Thru, no connection to Cumberland, additional SB lane

Analysis Date:

2019 Jan 03, Thu

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Count Date:

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Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1		1		1		n	445	2			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Demographics

Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

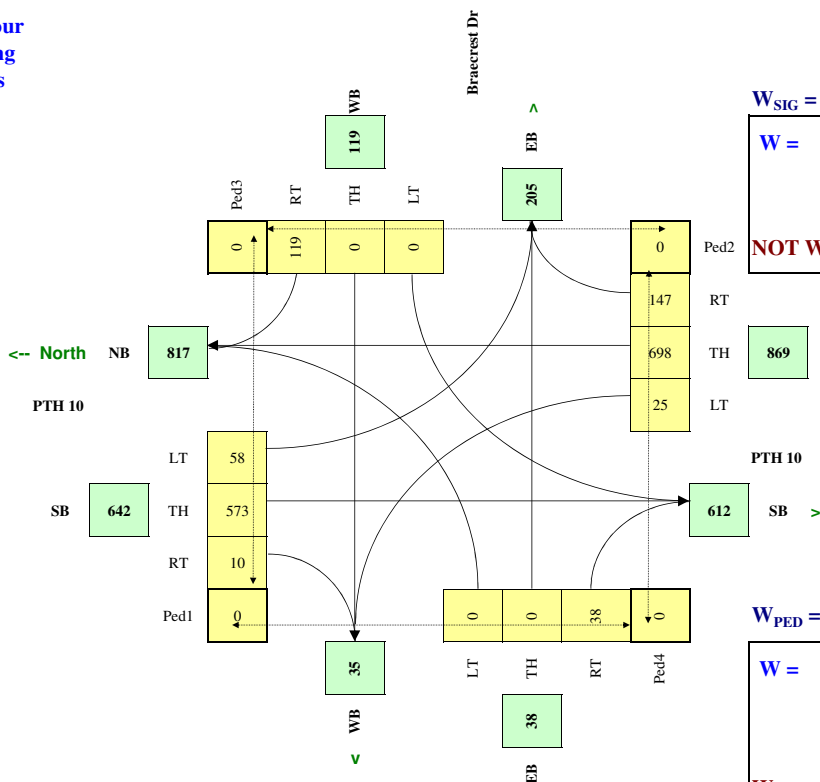
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Set Peak Hours												Ped1	Ped2	Ped3	Ped4	
Traffic Input	NB			SB			WB			EB			NS	NS	EW	EW
press 'Set Peak Hours' Button to set the peak hour periods	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
	9	432	205	44	489	2			155			51				1
	28	528	158	41	557	11			85			20				
	17	646	131	54	534	10			113			50				
	23	736	67	59	539	7			113			45				
	38	857	41	65	564	15			149			39				
	32	988	279	88	757	17			99			25				
	Total (6-hour peak)	147	4,188	880	351	3,439	62	0	0	713	0	0	230	0	0	0
Average (6-hour peak)	25	698	147	58	573	10	0	0	119	0	0	38	0	0	0	0
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	57	57	0
		Veh	Ped

NOT Warranted

RESET SHEET

$$W_{PED} = [F((X_{ped_m})d_m/K_2) + (X_{ped_s})d_s/K_3]$$

W =	0
-----	---

Warranted - Complex Intersection



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name) PTH 10
Side Street (name) Braecrest Dr
Quadrant / Int #
CHECK SHEET

Comments

2028 analysis, restricted EB and WB LT and Thru, no connection to Cumberland, additional SB lane

Road Authority: MI/City of Brandon
City: Brandon
Analysis Date: 2019 Jan 03, Thu
Count Date: 2017 Nov 22, Wed
Date Entry Format: (yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Tb+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1		1		1		n	445	2			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n) y

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

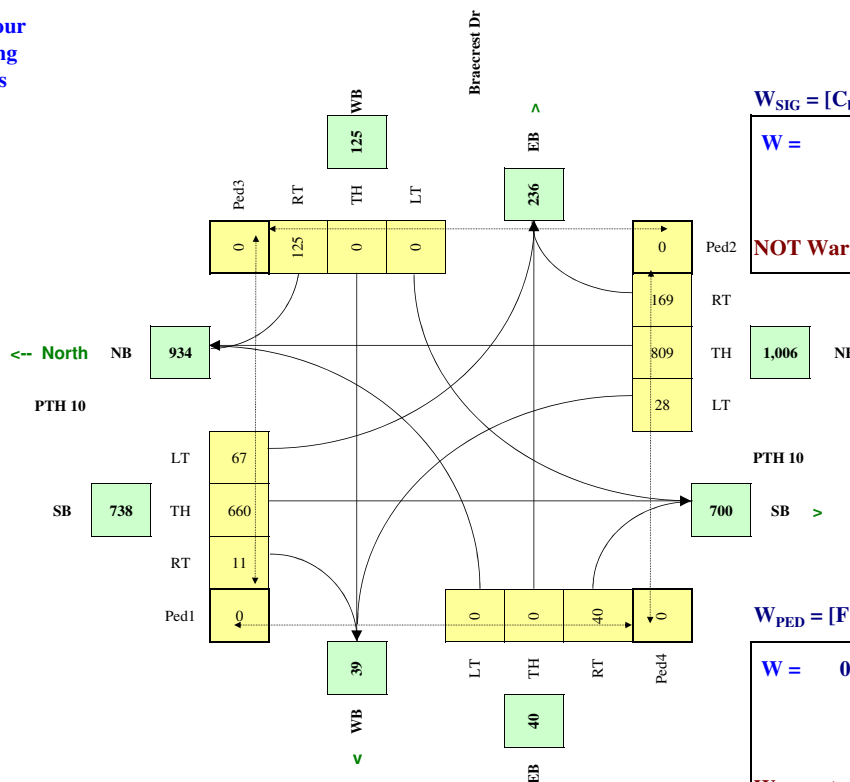
Set Peak Hours													Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
Traffic Input		NB		SB		WB		EB					W Side	E Side	N Side	S Side
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT				
	10	501	237	50	562	3			162			53				1
	32	612	183	47	639	13			89			21				
	19	748	150	62	615	10			118			52				
	26	853	77	68	621	8			118			47				
	43	994	47	75	649	15			156			40				
	36	1145	321	101	872	18			104			26				
Total (6-hour peak)	166	4,854	1,015	402	3,958	66	0	0	748	0	0	240	0	0	0	1
Average (6-hour peak)	28	809	169	67	660	11	0	0	125	0	0	40	0	0	0	0

Actual Pedestrian Crossing Distance (m)

$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W =	76	76	0
		Veh	Ped
NOT Warranted			

RESET SHEET



$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W =	0
Warranted - Complex Intersection	



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2038 analysis, restricted EB and WB LT and Thru, no connection to Cumberland, additional SB lane

Analysis Date:

2019 Jan 03, Thu

for Warrant Calculation Results, please hit 'Page Down'

CHECK SHEET

Count Date:

2017 Nov 22, Wed

Date Entry Format:

(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT	Channelization (y/n)	Up-Stream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	n	680	2			
PTH 10	SB	1		1		1		n	n	445	2			
Braecrest Dr	WB						1	y	y	2,000	0			
Braecrest Dr	EB						1	n	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Demographics

Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

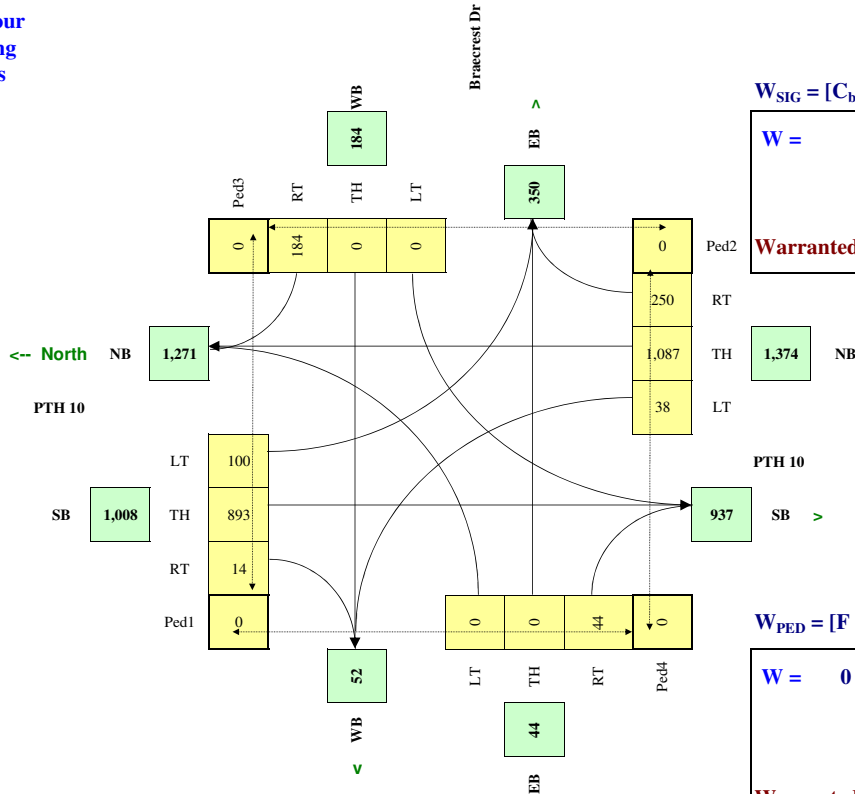
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Set Peak Hours												Ped1	Ped2	Ped3	Ped4		
Traffic Input		NB			SB			WB			EB			NS	NS	EW	EW
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
press 'Set Peak Hours' Button to set the peak hour periods		13	674	342	72	768	3			262			56				1
		43	823	264	68	874	16			144			22				
		26	1005	226	93	829	13			166			58				
		36	1146	116	102	837	10			166			53				
		58	1335	70	113	876	20			219			45				
		49	1538	482	153	1176	23			146			29				
Total (6-hour peak)		226	6,521	1,500	603	5,360	85	0	0	1,104	0	0	263	0	0	0	1
Average (6-hour peak)		38	1,087	250	100	893	14	0	0	184	0	0	44	0	0	0	0
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W =	170	170	0
		Veh	Ped
Warranted			

RESET SHEET

$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W =	0
Warranted - Complex Intersection	



MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)

PTH 10

Direction (EW or NS)

NS

Road Authority:

MI/City of Brandon

Side Street (name)

Braecrest Dr

Direction (EW or NS)

EW

City:

Brandon

Quadrant / Int #

Comments

2023 analysis, no EB & WB LT or Thru, assume connection to Cumberland, additional SB lane

Analysis Date:

2019 Jan 03, Thu

for Warrant Calculation Results, please hit 'Page Down'

CHECK SHEET

Count Date:

2017 Nov 22, Wed

Date Entry Format:

(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT Channelization (y/n)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
PTH 10	NB	1		2			1	y	680	2			
PTH 10	SB	1		1		1		n	445	2			
Braecrest Dr	WB						1	y	2,000	0			
Braecrest Dr	EB						1	n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)	Default Saturation Flow Rates (vphpl)
Left Turn	1,650
Through	1,800
Right Turn	1,500

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

y

Demographics

Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

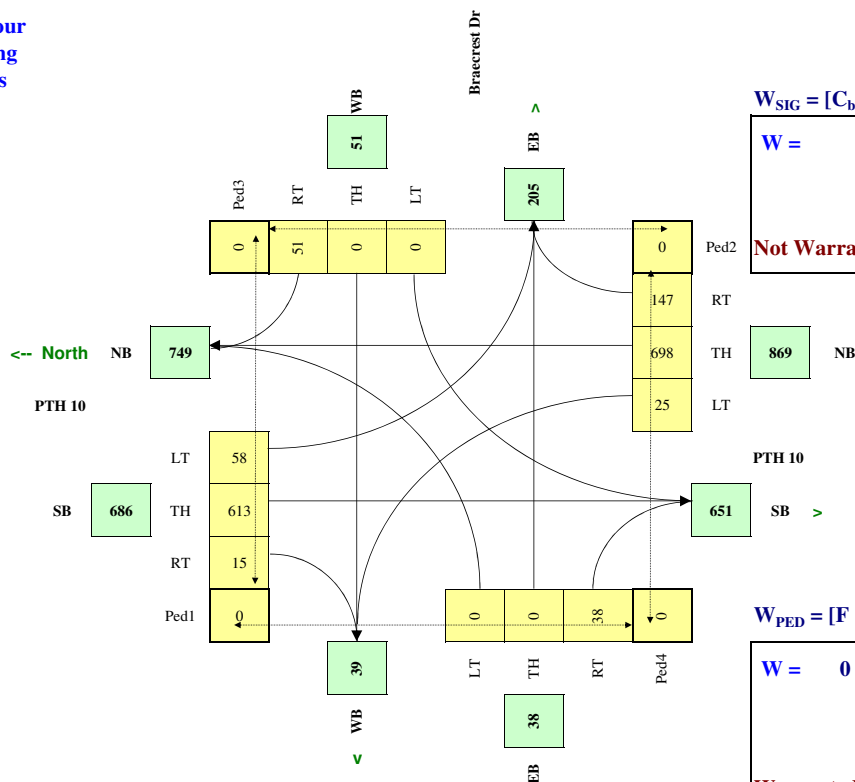
Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Set Peak Hours														Ped1	Ped2	Ped3	Ped4
Traffic Input	NB			SB			WB			EB			NS	NS	EW	EW	
press 'Set Peak Hours' Button to set the peak hour periods	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side	
	9	432	205	44	528	3			66			51				1	
	28	528	158	41	601	16			36			20					
	17	646	131	54	568	14			49			50					
	23	736	67	59	574	10			49			45					
	38	857	41	65	600	21			65			39					
	32	988	279	88	806	24			43			25					
Total (6-hour peak)	147	4,188	880	351	3,677	88	0	0	307	0	0	230	0	0	0	1	
Average (6-hour peak)	25	698	147	58	613	15	0	0	51	0	0	38	0	0	0	30.0	
Actual Pedestrian Crossing Distance (m)													10.0	10.0	30.0	30.0	

Actual Pedestrian Crossing Distance (m)

10.0	10.0	30.0	30.0
------	------	------	------

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v,v}) / K_1 + (F(X_{v,p}) L) / K_2] \times C_i$$

W =	46	46	0
		Veh	Ped

Not Warranted - Vs<75

RESET SHEET

$$W_{PED} = [F((X_{ped,m})d_m/K_2) + (X_{ped,s})d_s/K_3]$$

W =	0
-----	---

Warranted - Complex Intersection

TAC
NTC

**for Warrant Calculation
Results, please hit 'Page
Down'**

Are the PTH 10 SB right turns significantly impeded by through movements? (y/n)

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
PTH 10	NS	70	3.0%	y	5.0
Braecrest Dr	EW		2.0%	y	

Average 6-hour Peak Turning Movements



Not Warranted - Vs<75

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

$$\mathbf{W} = \mathbf{0}$$

Warranted - Complex Intersection

MI/City of Brandon - Traffic Signal & Pedestrian Signal Head Warrant Analysis

Main Street (name)	PTH 10	Direction (EW or NS)	NS	Road Authority:	MI/City of Brandon
Side Street (name)	Braecrest Dr	Direction (EW or NS)	EW	City:	Brandon
Quadrant / Int #		Comments	2038 analysis, no EB & WB LT or Thru, assume connection to Cumberland, additional SB lane	Analysis Date:	2019 Jan 03, Thu
or Warrant Calculation Results, please hit "Page Back"	CHECK SHEET			Count Date:	2017 Nov 22, Wed
				Date Entry Format:	(yyyy-mm-dd)

	Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	RT	Channelization (/m)	UpStream Signal (m)	# of Thru Lanes	LT Phase Type	RTOR Allowed (y/n)	Actuated Thru Phase
0															
1	PTH 10	NB	1		2			1		y	680	2			
2	PTH 10	SB	1		1		1			n	445	2			
3	Braecrest Dr	WB						1		y	2,000	0			
4	Braecrest Dr	EB						1		n	2,000	0			

Saturation Flow Rates (if not default) (vphpl)		Default Saturation Flow Rates (vphpl)
Left Turn		1,650
Through		1,800
Right Turn		1,500

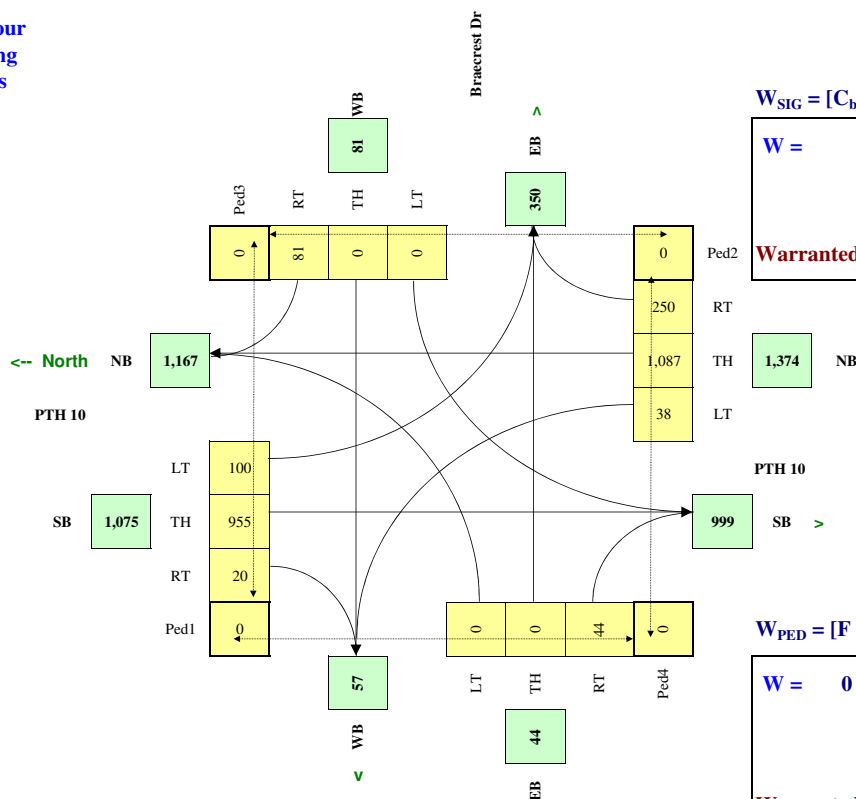
8		
9		
7		
8	Are the PTH 10 SB right turns significantly impeded by through movements? (v/n)	y

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	y
Pathway to School	(y/n)	n
Metro Area Population	(#)	49,000
Central Business District	(y/n)	n

0	Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
1						
2	PTH 10	NS	70	3.0%	y	5.0
3	Braecrest Dr	EW		2.0%	v	

Set Peak Hours														Ped1	Ped2	Ped3	Ped4
Traffic Input		NB			SB			WB			EB			NS	NS	EW	EW
		LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
press 'Set Peak Hours' Button to set the peak hour periods		13	674	342	72	834	4			115			56				1
		43	823	264	68	949	22			63			22				
		26	1005	226	93	881	18			73			58				
		36	1146	116	102	889	14			73			53				
		58	1335	70	113	930	27			96			45				
		49	1538	482	153	1249	32			64			29				
Total (6-hour peak)		226	6,521	1,500	603	5,732	118	0	0	484	0	0	263	0	0	0	1
Average (6-hour peak)		38	1,087	250	100	955	20	0	0	81	0	0	44	0	0	0	0
Actual Pedestrian Crossing Distance (m)														10.0	10.0	30.0	30.0

Average 6-hour Peak Turning Movements



$$W_{SIG} = [C_{bt}(X_{v-v}) / K_1 + (F(X_{v-p}) L) / K_2] \times C_i$$

W =	130	129	1
		<i>Veh</i>	<i>Ped</i>
Warranted			

RESET SHEET

$$\mathbf{W}_{\text{PED}} = [\mathbf{F} ((\mathbf{X}_{\text{ped}_m})\mathbf{d}_m/\mathbf{K}_2) + (\mathbf{X}_{\text{ped}_s})\mathbf{d}_s/\mathbf{K}_3]$$

Warranted - Complex Intersection

APPENDIX

D PUBLIC ENGAGEMENT MATERIALS

CITY OF BRANDON

FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR PUBLIC ENGAGEMENT REPORT - PHASE ONE

JANUARY 16, 2019





FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR

CITY OF BRANDON

PUBLIC ENGAGEMENT REPORT - PHASE ONE

PROJECT NO.: 18M-01581-00
DATE: JANUARY 17, 2019

WSP
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WINNIPEG, MB
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1 INTRODUCTION

1.1 PROJECT CONTEXT

WSP Canada Group Limited was retained by the City of Brandon (City) to produce a functional design for the Braecrest Drive Corridor. In order to understand the role of Braecrest Drive and to develop future solutions, a larger study area was defined for the project as shown in **Figure 1**. Braecrest Drive is an east-west roadway that services the North Hill neighbourhood in Brandon, which is comprised of a mix of residential, commercial and recreational uses. Braecrest Drive provides an important connection to 18th Street North and 1st Street North that carries vehicle traffic, public transit, and active transportation users to community destinations within the North Hill neighbourhood and to adjacent neighborhoods.

The two-major north-south roadways within the study area are 18th Street North and 1st Street North, both of which connect to the Trans-Canada Highway and carry high traffic volumes south into the City of Brandon. 18th Street North and 1st Street North are under the jurisdiction of Manitoba Infrastructure (MI) north of Braecrest Drive and under the jurisdiction of the City of Brandon south of Braecrest Drive. MI and the City of Brandon are both involved in this project.

There are existing concerns regarding traffic, safety for vehicles and pedestrians, and travel speed along Braecrest Drive. There are also concerns regarding the unsignalized connections of Braecrest Drive at 18th Street North and at 1st Street North, connections into Assiniboine Community College (ACC) North Hill Campus, and transit and pedestrian facilities. The study will ultimately provide recommendations to address existing challenges within the study area.



Figure 1: Braecrest Drive Corridor Study Area

1.2 REPORT CONTEXT

This report is a summary of Phase One Public and Stakeholder Engagement. The intent of Phase One Public and Stakeholder Engagement was to communicate project information, and gather public and stakeholder comments on existing transportation related issues within the Braecrest Drive Corridor study area.

Engaging the public is an important component of the Braecrest Drive Corridor Study. An effective and robust engagement program that targets landowners, stakeholders, local governments, special interest groups and the public is necessary to communicate information about the project, identify existing transportation and active transportation related issues, and opportunities as they exist in the study area and provide a preferred design alternative.

Public engagement for the Functional Design of the Braecrest Drive Corridor includes three phases (**Figure 2**). This report summarizes the feedback heard at the stakeholder meeting, online survey and online mapping tool.



Figure 2: Public Engagement Phases

2 PUBLIC ENGAGEMENT

2.1 OVERVIEW

The goal of Phase One Public and Stakeholder Engagement was to introduce the project, its scope and to seek stakeholder, and public input on transportation and active transportation issues, and opportunities as they exist in the study area (**Figure 1**). Project staff facilitated three public engagement activities for Phase One. Engagement activities included stakeholder meetings, an online survey and an online mapping tool. The feedback received from these activities will be considered when developing the conceptual design options.

2.1.1 STAKEHOLDER MEETINGS

On November 22, 2018, WSP project staff facilitated two stakeholder meetings. An afternoon stakeholder meeting was held at the City of Brandon's AR McDiarmid Building (638 Princess Avenue) from 1:30 p.m. to 3:00 p.m., and engaged internal stakeholders, regional stakeholders and municipal stakeholders. An evening stakeholder meeting was held at the Grand Valley Church (1620 Braecrest Drive) from 6:00 p.m. to 7:30 p.m. and engaged community stakeholders, and Braecrest Drive residents and business owners.

Stakeholders were directly contacted about the meeting through mail or an email invitation. Each meeting included a presentation on the project followed by a table mapping exercise and discussion. In total, 36 individuals attended the stakeholder meetings with 16 stakeholders attending the afternoon meeting and 20 stakeholders attending the evening meeting. The City of Brandon Project Manager engaged with seven additional individuals who could not attend the internal stakeholder meetings, but were still interested in providing their input. The following is a summary of the discussion from the meetings. The table maps from the meetings are in **Appendix A**.

General Travel Patterns

- Braecrest Drive is used by both local area residents and residents from other neighbourhoods to access both community destinations (i.e., businesses and services on Braecrest Drive, Kirkcaldy Heights School, Hanbury Park) and regional destinations (i.e., Sportsplex, Riverbank Discovery Centre, businesses, and services on 18th Street North and 1st Street North).
- Rather than cross 18th Street North and 1st Street North at unsignalized intersections such as at Braecrest Drive, residents in the study area will travel to controlled intersections, including Outback Drive, Centre Avenue and Kirkcaldy Drive. This has resulted in additional traffic on adjacent residential streets and past Kirkcaldy School.
- In the morning, vehicle flow is predominately southbound, and traffic counts show that traffic volumes are evenly split between 18th Street North and 1st Street North.
- U-turns are quite common at Outback Drive from northbound vehicles who want to go southbound. There can be confusion as to who has the right-of-way at this intersection when an eastbound vehicle on Outback Drive is making a right-hand turn and a vehicle is making a northbound U-turn.
- The intersections of 18th Street North at Kirkcaldy Drive and 1st Street North at Kirkcaldy Drive were both identified as intersections that work well.
- All vehicles entering the Oak Bluff development, west of Braecrest Drive use the intersection of 18th Street North and Braecrest Drive as this is the only access.

Braecrest Drive

- Westbound transit service on Braecrest Drive from Knowlton Drive to 18th Street North was discontinued. The southbound turning movement onto 18th Street North was a factor in this decision.
- Turning from westbound Braecrest Drive to southbound 18th Street North is very difficult when 18th Street North is busy.

