

5.0 Redevelopment Plan

5.1 OVERVIEW

The Redevelopment Plan is intended to serve as a long-term (115,000 population) planning guideline to outline the requirements for widening of Gaetz Avenue and the associated improvements to intersections, service road configurations, business accesses, walkways, bicycle paths, building set backs, and landscape requirements. The plan demonstrates how various tools can be applied in site-specific situations. Over time, the application of the tools may be modified to provide alternate solutions applicable to changes that have occurred within the area. The changes will be driven by the requirement for widening of Gaetz Avenue, intersection capacity improvements, or redevelopment of private property.

To minimize impacts on traffic and businesses along Gaetz Avenue, the elimination and reconfiguration of the service roads throughout the corridor should be completed as much as possible in conjunction with the road widenings and intersection improvements recommended in the Transportation Plan. Successful completion of the service road improvements will also require the interest and cooperation of businesses along the corridor and in a large number of instances, land acquisition and/or access agreements between property owners will be required.

One of the greatest operational concerns associated with the Gaetz Avenue corridor is the location and function of the service roads and their direct impact on the traffic movements at the cross streets. The corridor was originally developed as a highway under the Province's access management philosophy of giving priority to through movements along the corridor. Accesses have typically been secondary in terms of corridor importance. As a result, the Province restricts access wherever possible, so as not to interfere with through capacity.

Access to existing and former Provincial roadways is usually restricted to concentrated locations, usually at section lines. Gaetz Avenue was designed as a Provincial roadway, with the commercial development constructed along a service road design where accesses to the development were off the service roads. Traffic was then funneled to intersection points at the sections. This philosophy works well in a rural setting, where the traffic volumes are low. However, over the years the Gaetz Avenue corridor has matured and development now approaches full build out. As a result, the volumes on all roads including the service roads are significant. The intersection points along Gaetz Avenue are mostly signalized, and the locations of the service roads are now spaced too close to the Gaetz Avenue intersections. There is inadequate storage for the cross streets and the result is that traffic backs up in all of the approaches to the signals. When the light turns green there is gridlock experienced as vehicles jockey for their turn to enter the signalized intersection.

To improve this operational constraint, a review of possible service road closures was undertaken to provide improved traffic flow conditions. Where service road closure is not possible due to access requirements, bulbing of the service roads is recommended to increase

the storage length approaching the signalized intersection and reduce the influence of the service road intersection on the signalized intersection.

Another key issue, which must be considered in the development of the functional plan, is the spacing of the signalized intersections. The intersections along the corridor are located at cross streets that have high traffic volumes and provide 'all-turns' access. In general, signal spacing along the entire corridor is 360 meters apart.

The requirement for roadway improvements along the corridor drives the need to review and define a setback distance for buildings along the corridor. The redevelopment plan also defines the placement and construction of all the functional elements of corridor. The list of items includes walkways, bicycle paths, accommodation for the transit system, landscaping, street furniture, signage, and street lighting.

5.2 CROSS SECTION

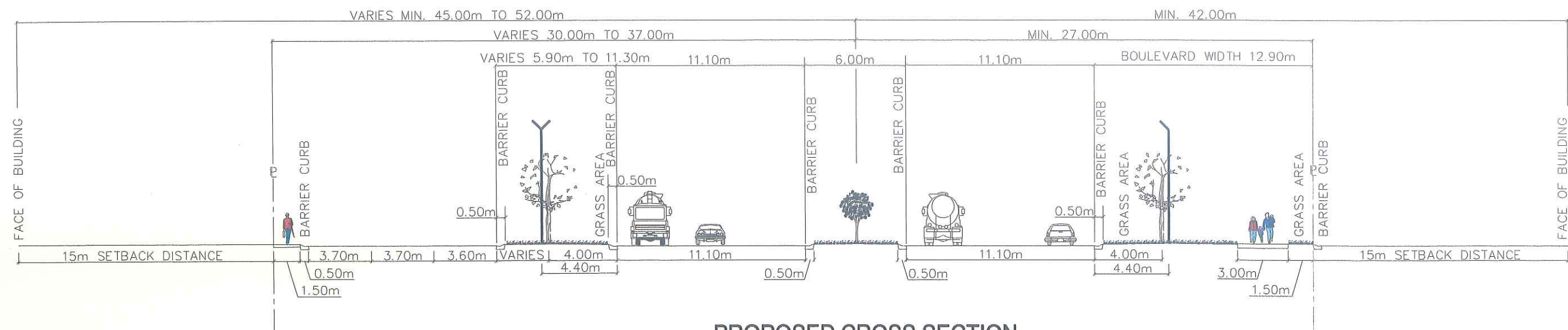
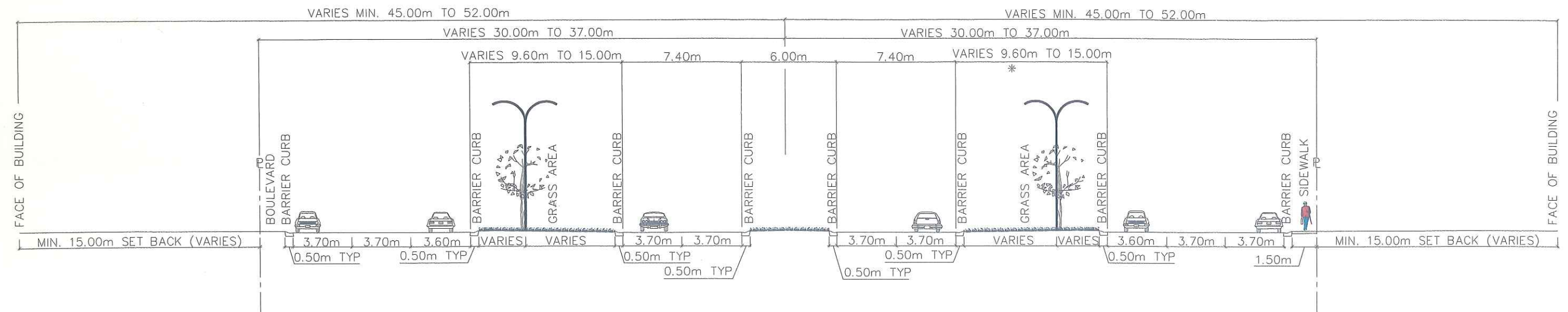
Several design concepts were considered for the Gaetz Avenue corridor including a wider center roadway median concept and an auxiliary shared access lane concept. Due to issues of cost, functionality, safety, and land area requirements it was determined that the most acceptable concept was to widen Gaetz Avenue about its current configuration maintaining the existing center median width.

The developed cross section for the corridor is based on the space requirements for the roadway, walkways, bicycle paths, and landscaping. Where the service roads have been removed, the edge of the road right-of-way will be 27 meters from the center of the median to the property lines. The boulevard will be a minimum of 12.9 meters from the lip of gutter to the property line. Where business owners choose not to purchase the surplus service road land the boulevard width will be greater. A three-meter wide walkway will meander within the boulevard and at no point will the outside edge be less than 1.5 meters from the property line.

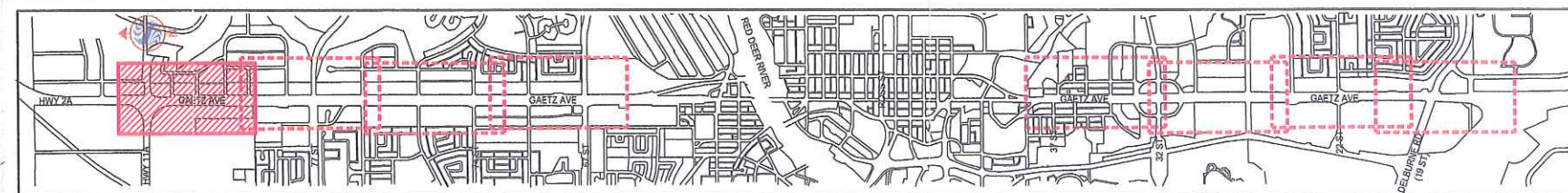
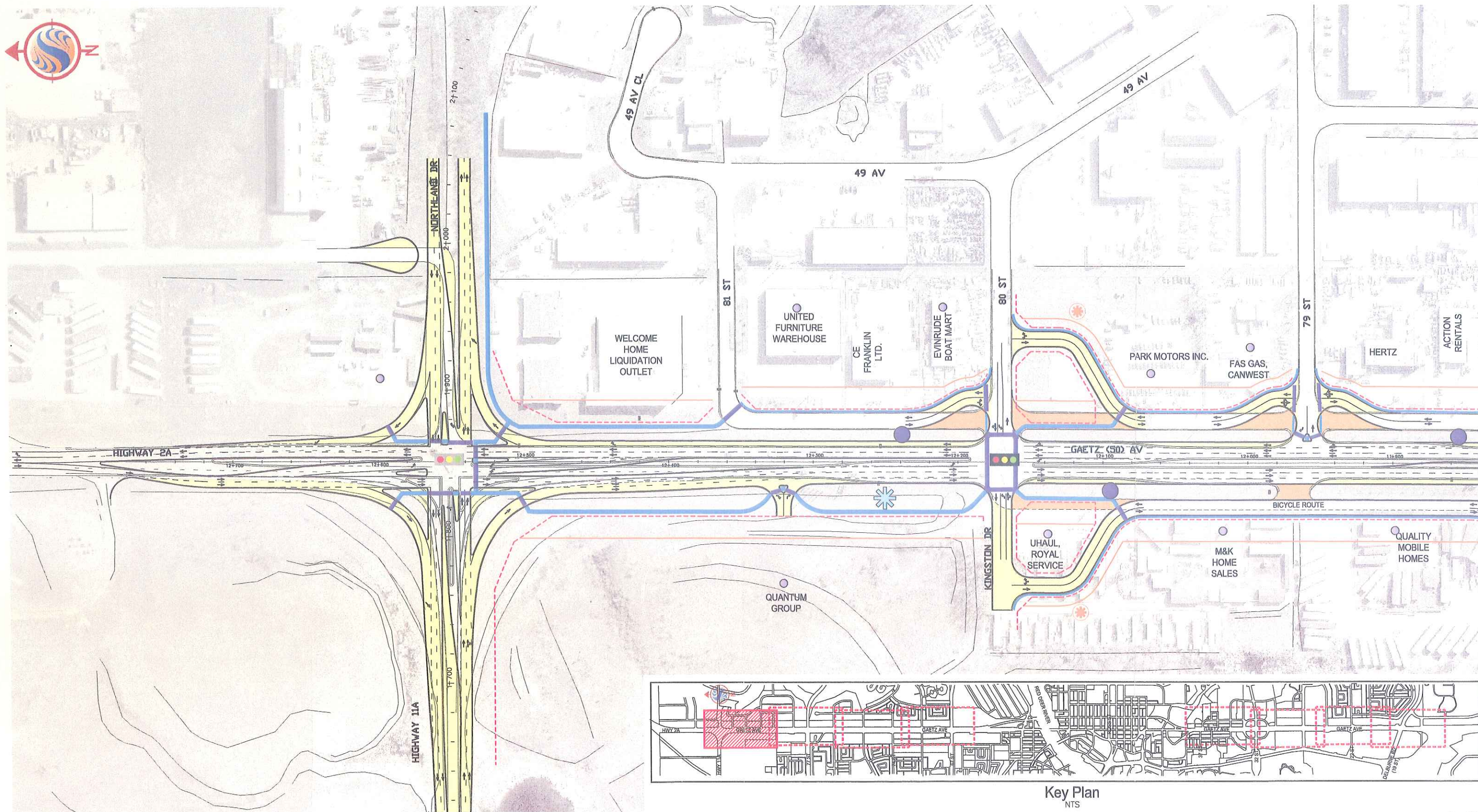
The center median will be six meters wide from the lip of gutter to the lip of gutter. Where dual left turns bays must be accommodated, the center median is widened in order to accommodate the additional turn bay. The roadway width will be 11.1 meters on each side of the median providing for a total of six, 3.7 meter wide driving lanes.