18th Street North

- 18th Street North currently carries high traffic volumes, and a perception exists that the roadway is becoming busier as a result of commercial and retail development in the North Hill neighbourhood.
- Drivers do not obey the posted speed limit on 18th Street North. Despite the signage, it is suggested that vehicles travel at speeds closer to 80 km/hr to 90 km/hr, disobeying the 70 km/hr posted speed limit.
- Concerns exist about accessing 18th Street North at Braecrest Drive, and different opinions exist on how to improve the operations of the 18th Street North and Braecrest Drive intersection. Some stakeholders suggest that signals are warranted at the intersection. However, others have concerns that the grade of 18th Street North is too great for large trucks to stop and have to re-start at a signal on the hill in winter. Other suggestions to improve intersection operations include closing the median, and allowing right-in and right-out movements only, driver education on establishing themselves in the median, improving sightlines, and/or providing an alternative route from Braecrest Drive to the signalized intersection at Outback Drive and 18th Street North.
- The access road west of 18th Street North, south of Outback Drive, and north of Braecrest Drive has one entrance and no-turn around spot, which makes turning movements difficult for large vehicles such as sanitation trucks and emergency vehicles.
- Extending Quail Ridge Drive to Mockingbird Drive was suggested to provide an alternative route to the signalized intersection at 18th Street North and Outback Drive.

1st Street North

- As a major north-south route in Brandon, 1st Street North is heavily used; however, comments suggest that it is not as busy as 18th Street North.
- Left-hand turns from eastbound Braecrest Drive onto northbound 1st Street North are perceived to be challenging due to traffic volumes and flow. This turning movement is also difficult for City of Brandon snow plows in the winter.

Pedestrian and Cycling Facilities

- There are few pedestrian crosswalks in the study area. Stakeholders suggested that crosswalks could be added at the following locations:
 - At Braecrest Drive crossing 18th Street North;
 - At Braecrest Drive crossing 1st Street North; and
 - Along Braecrest Drive to provide connections to the multi-use path on the south side of Braecrest Drive.
- Existing multi-use paths in the study area are well used; however, there are gaps in the infrastructure. Stakeholders suggested the following:
 - Extend the Braecrest Drive multi-use path to 1st Street North;
 - Extend the 18th Street North multi-use path north of Braecrest Drive;
 - Build a multi-use path on 1st Street North from Braecrest Drive to Knowlton Drive;
 - Complete the Knowlton Drive multi-use path by connecting it from 4th Street North to Paterson Crescent; and
 - Tie the multi-use pathway system into the ACC North Hill Campus.

Future Development

- The expansion of Clare Avenue to connect 18th Street North and 1st Street North is viewed as desirable by many stakeholders to provide another east-west route in the study area. A connection from the Clare Avenue extension to Braecrest Drive would provide another option for residents within the study area to access 18th Street North and 1st Street North. It is suggested that this connection could be located generally to the eastern edge of the existing golf course.
- Stakeholders were interested in learning more about MI's plans for PTH 1A (1st Street North) and PTH 10 (18th Street North), and how the realignments will impact traffic flow and patterns in the study area.

- A development application for a multi-family development has been submitted to the City of Brandon for 501 Braecrest, a vacant 10-acre parcel. A multi-family development (including two 18-unit buildings and 18 townhomes) is currently under construction on Braecrest Drive, generally located southeast of 18th Street North and Braecrest Drive.
- The City of Brandon has approved a secondary plan for the area to the north where the Northern Pines Golf Course is currently located. Proposed development includes residential, institutional, commercial and mixed-use. The Plan also includes the extension of Clare Avenue, and signalized intersections at Clare Avenue at 18th Street North and Clare Avenue at 1st Street North.

Assiniboine Community College (ACC) North Hill Campus

- Additional access points for vehicles and pedestrians into ACC's North Hill Campus were suggested, but the only specific location identified was transit entering the campus at the Service Road on 1st Street North.
- ACC is interested in having local area residents use their grounds for walking or cycling and would like to explore options to better connect to the neighbourhood to the west of 1st Street North.
- Providing a transit access into ACC was suggested to better serve the students and staff of ACC.

Knowlton Drive/Bluebird Street

- Instead of Braecrest Drive, some drivers in the study area use Knowlton Drive and Kirkcaldy Drive to access 18th Street North or 1st Street North. There is a school speed zone, curvature and grade on Knowlton Drive, which makes this route less desirable from a traffic and safety standpoint.
- The offset intersection of Knowlton Drive and Bluebird Street with Braecrest Drive is a location of caution/potential concern as drivers can get confused as to who has the right-of-way when completing turning movements. Either aligning the intersection or providing a roundabout was suggested.

2.1.2 ONLINE SURVEY

An online survey was used to collect feedback about existing transportation issues within the Braecrest Drive Corridor study area. The survey was aimed towards collecting feedback from local area community residents, but was available for project stakeholders and interested persons to share their feedback as well. The online survey was open from November 22, 2018, to December 6, 2018, and advertised on the project webpage hosted on the City of Brandon website and City of Brandon social media outlets. In addition, the online survey link was distributed at the stakeholder meetings, and stakeholders were encouraged to share the link with their colleagues and/or neighbours.

At the external stakeholder meeting, a comment was shared that some local area residents could not access the survey as they do not use the internet. A paper copy of the survey was created and available for pick-up from the City of Brandon Civic Office. A total of 67 surveys were completed. 63 online responses and four paper responses. The following is a summary of the survey results to each question.

1. What are the main community destinations in the study area?

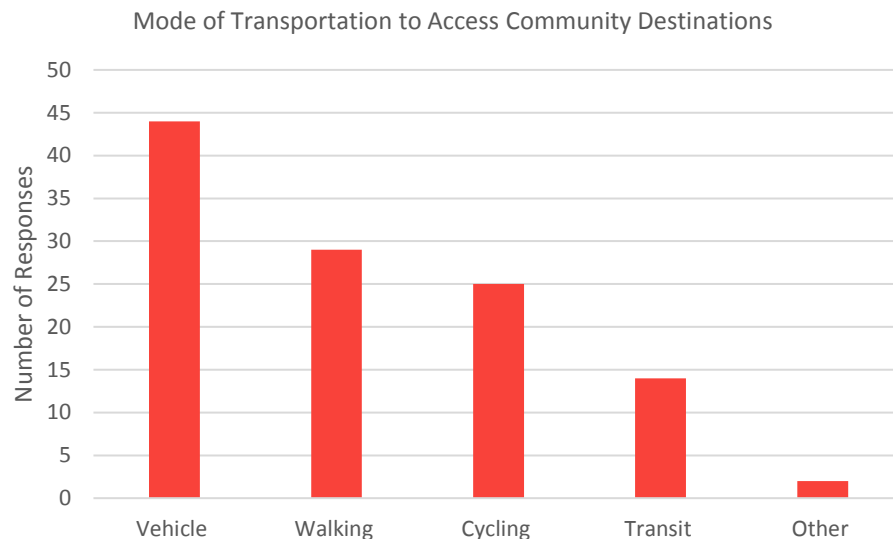
Survey results indicate that there are numerous community destinations within the study area. Community destinations include:

- The Sportsplex on Knowlton Drive;
- The Corral Centre on 18th Street North;
- Businesses accessed from 18th Street North (i.e., Princess Auto, Peavey Mart), Braecrest Drive (i.e., Leech Printing) and 1st Street North (i.e., Value Village);
- Assiniboine Community College North Hill Campus on 1st Street North;
- Northern Pines Golf Course on Braecrest Drive;
- The Riverbank Discovery Centre and walking trails along the banks of the Assiniboine River south of Kirkcaldy Drive;

- Kirkcaldy Heights School on Knowlton Drive; and
- Winston Churchill Park and Hanburry Hill located along the ridge south of Braecrest Drive.

2. What mode of transportation (i.e., vehicle, transit, bicycle, walking) do people use to access community destinations in the study area?

Out of 46 responses, 44 people indicated that vehicles are used to access community destinations in the study area, followed by walking (29), cycling (25), transit (14) and ‘other’ (two), which included mobility scooter and truck or semi-trailer. The question allowed multiple responses per respondent.

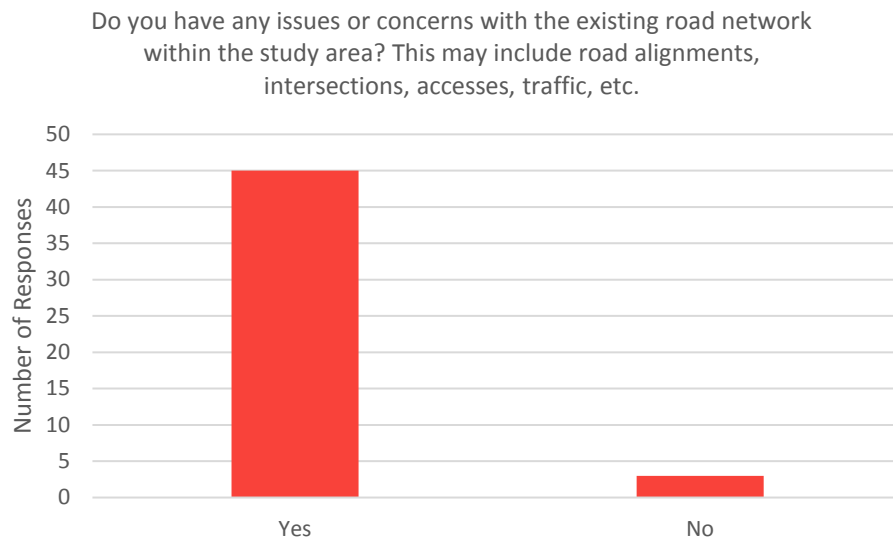


3. How does the use of streets (i.e., Braecrest Drive, 18th Street North and 1st Street North) in the study area change on weekdays, evenings and weekends?

Comments from the surveys suggest that 18th Street North and 1st Street North are quite busy Monday to Friday, and appear to carry more traffic during the A.M. and P.M. rush hours. The intersections of 18th Street North and Braecrest Drive, and 1st Street North and Braecrest Drive were noted to have long waits for vehicles accessing 18th Street North or 1st Street North from Braecrest Drive, because traffic flow is steady. A few comments suggest that overall traffic volumes remain relatively unchanged, but that peak times fluctuate between weekends and weekdays. Sunday in particular was noted as a day that has less traffic on 18th Street North and 1st Street North. Comments regarding local streets, such as Braecrest Drive and Knowlton Drive suggest that these routes are less busy than 18th Street North and 1st Street North, but still carry vehicles Monday through Friday, as well as on the weekend with people accessing the Sportsplex. Street use near the Corral Centre and the Sportsplex are perceived to be busy all of the time.

4. Do you have any issues or concerns with the existing road network within the study area? This may include road alignments, intersections, accesses, traffic, etc.

94% of the respondents (45 of 48 responses) indicate that there are issues or concerns with the existing road network.



- a. **If you answered yes, please explain the issue or concern and provide any suggestions you may have on how it can be addressed.**

18th Street North at Braecrest Drive

Comments suggest that it is difficult and dangerous to turn southbound onto 18th Street North from westbound Braecrest Drive due to traffic volumes, the existing speed limit, the lack of signals or controls at the intersection, and poor sightlines and visibility of northbound traffic because of the grade.

Suggestions from survey respondents to remediate the identified issues include the following:

- Enhanced driver education on how to enter the intersection and establish themselves in the median to complete the left turn;
- Reduce the speed limit on 18th Street North to 50 km/hr so that vehicle speeds are slower;
- Force westbound traffic on Braecrest Drive to make a right turn onto northbound 18th Street North. Drivers wanting to travel southbound can either make a U-turn at Outback Drive or use 1st Street North to travel south;
- Coordinate the signals at Outback Drive and the Corral Centre to provide gaps in oncoming traffic on 18th Street North;
- Build a new north-south road north of Braecrest Drive and connect to Clare Avenue with signalized intersections providing vehicles with an alternative route;
- Add a signal at 18th Street North and Braecrest Drive; and
- Prohibit westbound left turns from Braecrest Drive onto southbound 18th Street North during peak hours.

1st Street North at Braecrest Drive

Comments suggest that it can be difficult to make a left-hand turn from eastbound Braecrest Drive onto northbound 1st Street North, because drivers do not feel comfortable waiting in the protected median. Comments indicate that the median is, or is perceived to be, too narrow to safely wait. Instead of first crossing southbound traffic on 1st Street North and waiting in the median for northbound traffic to clear, drivers will wait for an opening in both southbound and northbound traffic on 1st Street North to cross. In addition, comments suggest that pedestrians do not have a safe place to cross 1st Street North and that the high traffic volumes on 1st Street North can make it unsafe for pedestrians to cross 1st Street North without a formal crosswalk.

Suggestions from survey respondents to remediate the identified issues include the following:

- Working with Brandon Transit to provide bus stops within the Assiniboine Community College North Hill Campus so that pedestrians do not have to cross 1st Street North;
- Force eastbound traffic on Braecrest Drive to make a right turn onto southbound 1st Street North. Drivers wanting to travel northbound from Braecrest Drive can use Bluebird Street or White Swan Drive to access the signalized intersection at Centre Street;
- Encourage drivers to access 1st Street North at signalized intersections by building a new north-south road north of Braecrest Drive to connect to Clare Avenue at signalized intersections; and
- Prohibit left turns onto northbound 1st Street North from eastbound Braecrest Drive during peak hours.

Knowlton Drive at Braecrest Drive

Two comments included concerns regarding the intersection of Knowlton Drive at Braecrest Drive:

- The intersections of Knowlton Drive, and Bluebird Street with Braecrest Drive do not line up properly and can cause confusion for northbound/southbound vehicles crossing Braecrest Drive. In addition, drivers also have difficulty when an eastbound and westbound vehicle both want to make a left-hand turn at this intersection; and
- It can be risky for westbound vehicles on Braecrest Drive wanting to turn southbound onto Knowlton Drive, because of the speed of traffic.

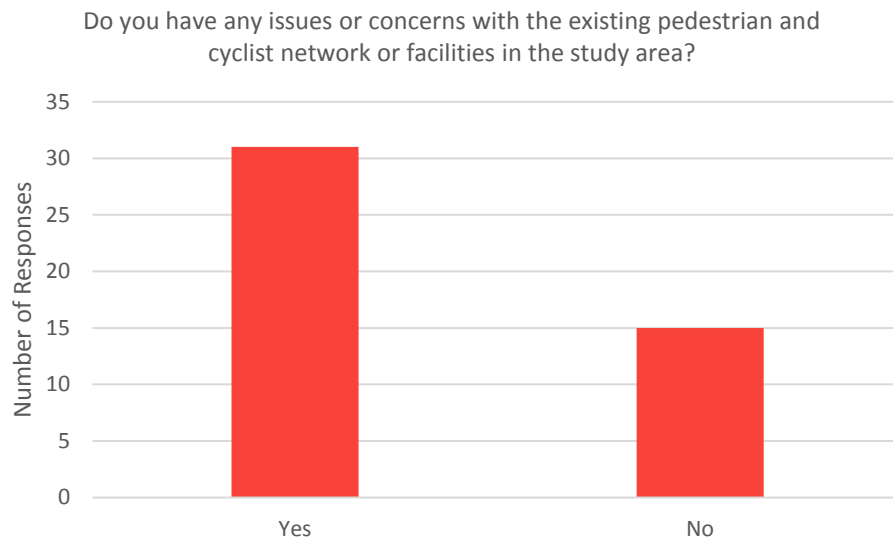
Transit

Although issues or concerns with transit were not common in survey responses, the following comments were provided:

- Curbside pull-out stops should be added along 18th Street North and 1st Street North. During peak times, bus loading/unloading backs up traffic;
- There is a lack of pedestrian facilities connecting to transit stops in the study area; and
- Transit should be provided within the Assiniboine Community College North Hill Campus. Students shouldn't have to cross 1st Street North to access the bus stop.

5. Do you have any issues or concerns with the existing pedestrian and cyclist network, or facilities in the study area? This may include location, connections and/or signage.

From 46 responses, 68% indicated an issue of concern with the existing pedestrian or cyclist network, or facilities in the study area.



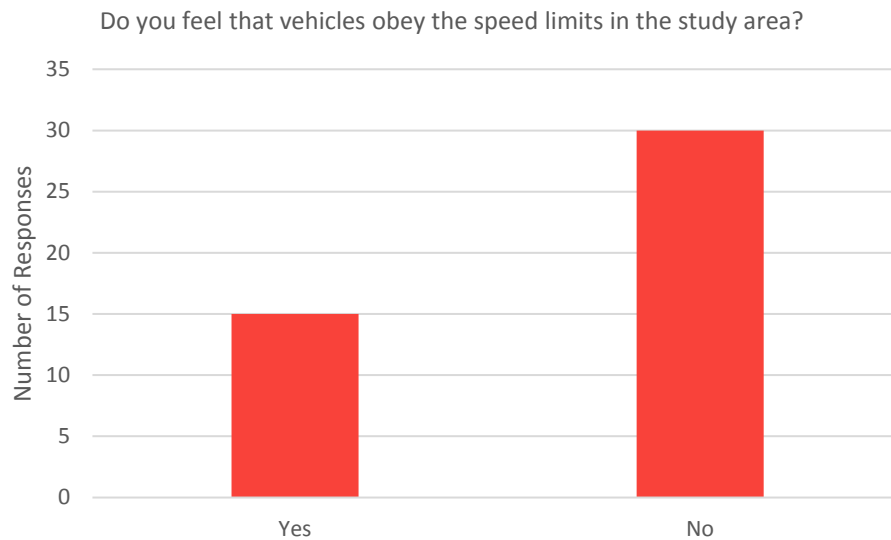
a. If you answered yes, please explain the issue or concern and provide any suggestions you may have on how it can be addressed.

The survey received 30 comments sharing issues and concerns with the existing pedestrian, and cyclist network and suggestions for improvements. The following points summarize these comments:

- Crossing 18th Street North or 1st Street North at Braecrest Drive is challenging for pedestrians as there is no pedestrian crosswalk or signals and vehicles do not stop for pedestrians;
- Providing a crosswalk for pedestrians at 18th Street North and 1st Street North at Braecrest Drive would help increase pedestrian and cyclist connectivity within the study area; however, a few comments suggested that at-grade crossings may pose safety risks with traffic stopping along 18th Street North or 1st Street North due to current vehicle speeds and volumes, as well as the grade of the hill. An above or below grade crossing at 18th Street North and 1st Street North was suggested as an alternative in a few comments;
- A path from Veterans Way to 1st Street North would be useful as pedestrians and cyclists currently walk on the shoulder of 1st Street North;
- There is only one pedestrian crosswalk on Braecrest Drive. Additional crosswalks need to be added for residents who live north of Braecrest Drive to access the multi-use pathway, which is on the south side of the street. A crosswalk at Village Drive is suggested as this area has experienced a lot of residential development;
- There is a fantastic trail on the hill behind Hanbury Place connecting to Galbraith Crescent. This trail should be connected to the pedestrian and cyclist path on Braecrest Drive;
- There is limited pedestrian infrastructure connecting Hamilton Heights to Braecrest Drive; and
- The Braecrest Drive walking path has inadequate lighting.

6. Do you feel that vehicles obey the speed limits in the study area?

From 47 responses, 68% indicated a perception that vehicles do not obey the speed limits in the study area.



a. If you answered no, please describe any location(s) where you believe speeding occurs within the study area

The following streets were identified as locations in the study area where survey respondents feel that drivers disobey the speed limit:

- Braecrest Drive: Survey respondents indicate that vehicles travelling on Braecrest Drive can approach speeds of 60 km/hr. It is believed that the design of the road (i.e., straight with no traffic controls or other speed reduction measures) encourages speeding. Two survey respondents suggested that the speed limit on Braecrest Drive could be increased to 60 km/hour as there are few houses with direct access onto the street;
- 18th Street North and 1st Street North: It is suggested that the wide driving lanes, paved shoulders, no sidewalks, and no permitted parking makes 18th Street North and 1st Street North feel similar to a roadway with a higher permitted speed, such as a highway, which encourages speeding. One comment shared that the electronic speed sign on 18th Street North has become ineffective as it has been in place for quite awhile and that drivers no longer notice it; and
- Kirkcaldy Drive and Whiteswan Drive were also identified as locations where drivers disobey the speed, but no description or reason was provided.

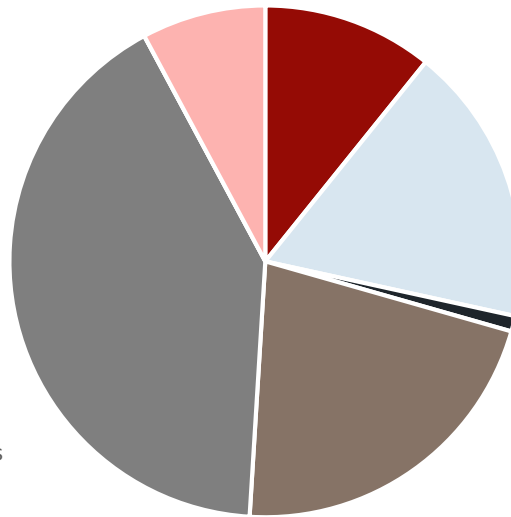
The following four questions collected general data from the survey respondents about their connecting to the study area.

7. What is your main connection to the study area?

The survey asked respondents to identify how they are connected to the study area. The question allowed multiple responses per respondent. The majority of the 66 survey respondents use Braecrest Drive to access community destinations, followed by work near Braecrest Drive, live near Braecrest Drive, live on Braecrest Drive, 'other' and work on Braecrest Drive. None of the survey respondents indicated that they are a student at Assiniboine Community College North Hill Campus. Responses to 'other' included resident of another neighbourhood in Brandon, use Braecrest Drive for walking and work at Assiniboine Community College North Hill Campus.

Connection to the Braecrest Drive Corridor

- I live on Braecrest Drive (17%)
- I live near Braecrest Drive (27%)
- I work on Braecrest Drive (2%)
- I work near Braecrest Drive (33%)
- I use Braecrest Drive to access community destinations (64%)
- I am a student at Assiniboine Community College North Hill Campus (0%)



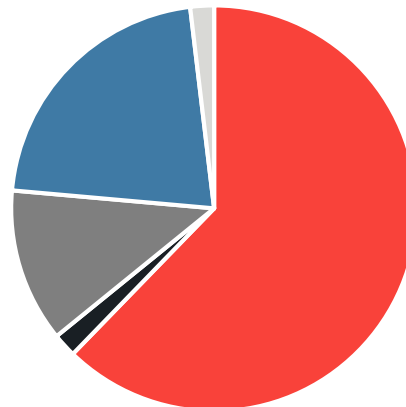
Multiple responses allowed per respondent

8. What are your regular modes of transportation?

The survey asked respondents to identify their main mode of transportation. The question allowed multiple responses per respondent. Out of a total of 66 survey respondents, the majority indicated their primary mode of transportation is vehicle, followed by walking, cycling, public transit and other.

Regular Modes of Transportation

- Vehicle (98%)
- Public Transit (3%)
- Cycling (19%)
- Walking (34%)
- Other (please specify) (3%)



Multiple responses allowed per respondent

9. Location of respondents by postal code

The survey asked respondents to share their postal code. Postal code responses are shown in **Table 1** and **Figure 3**.

Table 1: Number of Responses Per Postal Code

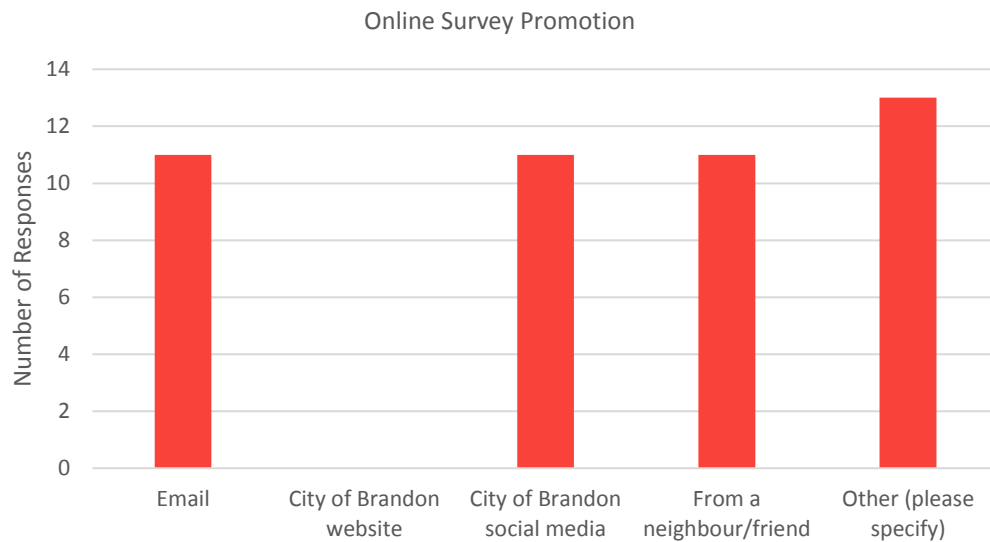
Postal Code	Number of Responses
R7A	14
R7B	9
R7C	21
R0J	1



Figure 3: Postal Code Map

10. How did you hear about the online survey?

Email promotion, City of Brandon social media outlets and community neighbours/friends were all equally effective in advertising the online survey. In addition, 13 respondents selected 'other', sharing that they learned about the online survey from City staff, MI staff, local condominium associations and the Brandon Sun. The City of Brandon website appears to be the least effective at advertising the online survey as zero respondents selected this option.



2.1.3 ONLINE MAPPING TOOL

An online interactive mapping tool (**Figure 4**) was created to provide an opportunity for stakeholders, and the public to identify local issues related to transportation and active transportation in the study area. Visitors who participated on the online map were asked to add ‘pins’ to routes, intersections, sidewalks, active transportation facilities, transit amenities or transportation infrastructure within the study area and indicate whether the infrastructure functions well, is an area of caution or potential conflict or is an area of concern. All visitors were able to comment and either ‘like or ‘dislike’ pins left by others.

The online mapping tool was accessed through the project website from November 22, 2018, to December 6, 2018, and received 138 views from 125 unique users. In total, 33 comments and 24 pins from 10 respondents were added to the map. **Figure 5** shows a summary of the stakeholder engagement and **Table 2** shows the breakdown of the number of map markers per category.