Where the service road remains in place, the distance from the centre of the median to the property line will vary depending on the existing conditions. The distance will range from 30 meters to 37 meters. A 1.5-meter walkway will be constructed between the property line and the curb line of the service road. The existing service road width will remain and the boulevard width will vary between 5.9 and 7.0 meters depending on existing conditions. A typical cross section for the corridor is shown in Figure 5.1.

Light standards will be placed at an offset of 4.4 meters from the lip of gutter in accordance with the City of Red Deer design guidelines for a divided arterial roadway. Trees will be planted at a minimum of 4.0 meters from the lip of gutter.



* BOULEVARD WIDTH IS NARROWER WHERE 6 LANES ALREADY EXIST.



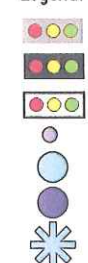
Key Plan
NTS

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2005-05-05 09:44AM By: bmcoulcheon

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Legend:



- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop
- Proposed Entrance Sign

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Removals
- Joint Access Roadway on Private Property
- Joint Access Agreement

The Small 24m Bulb Option May Be Utilized. Larger Bulbs Have Been Shown To Allow The Opportunity To Enhance The Development of Land Parcels.



Client/Project

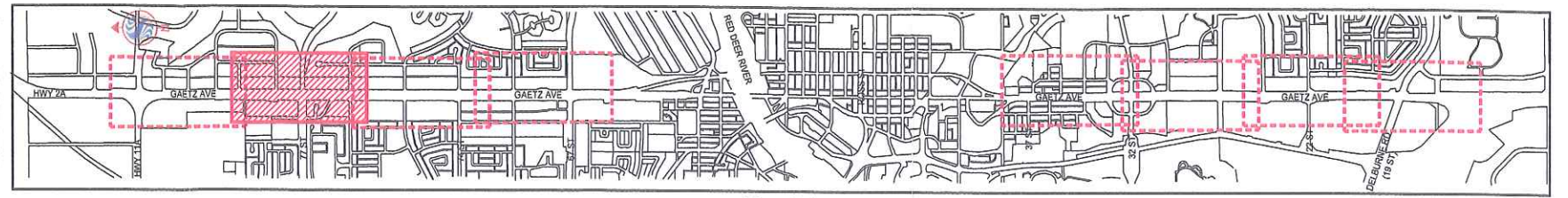
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STUDY

Figure No.

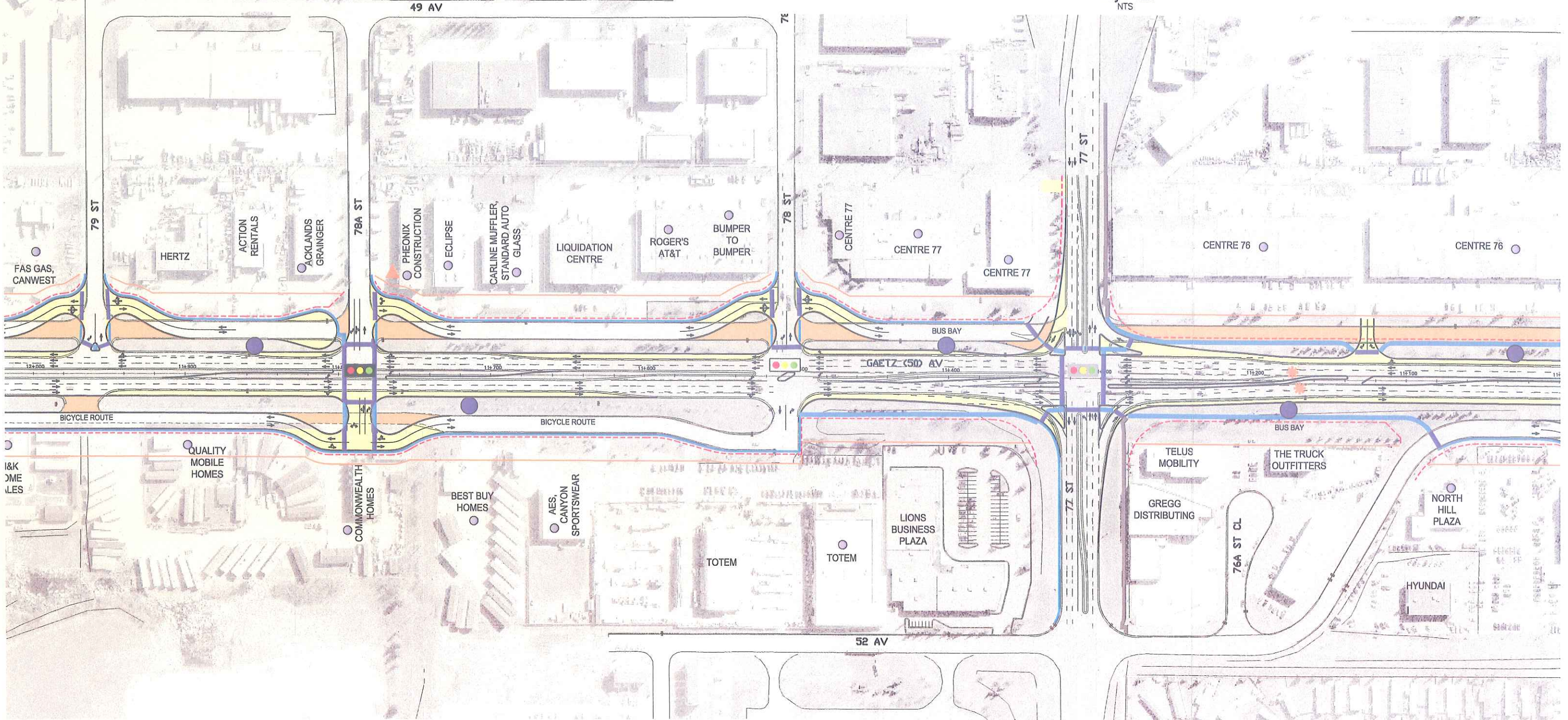
5.2

Title

Gaetz Avenue
Development Setback
79 Street To Highway 11A



Key Plan
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Legend:

- | | | | |
|--|----------------------------|--|---|
| | Existing Traffic Signals | | New 3.0m Bike Path / Walkway |
| | Future Traffic Signals | | New 1.5m Walkway |
| | Removal of Traffic Signals | | Crosswalk |
| | Participating Stakeholders | | Existing 1.5m Walkway |
| | Existing Bus Stop | | Existing 3.0m Bike Path |
| | Potential New Bus Stop | | Proposed Property Line / Roadway Required |
| | | | Proposed 15m/6m Setback Line |

- | | |
|--|--|
| | New Construction |
| | Removals |
| | Joint Access Roadway on Private Property |
| | Joint Access Agreement |
| | Non-Standard Deceleration Taper To Accomodate Slotted Left Turn (Slotted Left Turn May Be Required To Be Removed In The Future) |
| | Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future. |



Client/Project

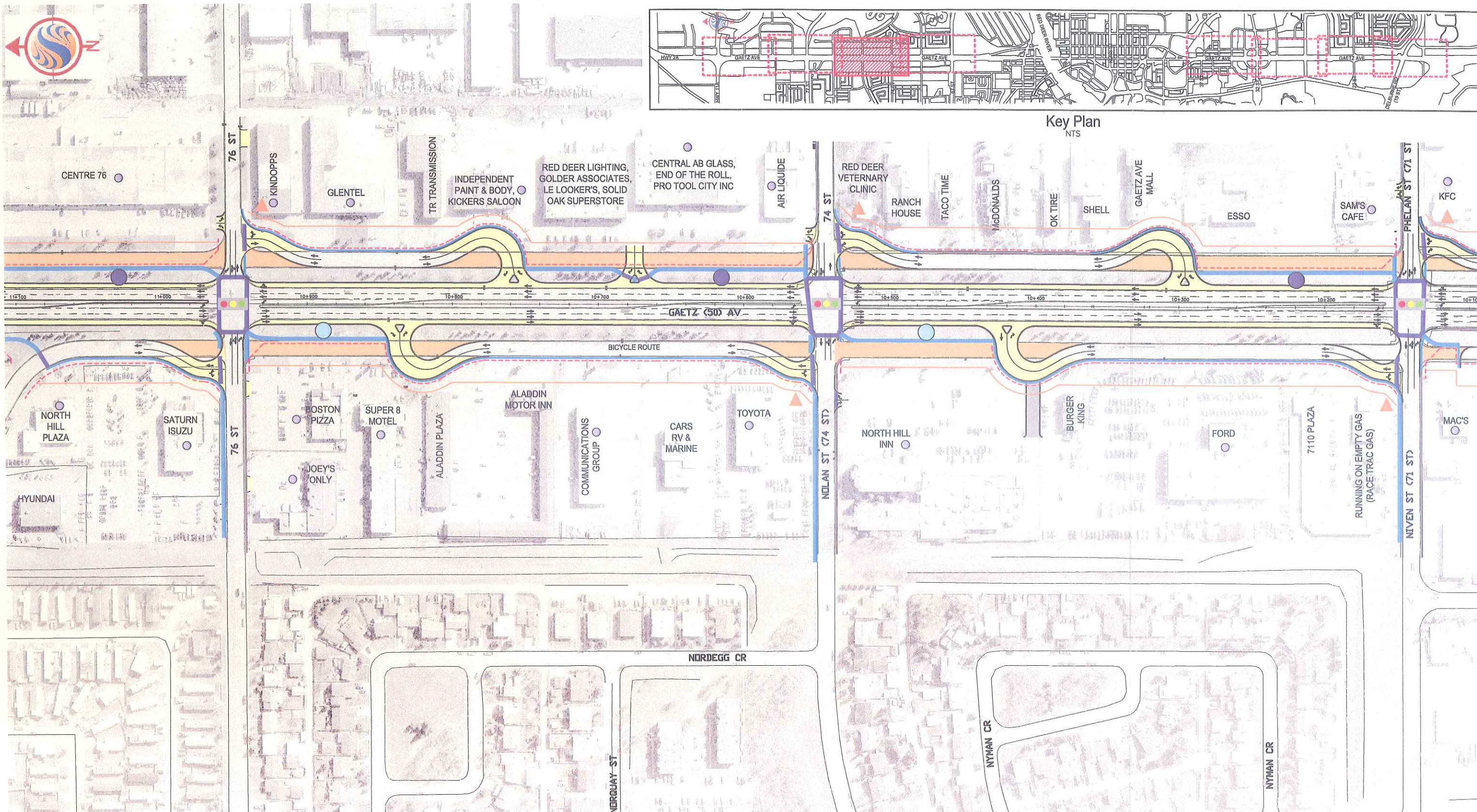
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Figure No.

5.3

Title

Gaetz Avenue
Development Setback
76 Street to 79 Street



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Stantec

Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop
- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Removals
- Joint Access Roadway on Private Property
- Joint Access Agreement



Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.



Client/Project

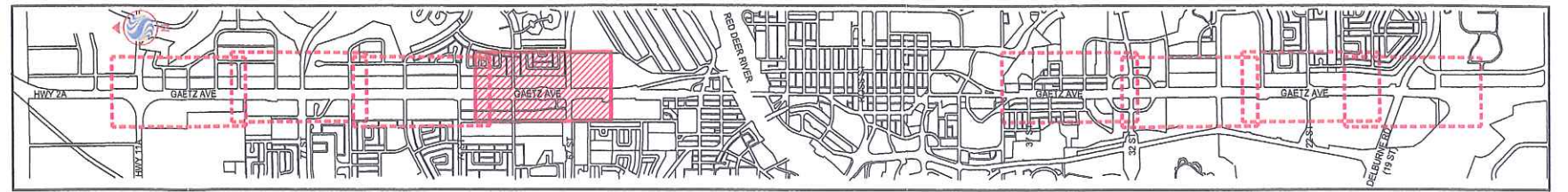
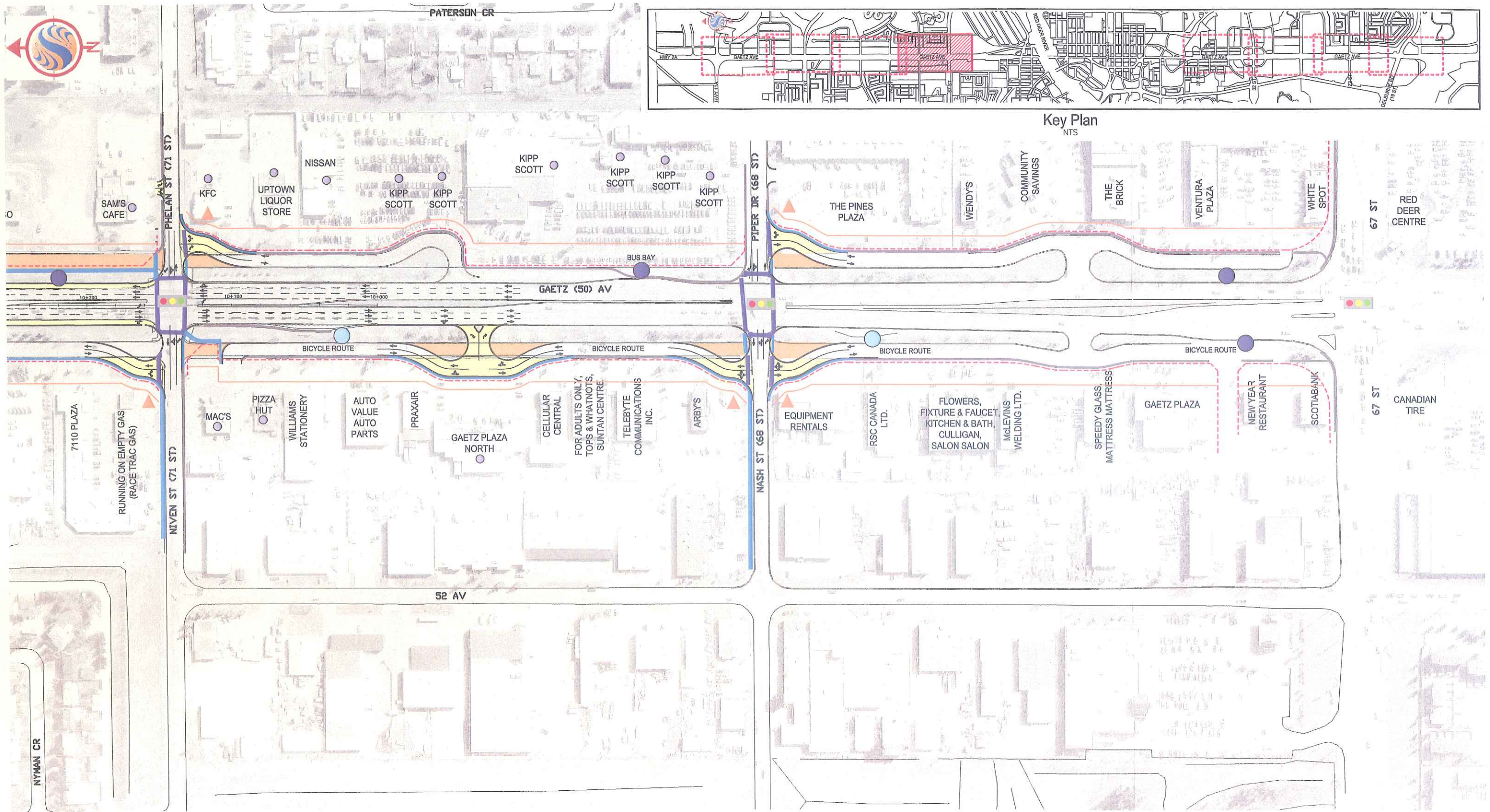
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Figure No.

5.4

Title

Gaetz Avenue
Development Setback
71 Street to 76 Street



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Stantec

Legend:

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|--|----------------------------|--|---|
| | Existing Traffic Signals | | New 3.0m Bike Path / Walkway |
| | Future Traffic Signals | | New 1.5m Walkway |
| | Removal of Traffic Signals | | Crosswalk |
| | Participating Stakeholders | | Existing 1.5m Walkway |
| | Existing Bus Stop | | Existing 3.0m Bike Path |
| | Potential New Bus Stop | | Proposed Property Line / Roadway Required |
| | | | Proposed 15m/6m Setback Line |

- | | |
|--|--|
| | New Construction |
| | Removals |
| | Joint Access Roadway on Private Property |
| | Joint Access Agreement |

Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.