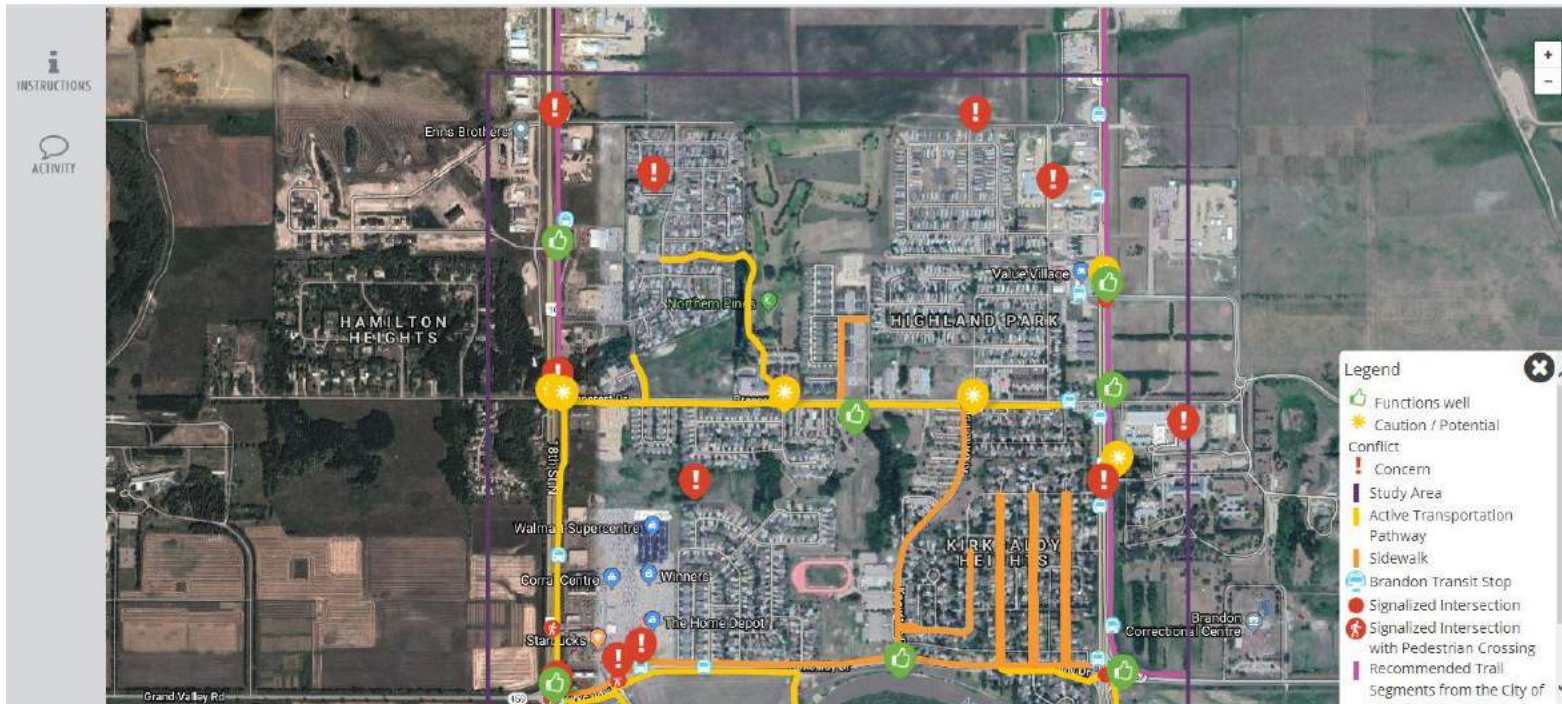


Figure 4: Image of Online Map

Stakeholder Engagement Summary

138
Total Visits

125
Unique Users

19:04
Avg Time (min)

10
Unique Stakeholders

33
Comments

0
Survey Responses

Figure 5: Stakeholder Engagement Summary of Online Map

Table 2: Number of Map Markers Per Category

Category	Number of Map Markers
Functions Well	9
Caution/Potential Conflict	7
Area of Concern	17

The following is a summary of the comments received on the online map organized by the map marker category.

Functions Well

- Comments indicate that the controlled and/or signalized intersections on Kirkcaldy Drive (i.e., at 18th Street North, Knowlton Drive and 1st Street North) function quite well for both vehicles and pedestrians. Comments regarding Kirkcaldy Drive received five ‘like’ votes and zero ‘dislike votes’.
- When travelling northbound on 1st Street North, comments suggest that the signalized intersection at Centre Avenue/Lori Road provides a good alternative to access Braecrest Drive than turning directly from 1st Street North. Three people liked this comment and zero disliked it. However, comments also indicate that the 1st Street North northbound left turn lane onto Braecrest Drive is well liked, this comment received four ‘like’ votes.
- One comment shares that providing a new access to the signalized intersection at Outback Drive and 18th Street North from Braecrest Drive would be well used as residents prefer using the signalized intersection to access 18th Street North. This comment received four ‘like’ votes.

Caution/Potential Conflict

- One comment shared that drivers do not establish themselves in the median when making a left turn from westbound Braecrest Drive onto southbound 18th Street North and could be a reason why the intersection appears not to function well. This comment received four ‘likes’ and two ‘dislikes’.
- A few comments suggest that there are opportunities to improve access into ACC North Hill Campus. For example, one comment shared that the service vehicle entrance into the campus on 1st Street North should be blocked off; however, another comment indicated that the Lori Road access feels too removed from the campus.
- The intersection of Knowlton Drive and Bluebird Street with Braecrest Drive was flagged as being an area of concern/potential conflict as the intersection is offset and it was suggested that there may be an opportunity to develop an oval roundabout if realignment is not possible. This comment received one ‘like’ and two ‘dislikes’.

Area of Concern

- Three comments indicate a desire for Clare Avenue to be extended, and provide an east-west access with signalized intersections at 18th Street North and 1st Street North. It is believed that a new east-west connection would help relieve congestion on Braecrest Drive, and the problems associated with the intersections at Braecrest Drive at 1st Street North and 18th Street North. A north-south connection from the Clare Avenue extension would be required to Braecrest Drive. It is suggested that this new connection would relieve some pressure from Braecrest Drive and provide an alternative route with signalized intersections. In total, the three comments received seven ‘likes’.
- A discussion between map commenters regarding the left turn from westbound Braecrest Drive onto southbound 18th Street indicate that a difference of opinion exists on solutions for the intersection. The initial comment suggested to add signals at 18th Street North and Braecrest Drive to help alleviate wait times (i.e., 10 to 15 minutes) and increase safety when making the left turn. This comment received one ‘like’ and five ‘dislikes’, as well as two responding comments. The first responding comment suggested that long wait times are the result of drivers waiting for both northbound and southbound traffic to be clear rather than

establishing themselves in the intersection. This comment received zero ‘likes’ and two ‘dislikes’. The second comment suggested that adding signals will create different problems at the intersection, such as stopping and starting on the hill. This comment received four ‘likes’ and zero ‘dislikes’.

- Three comments suggest that the bus stop at Kirkcaldy Drive and 18th Street North is an area of concern and could be improved. The bus stop is currently located on a traffic island and comments suggest that when buses stop to load or unload, the back end of the bus blocks a portion of the intersection. Comments suggest that the bus stop would be better north of the intersection, either within the general area of where Montana’s is located or within the Corral Centre. By relocating the bus stop, comments indicate that traffic could flow better in this area. In total, the three comments received three ‘likes’ and zero ‘dislikes’.
- One comment indicated that an area of concern is how ACC North Hill Campus students cross 1st Street North to access the campus from the bus stop. There is no pedestrian crosswalk within a reasonable walking distance on 1st Street North for the students to use.
- One comment suggested that another north-south connection between Kirkcaldy Drive and Braecrest Drive is needed. This comment received three ‘likes’ and one ‘dislike’.

2.2 SUGGESTED DESIGN CONSIDERATIONS & NEXT STEPS

The stakeholder meetings identified a few themes and specific issues that should be considered when developing the conceptual design options for the Braecrest Drive Corridor study area. These include:

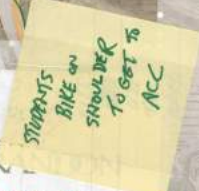
- Addressing concerns over the left turn movement from westbound Braecrest Drive onto southbound 18th Street North and more generally improving operations at this intersection;
- Providing an alternative connection(s) from Braecrest Drive to existing signalized intersections (i.e., connecting Quail Ridge Drive to Mockingbird Drive);
- Enhancing the existing pedestrian, and cycling facilities by building multi-use pathways and crosswalks;
- Providing better connections to ACC North Hill Campus for pedestrians, transit users and vehicles; and
- Exploring options for traffic calming measures on 18th Street North and Braecrest Drive.

Following completion of the conceptual design alternatives for the corridor, Phase Two of public engagement will seek feedback on the design alternatives under consideration. This will be done through two stakeholder meetings, and a public open house during Phase Two Public and Stakeholder Engagement.

APPENDIX

A TABLE MAPS

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- City of
BR
wsp

N
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- Study Area
- Active Transportation Pathway
- Sidewalks
- Brandon Transit Stop

- Signalized Intersection
- Signalized Intersections with pedestrian crossings



BRAECREST DRIVE CORRIDOR STUDY AREA



LEGEND

- Study Area
- Active Transportation Pathway
- Sidewalks
-  Brandon Transit Stop

- Recommended Trail Segments from the City of Brandon Greenspace Master Plan (exact location to be determined)
- Crosswalks

-  Signalized Intersection
-  Signalized Intersections with pedestrian crossings

N
↑



-  Study Area
-  Active Transportation Pathway
-  Sidewalks
-  Brandon Transit Stop

Recommended Trail Segments
from the City of Brandon
Greenspace Master Plan
(exact location to be determined)

Crosswalks

- Signalized Intersection
- Signalized Intersections with pedestrian crossings



BRAECREST DRIVE CORRIDOR STUDY AREA



*Pedestrian Connector
left turns - accidents*

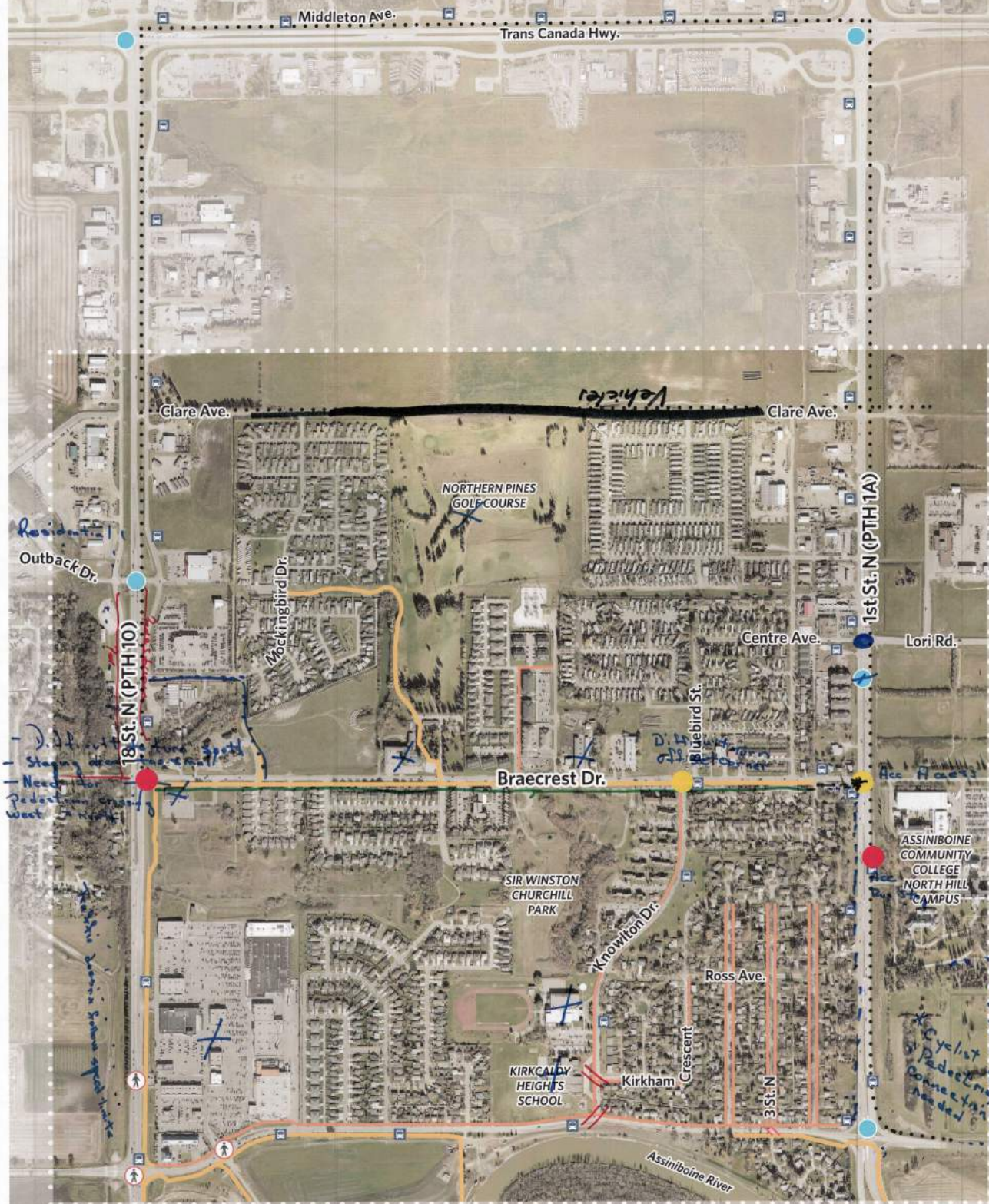
1/2 mi - 2 day road

*Why is bus stop
5 km from
intersection?*

- | | | |
|-------------------------------|--|--|
| Study Area | Recommended Trail Segments from the City of Brandon Greenspace Master Plan (exact location to be determined) | Signalized Intersection |
| Active Transportation Pathway | Crosswalks | Signalized Intersections with pedestrian crossings |
| Sidewalks | | |
| Brandon Transit Stop | | |



BRAECREST DRIVE CORRIDOR STUDY AREA



LEGEND

- Study Area
- Active Transportation Pathway
- Sidewalks
- Brandon Transit Stop
- Recommended Trail Segments from the City of Brandon Greenspace Master Plan (exact location to be determined)
- Crosswalks
- Signalized Intersection
- Signalized Intersections with pedestrian crossings



CITY OF BRANDON

FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR

PUBLIC ENGAGEMENT REPORT - PHASE TWO

APRIL 05, 2019





FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR

CITY OF BRANDON

PUBLIC ENGAGEMENT REPORT - PHASE TWO

PROJECT NO.: 18M-01581-00
DATE: APRIL 05, 2019

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1 INTRODUCTION

1.1 PROJECT CONTEXT

WSP Canada Group Limited (WSP), was retained by the City of Brandon (City) to produce a functional design for the Braecrest Drive Corridor. To understand the role of Braecrest Drive and to develop future solutions, a larger study area was defined for the project as shown in **Figure 1**. Braecrest Drive is an east-west roadway that services the North Hill neighbourhood in Brandon, which is comprised of a mix of residential, commercial and recreational uses. Braecrest Drive provides an important connection to 18th Street North and 1st Street North, and carries vehicle traffic, public transit and active transportation users to community destinations within the North Hill neighbourhood, and to adjacent neighborhoods.

The two-major north-south roadways within the study area are 18th Street North and 1st Street North, both of which connect to the Trans-Canada Highway and carry high traffic volumes south into the City of Brandon. 18th Street North and 1st Street North are under the jurisdiction of Manitoba Infrastructure (MI) north of Braecrest Drive and under the jurisdiction of the City of Brandon south of Braecrest Drive. MI and the City of Brandon are both involved in this project.

There are existing concerns regarding traffic, safety for vehicles and pedestrians, and travel speed along Braecrest Drive. There are also concerns regarding the unsignalized connections of Braecrest Drive at 18th Street North and at 1st Street North, connections into Assiniboine Community College (ACC) North Hill Campus, and transit and pedestrian facilities. The study will ultimately provide recommendations to address existing challenges within the study area.



Figure 1: Braecrest Drive Corridor Study Area

1.2 REPORT CONTEXT

Engaging the public is an important component of the Braecrest Drive Corridor Study. An effective and robust engagement program that targets landowners, stakeholders, local governments, special interest groups and the public is necessary to communicate information about the project, identify existing transportation and active transportation related issues and opportunities as they exist in the study area, and provide a preferred design alternative.

This report is a summary of Phase Two Public and Stakeholder Engagement. The intent of Phase Two Public and Stakeholder Engagement was to share what the Project Team learned from Phase 1, share the proposed design enhancements and alternatives, share how the design elements address key issues and concerns, and seek feedback on characteristics of design elements and evaluation criteria.

Public engagement for the Functional Design of the Braecrest Drive Corridor includes three phases (**Figure 2**).



Figure 2: Public Engagement Phases

2 PUBLIC ENGAGEMENT

2.1 OVERVIEW

Following Phase One Public and Stakeholder Engagement, the Project Team reviewed public input on the existing issues and challenges for the Braecrest Drive Corridor, and identified conceptual designs. The conceptual designs were classified as either an enhancement or an alternative. Enhancements were defined as options in which either none, some, or all could be implemented. Alternatives were defined as options in which either none or one could be implemented. Unlike the enhancements, all of the alternatives for one location cannot be implemented.

Phase Two Public and Stakeholder Engagement presented the proposed conceptual design enhancements and alternatives, and the proposed evaluation criteria categories to stakeholders and the public to receive their feedback. Phase Two included three public engagement activities; a stakeholder meeting, public open house and online comment sheet.

2.1.1 STAKEHOLDER MEETING

On February 28, 2019, stakeholders for the Functional Design of the Braecrest Drive Corridor Study were invited to review and discuss the proposed enhancements and alternatives. Stakeholders included representatives from City of Brandon departments, Manitoba Infrastructure and Assiniboine Community College. The meeting was held at the McDiarmid Civic Complex in Brandon from 1:30 – 3:00 p.m. and 19 stakeholders attended. The meeting included a brief presentation sharing project background information, large group discussion on the proposed enhancements, small group discussion on the proposed alternatives and an interactive activity ranking the evaluation criteria categories. The table maps from the meetings are in **Appendix A**.

2.1.2 OPEN HOUSE

The public open house was hosted on February 28, 2019, at Assiniboine Community College, North Hill Campus from 4:00 – 7:00 p.m. Local area residents within the study area were invited to attend through direct mail. The event was also advertised in the Brandon Sun and through social media. Eighty-one people attended the event. Informational display boards and large drawings of the proposed alternatives were set-up, and WSP and City of Brandon staff were available for informal discussion and questions. Attendees were asked to share their opinion on the evaluation criteria categories through an interactive “voting” activity and to complete a comment sheet to provide written feedback on the proposed enhancements and alternatives. In addition, attendees could leave comments on large printed copies of the proposed alternatives. Forty-three comment sheets were completed at the open house and 19 comments were left on the proposed alternative open house table drawings.

2.1.3 ONLINE COMMENT SHEET

A copy of the open house display boards and comment sheet were posted on the City of Brandon website for two weeks following the open house. The online comment sheet provided an opportunity for those who could not attend the open house to participate in the project and provide their feedback on the proposed concepts. Sixty-one individuals completed the online comment sheet.

3 STAKEHOLDER AND PUBLIC FEEDBACK

3.1 STAKEHOLDER MEETING

The feedback shared at the stakeholder meeting regarding each enhancement and alternative is presented below.

BRAECREST DRIVE ENHANCEMENTS

1. Enhancement 1: Intersection Modifications

Stakeholders agreed that the proposed roundabouts are a good suggestion to help slow down vehicles and provide additional pedestrian crossings on Braecrest Drive. Brandon Transit noted that the roundabouts will need to accommodate transit buses.

2. Enhancement 2: Pedestrian Crossings

There were no specific comments regarding the proposed pedestrian crossings.

3. Enhancement 3: Pathway Connection from Kensington Crescent to 1st Street North

The City of Brandon shared that the location of the proposed pathway would likely result in property impacts because of existing accesses from Braecrest Drive to the Motel and Domo located at/near 1st Street North and Braecrest Drive. As an alternative, it was suggested to build the pathway connection on the north side of Braecrest Drive instead of the proposed southside, however, this location may also be challenging as there are street-trees where the pathway would likely be built.

4. Enhancement 4: Sidewalk Connections

The Project Team proposed sidewalk connections only at locations where there is development adjacent to Braecrest Drive without a sidewalk. It was suggested that the design propose a sidewalk along the entire north side of Braecrest Drive from 18th Street North to 1st Street North regardless of where development is. In doing so, as development occurs, the study would help provide direction for Developers and the City on sidewalk connection requirements.

1ST STREET NORTH ENHANCEMENTS

1. Enhancement 1: Transit Connection

There were no specific comments regarding the proposed transit connection.

2. Enhancement 2: Multi-Use Pathway

Stakeholders shared that the proposed multi-use pathway will likely need a lot of switchbacks and/or rest platforms so that the grade of the pathway meets accessibility standards. To accommodate the design, the pathway may then need to be built on City of Brandon and Assiniboine Community College property, which would require agreements regarding shared ownership and/or maintenance.

3. Enhancement 3: ACC Bus Turnaround

There were no specific comments regarding the ACC bus turnaround.

18TH STREET NORTH ENHANCEMENTS

1. Enhancement 1: Transit Connection

Brandon Transit shared that the bus stop north of Braecrest Drive on 18th Street North is not very well used and that they would be open to moving the location of the bus stop south of its current location closer to Braecrest Drive. A stakeholder expressed the concern that there are currently issues with drainage in the northbound acceleration lane at Braecrest Drive and 18th Street North and this will need to be addressed if the bus stop is moved.

2. Enhancement 2: Reduce Speed Limit

Stakeholders discussed that a speed study could help provide guidance on whether the speed limit on 18th Street North should be reduced from 70 km/hr to 60 km/hr south of Outback Drive. Although the City does not have a current speed study for 18th Street North, City of Brandon Police indicated that it is safe to assume that on average people are driving 7 to 10 km/hr over the speed limit. In addition, stakeholders noted that reducing the speed limit south of Outback Drive may help traffic operations at the Braecrest Drive and 18th Street North intersection.

BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

1. Alternative 1: Restrict Left Turns (Permanent)

Stakeholders discussed that if the left turn onto 1st Street North is restricted, vehicles will use White Swan Street to access northbound 1st Street North. A difference of opinion exists on whether White Swan Street has the capacity to support this additional traffic. It was suggested that a permanent left turn restriction will increase traffic on White Swan Street in the evening and during baseball/softball season. If the left turn is permanently restricted, stakeholders agreed that alternative route signage should be installed to help direct drivers on how to access northbound 1st Street North.

The City of Brandon Maintenance Department shared that the design for permanently restricting the left turn may impact their snow clearing procedures. City of Brandon Emergency Services has no issues with the design.

2. Alternative 2: Restrict Left Turns (Peak Hours Only)

Stakeholders identified that if peak hour restrictions are implemented, the City should monitor the effectiveness of peak hour restrictions and any impacts that it may create on traffic patterns in the neighbourhood, specifically, how it affects traffic volumes on White Swan Street. It was shared that Brandon currently does not have any peak hour restrictions and that introducing peak hour restrictions at Braecrest Drive and 1st Street North may require a driver education campaign to help ensure compliance.

3. Alternative 3: Limited Access to ACC

There was a difference of opinion among stakeholders about adding limited access to ACC. It was suggested that adding a vehicle connection to ACC at Braecrest Drive and 1st Street North will make the campus less pedestrian friendly. Stakeholders discussed how vehicle access at Braecrest Drive and 1st Street North could result in potential conflicts with pedestrians and that ACC may need to prepare a safe management scheme to address this potential conflict.

Stakeholders discussed whether access to ACC at Braecrest Drive and 1st Street North is necessary as the main vehicle access located at Lori Road and Braecrest Drive is not too far from the proposed access at Braecrest Drive and 1st Street North. MI shared that installing a signal at Braecrest Drive and 1st Street North is not being considered and so traffic should not be directed to this intersection. Rather, vehicles should be encouraged to use the existing signals at Lori Road and Braecrest Drive. Opposing views noted that ACC's Campus Master Plan includes parking lots east of the Braecrest Drive and 1st Street North intersection and that the northbound right-hand turn into campus as well as a southbound left-hand turn into campus would provide better access to future parking lots.

It was noted that to accommodate a northbound right-hand turn, a deceleration lane on 1st Street North would likely be required.

BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMMODATION ALTERNATIVES

1. Alternative 1: Half Signal at Braecrest Drive

Stakeholders shared concerns with locating the half signal at Braecrest Drive. Concerns included questions over whether sightlines will be an issue because of the grade on 1st Street North as well as whether vehicles making the northbound left turn from Braecrest Drive onto 1st Street North will be able to see the signal.

2. Alternative 2: Half Signal North of Braecrest Drive

Stakeholders suggested that locating a half signal north of Braecrest Drive is the preferred location as northbound left turning vehicles from Braecrest Drive onto 1st Street North will have a better view of the half signal, limiting the risk of pedestrian and vehicle conflict. However, stakeholders noted that if the pedestrian crossing is located too far north, pedestrians may not use the crosswalk as pedestrians may perceive the crosswalk to be too far and instead choose to cross at uncontrolled locations.

It was also suggested that relocating the bus stop from its current location south of Braecrest Drive to north of Braecrest Drive is desirable to help prevent vehicles blocking the intersection of Braecrest Drive and 1st Street North as they wait for the bus to load/unload.

The North Brandon Gateway Secondary Plan includes commercial designated land along 1st Street North and where the proposed half signal is located. It is suggested that locating the half signal north of Braecrest Drive could fit well in the context of future development.

3. General Comment

A stakeholder shared that neither Alternative 1 or Alternative 2 addresses the existing challenges with ACC students crossing 1st Street North to access the transit stop just south of Kirkham Crescent.

BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

1. Alternative 1: Traffic Signals with Pedestrian Phase

A common concern among stakeholders with this option is the existing 6% slope on Braecrest Drive and how large trucks travelling northbound will be able to handle stopping and starting on the hill during snowy/icy periods. The issue is whether the truck will get the required traction to get up the hill. The City of Brandon Maintenance Department shared that if the City were to take on the responsibility of snow clearing and sanding the intersection of Braecrest Drive and 18th Street North, they would require additional resources (i.e., more manpower and equipment).

2. Alternative 2: Restrict Left Turns (Permanent)

Stakeholders shared that the extended median that restricts left turns may impact the City's snow clearing procedures. To minimize this impact, one stakeholder asked if the median could be designed so that snow clearing equipment can mount the median. Emergency Services has no issues with the extended median.

Stakeholders noted that by restricting the left turn at 18th Street North and Braecrest Drive, more vehicles may travel on Knowlton Drive to access southbound 18th Street North. As there is a school zone on Knowlton Drive, it was suggested that increasing traffic volumes on Knowlton Drive is not desirable.

Restricting left turns permanently at 18th Street North and Braecrest Drive requires vehicles to travel northbound and complete a U-turn to then travel southbound on 18th Street North. Stakeholders shared that U-turns are currently not permitted at signalized intersections in Brandon under the City of Brandon Traffic By-Law.

3. Alternative 3: Restrict Left Turns (Peak Hours Only)

Stakeholders suggested that restricting left turns during peak hours is a compromise between addressing traffic management issues at 18th Street North and Braecrest Drive, and minimizing impacts to other streets/routes in the neighbourhood.

4. Alternative 4: New Roadway Connection from Quail Ridge Drive to Mockingbird Drive

Stakeholders viewed a new roadway connection from Quail Ridge Drive to Mockingbird Drive desirable as it provides a new north-south connection for vehicles to access 18th Street North, as well as directs vehicles to a signalized intersection (Outback Drive and 18th Street North). However, one concern with a new roadway connection is how it may impact an important drainage channel for the area as it is quite common for this area to have standing water.

It was suggested that a new roadway connection could help improve the developability of the site generally located south of Mockingbird Drive and west of the proposed Quail Ridge Drive extension. An application was submitted to the City of Brandon to subdivide the parcel, but has not yet occurred.

To help address queueing at Outback Drive and 18th Street North, a stakeholder suggested to use 6th Street SW and the Trans Canada Highway in Medicine Hat as a precedent on how to address issues with queueing on frontage roads. Medicine Hat installed signals on the Trans Canada and on the adjacent frontage road. The signals are coordinated and the stop line on the frontage road is in a location to help limit queueing on a small road stub.

EVALUATION CRITERIA

Draft evaluation criteria that reflect the goals for the project and input obtained through public and stakeholder engagement were developed. At the stakeholder meeting, stakeholders were asked to share which category of evaluation criteria they believe to be most important by “voting”. Using dot stickers, each stakeholder could “vote” up to three times for different evaluation criteria categories. The results of this exercise will help inform the final weightings of each evaluation criteria category.

As shown in **Table 1**, the top evaluation criteria category that emerged from the stakeholder meeting was engineering and safety (20 votes) followed by community and environmental impacts (11 votes). Construction costs (0 votes) and traffic operations (3 votes) were identified as having the least importance in evaluating the proposed design concepts.

Table 1: Stakeholder Meeting Evaluation Criteria Summary

EVALUATION CRITERIA CATEGORY	NUMBER OF “VOTES”
Engineering and Safety	20
Community and Environmental Impacts	11
Traffic Operations	3
Active Transportation and Transit	6
Construction Costs	0
Ease of Construction and Maintenance	10

3.2 OPEN HOUSE

Open house attendees provided feedback on the proposed enhancements and alternatives through a comment sheet and on printed copies of the design concept drawings. A summary of the feedback received from the comment sheets is discussed in section 3.3 and feedback received on the design concept drawings is summarized below. Copies of the open house printed drawings with public comments is in **Appendix A**.

BRAECREST DRIVE AND 1ST STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES DRAWING

No written comments were provided on the drawing for traffic management alternatives at Braecrest Drive and 1st Street North at the open house.

BRAECREST DRIVE AND 1ST STREET NORTH PEDESTRIAN ACCOMMODATION ALTERNATIVES

Two comments were received regarding pedestrian accommodation alternatives at Braecrest Drive and 1st Street North. One comment suggested that the pedestrian accommodation alternative of a half signal at Braecrest Drive is the best and safest option. The second comment suggested that a curbside pull-out spot for transit be included in the half signal option north of Braecrest Drive.

BRAECREST DRIVE AND 18TH STREET NORTH TRAFFIC MANAGEMENT ALTERNATIVES

1. Alternative 1: Traffic Signals with Pedestrian Phase

Comments were mixed as to whether traffic signals at 18th Street North and Braecrest Drive should be installed. One comment suggested that signals are the preferred traffic management alternative for the intersection, yet another stated that signals should not be installed. In support of installing signals, it was shared that signals are safe and easy to understand.

2. Alternative 2: Restrict Left Turns (Permanent) and Alternative 3: Restrict Left Turns (Peak Hours Only)

Comments note mixed opinions regarding permanent restrictions for left-hand turns; while some comments agreed to the proposed alternative others did not. Comments expressed that sending traffic north to make a U-turn at Outback Drive and Braecrest Drive does not make sense, and that if either option is implemented, the City should consider adding a second southbound left turn lane from 18th Street North to Kirkcaldy Drive.

3. Alternative 4: New Roadway Connection from Quail Ridge Drive to Mockingbird Drive

Comments suggest that a new roadway connection from Quail Ridge Drive to Mockingbird Drive could be a viable option if impacts to Monterey Estates as a result of the new connection are minimal. It was expressed that the new roadway connection could increase traffic to the community but that the new connection would help with traffic operations at Braecrest Drive and 18th Street North.

4. General Comments

It was suggested that the Project Team considers a frontage road running parallel with 18th Street North connecting Braecrest Drive to the intersection of Mockingbird Drive and the existing frontage road. This connection would provide another alternative for vehicles to access a signalized intersection on 18th Street North.

EVALUATION CRITERIA

The evaluation criteria activity presented at the stakeholder meeting was also conducted at the open house. Using dot stickers, open house attendees could “vote” up to three times for evaluation criteria categories. As shown in **Table 2**, the evaluation criteria categories of engineering and safety and traffic operations each received 38 votes followed by community and environmental impacts with 24 votes. Categories which received the lowest votes were construction costs (6 votes), and active transportation and transit (18 votes).

Table 2: Open House Evaluation Criteria Summary

EVALUATION CRITERIA CATEGORY	NUMBER OF "VOTES"
Engineering and Safety	38
Community and Environmental Impacts	24
Traffic Operations	38
Active Transportation and Transit	18
Construction Costs	6
Ease of Construction and Maintenance	8

3.3 COMMENT SHEET (OPEN HOUSE AND ONLINE)

A comment sheet was available at the open house and online as a way to collect written feedback on the design concepts. A summary of the responses received for each question is below.

1. What are the first three digits of your postal code?

The online version of the comment sheet asked respondents to share the first three digits of their postal code. As seen in **Table 3**, the majority of respondents live within the study area (**Figure 3**); 32 respondents live in R7A which is south of Braecrest Drive and 16 respondents live in R7C which is north of Braecrest Drive and includes the Oak Bluff neighbourhood west of 18th Street North.

Table 3: Number of Responses Per Postal Code

POSTAL CODE	NUMBER OF RESPONSES
R7A	32
R7B	8
R7C	16

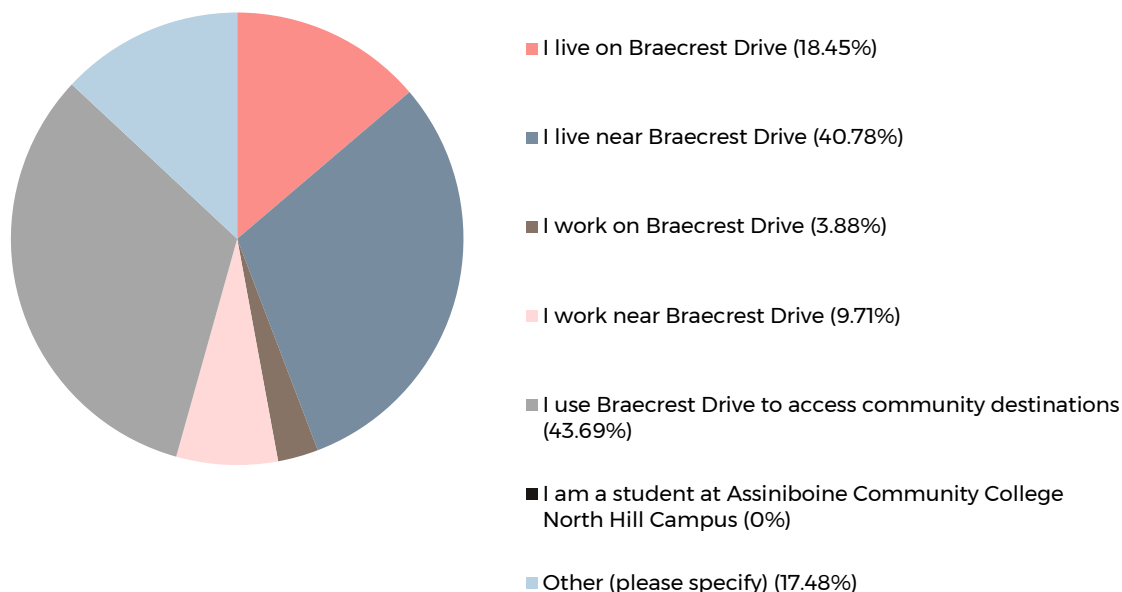


Figure 3: Postal Code Responses

2. What is your main connection to the Braecrest Drive Corridor?

From 103 responses, 40% of respondents indicated that they live near Braecrest Drive, 44% indicated that they use Braecrest Drive to access community destinations, 18% of respondents indicated that they live on Braecrest Drive, 10% indicated that they work near Braecrest Drive, 4% work on Braecrest Drive and 17% selected 'other'. The comments provided for 'other' included connections to the Oak Bluff neighbourhood, Monterey Estates and Assiniboine Community College.

Connection to the Braecrest Drive Corridor



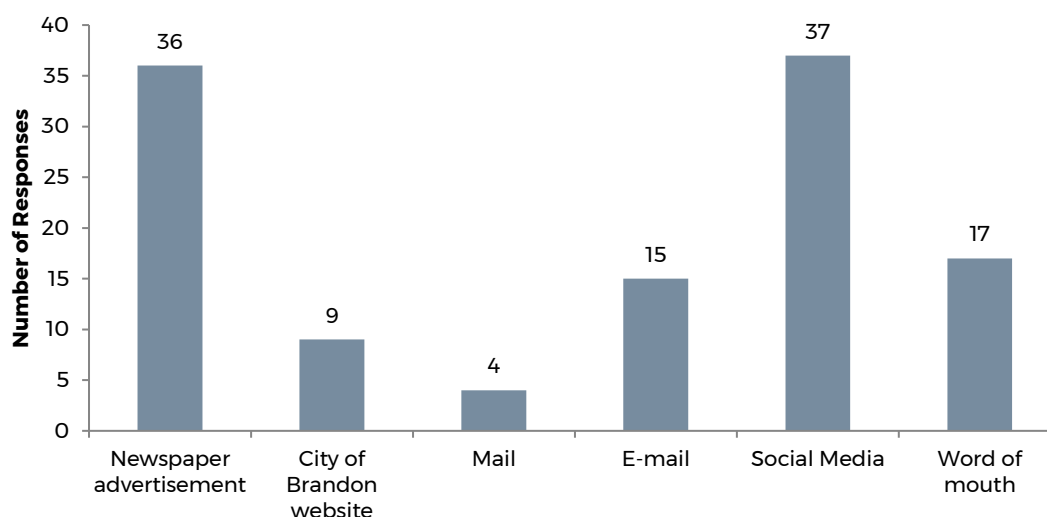
Multiple responses allowed per respondent

Responses to Question 1 and Question 2 suggest that the individuals who completed the comment sheets are well connected to the study area, and likely have first hand knowledge and experience of the existing issues.

3. How did you learn about the study?

Social media (37 responses) and the newspaper advertisement (36 responses) were quite effective in advertising the study. In addition, 17 responses indicated that they learned about the study through word of mouth, 15 responses learned about the study through email, 9 through the City of Brandon website and 4 through mail.

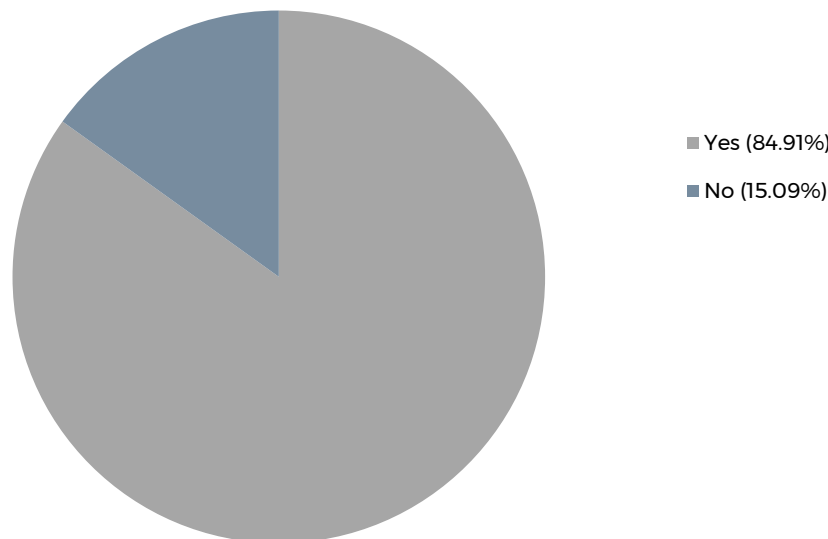
Study Promotion



4. Did the open house boards provide adequate information on the purpose of the study?

The majority of respondents (85%) indicated that the open house boards provided adequate information on the purpose of the study.

Did the open house boards provide adequate information on the purpose of the study?



5. What are your thoughts on the proposed enhancements for Braecrest Drive, 1st Street North and/or 18th Street North (shown on Board 6, 7 and 8)?

For the proposed **Braecrest Drive** enhancements, responses note that roundabouts are a good suggestion to help improve traffic management and provide a safe place for pedestrians to cross but there are concerns with adding roundabouts to Braecrest Drive. Comments questioned whether the proposed locations at Daly Crescent and Knowlton Drive are appropriate, because of low traffic volumes. In addition, specific comments noted that roundabouts are disliked, because of installation costs, drivers not obeying the rules or knowing how to use them, as well as concerns on whether larger vehicles could use the roundabouts.

Responses shared that the proposed pedestrian crossings on Braecrest Drive are a cost-efficient solution that will help improve safety for pedestrians with minimal traffic impacts. The proposed location at Braecrest Drive and Quail Ridge Drive was specifically mentioned as a location where a pedestrian crossing should be installed.

No specific comments related to the pathway connection from Kensington Crescent to 1st Street North were shared in the comment sheet. Only one comment regarding the proposed sidewalk connections was shared which noted that there is a need for sidewalks on the north side of Braecrest Drive.

A few comments regarding the proposed enhancements for **1st Street North** suggest that the proposed transit connection and multi-use pathway is liked. In addition, it was suggested that the multi-use pathway be built on the west side of 1st Street North rather than the proposed east side.

Proposed enhancements for **18th Street North** included improving an existing transit connection and reducing the speed limit on 18th Street North. Responses indicate mixed opinions on the transit connection; one comment suggests that the enhancement is liked while the other shares that they don't like the idea of a bus stop located within a merge lane. Comments also suggest a difference of opinion on reducing the speed limit on 18th Street North. There are some concerns that lowering the speed limit to 60 km/hr would result in longer waits for traffic and

potentially more accidents. However, others share that lowering the speed limit on Braecrest Drive will do just the opposite and reduce accidents by improving traffic operations.

6. What are your thoughts on the proposed alternatives for the intersection of Braecrest Drive and 1st Street North (shown on Board 9, 10 and 11)?

The following comments were shared for the proposed traffic management alternatives for **Braecrest Drive and 1st Street North**. General comments ask whether traffic management improvements at Braecrest Drive and 1st Street North are necessary. Some of the responses suggest a belief that the demand for left-hand turns from Braecrest Drive to 1st Street North is not significant enough to warrant left turn restrictions. Rather, improvements focusing on greater pedestrian safety and/or signage alerting vehicles to a signalized intersection may be a more appropriate solution.

Comments specific to the permanent left turn restrictions note that a permanent left turn restriction will improve traffic and vehicle safety as it is this turning movement which creates near misses and accidents. However, there are concerns that the proposed permanent restriction will result in additional traffic on White Swan Street. White Swan Street does not have sidewalks and increasing traffic volumes on a residential street without sidewalks is a concern for local area residents. Comments specific to left turn restrictions during peak hours noted that this alternative may not be that effective in improving traffic operations as it relies on driver compliance.

Comments suggest that limited access into ACC is well liked and that it would be positive to have additional access into the campus.

The proposed half signal at Braecrest Drive and 1st Street North did not receive many positive responses in the comment sheets. The most reoccurring concern with installing a half signal, regardless of the proposed location, is impeding traffic during slippery road conditions. Comments suggest that a half signal will create a false sense of pedestrian safety because vehicles will have difficulty stopping and starting on the hill. A few comments did share that pedestrian infrastructure is required at the intersection, and that a half signal is a practical and safe option. To help mitigate concerns regarding vehicles starting/stopping on the hill, comments note that additional sanding/salting may be required.

7. What are your thoughts on the proposed alternatives for the intersection of Braecrest Drive and 18th Street North (shown on Board 12 and 13)?

The proposed traffic signal at Braecrest Drive and 18th Street North received quite a few comments many of which generally indicated support for signals. Comments express how signals would be the most suitable option as it provides the safest alternative for drivers, pedestrians and cyclists, while maintaining all-direction traffic operations. In addition, it was noted that all drivers understand the rules of traffic signals and is therefore ‘user-friendly’. The signal is also viewed as a strong long-term solution which can handle traffic volumes from future development. A handful of comments indicate that a signal is also preferred because respondents dislike the left turn restriction and new roadway connection.

Comments which do not support the proposed signal suggest that a signal at Braecrest Drive and 18th Street North is a bad idea because large vehicles may not be able to get up the hill in slippery conditions after being stopped at a signal at Braecrest Drive. Some comments note that this concern can be mitigated through improved winter maintenance (i.e., priority sanding and salting) and points to other Canadian cities which manage signals on roadways with steeper grades than 18th Street North.

Left turn restrictions from Braecrest Drive onto 18th Street North received quite a bit of support in the comment sheet responses. Comments suggest that permanent (as well as peak hour restrictions) are a cost-effective solution that will help manage existing issues until a longer-term solution, such as the Clare Avenue extension and connection to Braecrest Drive is developed. Respondents who do not support left turn restrictions share that neither option addresses pedestrians and cyclists crossing 18th Street North as well as generally dislike having to be forced to make a U-Turn on 18th Street North. In addition, there are concerns as to whether drivers will obey a peak hour left turn restriction and that the permanent restriction limits connectivity to the Oak Bluff neighbourhood.

Responses indicate a mix of opinion on the new roadway connection from Quail Ridge Drive to Mockingbird Drive. Quite a few comments support the new roadway suggesting that it will provide an alternate route to a signalized

intersection, provides an opportunity to reinstate transit service in the neighbourhood, and could remove the need for left turn restrictions at Braecrest Drive and 18th Street North. However, there are concerns that the new connection would bring increased traffic near and/or through Monterey Estates which is accessed off of Mockingbird Drive. Comments suggest that local area residents use the existing right-of-way as a green space and as an active transportation (AT) connection to the multi-use path on Braecrest Drive. There are some fears that if a new road is built here, this community space will be lost. In addition, a few comments note whether the existing service road has the capacity to handle increased traffic, specifically whether the short stretch of Cumberland Avenue can accommodate vehicles queuing at the signals.

8. Evaluation criteria is proposed to evaluate the options for the Braecrest Drive Corridor (shown on Board 13). Please rank the evaluation criteria categories using the drop-down boxes with 1 as the most important.

The online comment sheet asked respondents to rank all six evaluation criteria categories in order of most important to least important. A weighted ranking was then assigned to each criteria category. As shown in **Table 4** traffic operations received the highest weighted ranking (4.82) followed by engineering and safety (3.89). Categories which received the lowest rankings were active transportation and transit (2.89), and community and environmental impacts (2.94).

Table 4: Evaluation Criteria

EVALUATION CRITERIA CATEGORY	WEIGHTED SCORE
Engineering and Safety	3.89
Community and Environmental Impacts	2.94
Traffic Operations	4.82
Active Transportation and Transit	2.89
Construction Costs	3.41
East of Construction and Maintenance	3.37

9. Do you have any suggestions for the evaluation criteria (Board 14)?

A few comments shared that the evaluation criteria should reflect maintaining traffic flow and minimize diverting traffic onto adjacent neighbourhood streets.

10. Do you have any other comments or suggestions that should be considered for the proposed options?

The following comments or suggestions were shared in the comment sheet:

- A suggestion to add a pedestrian crossing at Outback Drive and 18th Street North;
- Extending the service road that runs parallel and east to 18th Street North to Braecrest Drive; and
- Driver education on how to use the center median on 18th Street North.

3.4 SUMMARY & NEXT STEPS

Feedback from participants at the stakeholder meeting, public open house and online comment sheet expressed preferences for the recommended design and evaluation criteria category weightings. Although differences in opinion exist in which design concept will best provide a solution for the existing issues for the Braecrest Drive Corridor Study Area, the feedback and comments shared in Phase 2 Public Engagement do offer the following valuable insight.

EVALUATION CRITERIA

As shown in **Table 5**, the evaluation criteria category of engineering and safety received the most number of votes at the stakeholder meeting and open house, as well as was ranked the second highest in the online comment sheet. Traffic operations received the same number of votes as engineering and safety at the open house, and was ranked the highest in the online comment sheet. This suggests that the evaluation criteria should weight these two categories high. Construction costs received the least number of votes at the stakeholder meeting and open house but was ranked third in the online comment sheet. Although active transportation and transit received 18 number votes at the open house, stakeholders and online comment sheet respondents ranked the category quite low; 6 votes at the stakeholder meeting and ranked the least important (2.89) through the online comment sheet.

Table 5: Evaluation Criteria Feedback

EVALUATION CRITERIA CATEGORY	STAKEHOLDER MEETING (TOTAL "VOTES")	OPEN HOUSE (TOTAL "VOTES")	ONLINE COMMENT SHEET (WEIGHTED SCORE)
Engineering and Safety	20	38	3.89
Community and Environmental Impacts	11	24	2.94
Traffic Operations	3	38	4.82
Active Transportation and Transit	6	18	2.89
Construction Costs	0	6	3.41
Ease of Construction and Maintenance	10	8	3.37

ENHANCEMENTS

Comments shared at the public engagement events reinforced how there are issues with pedestrian safety along Braecrest Drive and at the intersections of Braecrest Drive and 18th Street North and Braecrest Drive and 1st Street North. The proposed enhancements (i.e., roundabouts, pedestrian crossings, pathway and sidewalk connections, relocating transit stops, and reducing the speed limit) for Braecrest Drive, 18th Street North and 1st Street North will all help improve pedestrian safety within the study area.

ALTERNATIVES

The proposed traffic management alternative for 1st Street North included restrictions on left turns. The feedback received for this alternative suggested that the northbound left turn from Braecrest Drive onto 1st Street North is not

much of an issue. However, as traffic volumes are predicted to increase as a result of future development, it is predicted that the northbound left turn will become more of an issue for drivers.

Comments noted that left turn restrictions at Braecrest Drive and 1st Street North may result in increased traffic on other neighbourhood streets, specifically White Swan Street. White Swan Street is a residential street and currently does not have a sidewalk. If left turn restrictions are recommended for Braecrest Drive and 1st Street North, the City of Brandon may consider adding a sidewalk to White Swan Street.

In general, the feedback shared in the second round of public engagement suggests a strong desire for the City of Brandon and MI to address the southbound left turn from Braecrest Drive to 18th Street North. Comments note that there have been many discussions and proposals for improvements at this intersection and that it is time to rectify the problems. While opinions widely vary on what is the best solution for the intersection, it is apparent that everyone agrees that changes to the intersection and/or access to 18th Street North is required.

NEXT STEPS

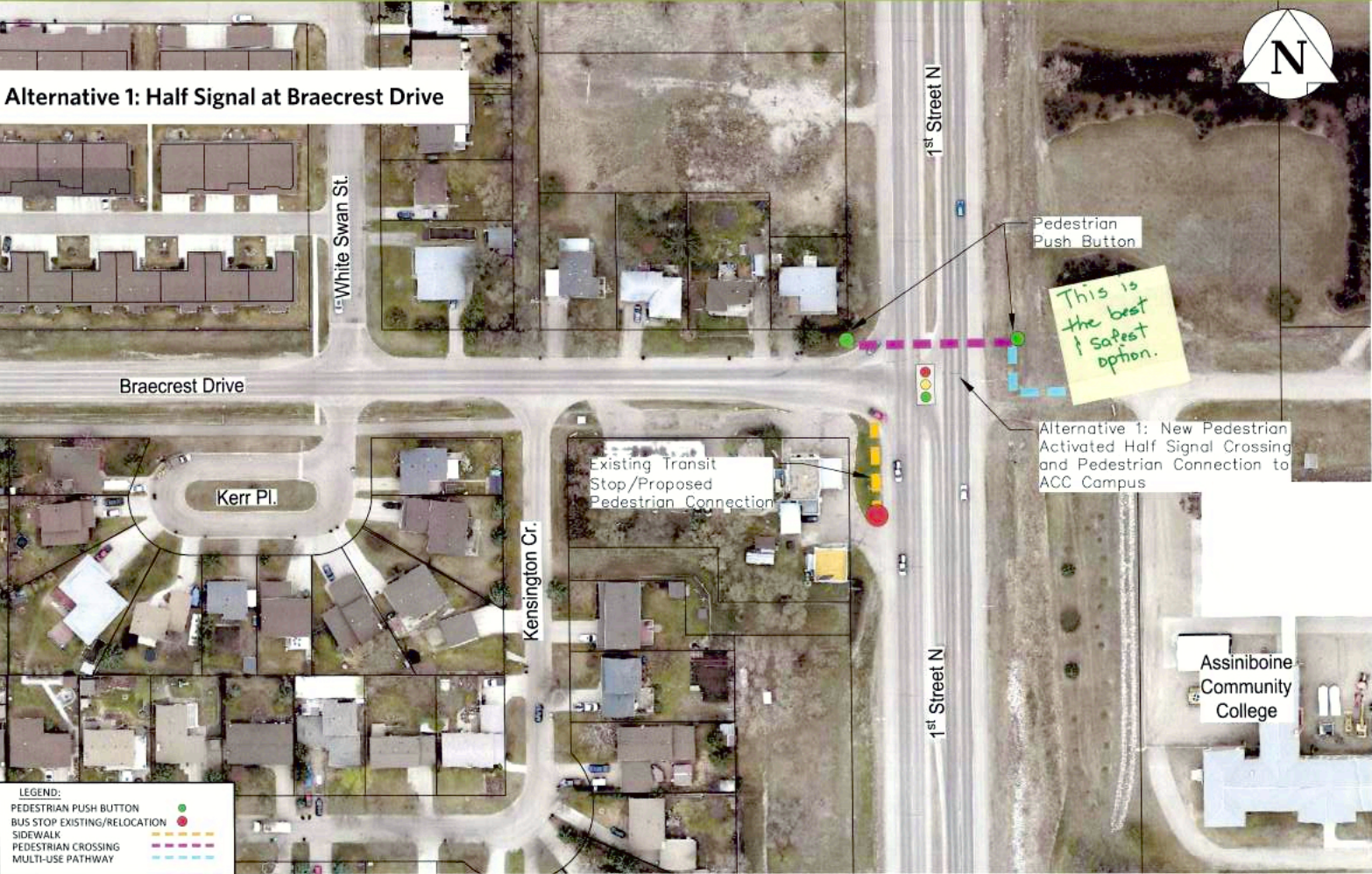
Using the feedback from the public engagement events, the Project Team will assign weightings to the evaluation criteria categories and through discussion with the Steering Committee will rank each enhancement and alternative to determine the preferred design concepts. The recommended design concepts will be presented back to the public at a public open house in late April/early May 2019.