Client/Project

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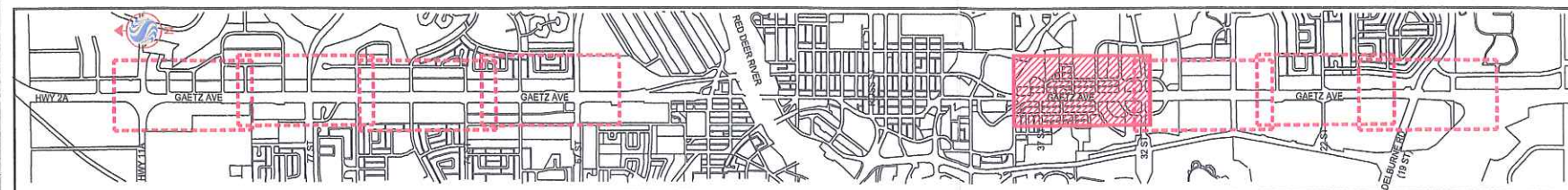
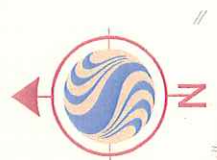
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5.5

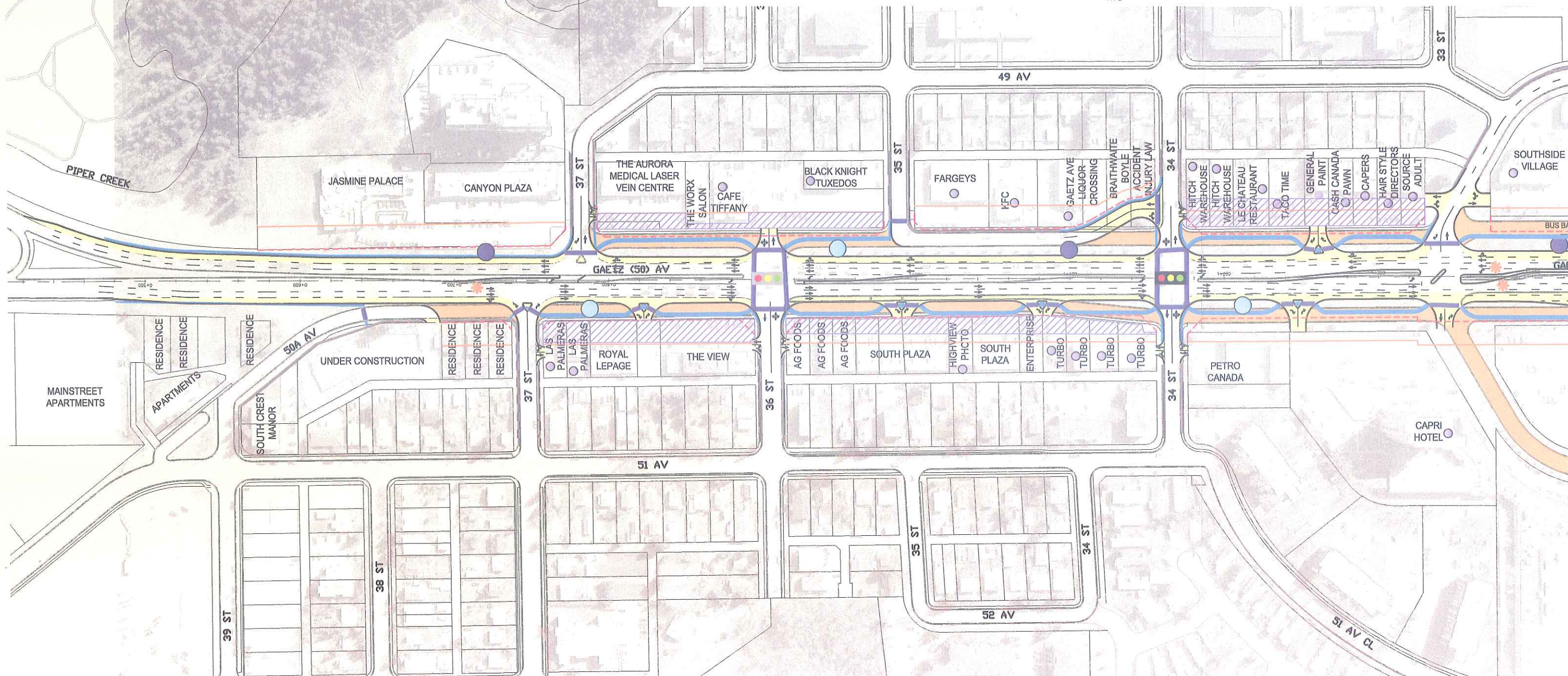
Title

Gaetz Avenue
Development Setback
67 Street to 71 Street





Key Plan
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Stantec

Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop

- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Removals
- Joint Access Roadway on Private Property
- Joint Access Agreement
- Non-Standard Deceleration Taper To Accommodate Slotted Left Turn (Slotted Left Turn May Be Required To Be Removed In The Future)



Client/Project

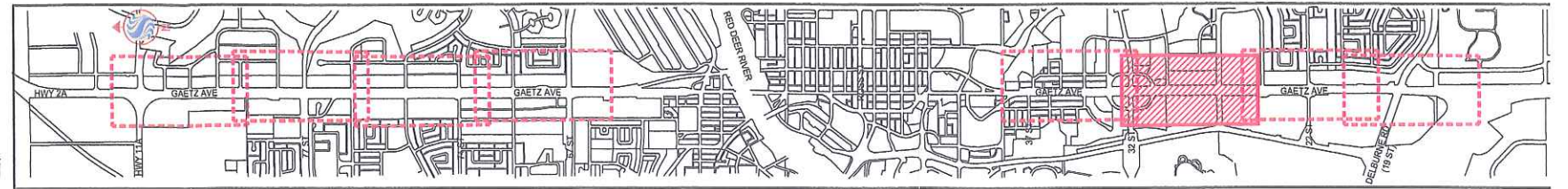
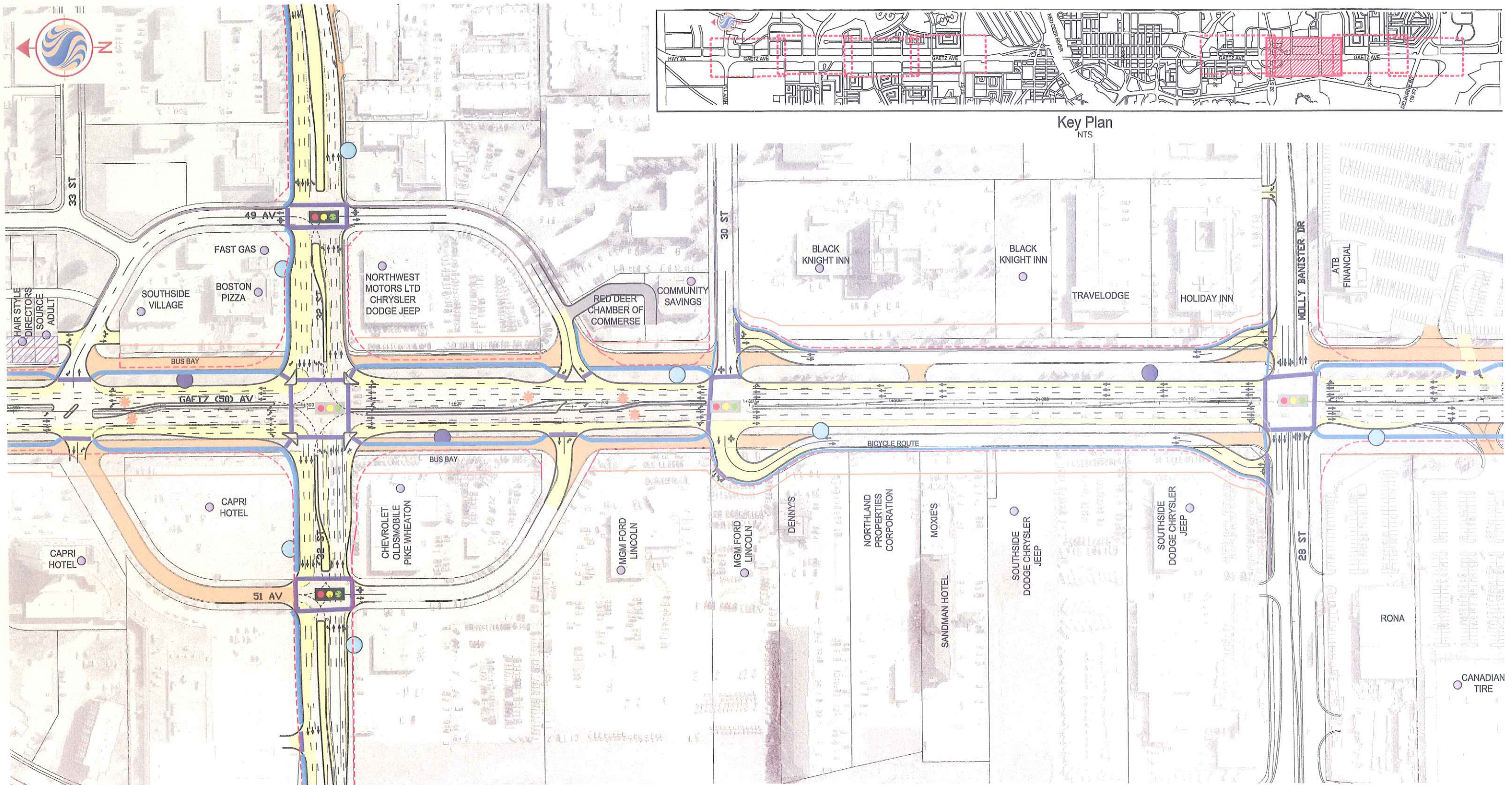
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Figure No.