APPENDIX

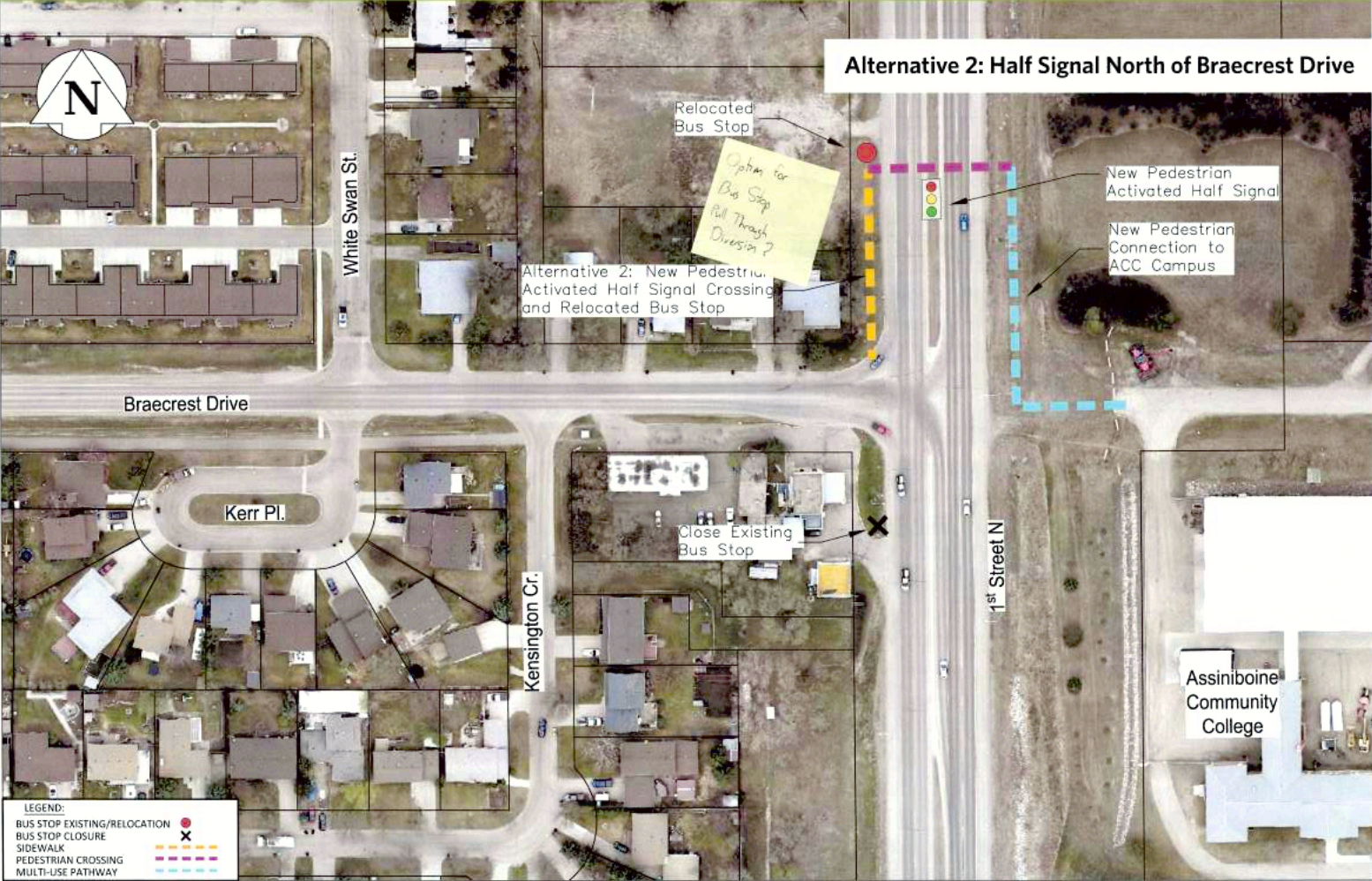
A TABLE MAPS

Braecrest Drive and 1st Street North - Pedestrian Accommodation Alternatives

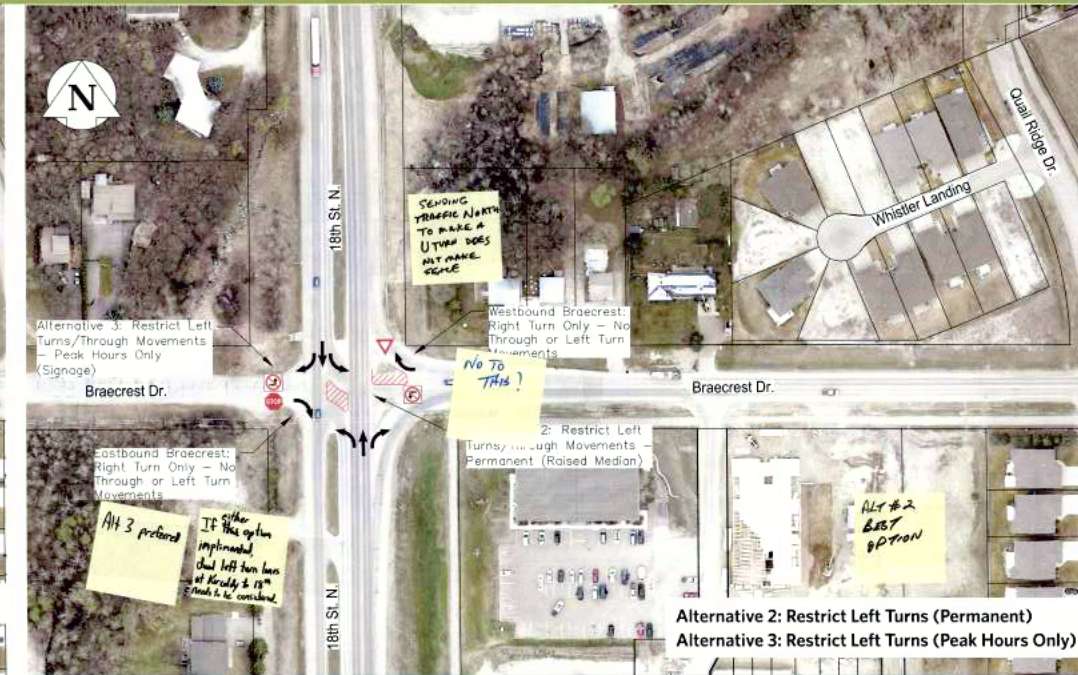
Alternative 1: Half Signal at Braecrest Drive



Alternative 2: Half Signal North of Braecrest Drive




Braecrest Drive and 18th Street North - Traffic Management Alternatives



Evaluation Criteria

PLACE
DOTS
HERE

- » Draft evaluation criteria that reflect the goals for the project and input obtained through public and stakeholder engagement have been developed.
- » The following criteria are proposed to evaluate the options for the Braecrest Drive Corridor.

EVALUATION CRITERIA CATEGORY		Place up to three dots in the column below to indicate which category of evaluation criteria is most important to you.
	Engineering and Safety <ul style="list-style-type: none">How well does the option meet the geometric design criteria for the project?How well does the option meet Manitoba Infrastructure's (MI) standards and align with MI's plans?How well does the option meet driver expectations?How well does the option address safety issues for all users of the facility, including vehicles, pedestrians, and cyclists?How well does the option accommodate large trucks and other heavy vehicles?	
	Community and Environmental Impacts <ul style="list-style-type: none">Does this option require property acquisition and if so, how significant?Does the option impact or improve access for area properties?How does the option impact the community/neighbourhood?What is the impact of the option on the surrounding environment?How well does the option align with the goals of the ACC Master Plan?	
	Traffic Operations <ul style="list-style-type: none">How well does the option accommodate traffic volumes (congestion/delays)?	
	Active Transportation and Transit <ul style="list-style-type: none">Does the option improve pedestrian and cyclist infrastructure?Does the option improve pedestrian and cyclist crossing risks?How does the option impact transit operations?How well does the option accommodate access for transit users?Is the option accessible for all potential users?	
	Construction Costs <ul style="list-style-type: none">How does the option impact utilities?What are the construction costs associated with the option?	
	Ease of Construction and Maintenance <ul style="list-style-type: none">How difficult is the option to construct and stage?How difficult will the option be to maintain?	

The final weightings for each evaluation criteria category have not yet been determined.

CITY OF BRANDON

FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR PUBLIC ENGAGEMENT REPORT – PHASE THREE

JUNE 28, 2019

CONFIDENTIAL





FUNCTIONAL DESIGN OF THE BRAECREST DRIVE CORRIDOR

PUBLIC ENGAGEMENT REPORT - PHASE THREE

CITY OF BRANDON

CONFIDENTIAL

PROJECT NO.: 18M-01581-00
CLIENT REF: CLIENT REF. NO
DATE: JUNE 28, 2019

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APPENDIX B	DISPLAY BOARDS
APPENDIX C	COMMENT SHEETS

1 INTRODUCTION

1.1 PROJECT CONTEXT

WSP Canada Group Limited (WSP), was retained by the City of Brandon (City) to produce a functional design for the Braecrest Drive Corridor. To understand the role of Braecrest Drive and to develop future solutions, a larger study area was defined for the project as shown in **Figure 1**.

Braecrest Drive is an east-west roadway that services the North Hill neighbourhood in Brandon, which is comprised of a mix of residential, commercial and recreational uses. Braecrest Drive provides an important connection to 18th Street North and 1st Street North, and carries vehicle traffic, public transit and active transportation users to community destinations within the North Hill neighbourhood, and to adjacent neighborhoods. The two-major north-south roadways within the study area are 18th Street North and 1st Street North, both of which connect to the Trans-Canada Highway and carry high traffic volumes south into the City of Brandon. 18th Street North and 1st Street North are under the jurisdiction of Manitoba Infrastructure (MI) north of Braecrest Drive and under the jurisdiction of the City of Brandon south of Braecrest Drive. MI and the City of Brandon are both involved in this project.

There are existing concerns regarding traffic, safety for vehicles and pedestrians, and travel speed along Braecrest Drive. There are also concerns regarding the unsignalized connections of Braecrest Drive at 18th Street North and at 1st Street North, connections into Assiniboine Community College (ACC) North Hill Campus, and transit and pedestrian facilities. The study will ultimately provide recommendations to address existing challenges within the study area.



Figure 1: Braecrest Drive Corridor Study Area

1.2 REPORT CONTEXT

Engaging the public is an important component of the Braecrest Drive Corridor Study. An effective and robust engagement program is necessary to communicate information about the project, identify existing transportation and active transportation related issues and opportunities as they exist in the study area, and provide a preferred design alternative.

Public engagement for the Functional Design of the Braecrest Drive Corridor includes three phases (**Figure 2**).



Figure 2: Public Engagement Phases

This report is a summary of Phase Three Public and Stakeholder Engagement. The intent of Phase Three Public and Stakeholder Engagement was to show how public and stakeholder feedback from Phase 2 was reflected in the design and to share the preferred design alternatives.

2 PHASE THREE PUBLIC ENGAGEMENT

2.1 OVERVIEW

Following Phase Two Public and Stakeholder Engagement, the Project Team reviewed public input on the existing issues and challenges for the Braecrest Drive Corridor and made final changes to the preferred designs. The conceptual designs were classified as either an enhancement or an alternative. Enhancements were defined as options in which either none, some, or all could be implemented. Alternatives were defined as options in which either none or one could be implemented. Both the proposed enhancements and alternatives were assigned a conceptual timeframe from short, medium to long-term.

Phase Three Public and Stakeholder Engagement presented the preferred conceptual designs to the public to receive their feedback. Phase Three included three public engagement activities: meetings/discussions with affected landowners, a public open house, and an online comment sheet.

2.1.1 LANDOWNER MEETINGS

On May 9th, 2019, affected landowners were invited to the public open house to review and discuss the preferred enhancements and alternatives. Six landowners were invited in total. The meetings included a brief discussion on the preferred enhancements and an overview of any impacts to their property.

2.1.2 OPEN HOUSE

The public open house was hosted on May 9th, 2019, at the Grand Valley Church from 4:00 to 7:00 p.m. Local area residents within the study area were invited to attend through direct mail. The event was also advertised in the Brandon Sun and through social media. One hundred and thirty-six people attended the event. Informational display boards and large drawings of the preferred alternatives were set-up, and WSP, the City of Brandon and Manitoba Infrastructure staff were available for informal discussion and questions. Attendees could leave comments regarding the preferred enhancements and design alternatives using a comment sheet. Thirty-six comment sheets were completed at the open house.

2.1.3 ONLINE COMMENT SHEET

A copy of the open house display boards and comment sheet were posted on the City of Brandon website for approximately two weeks following the open house. The online comment sheet provided an opportunity for those who could not attend the open house to participate in the project and provide their feedback on the preferred enhancements and design alternatives. Only one online comment sheet was completed.

3 STAKEHOLDER AND PUBLIC FEEDBACK

3.1 LANDOWNER MEETINGS

Six different landowners were contacted regarding the preferred enhancements and design alternatives impact on their properties. Five landowners attended the public open house and discussed the impacts with WSP staff and staff from the City of Brandon. The sixth landowner contacted WSP by phone. A summary of their comments is found below. A copy of the table maps used to illustrate the impacts to private land owners is shown in **Appendix A**.

BRAECREST DRIVE AND 18TH STREET NORTH PROPERTY IMPACTS

Three different landowners were shown to be impacted by the proposed roundabout concept shown for Braecrest Drive and 18th Street North. Two landowners showed interest in the concept and did not express a concern with the design. A third landowner did not express any concern with the roundabout but did express concern about the placement of a bus stop north of the roundabout adjacent to their property.

BRAECREST DRIVE AND DALY ROUNDABOUT PROPERTY IMPACTS

One landowner was in attendance at the public hearing to discuss impacts to property because of the roundabout at Braecrest Drive and Daly Crescent. That landowner did not express any concerns regarding the proposed concept and was also not aware the parking lot on their property was encroaching onto the neighbouring property. The City of Brandon received additional feedback regarding the location of the northerly right-of-way from the roundabout and a request to see it be situated adjacent to the existing restaurant to reduce impacts on the land's future developability.

QUAIL RIDGE DRIVE AND MOCKINGBIRD DRIVE REALIGNMENT PROPERTY IMPACTS

Two property owners were in attendance at the public open house to discuss impacts on their properties as a result of the realignment of Quail Ridge Drive to connect with Mockingbird Drive. No concerns were expressed by either land owner as a result of the preferred options presented.

3.2 OPEN HOUSE

Open house attendees provided feedback on the preferred enhancements and alternatives through a comment sheet. A summary of the feedback received from the comment sheets is summarized below. Copies of the open house boards can be found in **Appendix B** and detailed public comments can be found in **Appendix C**.

A summary of the responses received for each question is below.

1. What are the first three digits of your postal code?

The online version of the comment sheet asked respondents to share the first three digits of their postal code. As seen in **Table 3**, the majority of respondents live within the study area (**Figure 3**); 4 respondents live in R7A which is south of Braecrest Drive and 27 respondents live in R7C which is north of Braecrest Drive and includes the Oak Bluff neighbourhood west of 18th Street North.

Table 1: Number of Responses Per Postal Code

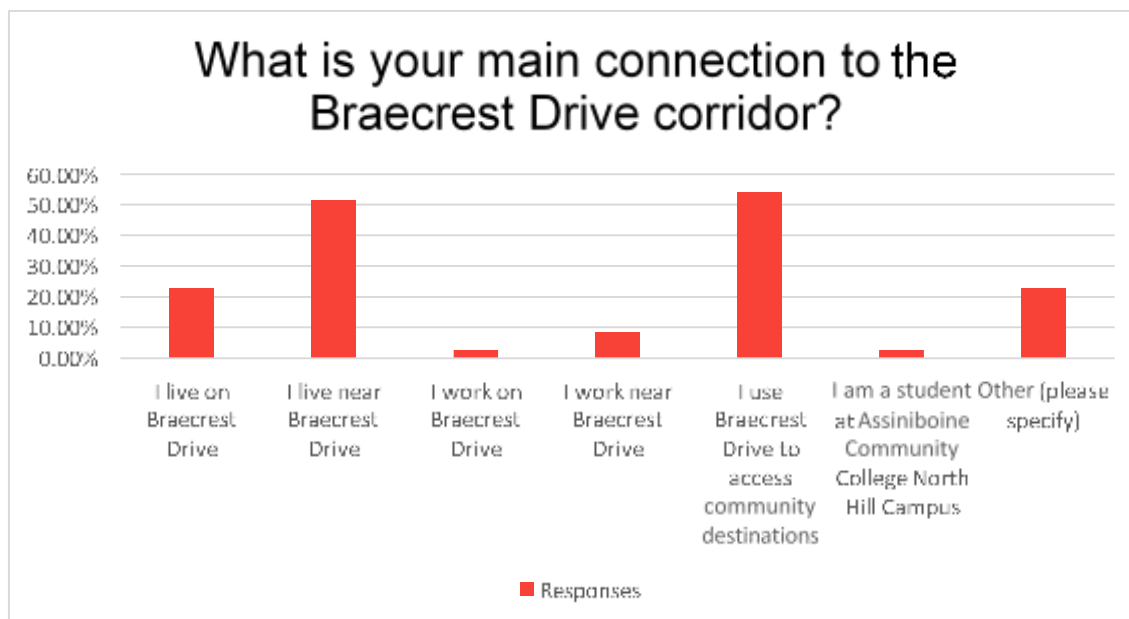
POSTAL CODE	NUMBER OF RESPONSES
R7A	4
R7B	4
R7C	27
R0K	1



Figure 3: Postal Code Responses

2. What is your main connection to the Braecrest Drive Corridor?

Respondents were asked to identify their connection to Braecrest Drive Corridor and had the opportunity to check multiple options within the question.

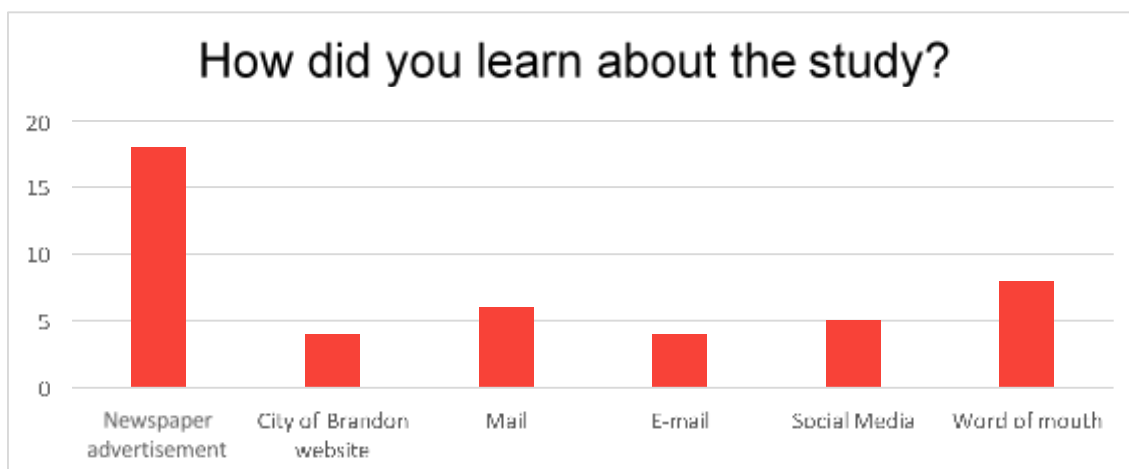


*Multiple responses allowed per respondent

Responses to Question 1 and Question 2 suggest that the individuals who completed the comment sheets are well connected to the study area, and likely have firsthand knowledge and experience of the existing issues.

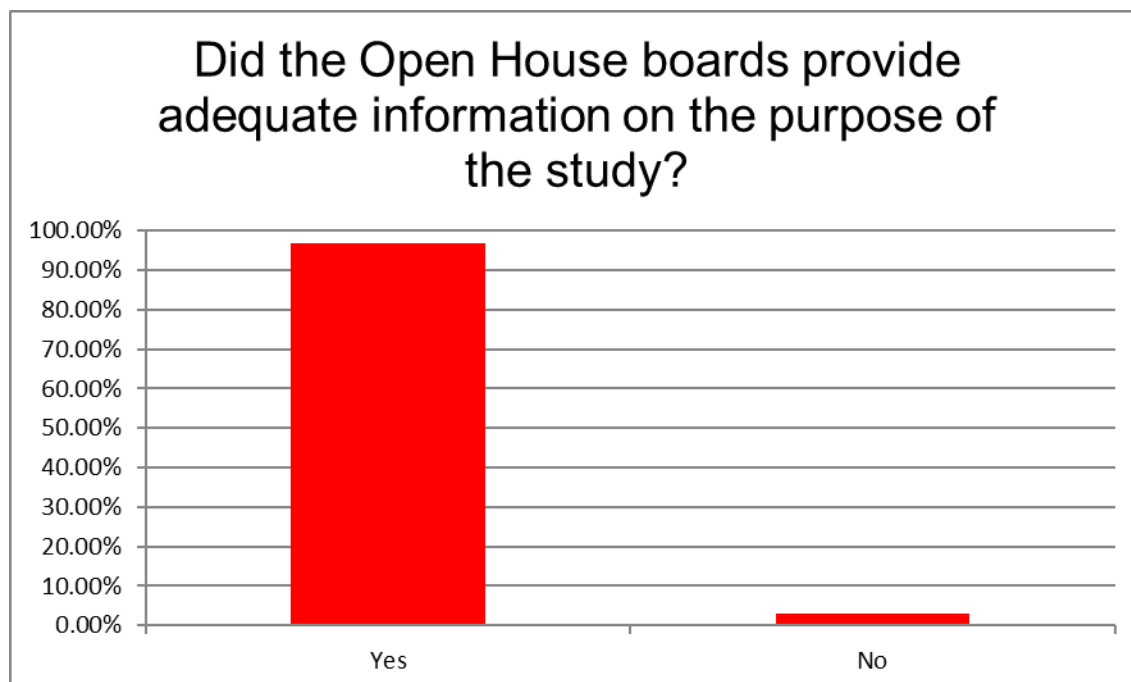
3. How did you learn about the study?

Newspaper advertisement (18 responses) and word of mouth (8 responses) were the most effective in advertising the study.



4. Did the open house boards provide adequate information on the purpose of the study?

The overwhelming majority of respondents (97%) indicated that the open house boards provided adequate information on the purpose of the study.



5. What are your thoughts on the recommended design for Braecrest Drive (i.e. pedestrian crossings, sidewalk connections, intersection modifications, and pathway connection) on Board 8?)?

For the proposed Braecrest Drive Recommended Design, responses note that the inclusion of enhancements to pedestrian crossings and pathways are very much needed and great additions to Braecrest Drive.

Specific comments allude to a lack of crossings across 18th Street North and then going north or south for residents who live on the west side of 18th Street North. Additionally, several comments questioned the viability of a roundabout at the corner of Braecrest Drive and 18th Street North.

Another comment asked whether ditches will be removed and curb/gutters will be installed for a more urban transect, but overall, the commenter liked the proposed enhancements.

6. What are your thoughts on the recommended design for Braecrest Drive and 1st Street North (i.e. permanent restriction on left turns and limited access to Assiniboine Community College (ACC), pedestrian half signal north of Braecrest Drive, transit stop relocation, ACC bus turnaround, and multi- use pathway) on Board 9?

For the recommended design of Braecrest Drive and 1st Street North, including the bus turnaround at Assiniboine Community College, the majority of respondents agreed the recommendations were a good idea, indicating broad support for the recommendations.

Additional comments indicated that enhanced signage will be required for White Swan Street to advise drivers of the changes and that drainage should be a consideration.

7. What are your thoughts on the recommended design for Braecrest Drive and 18th Street North (i.e. transit stop relocation, connection from Quail Ridge to Mockingbird Drive, and roundabout) on Board 10 and 11?

Boards 10 and 11 highlighted the recommended design for the connection of Quail Ridge Drive to Mockingbird Drive and the roundabout at the intersection of Braecrest Drive and 18th Street North.

Concerning the recommended concept of a roundabout at the intersection of Braecrest Drive and 18th Street North, the majority of respondents indicated this was a good idea and showed broad support for the recommendation.