5.6

Title

Gaetz Avenue
Development Setback
49 Avenue to 37 Street



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Stantec

Legend:

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|--|----------------------------|--|---|
| | Existing Traffic Signals | | New 3.0m Bike Path / Walkway |
| | Future Traffic Signals | | New 1.5m Walkway |
| | Removal of Traffic Signals | | Crosswalk |
| | Participating Stakeholders | | Existing 1.5m Walkway |
| | Existing Bus Stop | | Existing 3.0m Bike Path |
| | Potential New Bus Stop | | Proposed Property Line / Roadway Required |
| | | | Proposed 15m/6m Setback Line |

- | | |
|--|--|
| | New Construction |
| | Removals |
| | Joint Access Roadway on Private Property |
| | Joint Access Agreement |
| | Non-Standard Deceleration Taper To Accommodate Slotted Left Turn (Slotted Left Turn May Be Required To Be Removed In The Future) |



Client/Project

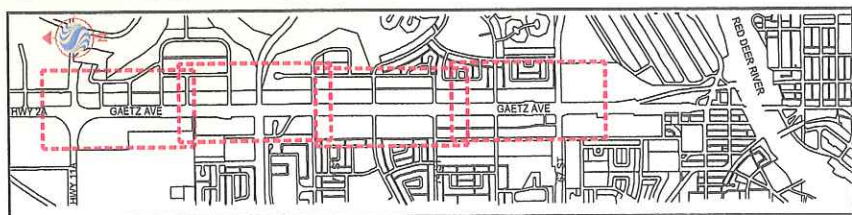
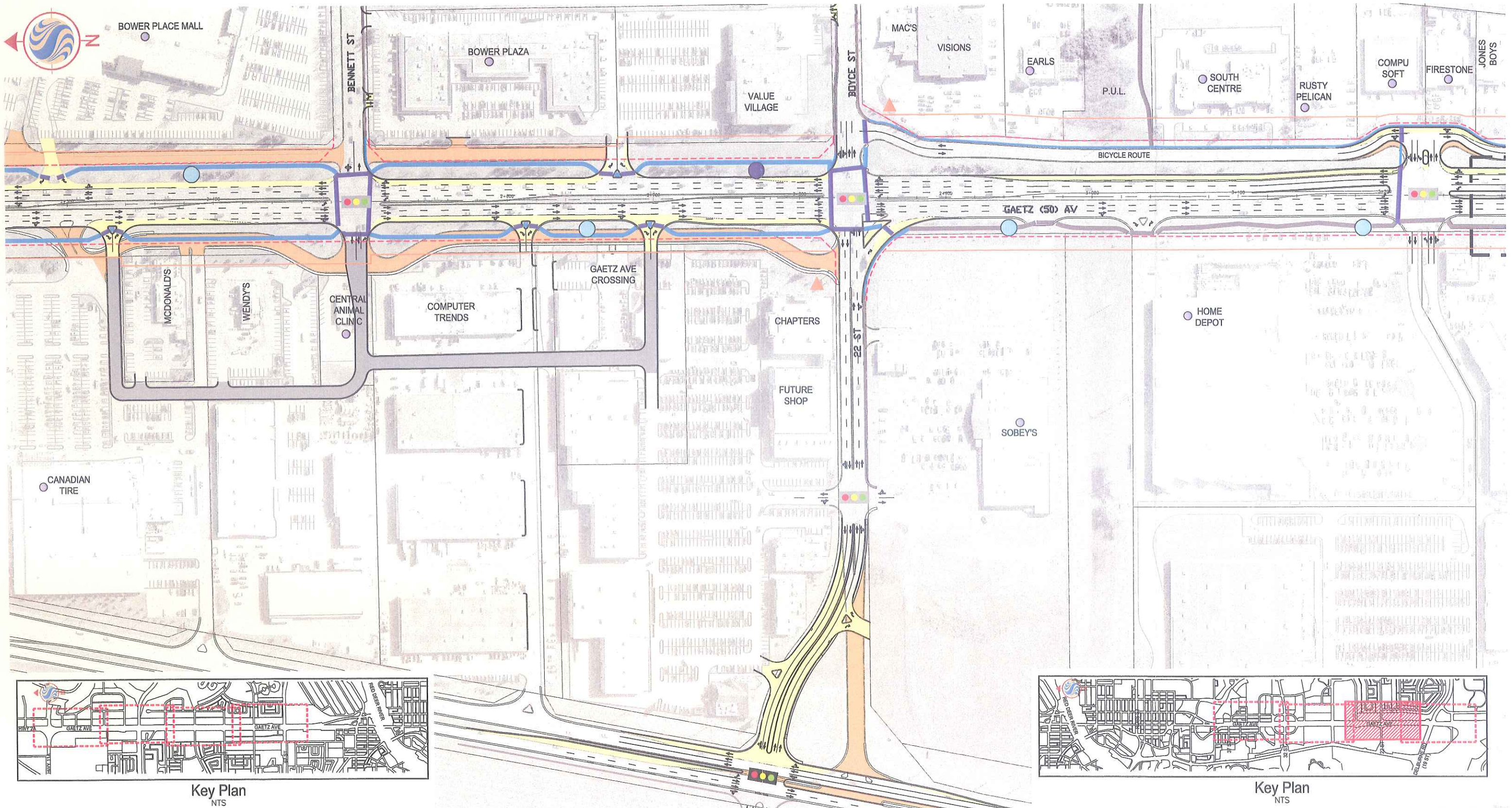
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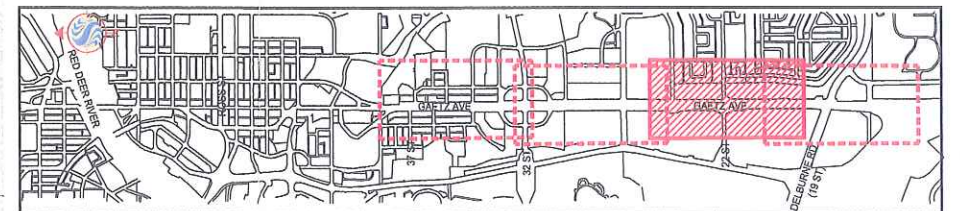
5.7

Title

Gaetz Avenue
Development Setback
28 Street to 49 Avenue



Key Plan
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Key Plan
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Legend:

- Existing Traffic Signals
- Future Traffic Signals
- Removal of Traffic Signals
- Participating Stakeholders
- Existing Bus Stop
- Potential New Bus Stop
- New 3.0m Bike Path / Walkway
- New 1.5m Walkway
- Crosswalk
- Existing 1.5m Walkway
- Existing 3.0m Bike Path
- Proposed Property Line / Roadway Required
- Proposed 15m/6m Setback Line

- New Construction
- Removals
- Joint Access Roadway on Private Property
- Joint Access Agreement

Cross Street Traffic Volumes Require A 45m Bulb As Per TAC Guidelines. Non-Standard 24m Bulbs Have Been Shown Due To Property Constraints. Refer To Section 3.9 And Table 3.2. Centre Medians On The Cross Street May Be Required In The Future.



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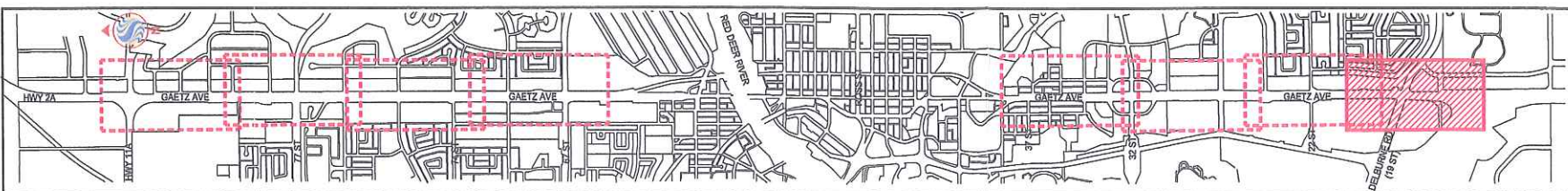
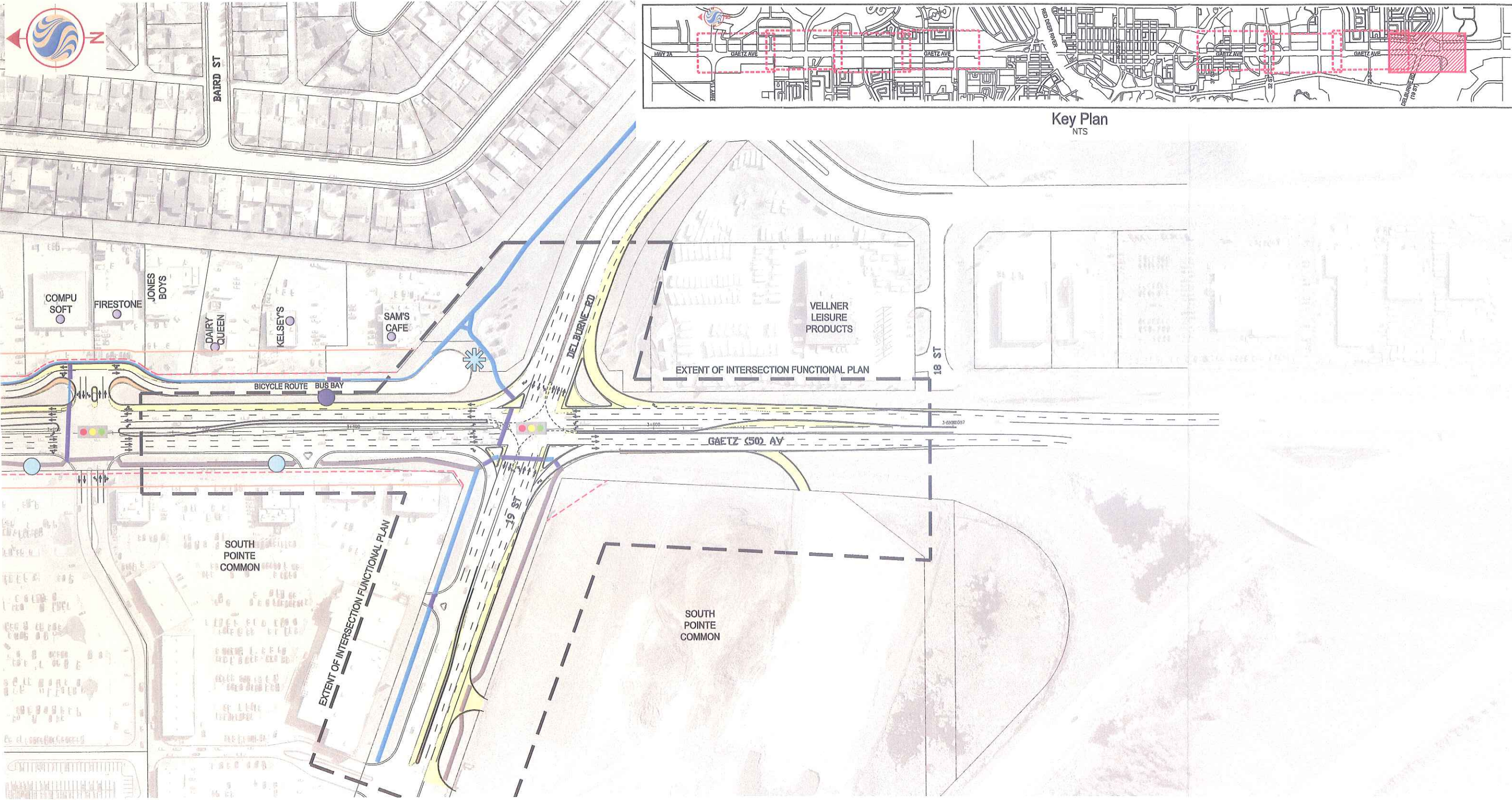
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5.8

Title

Gaetz Avenue
Development Setback
20 Street to 28 Street

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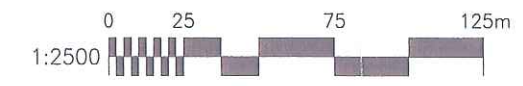
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| | Existing Traffic Signals | | New 3.0m Bike Path / Walkway | | New Construction |
| | Future Traffic Signals | | New 1.5m Walkway | | Removals |
| | Removal of Traffic Signals | | Crosswalk | | Joint Access Roadway on Private Property |
| | Participating Stakeholders | | Existing 1.5m Walkway | | Joint Access Agreement |
| | Existing Bus Stop | | Existing 3.0m Bike Path | | |
| | Potential New Bus Stop | | Proposed Property Line / Roadway Required | | |
| | Proposed Entrance Sign | | Proposed 15m/6m Setback Line | | |



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STUDY

Figure No.
5.9

Title
Gaetz Avenue
Development Setback
19 Street to 20 Street

5.3 WIDENING TO 6 LANES

Both the north and south portions of the Gaetz Avenue corridor will be widened to 6 lanes in accordance with the staged plan. The widening consists of an additional 3.7 meter wide driving lane to the outside of the existing roadway, except where there are six existing lanes along the corridor, such as between 22 Street and 19 Street, and between 67 Street and 71 Street. The 2003/2004 Transportation update plan recommends the widening of Gaetz Avenue from 71 Street to 77 Street within 5 years, and from 34 Street to the Highway 2 within 6 to 10 years. The study also indicates that six lanes on Gaetz Avenue from 77 Street to Highway 11A will not be required until the 115,000 population horizon (approximately 20 years). The short section of the widening to six lanes between 34 Street and where Gaetz Avenue splits into one-way traffic will not be required until after the 115,000 population horizon.

The following locations along Gaetz Avenue will require specific design considerations as part of the functional planning process and detailed design as noted herein:

- The grade separation between the service road and Gaetz Avenue is significant near the proposed new access to 81 Street. Particular attention will be required in the design of this access;
- As a result of the widening of Gaetz Avenue, the boulevard slopes will be steepened at several locations in the north Gaetz corridor. The steepness of the slope should be accounted for in detailed landscape plans;
- Configuration of the intersection island at 78 Street will require special design attention;
- Where Gaetz Avenue parallels 50A Avenue south of 37 Street, the east and west respective curb lines will be very close together. A barrier will be required between 50A Avenue and Gaetz Avenue; and
- Between 34 Street and 37 Street on the west side of Gaetz Avenue the design criteria of a 27-meter offset to property line must be compromised. If the 27-meter offset were used, property owners would need to give up land in this location to meet the requirement. In order for property owners to maintain the travel way requirements of a joint access, they will not be able to afford the loss of any lands. The existing property lines should therefore be maintained. In this instance the boulevard width will be approximately 1.5 to two meters narrower.

5.4 TURN BAY REQUIREMENTS

The Gaetz Avenue Widening and Highway 11A Functional Plan, 32 Street Functional Plan, and 19 Street Functional plan included traffic analysis of the important intersections in the Gaetz Avenue corridor. Turn bay requirements were first analyzed by using the existing turn bay distances to determine if the existing distance was sufficient. This distance was run in Synchro, a traffic signal coordination software, to establish the level of service of the turning movement. Then, based on the Synchro results, either a longer turn bay was designed or a second turn bay

(for left hand turns) was designated. In most cases, if a left turn bay was not sufficient, the volumes warranted a second left turn bay. The analysis findings have been applied to the Gaetz Avenue redevelopment plan.

5.5 SIGNALIZATION TIMING

In Red Deer, Gaetz Avenue functions as a major corridor with heavy volumes of traffic. For this reason, Gaetz Avenue must operate with signalized timing to provide Gaetz Avenue with proper flow along the corridor; the timing on the side streets is secondary, as the volumes of traffic are not as large. One exception to this though is Option 4. Here, the ring roads function as through movement for the Gaetz Avenue traffic. Gaetz Avenue functions only as an access to local businesses. For this reason, 32 Street operates with signalized timing.

Pedestrians affect the signal timing at any given intersection based on the number of lanes at the intersection. The more lanes there are, the longer it will take a pedestrian to cross the street, ultimately lengthening the cycle length. The safety of pedestrians must be taken into consideration when modeling a particular intersection; attention must be given to the number of pedestrians crossing the road.

5.6 NORTH GAETZ INTERSECTIONS

5.6.1 Intersection Spacing

A key issue with the north Gaetz Avenue corridor is the spacing of the signalized intersections. The intersections along the corridor are located at cross streets that have high traffic volumes and provide 'all-turns' access. The existing corridor includes a signalized intersection at 78 Street. This intersection is located approximately 200 meters from 77 Street. In general, signal spacing along the entire corridor is 360 meters, with the exception of 78 Street.

Upon review of the volumes, operations and collisions, the partial closure of 78 Street from an 'all-turns' signalized intersection to an un-signalized direct access intersection is recommended. A signal is proposed at 78A Street to provide the 'all-turns' access that will be lost at 78 Street. This signal revision, along with the creation of a signalized intersection at 80 Street, provides equal signal spacing between 77 street and Highway 11A of approximately 360 meters. This will also eliminate the issue with substandard queuing storage along both Gaetz Avenue at 77 Street and on 78 Street.

Northbound and southbound left turn access would be provided at 78 Street. This access will not be signalized, as the volume of left turning traffic in the afternoon peak (worst case scenario) is estimated to be only 59 vehicles. Based on a Sim-Traffic analysis, the allowance for opposing left turns works well as there are sufficient gaps created by the new signal at 78A Street to allow the turning vehicles through the intersection without a signal.

5.7 ACCESS MANAGEMENT

5.7.1 Application

A number of applications have been developed utilizing the design tools outlined in Section 3.8 to improve the service roads cross street intersection congestion and provide proper access to business owners. The tool box as it were, consists of service road bulbing, right-in/right-out access points, cul-de-sacs, service road termination, established driveway entries, and shared property access. Each block along the corridor must be considered unique and requires special attention with regard to the implementation of the tools available. The plan for addressing the service road concerns are founded in the TAC guidelines, City of Red Deer roadway standards, safety concerns, traffic analysis, intersection traffic counts, cross street traffic volumes, and field observations. The plan must also take into consideration the effects on property owners and land acquisition. Reconfiguration of access often has a significant impact on property owners and businesses along the corridor. In many instances short-term compromises are required to lessen the impact on property and business. In these instances a lesser standard is accepted recognizing that full compliance with the TAC guidelines or City standards will not take place. It is important to note that even the lesser standard is a significant improvement over the existing condition.

The public consultation process that is fully described in Section 6.0 included many group and individual meetings with property owners and businesses along the corridor. Through these meetings Stantec became aware of individual property redevelopment plans, concerns, and suggestions. This information was very valuable and helped in the decision of what access management tools were most appropriate for each block. Some business blocks were receptive to changes in property access; other were not.

5.7.2 Individual Property Access

It is preferred to remove the service road when property owners are in agreement to do so and alternative access can be provided. In some instances all properties in the block can be provided with access in the form of a right-in/right-out access to Gaetz Avenue or from the cross streets in the case of corner lots. The locations of the right-in/right-out accesses take into consideration the Transportation Association of Canada (TAC) spacing requirements from intersections. The right-in/right-out access solution provides more direct access to business from one direction of vehicle travel on Gaetz Avenue. This approach has been used in instances where property owners are not in favor of shared access and maintaining the service road is not a option due to the high impact on properties of a bulb at the cross street location.

5.7.3 Shared Access

In those instances where maintaining the service road has high impact on property development and individual access to a property is not possible due to building locations, grade separations, or closeness to intersections, a shared access between properties becomes necessary. A shared access agreement is a legal agreement between property owners and the City of Red Deer that defines a portion of land and the maintenance of land for the sharing of access. A

portion of the service road land may be sold to the property owners within the block to provide more land to help facilitate a shared access or may be used to develop additional parking. In the event that the service road land is not purchased by adjacent property owners, the area would be landscaped and retained by the City. Driveway entrances to the business blocks are provided at the cross streets 24 meters back from the intersection with Gaetz Avenue. Right-in/right-out access may be provided at strategic points within the block in accordance with TAC requirements and in locations that are of most benefit to business.

5.7.4 Service Road Access

The implementation of a service road bulb represents poor utilization of land within the corridor; however in some locations it is the best access management tool to apply. In these instances the City must purchase land from property owners, and in extreme cases buildings and the business. The decision regarding the latter would likely only occur at a time when the property would be redeveloped.

In locations where leaving the service road in place is the favoured way of providing property access, the TAC guidelines in conjunction with the cross street volumes are used to determine the appropriate size of service road bulb. In some instances the application of TAC bulbing criteria significantly impacts property and other means of access cannot be applied. In these cases the approach is much more subjective and considers the relative improvement to traffic function, safety and field observations of how the intersection functions rather than pure traffic statistics. A lesser bulb standard is then accepted.

Mid block bulbs at 18 meter diameter could be applied where the impact of a 24 meter bulb is significant. The 18 meter diameter would allow an SU9 truck to complete the turn within the proper lane. The 18 meter diameter bulb would not accommodate a WB15 truck in the same manner.

Section 4.1 provides a detailed analysis of the 74 Street intersections along with some conclusions regarding the adherence to the TAC guideline and the conditions for the appropriate application service road bulbs.