Comments were mixed regarding the connection of Quail Ridge Drive and Mockingbird Drive. Several respondents believe this to be a good idea, and one that will improve circulation within the area, while several other respondents expressed concern there will be additional traffic moving through Monterey Estates to Clare Avenue.

Several comments expressed concern regarding the location of the transit bus stop north of the roundabout along 18th Street North.

8. Do you have any other comments regarding the recommended design?

Several comments expressed concern regarding how semi-trailers will be able to mount and traverse the roundabouts along Braecrest Drive and 18th Street North. Most agree this is a high traffic intersection, however, several respondents were not sure roundabouts are the best idea for that much traffic.

Several comments suggest the issues with traffic in this area are the cause of drivers not following the rules of the road.

Additionally, several comments expressed concern that having a two-lane roundabout at the intersection of Braecrest and 18th Street and that having a complex roundabout poses a significant risk.

4 SUMMARY & NEXT STEPS

Feedback from participants at the public open house and online comment sheet expressed broad support for the proposed enhancements and design alternatives as presented. While several commenters expressed general concern regarding the flow of traffic, and the viability and complexity of roundabouts, the feedback provided supports the final recommendations and provides insight into the preferences of the community.

ENHANCEMENTS

Comments shared at the final public house indicate broad support and acceptance for the proposed enhancements to pedestrian connectivity and flow of transportation along the Braecrest Drive Corridor. The proposed enhancements (i.e., roundabouts, pedestrian crossings, pathway and sidewalk connections, relocating transit stops, and reducing the speed limit) for Braecrest Drive, 18th Street North and 1st Street North will all help improve pedestrian safety within the study area.

ALTERNATIVES

The proposed traffic management alternative for 1st Street North included restrictions on left turns. Feedback was generally positive and indicates support for the alternative.

Additionally, there was broad support for the inclusion of a roundabout at the intersection of Braecrest Drive and 18th Street North, with many believing this to be most appropriate solution, as opposed to traffic lights.

In general, the feedback shared in the third and final round of public engagement suggests a strong support for the recommendations being proposed for the Braecrest Drive Corridor.

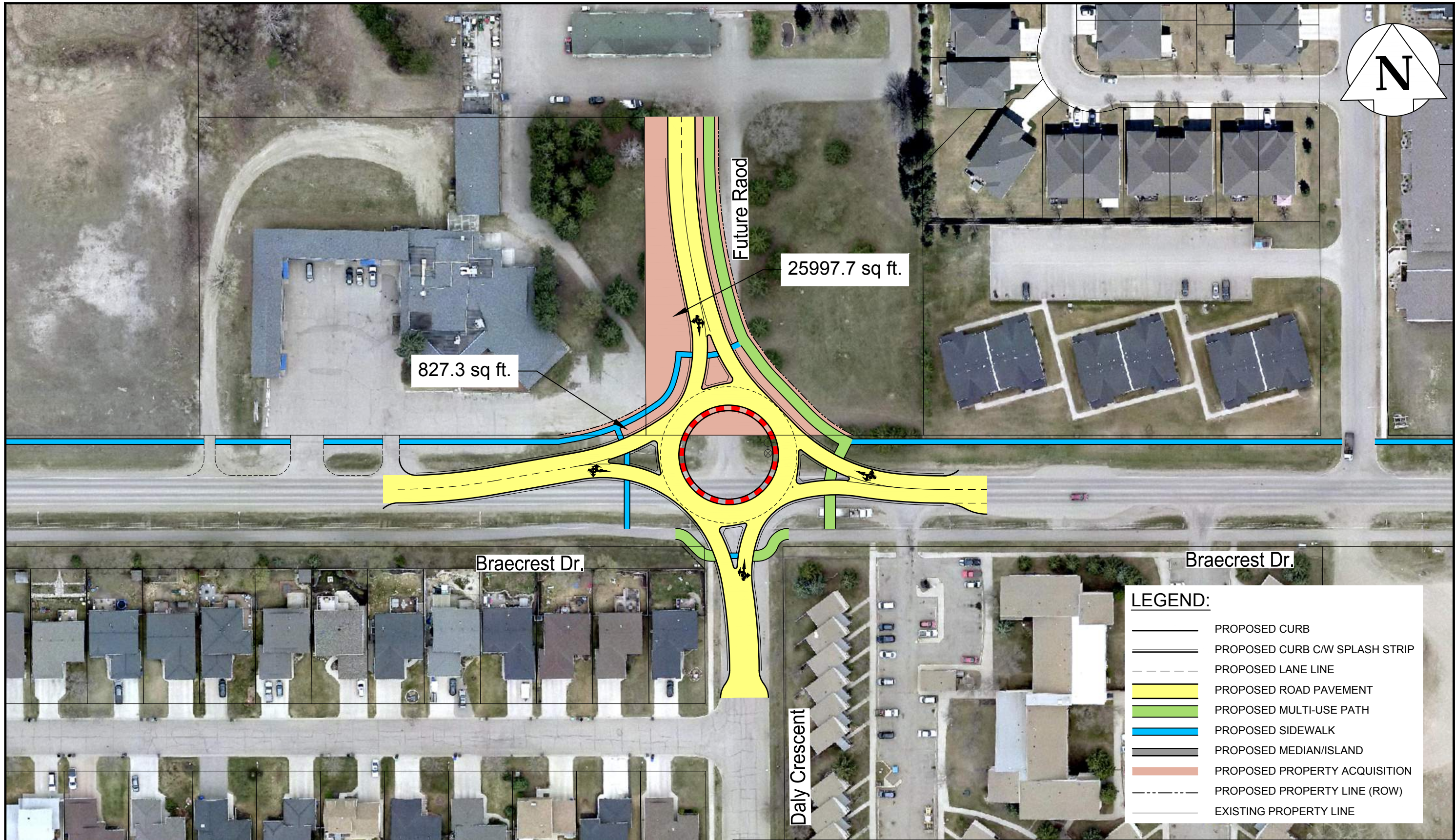
NEXT STEPS

The final report on the functional design of Braecrest Drive will be submitted to the City of Brandon for their comment. The findings from the final phase of public engagement, as well as the first and second phases of public engagement will also be included in the report.

APPENDIX

A

PROPERTY
MAPS



- Areas are approximation only
- Jurisdictions may require additional lands as necessary
- Development on these properties still subject to review and approval by the appropriate jurisdiction (MI and/or City of Brandon)

FOR DISCUSSION
PURPOSES ONLY

PRELIMINARY
NOT FOR CONSTRUCTION



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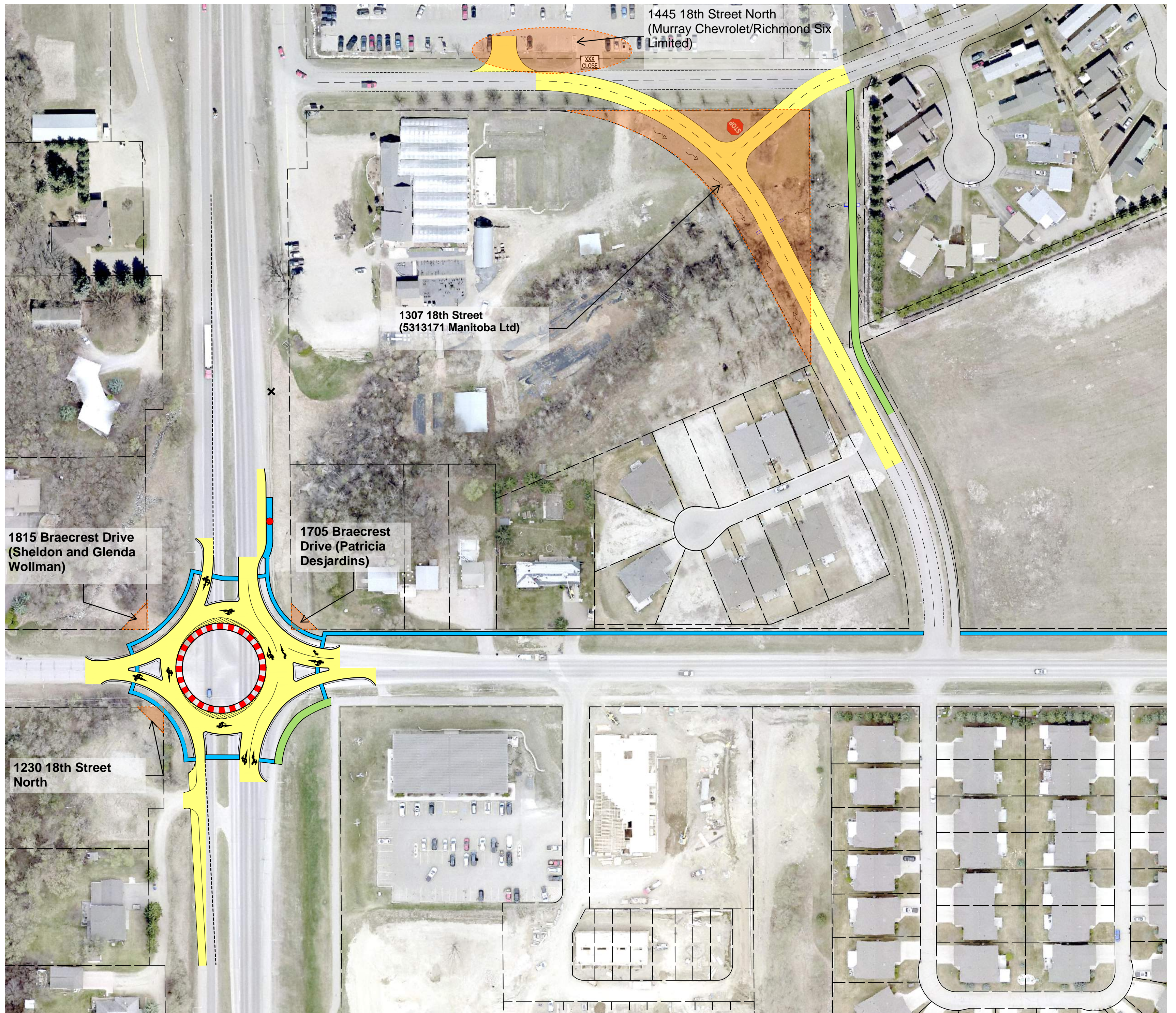
CITY OF BRANDON
Bracrest Drive Corridor Functional Design
Bracrest Dr. & Daly Crescent Roundabout -
Proposed Property Acquisition

SCALE: 1:1000

DATE: Apr.30.2019

DWG. No. FIGURE 1.2

NOTE:
These design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.



1445 18th Street North
(Murray Chevrolet/Richmond Six Limited)

1307 18th Street
(5313171 Manitoba Ltd)

1815 Braecrest Drive
(Sheldon and Glenda Wollman)

1705 Braecrest Drive (Patricia Desjardins)

1230 18th Street North

APPENDIX

B

DISPLAY
BOARDS





FUNCTIONAL DESIGN OF THE

Braecrest Drive Corridor



Public Open House

Thursday, May 9, 2019

Welcome!

To the Open House for the

Functional Design of the

Braecrest Drive Corridor



Please review the boards which provide project background information and the recommended design for the Braecrest Drive Corridor study area



Ask questions and share your feedback with project team members



Complete a comment sheet

Project Background

1

- » Braecrest Drive is an east-west roadway that services the North Hill neighbourhood, which is comprised of a mix of residential, commercial, and recreational uses.
- » Braecrest Drive provides an important connection between 18th Street North and 1st Street North and carries vehicle traffic, public transit, and active transportation users.
- » There are existing concerns regarding traffic, safety for vehicles and pedestrians, and travel speeds along Braecrest Drive. There are also concerns regarding the unsignalized connections at 1st Street North and 18th Street North.
- » The City of Brandon is working with WSP Canada Group Limited (WSP), a planning and engineering consulting firm, to address these concerns by developing a recommended design for the Braecrest Drive Corridor.



Braecrest Drive at 1st Street North (looking west)



Bus Stop at Braecrest Drive and 1st Street North (looking south)



Bus Stop on 18th Street North (looking north)



Braecrest Drive (looking east)



Braecrest Drive at 18th Street North (looking east)

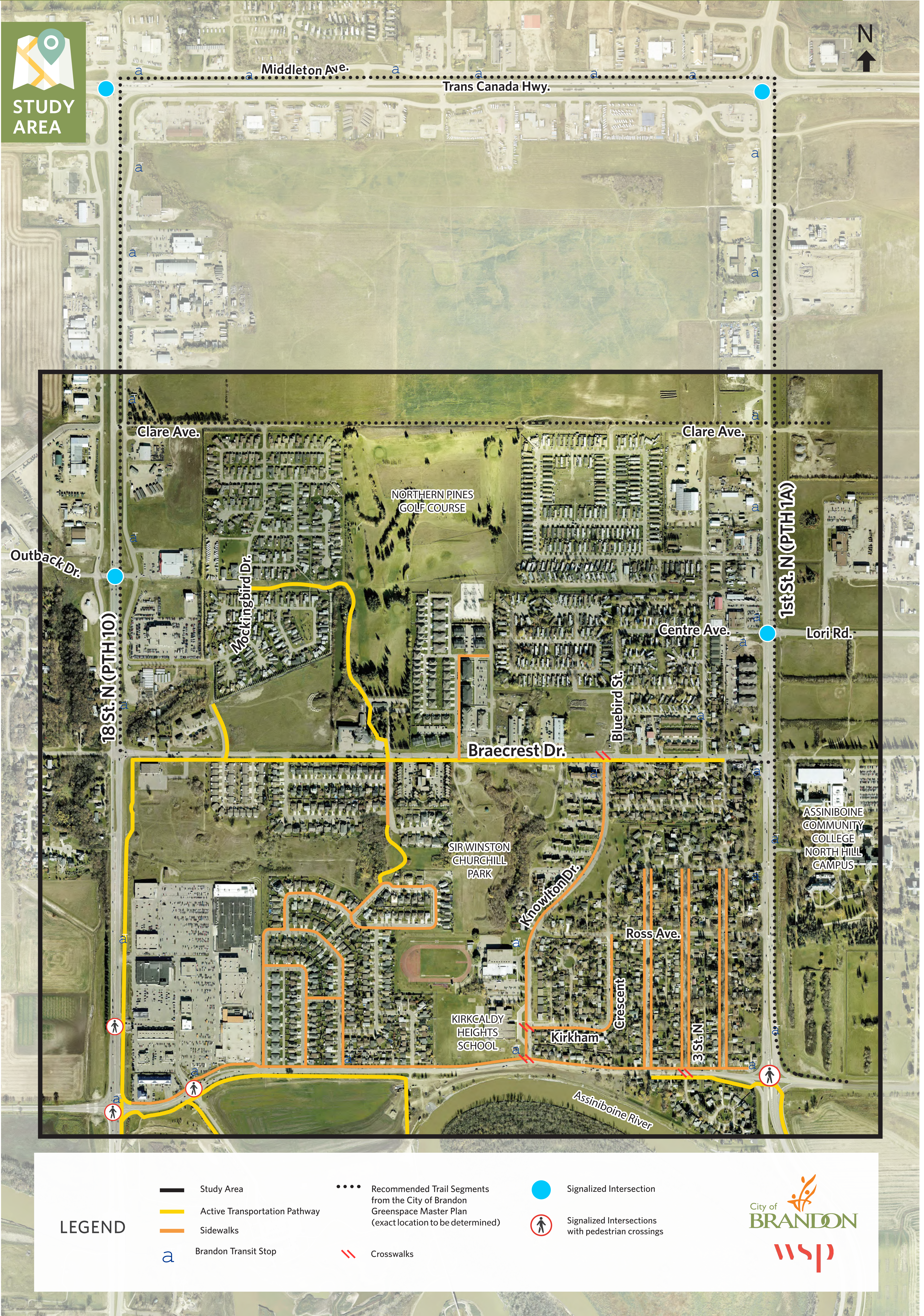


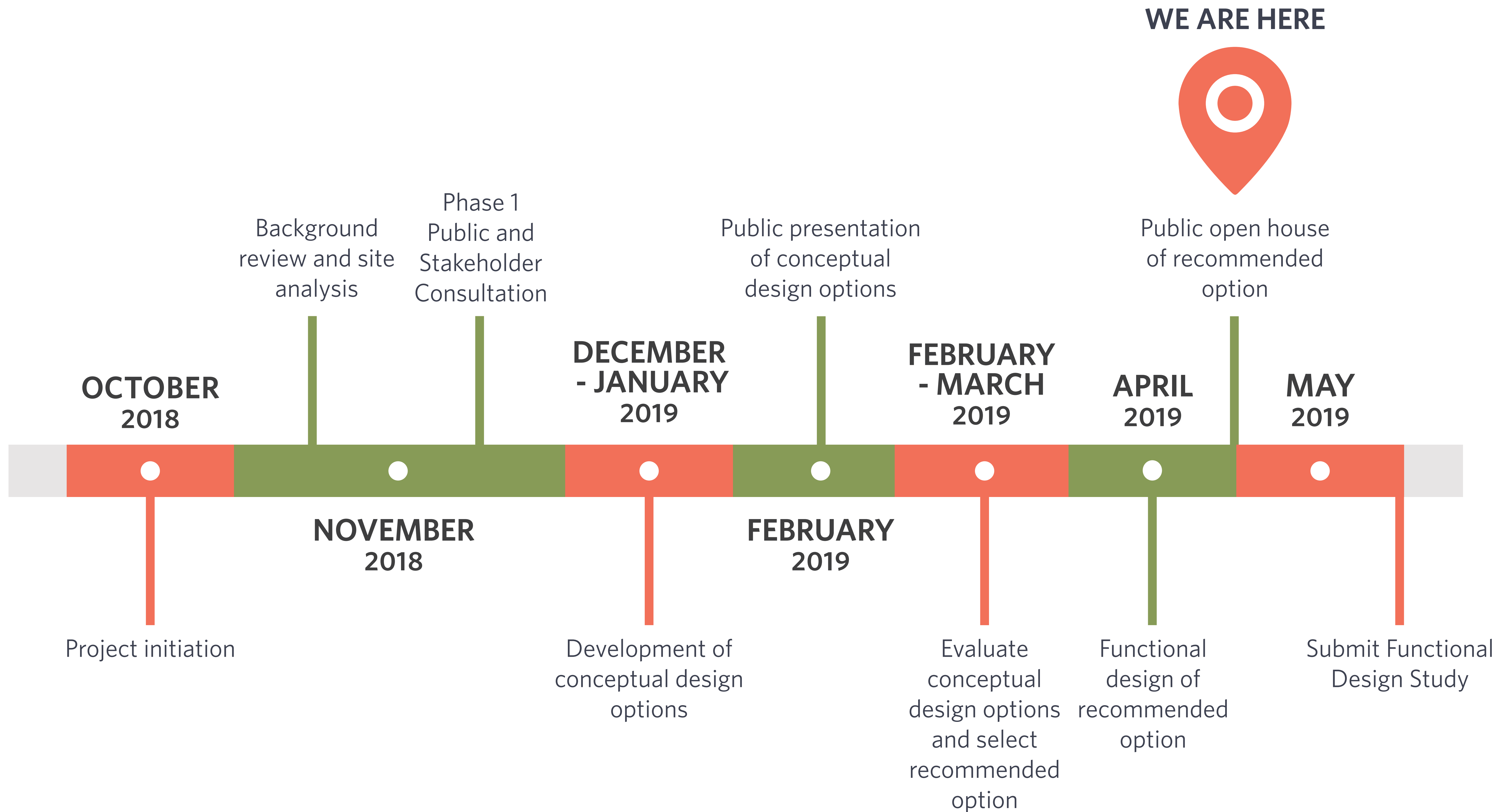
Braecrest Drive at 18th Street North (looking west)



Pedestrian Facilities on Braecrest Drive at Knowlton Drive (looking south)

Braecrest Drive Corridor Study Area





- » In **November 2018**, stakeholders and the public were invited to share their experiences and knowledge on local issues related to transportation operations and safety for vehicles, transit users, pedestrians and cyclists for the Braecrest Drive Corridor study area. This information was used by the Project Team to help develop conceptual design options that address the existing concerns and challenges.
- » In **February 2019**, the conceptual design options were presented to stakeholders and community residents for their feedback and comments.
- » All of the feedback we received for the conceptual design options has been summarized and compiled into a Public Engagement Report. The project team reviewed and considered this feedback when evaluating the conceptual design options. A copy of the report is available on the project website.
- » The feedback received helped inform the recommended design presented here today on boards **8** to **11**.





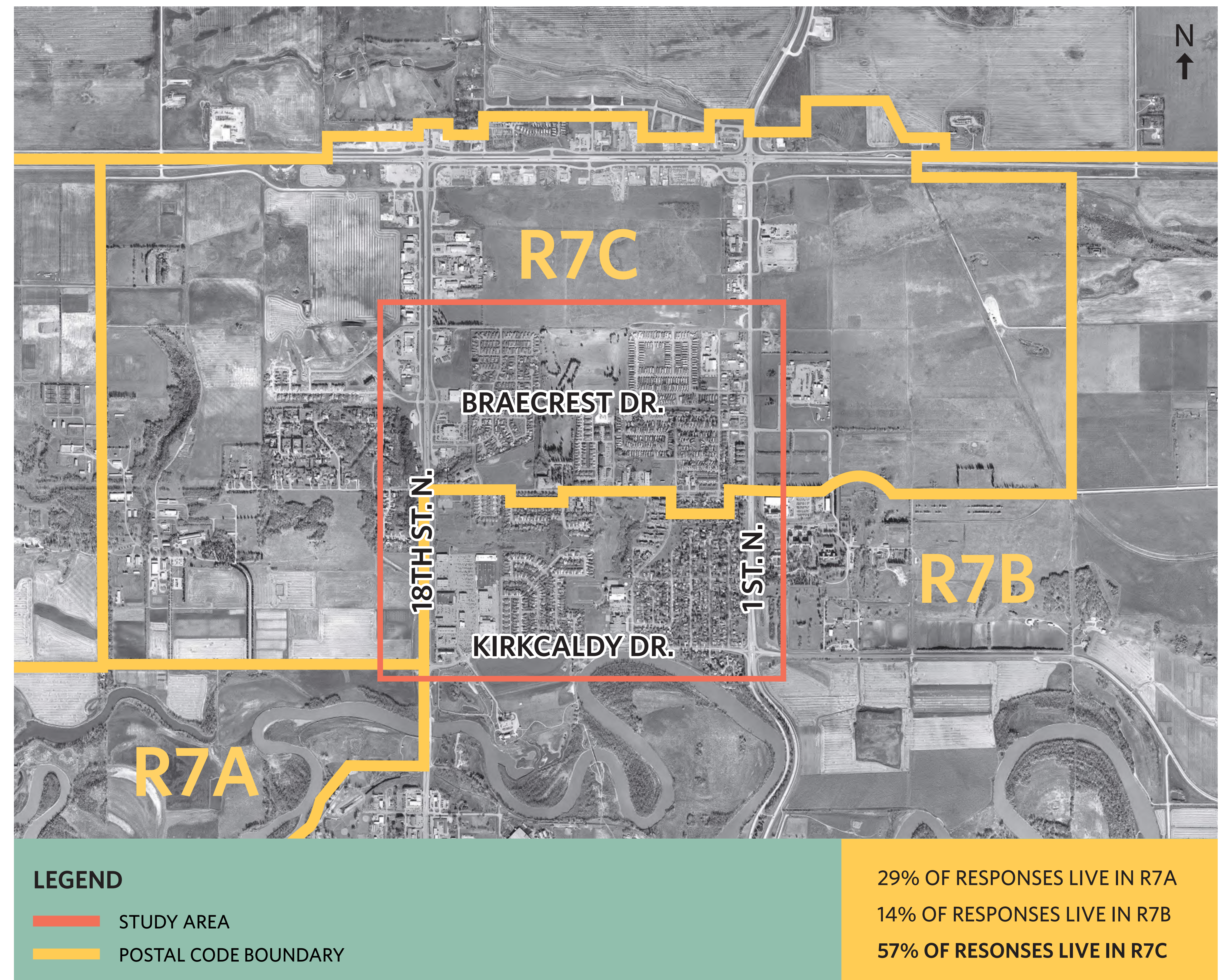
Approximately

161

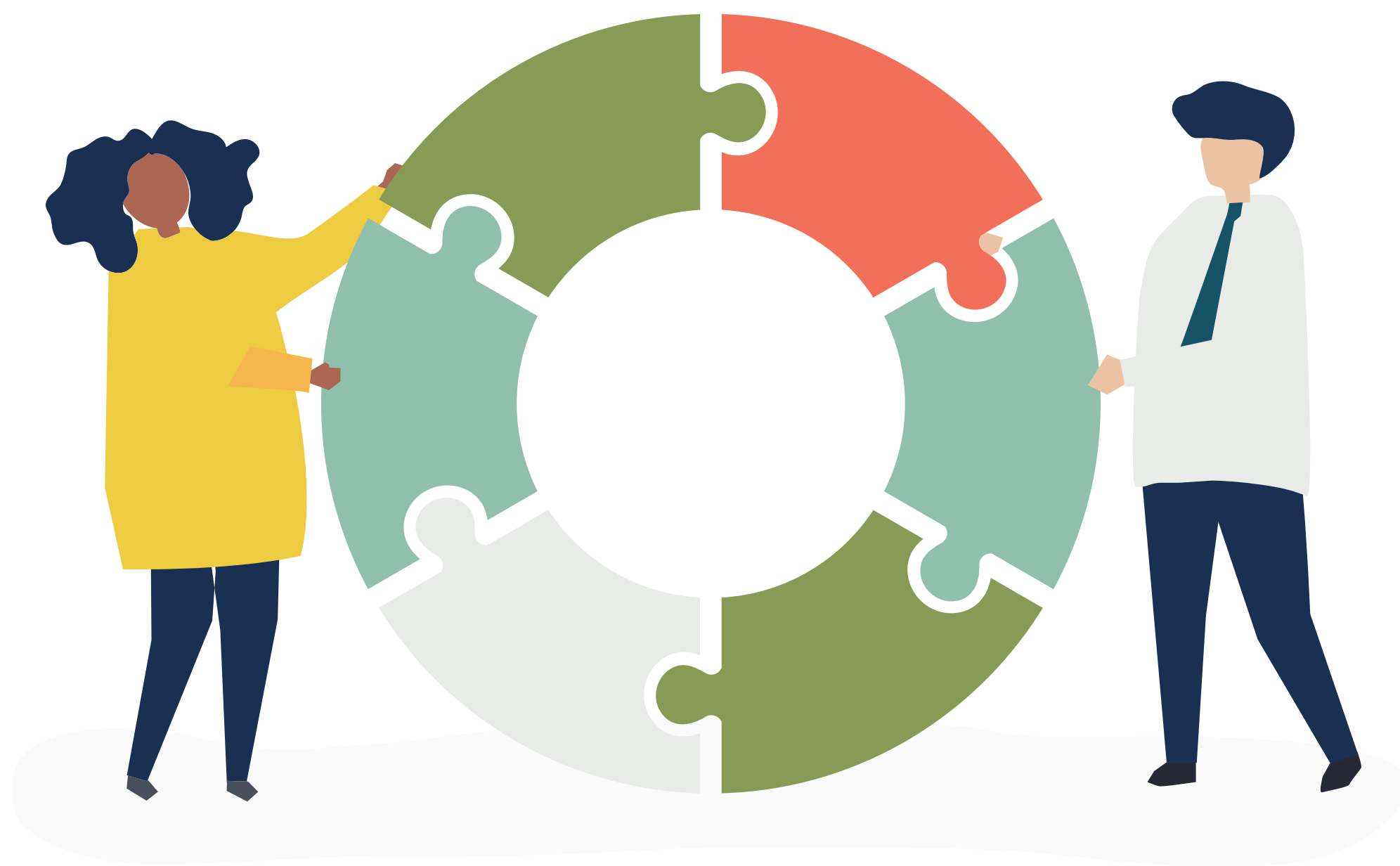
Individuals reviewed the conceptual designs and provided input

Overall, most of the respondents were pleased that this study was being undertaken.