In the process of developing the Gaetz Avenue Redevelopment Plan, business owners were consulted with regard to the preferred methods and locations of their accesses. The driveway locations on the cross streets are positioned to permit unobstructed access to properties. The distance that they are located back from the intersection should be a minimum of 24 meters. Right-in/right-out access is provided in locations that are the least disruptive and most beneficial to property owners.

The plan also incorporates cul-de-sacs where a service road remains in place and the distance to a second cross street is relatively short. Where the implementation of a service road cul-de-sac is not practical due land acquisition requirements, the service road may terminate in a parking area providing that the configuration will permit traffic flow in the parking area.

5.7.5 Staging

The existing service road configurations and business access is a concern that is accentuated with the widening of Gaetz Avenue. Access to a particular block or property as shown in the development plan may be implemented under the City's plan for capital projects or will be addressed when widening of Gaetz Avenue occurs. An incentive to implement the plan would also occur when a particular business or property owner expresses the desire to purchase service road lands.

The signalized intersection access to the Northlands Industrial subdivision is an example where a staged implementation of the plan is proposed. The establishment of improved points of access is to occur prior to the reconfiguration of an existing intersection.

In those locations where it is difficult to accommodate the TAC large 45 meter bulb design standard due to conflicts with existing development and buildings, a small bulb has been implemented. The smaller 24 meter bulb that has less of an impact may be implemented as a compromise. In these instances the City will be acknowledging and accepting a reduced level of service. The reduced standard will improve the queuing storage, wait times, and vehicle turning movements over the existing condition. In this way the City may move forward with some level of improvement recognizing that it is not the desirable solution for a particular location but it is a significant improvement over the existing situation. Where indicated by an asterisk on the Figures 5.2 through 5.9 the implementation of the large 45 meter bulb is highly recommended should the opportunity become available through property redevelopment and land owner agreement.

The widening of the north Gaetz Avenue corridor from 71 to 77 Street is to take place in 2005. For those blocks affected by this work, a short-term plan must be in place where the long-term plan cannot be implemented. The staged plan at the very minimum should maintain the existing separation between Gaetz Avenue and the service road after the widening. The widening will reduce the separation of the service road cross street intersection from Gaetz Avenue by an additional 3.7 meters worsening the existing condition. Where the long-term solution shown on Figures 5.2 to 5.9 cannot be implemented and where multiple property owners within the block have not been able to agree on a viable short-term method of access, the existing service road separation from Gaetz Avenue should be maintained as a very minimum. In order to do so the service road becomes narrower at the intersection with the crossroad and parking removed for a portion of the roadway. A median may be constructed on the cross street through the intersection with the service road. The service road may also be narrowed by the removal of the parking lane to accommodate widening of Gaetz Avenue.

One significant difference between the north and south portions of Gaetz Avenue is timing of the redevelopment. The widening of Gaetz Avenue in the south portion of the corridor of Gaetz Avenue is not required within the next 5 years, although the major intersections of 32 Street and 19 Street may see improvements take place within 1 to 5 years. The approach to the design can therefore be somewhat more focused on longer-term solutions. In the south Gaetz Corridor the timing of the redevelopment of service roads can be contingent on the property owner, who may wish to purchase and develop service road land. It could be driven by the City's desire

address a particular problem area or could take place in conjunction with future widening of Gaetz Avenue. There are no locations in the south Gaetz Avenue corridor where interim service road bulbing is required (with perhaps the exception of Boyce Street where cross street volumes indicate that a 45 meter offset bulb is necessary. The service road intersection with the cross street is operating satisfactory at the present time with a 24 meter offset bulb.) A staged plan has therefore not been described for the south Gaetz Corridor. It is expected that the design plan will be implemented over time as the need arises. As with the north Gaetz corridor, the majority of the improvements will be ultimately linked with the widening of Gaetz Avenue.

5.8 PLAN DESCRIPTION

The Gaetz Avenue corridor for the most part has been fully built out, with the exception of Phase II of South Pointe Common, currently under development, and a few small parcels of land in the vicinity of 80 Street at the north end of Gaetz Avenue. The land use along the corridor can be described as commercial with a few pockets of light industrial. The requirement of numerous and functional access points is critical to the economic viability of the businesses along the roadway.

The removal of service roads will improve traffic flow, however access requirements may prevent complete service road removal. As part of the study, each block within the study area was conceptually redesigned with the interests of both business access and traffic objectives in mind. Although not all business owners were fully agreeable to the plan, every effort was made to address as many of their concerns as possible without compromising the traffic requirements and the continuity of the corridor.

Each of the main components of the Setback Plan is described in detail in this section. The roadway geometric items are developed from the results of traffic analysis. The design of walkways and bicycle pathways have been developed based on the content of previous reports and in consultation with the City Steering Committee for the ongoing Trails and Pathways Master Plan project. Extensive public consultation with the business owners and City land officials resulted in the definition of the land access and land transfer requirements. Utility companies were engaged in order to create logical utility alignments.

The following description provides the logic for the type of property access under the plan. Where different alternatives were considered as part of the decision making process, descriptions of the options are provided. Where short-term plans are required they are described for each portion of the corridor within the appropriate block.

Figures 5.2 through 5.9, illustrate how the Redevelopment Plan accommodates the needs of traffic capacity, safety and accessibility to businesses along the corridor. The areas that are shaded in yellow represent new construction or roadwork. The areas shaded in orange represent areas where the service roads or small portions of roadway will be removed. Where a desirable standard for service roads bulbs cannot be readily achieved the preferred bulb is shown in purple crosshatch. Signal lights are shown where existing, where new lights will be installed and where lights will be removed. New walkways and bike paths are shown with blue

lines as well as connections to the existing that are shown as gray lines. Crosswalks are shown in dark blue. Existing property lines are shown as a thin black line and potentially new property lines shown with a dashed red line. The new set back distance based on the new property line is shown as a solid orange line. Where comment forms have been received from property owners, a purple dot has been applied to the parcel location.

5.9 NORTH GAETZ INTERSECTIONS AND BUSINESS ACCESS

The development of the plan for the north Gaetz Avenue corridor is based on principles of the design criteria and uses the various access management tools. The plan reflects the desires of property owners and businesses wherever possible in meeting the design criteria. Removal of service roads is preferred, facilitating the most practical use of the land from a business and traffic perspective. Service road bulbs are provided in instances where joint access or individual access is not practical, and where businesses prefer to have the service road remain in place. The main design elements of the north Gaetz Avenue plan are described in the following subsections.

5.9.1 Highway 11A and Gaetz Avenue Intersection Design

The Gaetz Avenue Widening and Highway 11A Functional Plan report defines the required improvements for the Highway 11A intersection. The Redevelopment Plan has incorporated the findings and road geometrics of this report. The widened intersection provides for 6 lanes on Gaetz Avenue, and the widening of Highway 11A. Slotted left turn bays are provided for all approaches with a dual slotted left turn bay for Gaetz Avenue northbound. The upgraded intersection will accommodate the traffic volumes from the future construction of Northlands Drive. The roadway east of Best Value Homes will not have access to the new Northlands Drive. Inherent in the design is the accommodation of the high volume of truck movements eastbound on Highway 11A turning north onto Highway 2A.

5.9.2 Highway 11A to 80 Street

Design Plan

The service road is shown as being maintained between 81 Street and 80 Street. A 24 meter service road bulb is required at the Boat Mart property on the corner of 80 Street. The construction of the bulb at this location is contingent on the redevelopment of the Boat Mart land. The service road intersection at 81 Street would remain unchanged. The forward position of the CE Franklin building limits the potential of a mid block right-in/right-out access. The grade separation between Gaetz Avenue and the lot line also causes mid block right-in/ right-out access difficulties. Leaving the service road in place maintains the exiting access to CE Franklin Ltd. and United Furniture Warehouse.

The west side of Gaetz Avenue is planned for commercial development. A right-in/right-out access has been provided opposite United Furniture Warehouse. A detailed traffic study is required for these lands to finalize the positioning and geometrics of the access.

Options Considered

An alternative to the design plan would be the construction of a new right-in/right-out intersection at 81 Street and Gaetz Avenue providing access to businesses on the east side of Gaetz Avenue. The right turn only intersection would give access to the Home Liquidation Outlet, United Furniture Warehouse and CE Franklin Ltd. The service road would be removed. A shared access is required between United Furniture and CE Franklin Ltd. Boat Mart will have side lot access at 80 Street. The three property owners between 81 Street and 80 Street will have the opportunity to purchase a portion of the surplus service road land. There is a considerable grade separation between Gaetz Avenue and the existing service road toward 81 Street. Some service road land area will need to be retained in order to construct proper grade slopes without the use of retaining walls at the 81 Street access. Important to the United Furniture Warehouse property is the preservation of their existing access to 81 Street.

Staging

A short-term plan is not required. The design plan could be implemented in conjunction with the widening of this section of Gaetz Avenue.