The majority of public comments came from community residents living in close proximity to Braecrest Drive .



EVALUATION CRITERIA CATEGORY		FINAL WEIGHTING
	Engineering and Safety <ul style="list-style-type: none">How well does the option meet the geometric design criteria for the project?How well does the option meet Manitoba Infrastructure's (MI) standards and align with MI's plans?How well does the option meet driver expectations?How well does the option address safety issues for all users of the facility, including vehicles, pedestrians, and cyclists?How well does the option accommodate large trucks and other heavy vehicles?	30%
	Traffic Operations <ul style="list-style-type: none">How well does the option accommodate traffic volumes (congestion/delays)?	20%
	Community and Environmental Impacts <ul style="list-style-type: none">Does this option require property acquisition and if so, how significant?Does the option impact or improve access for area properties?How does the option impact the community/neighbourhood?What is the impact of the option on the surrounding environment?How well does the option align with the goals of the ACC Master Plan?	15%
	Ease of Construction and Maintenance <ul style="list-style-type: none">How difficult is the option to construct and stage?How difficult will the option be to maintain?	15%
	Construction Costs <ul style="list-style-type: none">How does the option impact utilities?What are the construction costs associated with the option?	10%
	Active Transportation and Transit <ul style="list-style-type: none">Does the option improve pedestrian and cyclist infrastructure?Does the option improve pedestrian and cyclist crossing risks?How does the option impact transit operations?How well does the option accommodate access for transit users?Is the option accessible for all potential users?	10%
		100%



- » **Draft evaluation categories and criteria were presented to stakeholders and the public for their input in February 2019.** Through an interactive activity, stakeholders and the public had the opportunity to share which evaluation criteria category they believe is the most important when evaluating the conceptual design options.
- » The feedback received was then used to help determine the final weightings for each evaluation criteria category as shown in the table.
- » Each conceptual design option was evaluated against each criteria category to determine a final weighted evaluation score and the recommended design.

Based on the evaluation process described on board 6, the following design is recommended for the Braecrest Drive Corridor study area.

Drawings and additional details for each element of the recommended design are explained further on the following presentation boards.

1 Braecrest Drive

Short Term

- » Pedestrian Crossings
- » Sidewalk Connections
- » Intersection Modifications

Medium Term

- » Sidewalk Connections
- » Roundabouts

Long Term

- » Pathway Connection

2 Braecrest Drive and 1st Street North

Short Term

- » Permanent Restriction on Left Turns
- » Limited Access to Assiniboine Community College (ACC)

- » ACC Bus Turnaround

Medium Term

- » Pedestrian Half Signal North of Braecrest Drive
- » Transit Stop Relocation

Long Term

- » Multi-use Pathway

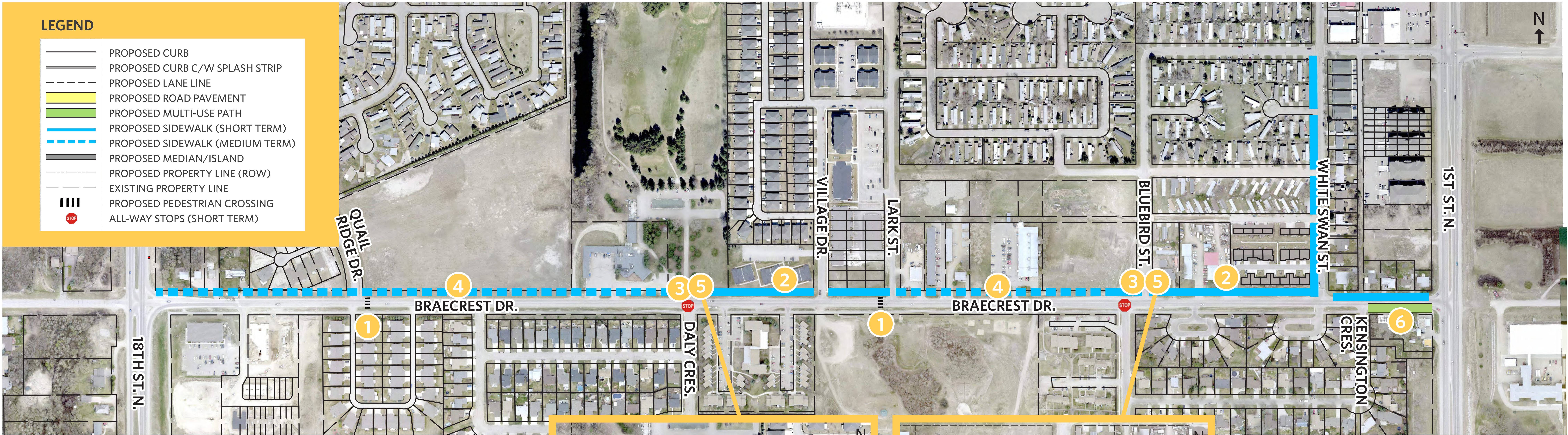
3 Braecrest Drive and 18th Street North

Short Term

- » Transit Stop Relocation
- » Connection from Quail Ridge Drive to Mockingbird Drive

Long Term

- » A conceptual roundabout option was developed following the February 2019 Open House as a result of public feedback and challenges associated with the long-term operations at the intersection
- » Reduce speed on 18th Street North to 60 km/hr



- 1

Pedestrian Crossings
 - Pedestrian crossings (signage and pavement markings) at Quail Ridge Drive and at Lark Street.
- 2

Sidewalk Connections
 - Sidewalk connections on the north side of Braecrest Drive from Bluebird Street to 1st Street North and from Lark Street to Daly Crescent.
- 3

Intersection Modifications
 - All-way stops at the intersections of Braecrest Drive and Daly Crescent and at Braecrest Drive and Knowlton Drive/Bluebird Street.
- 4

Sidewalk Connections
 - A sidewalk along the entire north side of Braecrest Drive from 18th Street North to 1st Street North.
- 5

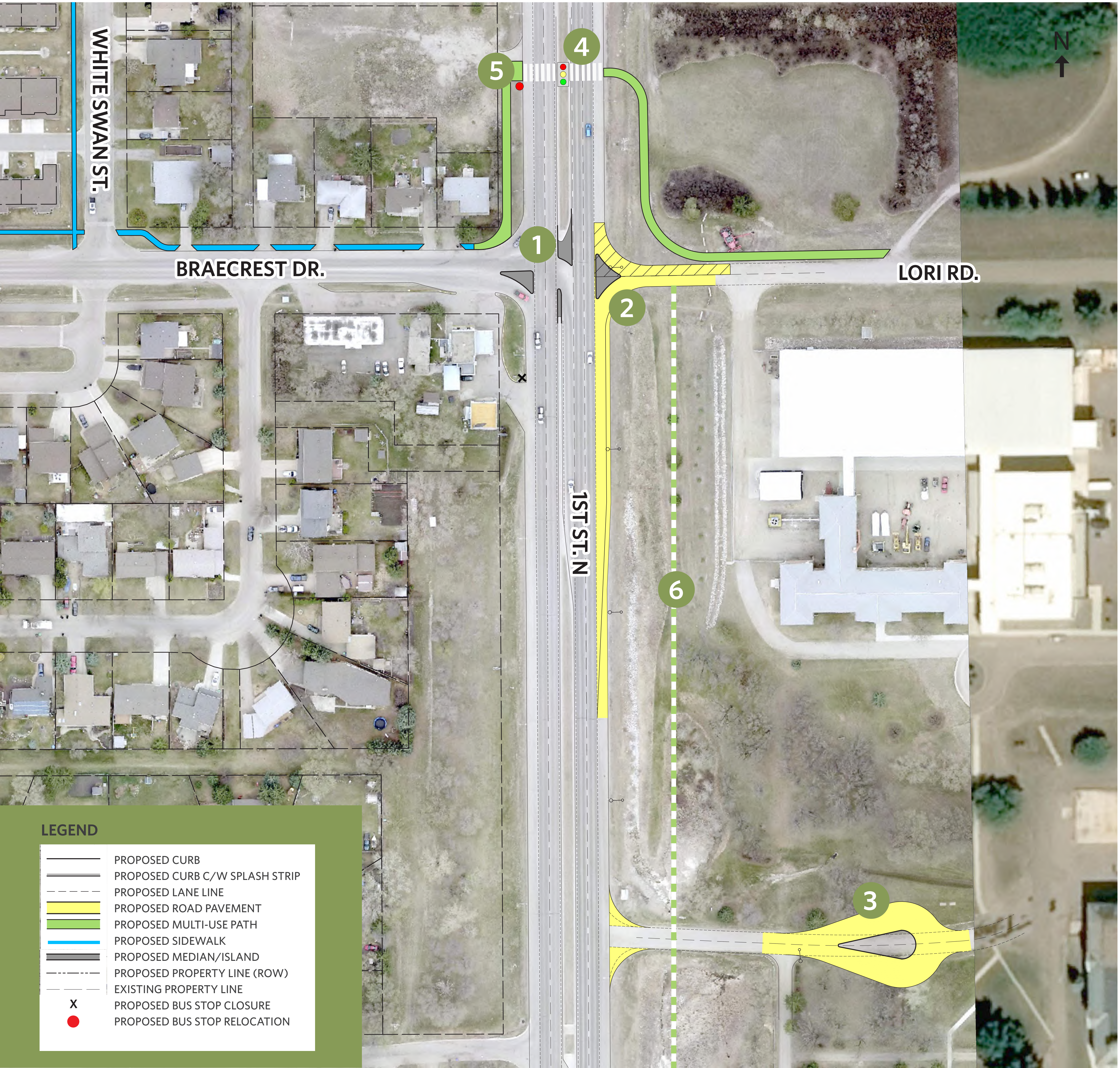
Roundabouts
 - Roundabouts are recommended at Braecrest Drive and Daly Crescent and at Braecrest Drive and Knowlton Drive/Bluebird Street.
- 6

Pathway Connection
 - A pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North is recommended if and when future redevelopment of the adjacent property occurs.
- SHORT TERM

MEDIUM TERM

LONG TERM
-
-
-
- ## Public Input

- A pedestrian crossing at Quail Ridge Drive and Braecrest Drive would help connect residents from Whistler Landing and Monterey Estates to the pathway on the south side of Braecrest Drive.
 - Roundabouts on Braecrest Drive are needed to improve traffic management and provide a safe place for pedestrians to cross.
 - A sidewalk should be added along the entire north side of Braecrest Drive from 18th Street North to 1st Street North.
 - Adding the pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North may result in potential impacts on the adjacent property.
- City of BRANDON wsp



1 Permanent Restriction on Left Turns

- A permanent left turn restriction is recommended to help address existing safety concerns. The median on 1st Street North will be extended to force eastbound vehicles on Braecrest Drive to turn right onto southbound 1st Street North. Northbound vehicles on 1st Street North can make a left turn onto Braecrest Drive.
- A sidewalk on the west side of White Swan Street is recommended to help address community concerns about additional vehicles using White Swan Street as a result of the permanent left turn restriction.

2 Limited Access to ACC

- A northbound right turn into campus from 1st Street North is recommended to provide an additional entrance for vehicles wanting to enter ACC from the south. A westbound right turn exiting campus onto 1st Street North could be considered as well.

3 Assiniboine Community College Bus Turnaround

- A bus turnaround off the ACC Service Road is recommended to help improve transit service to the campus and provide a safe place for students to stand while waiting for the bus.

4 Pedestrian Half Signal

- A half signal north of Braecrest Drive is recommended to improve pedestrian safety. The signal will be activated by pedestrian push buttons. Vehicles on 1st Street North will stop at a red light to allow pedestrians to safely cross. The crossing will be north of Braecrest Drive to provide space for vehicles to queue off of the steeper grade on 1st Street North.

5 Transit Stop Relocation

- Relocating the existing southbound transit stop north of Braecrest Drive to the half signal crossing location is recommended. A formal pathway connection on the east side of 1st Street North will lead to the ACC Campus.

6 Multi-use Pathway

- A multi-use pathway on the east side of 1st Street North from Kirkcaldy to Braecrest Drive is recommended for the long-term as further investigations are required to determine accessibility and drainage requirements.
- Alignment to be determined in the future.

SHORT TERM

MEDIUM TERM

LONG TERM

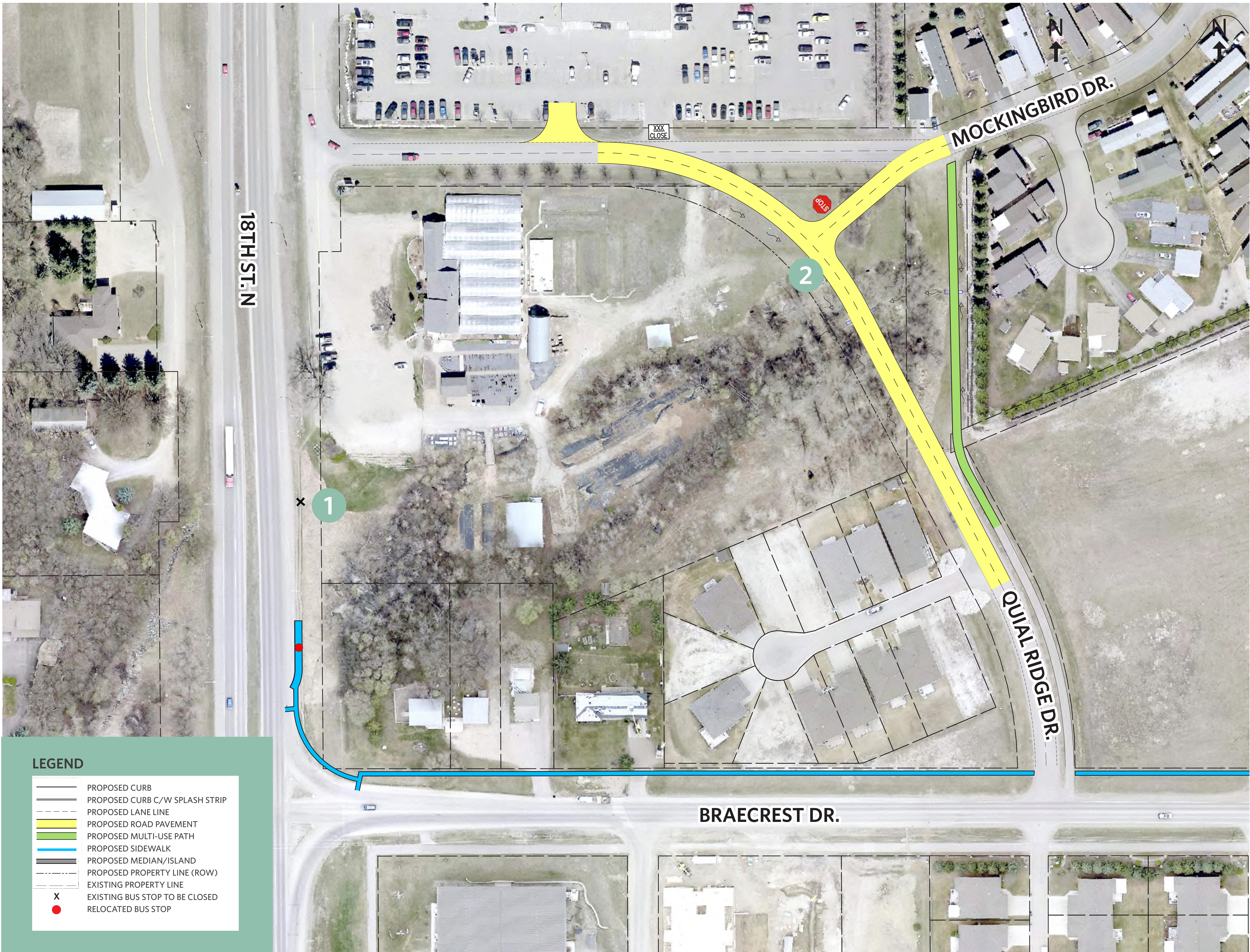
Public Input



- A permanent left turn restriction will improve vehicle and pedestrian safety at 1st Street North and Braecrest Drive but may result in additional traffic on adjacent streets, such as White Swan Street.
- A half signal is a practical and safe option for pedestrians crossing 1st Street North. However, concerns exist about vehicles having to stop on the hill in icy/snowy conditions.
- A right turn into ACC at Braecrest Drive is a positive idea as it provides an additional entrance to the campus.
- The addition of a bus turnaround at ACC is a good idea to provide a safe place for students to stand while waiting for the bus as students currently wait on 1st Street North.



Recommended Design



1

Transit Stop Relocation

- Relocating the existing transit stop on the east side of 18th Street North is recommended to make the stop more accessible to all pedestrians. Buses would pull out of the through lane on 18th Street North into the acceleration lane to pick up or drop off passengers at the stop.

2

New Roadway Connection

- A new roadway connection from Mockingbird Drive to Quail Ridge Drive is recommended in the short-term to help address the major concern of the westbound left-turn from Braecrest Drive onto southbound 18th Street North. The new connection will allow westbound vehicles on Braecrest Drive to access the signalized intersection at 18th Street North and Cumberland Avenue.
- The new connection is considered a short-term improvement as traffic at Braecrest Drive and 18th Street North intersection will continue to grow. In addition, this recommendation does not address safe pedestrian crossing of 18th Street North at Braecrest Drive.

SHORT TERM

Public Input

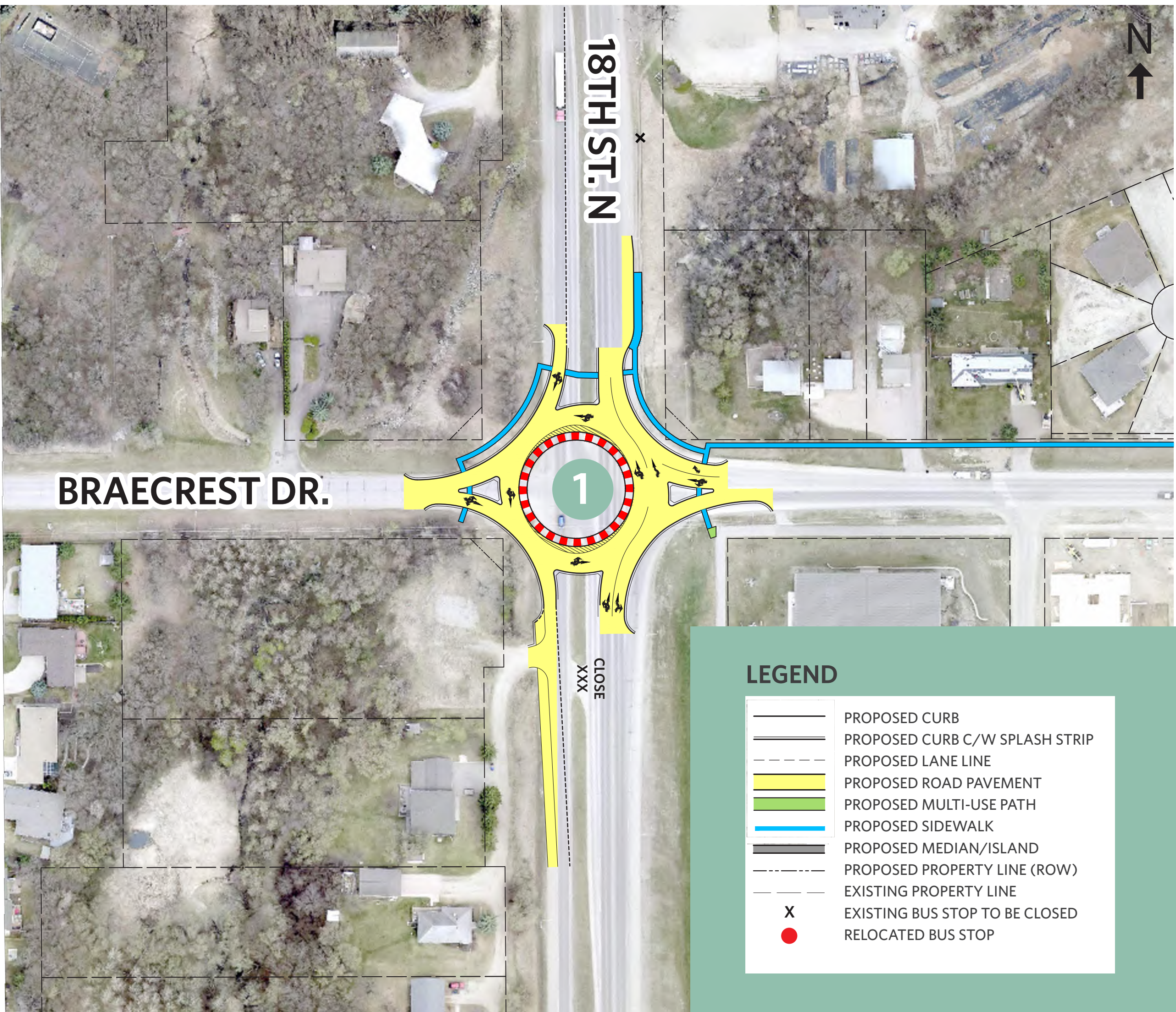


- A new connection between Quail Ridge Drive and Mockingbird Drive is desired as it provides an alternative for vehicles who want to travel southbound on 18th Street North but do not want to perform a left turn from Braecrest Drive or a U-turn on 18th Street North. However, the right-of-way is currently used by local area residents to connect to the multi-use path on Braecrest Drive and there are concerns that a new connection will impact the use of this space.
- There is a desire for the City to find a long-term solution addressing concerns at 18th Street North and Braecrest Drive. There is a difference in opinion as to whether traffic signals are the best solution because of concerns over whether vehicles can get enough traction to get up the hill after stopping at a red light.
- The recommended design should address existing concerns for not only drivers but also pedestrians and cyclists.

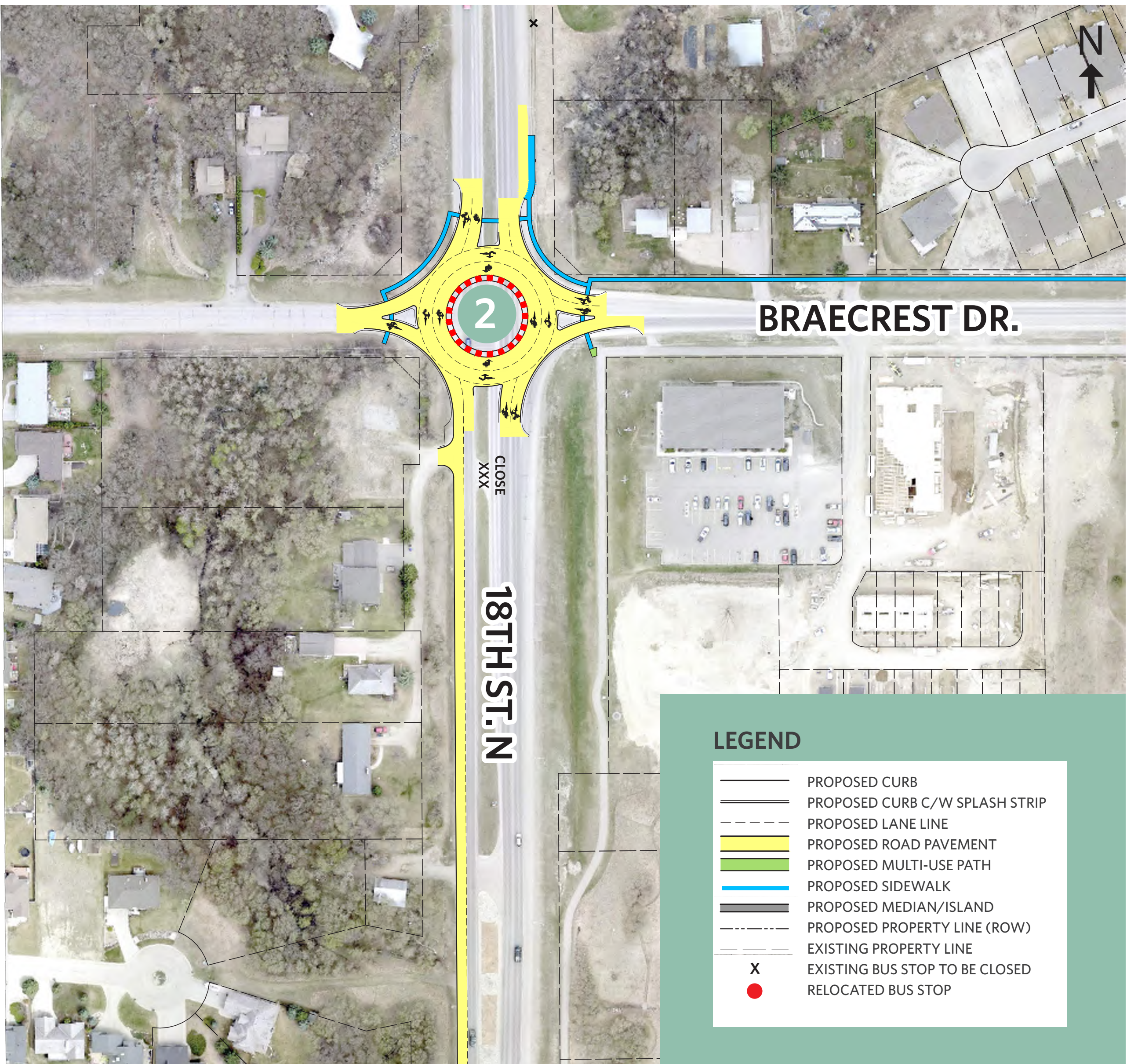


Recommended Design

Braecrest Drive and 18th Street North - Conceptual Design Option



Stage 1 Roundabout: Two northbound lanes and one southbound lane



Stage 2 Roundabout: Two lanes

Traffic Signals

- Traffic signals at Braecrest Drive and 18th Street North was proposed as a conceptual design option. However, there were concerns from stakeholders and the public with adding traffic signals at this intersection because of the steep grade on 18th Street North.
- To address safe pedestrian crossing and to accommodate anticipated growth in traffic volumes at Braecrest Drive and 18th Street North, a roundabout was added as a conceptual design option.

1 Roundabout

- The roundabout will initially include two northbound lanes and one southbound lane to align with the lanes on 18th Street North. Pedestrian crossings are provided on three approaches with signed and marked crosswalks. A speed limit reduction to 60 km/hr on 18th Street North is recommended as part of the roundabout.

2 Upgraded Roundabout

- The roundabout can be upgraded to two-lanes when a second southbound lane is added on 18th Street North.

Further study is needed to confirm the feasibility and functionality of a roundabout at this location.



Recommended Design

LONG TERM

The following implementation plan is recommended for the Braecrest Drive Corridor improvements.

Short Term

- » Pedestrian crossings of Braecrest Drive at Quail Ridge Drive and Lark Street
- » Sidewalk connections on the north side of Braecrest Drive (Lark Street to Daly Crescent and Bluebird Street to 1st Street North)
- » All-way stops at Braecrest Drive and Daly Crescent and at Braecrest Drive and Knowlton Drive
- » Restricted left-turns and access to ACC at Braecrest Drive and 1st Street North
- » Bus turnaround on the ACC service road off 1st Street North
- » New roadway connection from Quail Ridge Drive to Mockingbird Drive
- » Relocation of transit stop on northbound 18th Street North north of Braecrest Drive

Medium Term

- » Sidewalk connections on the north side of Braecrest Drive (remaining portion from 18th Street North to 1st Street North)
- » Roundabouts at Braecrest Drive and Daly Crescent and at Braecrest Drive and Knowlton Drive / Bluebird Street
- » Pedestrian half signal crossing of 1st Street North and relocation of transit stop on southbound 1st Street North north of Braecrest Drive

Long Term

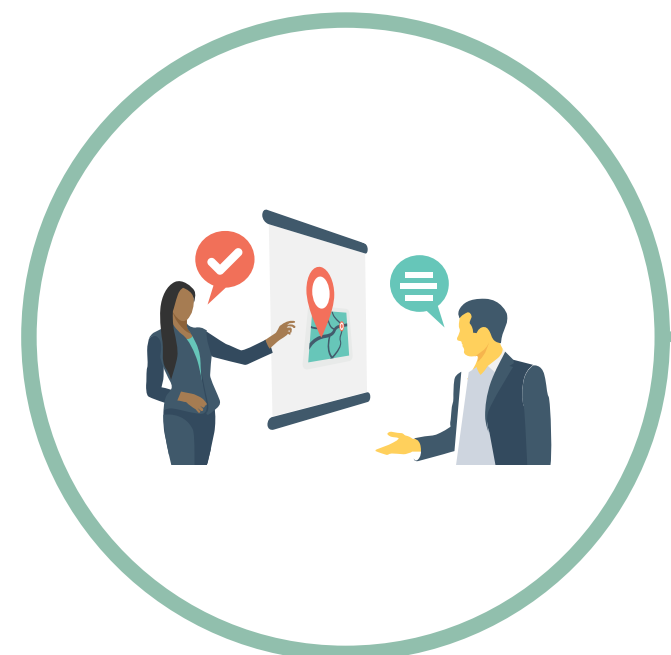
- » Roundabout at Braecrest Drive and 18th Street North and reduced speed limit on 18th Street North
- » Pathway connection on the south side of Braecrest Drive from Kensington Crescent to 1st Street North
- » Multi-use pathway on the east side of 1st Street North from Kirkcaldy Drive to Braecrest Drive



Prepare and submit a **Public Engagement Report** detailing a summary of feedback from today's open house and online comment sheet.



Prepare and submit a **Functional Design Report for the Braecrest Drive Corridor**. The report will detail the results of all investigations and analysis completed, the proposed enhancements and alternatives, and the recommended design.



The **final design will be presented** to City of Brandon Council.

Thank you for attending today's public open house.

Please complete a
comment sheet before
you leave today.



For additional information please contact:

David Jopling, Public Engagement Lead, WSP
at **204-943-3178** or **david.jopling@wsp.com**

or

Sam Van Huizen, Traffic and Transportation Planner, City of Brandon
at **204-729-2105** or **s.vanhuizen@brandon.ca**

Visit the project website at:

<http://brandon.ca/current-projects/braecrest-functional>

APPENDIX

C

COMMENT
SHEETS

Functional Design of the Braecrest Drive Corridor - Recommended Design

What are the first three digits of your postal code?

Answered 36

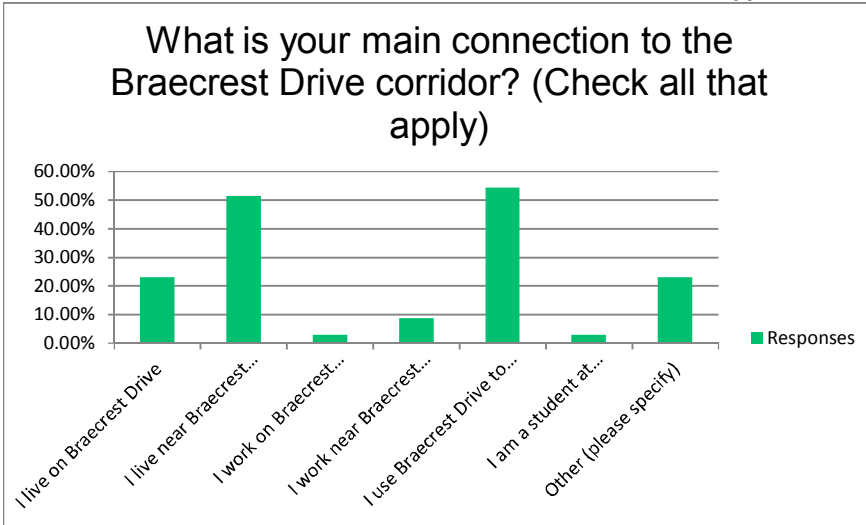
Skipped 0

Respondents	Response Date	Responses	Tags
1	May 29 2019	(ROK	
2	May 29 2019	· R7C	
3	May 29 2019	· R7C	
4	May 29 2019	· R7B	
5	May 29 2019	· R7B	
6	May 29 2019	· R7C	
7	May 29 2019	· R7C	
8	May 29 2019	· R7A	
9	May 29 2019	· R7B	
10	May 29 2019	(R7C	
11	May 29 2019	(R7B	
12	May 29 2019	(R7A	
13	May 29 2019	(R7C	
14	May 28 2019	(R7C	
15	May 28 2019	(R7C	
16	May 28 2019	(R7C	
17	May 28 2019	(R7C	
18	May 28 2019	(R7C	
19	May 28 2019	(R7C	
20	May 28 2019	(R7A	
21	May 28 2019	(R7C	
22	May 28 2019	(R7C	
23	May 28 2019	(R7C	
24	May 28 2019	(R7C	
25	May 28 2019	(R7C	
26	May 28 2019	(R7C	
27	May 28 2019	(R7C	
28	May 28 2019	(R7C	
29	May 28 2019	(R7C	
30	May 28 2019	(R7C	
31	May 28 2019	(R7C	
32	May 28 2019	(R7C	
33	May 28 2019	(R7C	
34	May 28 2019	(R7C	
35	May 28 2019	· R7C	
36	May 16 2019	(r7a	

Functional Design of the Braecrest Drive Corridor - Recommended Design

What is your main connection to the Braecrest Drive corridor? (Check all that apply)

Answer Choices	Responses	
I live on Braecrest Drive	22.86%	8
I live near Braecrest Drive	51.43%	18
I work on Braecrest Drive	2.86%	1
I work near Braecrest Drive	8.57%	3
I use Braecrest Drive to access community destinations	54.29%	19
I am a student at Assiniboine Community College North Hill Campus	2.86%	1
Other (please specify)	22.86%	8
Answered		35
Skipped		1

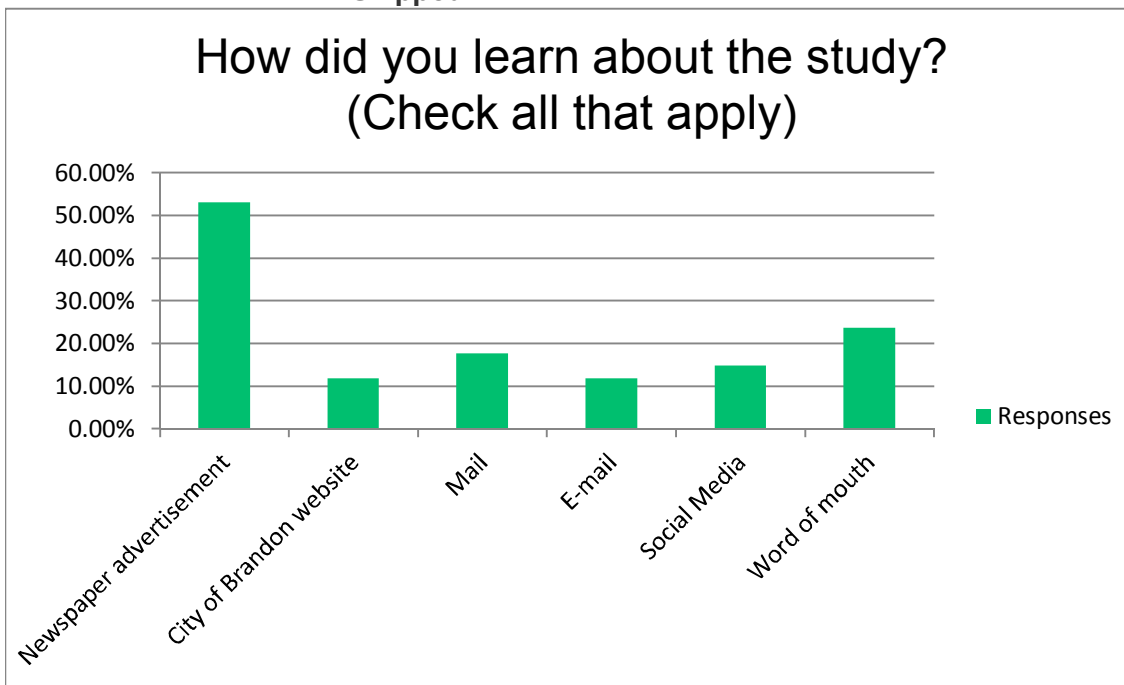


Respondents	Response Date	Other (please specify)	Tags
	1	May 29 2019 C -	
	2	May 29 2019 1 design sites adjacent to	
	3	May 29 2019 1 Leech's Business	
	4	May 29 2019 C we avoid it because of safety	
	5	May 28 2019 C Monterey Resident	
	6	May 28 2019 C -	
	7	May 28 2019 C Outback	
	8	May 28 2019 C No crosswalk on Braecrest	

Functional Design of the Braecrest Drive Corridor - Recommended Design

How did you learn about the study? (Check all that apply)

Answer Choices	Responses	
Newspaper advertisement	52.94%	18
City of Brandon website	11.76%	4
Mail	17.65%	6
E-mail	11.76%	4
Social Media	14.71%	5
Word of mouth	23.53%	8
Other (please specify)		4
Answered		34
Skipped		2

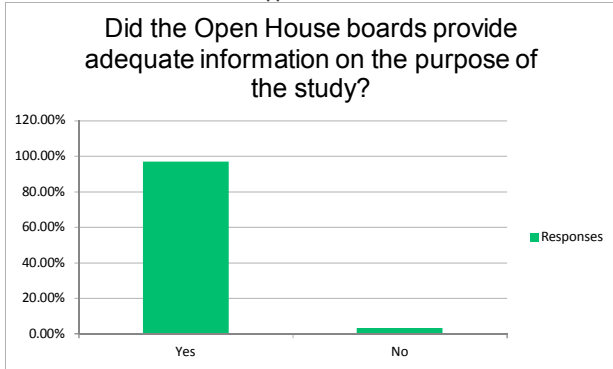


Respondents	Response Date	Other (please specify)	Tags
1	May 29 2019	(Radio	
2	May 29 2019	From Sam	
3	May 29 2019	Provided the facility for the meeting	
4	May 28 2019	(Radio	

Functional Design of the Braecrest Drive Corridor - Recommended Design

Did the Open House boards provide adequate information on the purpose of the study?

Answer Choices	Responses	
Yes	96.88%	31
No	3.13%	1
If no, please elaborate why:		2
	Answered	32
	Skipped	4



Respondents	Response Date	If no, please elaborate why:	Tags
1	May 29 2019 09:27 AM	No cost of alternative proposal	
2	May 28 2019 02:48 PM	In your minds you think this will work for Monterey Estates but what is to stop fast traffic from destroying our community	

Functional Design of the Braecrest Drive Corridor - Recommended Design

What are your thoughts on the recommended design for Braecrest Drive (i.e. pedestrian crossings, sidewalk connections, intersection modifications, and pathway connection) on Board 8?

Answered

29

Skipped

7

Respondents	Response Date	Responses	Tags
	1 May 29 2019 0	no opinion	
		Let's build this ASAP. There are aspects I wish I could change but give space and traffic flow this seems the	
	2 May 29 2019 1	most reasonable and effective plan for NOW. Do it.	
		My main concern is riding a bike or walking across 18th St. north to go south on the path or east on the	
	3 May 29 2019 1	path (these are both existing). A crosswalk may work or pedestrian controlled lights.	
	4 May 29 2019 1	Looks good. Sidewalk connection is important.	
	5 May 29 2019 1	Excellent	
	6 May 29 2019 1	Lots of planning and thoughts have gone into this. Thank you.	
	7 May 29 2019 1	It is a very functional solution for a difficult intersection.	
		alignment of intersections makes sense, sidewalks are important here. Will ditches be removed and curb	
	8 May 29 2019 1	and gutter installed?	
		I have "big" problems accepting aroundabout at Braecrest and 18th st. I can't see semi's driving through in	
	9 May 29 2019 1	our winter weather	
	10 May 29 2019 1	I like the choices/thoughts on board #8. Ped crossings - good. Sidewalks/pathways - good.	
	11 May 29 2019 0	Definitely some good idea of crosswalk, pathways	
	12 May 29 2019 0	Not my concern but appreciate a good idea.	
	13 May 28 2019 0	1st and 18th Roundabout, traffic thru Monterey	
		Why we using the name of Mockingbird which belongs to Monterey Estates. What is to stop traffic flowing	
		through the park at a high speed. We are a seniors park with many walkers, wheelchairs, scooters with no	
		sidewalks. This is a safety hazard and will destroy Monterey's seniors housing. Please consider another	
	14 May 28 2019 0	option	
	15 May 28 2019 0	Poor	
		Crosswalk on north end of traffic circle is a concern (traffic circle Braecrest & 18th) will lights be safe	
	16 May 28 2019 0	enough	
	17 May 28 2019 0	pathway connection	
	18 May 28 2019 0	Looks impressive and will be a great improvement	
		Like there is a pedestrian crossing planned for Braecrest but it is still not addressing pedestrians trying to	
		connect to the walking paths from Outback. The light at Outback doesn't change for pedestrians so it makes	
	19 May 28 2019 0	it difficult to connect to the walking paths at Braecrest.	
		I walk on bike/walking path on Braecrest. I also cross 18th on occasion to extend my walk. The proposal to	
		bring additional traffic to the lights at Peavey Mart. I strongly disagree as there is 11-12 vehicles backed up	
		at these lights at any given time. There are vehicles coming from all directions (also 2 approaches to Peavy	
	20 May 28 2019 0	Mart)	
		Only major concern I still have, are the 2 entrances into Peavey Mart the south entrance s/b closed off.	
		Then we would only have 1 entrance/exit into the store, eliminated the potential for more accidents to	
	21 May 28 2019 0	happen with the extra traffic. Right now there are 6 potential accident opportunities here!! Please consider!	
	22 May 28 2019 0	Good things should be done!	
	23 May 28 2019 0	No pedestrian walk from Outback to Braecrest	
	24 May 28 2019 0	Find an issue living on Outback Dr. trying to cross 18th st. to get to Braecrest for pedestrian walking.	
	25 May 28 2019 0	We like the short term plan and the roundabouts at 1st and 18th streets	
	26 May 28 2019 0	I think all the planned changes would work well!	
	27 May 28 2019 0	Not too bad.	
	28 May 28 2019 0	Looks good.	
		I don't agree with a sidewalk on the north side nor do I agree with the bus stop location. 18th st. &	
	29 May 28 2019 1	Braecrest.	

Functional Design of the Braecrest Drive Corridor - Recommended Design

What are your thoughts on the recommended design for Braecrest Drive and 1st Street North (i.e. permanent restriction on left turns and limited access to Assiniboine Community College (ACC), pedestrian half signal north of Braecrest Drive, transit stop relocation, ACC bus turnaround, and multi-use pathway) on Board 9?

Answered

16

Skipped

20

Respondents	Response Date	Responses	Tags
		1 - not required at this time 2 - not needed 3-5 - probably :	
	1 May 29 2019	0good idea 6 - good idea	
	2 May 29 2019	1The plan makes effective traffic flow and safety sense. I don't use 1st and Braecrest often so have no problem	
	3 May 29 2019	1going north if need be.	
	4 May 29 2019	1Looks good.	
	5 May 29 2019	1All good.	
		Adequate signage will be needed for the white swan street	
	6 May 29 2019	1and improvements to the drainage channels in that street	
	7 May 29 2019	1looks gooc	
	8 May 29 2019	1All good.	
		Not a big concern and with the ___ north one block the time	
	9 May 29 2019	0on left hand thanks will not be concern.	
	10 May 28 2019	0Does not affect me.	
	11 May 28 2019	0not optimistic	
	12 May 28 2019	0restrict left turns. Yes!	
	13 May 28 2019	0Terrific!	
	14 May 28 2019	0Good idea!	
	15 May 28 2019	0I personally have no issues with 1st street	
	16 May 28 2019	0Good	

Functional Design of the Braecrest Drive Corridor - Recommended Design

What are your thoughts on the recommended design for Braecrest Drive and 18th Street North (i.e. transit stop relocation, connection from Quail Ridge to Mockingbird Drive, and roundabout) on Board 10 and 11?

Answered

27

Skipped

9

Respondents	Response Date	Responses	Tags
		#10 1 & 2 good ideas #11 Roundabout not feasible - 2 lane would be required for all n & a second southbound lane would be better with signage to keep traffic to the west lane	
1	May 29 2019	C unless turning east.	
2	May 29 2019	1 I sincerely believe it is the best option and I will on Whistle	
		This is one of the two best ideas. The other is extend the service rd. from Kelleher Ford to Braecrest Dr. and make vehicles go north on the service rd. to the lights on 18th st. north	
3	May 29 2019	1 to go south or north. Stop signs at Daly and Knowlton on Braecrest will slow down traffic.	
4	May 29 2019	1 Skeptical of future 4-lane through roundabout. Traffic flow with trucks may be complicated.	
5	May 29 2019	1 Transit stop - good. Quail Ridge - About time. Roundabout - hopefully it will work	
		It will be annoying during construction, but there is no way around that. I think once	
6	May 29 2019	1 completed it will be appreciated.	
		alignment makes sense. who deals with drainage? The impact on this site will reduce	
		property development possibilities. Is a roundabout the best plan? Can't we extend service	
7	May 29 2019	1 road over the ravine?	
		I think they're all good. NOT having traffic lights is a good idea. A better/safer method for	
8	May 29 2019	1 pedestrians to cross 18th st. is a "MUST DO!!"	
		Silly, there is a better and safer way. West bound traffic to 18th street will have to cross	
9	May 29 2019	C lanes of traffic to head south in the roundabout	
		This would seem to be the best that can be announced without a very major expense. I can	
10	May 29 2019	C live well with this arrangement.	
		I live on corner of 18th st. and Braecrest or 1815 Braecrest Dr. I like the roundabout	
		design just wondering how much of our property will be affected? Sheldon Wollman 204-	
11	May 29 2019	C 901-1736	
		Don't like Quail option! Turn west bound Braecrest traffic north before 18 and up the	
12	May 28 2019	C service road to the traffic light north of Kelleher.	
		I live on Braecrest, 2nd house west of 18th. I really like the roundabout solution	
		Braecrest Drive and 18th. The pedestrian crossing north of the roundabout is a great	
13	May 28 2019	C solution.	
		Not in favor of connecting Quail Ridge to Mockingbird Dr. traffic will and might use	
14	May 28 2019	C Mockingbird to get to Claire.	
		As long as access to Mockingbird is restricted to "residents" only it would be fine. Traffic	
		coming off the service road - along Claire Ave. and down Mockingbird is already used by	
15	May 28 2019	C non-residents.	
16	May 28 2019	C Great idea!	
17	May 28 2019	C roundabout!	
18	May 28 2019	C Don't like the proposed bus stop. Quail Ridge and roundabout are good	
19	May 28 2019	C Like the traffic circle idea at Braecrest!	
		No problem! There is not going to be that much traffic going through Mockingbird Drive	
20	May 28 2019	C (where we live), and this will help us get to the #1 easier.	
21	May 28 2019	C a roundabout should be ok	
22	May 28 2019	C I think the roundabout is a better idea than the traffic lights they proposed on 18th St.	
23	May 28 2019	C Good idea!	
24	May 28 2019	C might work	
25	May 28 2019	C ok	
26	May 28 2019	C I think it will work. There aren't a lot of alternative	
27	May 28 2019	1 Don't agree with the transit stop location	

Functional Design of the Braecrest Drive Corridor - Recommended Design

Do you have any other comments regarding the recommended design?

Answered

21

Skipped

15

Respondents	Response Date	Responses	Tags
	1 May 29 2019	(all ways stops on Braecrest not a good idea. not enough traffic for roundabouts.	
	2 May 29 2019	Let's proceed as soon as possible The roundabouts at 18th and Braecrest and 1st and Braecrest!!!!!! These are very	
	3 May 29 2019	busy high traffic areas. Roundabouts would not work in my opinion.	
	4 May 29 2019	The city needs more sidewalks and paths north of Braecrest to Outba	
	5 May 29 2019	Thank you for the time and effort put into this design proces With 18th st being so busy (north and southbound). I really wonder how big truc (semi-tractor trailers) will negotiate the roundabout at 18th st and Braecrest, if that	
	6 May 29 2019	comes to pass. Don't know if it will work?	
	7 May 29 2019	look at other design other then the roundabo I have concerns about the all way stops at Blund and Knowlton our ___ offset the fin	
	8 May 29 2019	aroundabout would clear up my concern. Wondering how much of our property (1815 Braecrest Dr.) will affected wit recommended design? The design is a great idea I think. Traffic would always keep	
	9 May 29 2019	moving in all 4 ways. Most people don't know and don't MERGE. Roundabout REQUIRE drivers t	
	10 May 28 2019	MERGE! GOOD LUCK!! Yes, this is not good for pedestrians in Monterey. We need Buckley to make our pa	
	11 May 28 2019	gated if this plan is going forward. Our concern is any access to Monterey Estates - a PRIVATELY owned park - th roads are not deesigned for a large amount of traffic and are NOT maintained at all by the City of Brandon - There are no sidewalks and many residents use walkers -	
	12 May 28 2019	scooters etc. when using the roads	
	13 May 28 2019	I'll be dead before any of this happens - prove me wro Concern regarding south lane entering traffic circle Braecrest and 18th, regarding seniors keeping to one lane and changing to other lane in the traffic circle. I think it	
	14 May 28 2019	creates an opportunity for accidents with small cars in the inside lane.	
	15 May 28 2019	Happy to see that we are going to have a roundabo	
	16 May 28 2019	Think you have done very well with what you hav No perfect solution!! Well done. Please brainstorm all the comments. Thanks for th	
	17 May 28 2019	opportunity!	
	18 May 28 2019	no I still don't know why you haven't finished 1st and Pacific Ave. How does a person g	
	19 May 28 2019	off of Pacific onto 1st going north?	
	20 May 28 2019	Hope it goes ahead I believe the city would be recreating the same issue in regards to 1st st. ar Braecrest if they re-locate the bus stop at 18th st and Braecrest. Braecrest Dr. already has a sidewalk on the south side. It isn't necessary to have 2 sidewalks if they want to	
	21 May 28 2019	make one on the north side.	

Functional Design of the Braecrest Drive Corridor -
Recommended Design

If you would like to receive project updates, please
provide your email address below. Your contact
information will be used only for project updates.

Answer Choices	Responses	
Name:	0.00%	0
Company:	0.00%	0
Address:	0.00%	0
Address 2:	0.00%	0
City/Town:	0.00%	0
State/Province:	0.00%	0
ZIP/Postal Code:	0.00%	0
Country:	0.00%	0
Email Address:	0.00%	0
Phone Number:	0.00%	0
Answered		0
Skipped		36