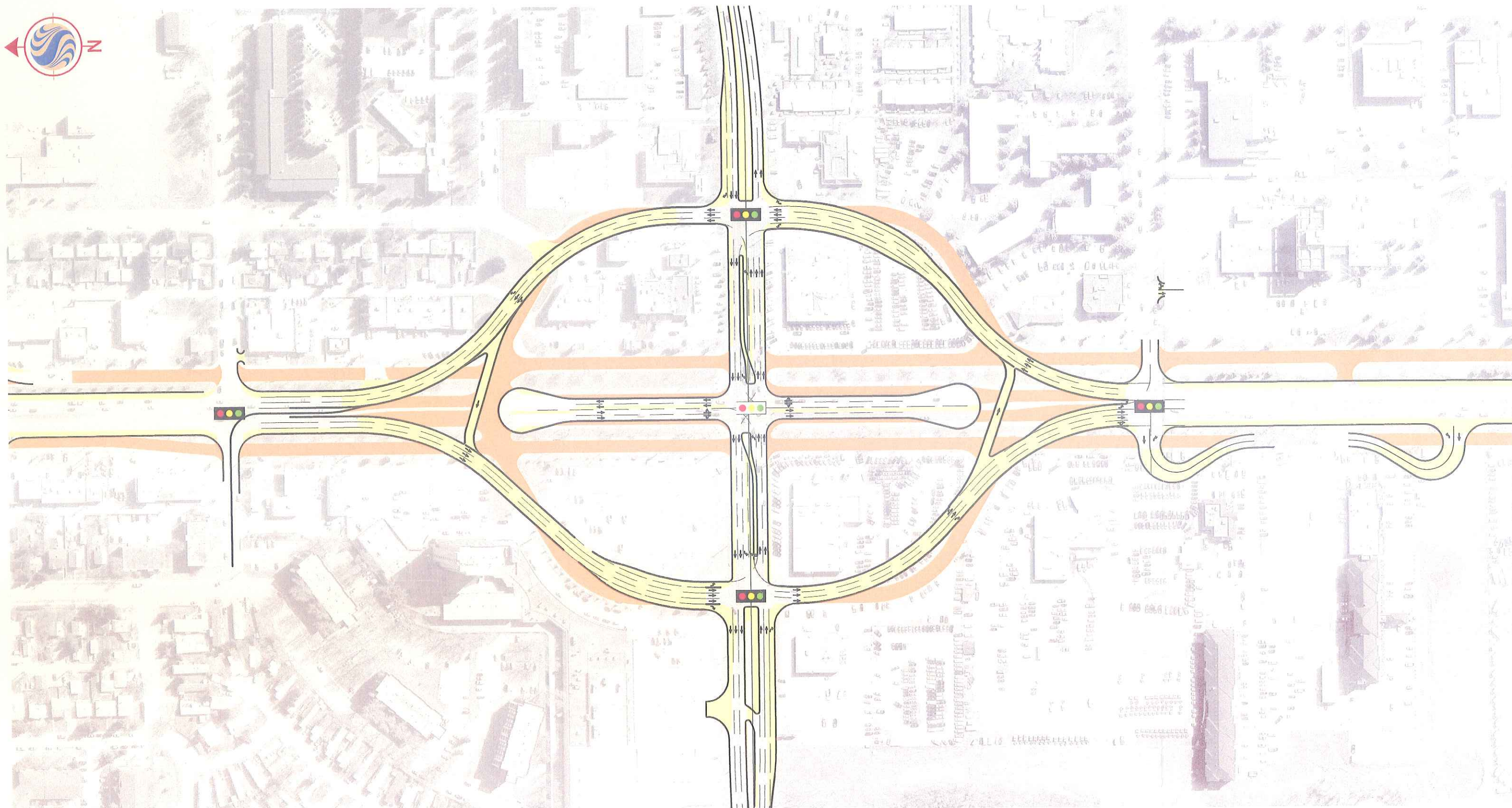
5.9.3 80 Street to 78A Street

Design Plan

Two large service road bulbs are shown on the drawings at 80 Street. The projected cross street volumes on the east side of the 80 Street intersection are estimated at 2270 AADT. This projected volume of traffic does not warrant the implementation of a large bulb. The undeveloped property on the east side of Gaetz Avenue south of 80 Street is shown to have a bulb that creates a marketable block of land. This configuration was determined to be more beneficial to the property owner than a 24-meter diameter bulb. The property owner has indicated that the service road bulb as shown may be acceptable, however the owner has no redevelopment plans for the property at the time of the study. The radii shown will accommodate a WB-15 vehicle. Similarly the projected traffic volumes on 80 Street west of Gaetz Avenue will not require a large service road bulb, however the enlarged bulb creates a marketable block of land that would be more beneficial to the property owner, rather than constructing a 24-meter bulb. An enlarged bulb is therefore shown on the west side of Gaetz Avenue south of 80 Street. Although the frequency is low, large trucks servicing the modular home sales businesses in the block use of this particular intersection. The enlarged bulb would provide for easier movement and storage for these trucks waiting at the 80 Street intersection.

The 80 Street intersection will be signalized as part of the intersection spacing plan which will reduce the traffic loading at 78 Street. The signal at this location will be important as the Kingsgate subdivision and the commercial area north of 80 Street known as the Quantum property will be developed.

On the east side of Gaetz Avenue the service road is maintained with a cu-de-sac terminating the connection with 78A Street. The businesses in this block were not in favor of removing the



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Legend:



Existing Traffic Signals

Future Traffic Signals

Removal of Traffic Signals



New Construction

Removals



Client/Project

THE CITY OF RED DEER
GAETZ AVENUE REDEVELOPMENT
STUDY

Figure No.

5.10

Title

Option 4
One Way Couplet
Gaetz Avenue & 32nd Street

service road that is used for parking and did not support the shared access concept. A small service road bulb on both sides at 79 Street will function properly based on the projected traffic volumes on the cross street. The projected cross street volumes on 78A Street are expected to increase to 4525 AADT with the installation of the light and for this reason a cul-de-sac on the north side of 78A Street has been shown. It will have less of an impact on the Acklands Grainger property than a service road bulb. The businesses of Hertz and Action Rental on the east side of the block between 78A street and 79 Street will have access to an all turns intersection at 80 Street by traveling north on the service road or around the block behind the properties to 78A Avenue and right-in/right-out access at 79 Street.

On the west side of Gaetz Avenue the service road is maintained in the plan. The properties in this section use the service road for the delivery of mobile homes. Due to the geometric impact of a 24 meter bulb, right-in/right-out access to Gaetz Avenue located at 79 Street is not appropriate and will be closed. Access to a controlled intersection at both ends of the block allows large delivery trucks to enter and exit Gaetz Avenue. The access to the service road at the lighted intersection of 78A Street and the intersection of 78 Street is appropriate for trucks up to a WB-15. Trucks larger than this will be able to use the intersection access at 80 Street. Should the bulb at 80 Street be reduced in size, the delivery of modular homes may require flag personnel to monitor traffic while a truck negotiates the corner.

Options Considered

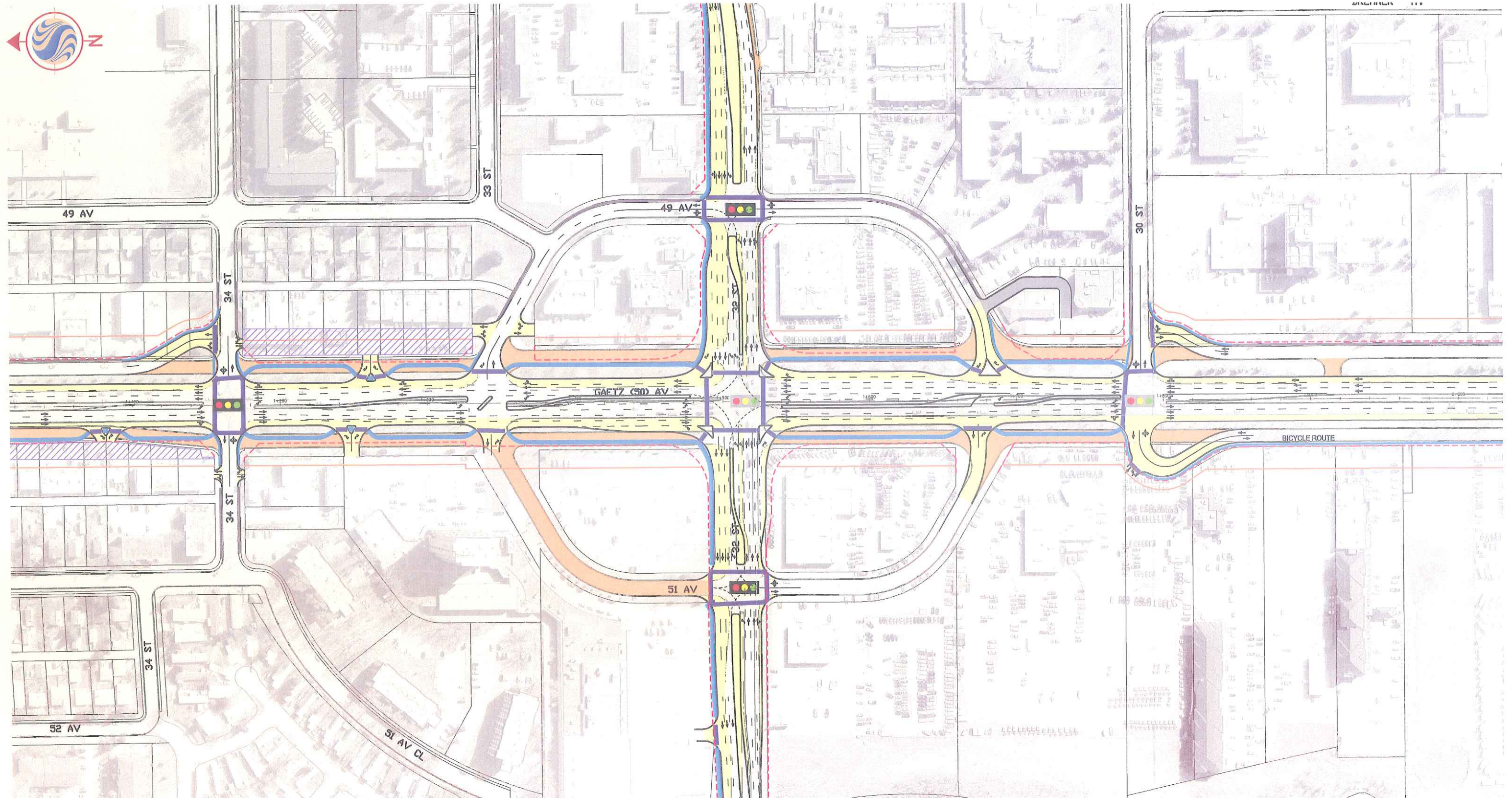
A 24 meter bulb could be implemented on the east side of Gaetz at 80 Street rather than the service road bulb that creates a separate parcel of land. This decision is at the discretion of the property owner.

Between 79 Street and 78A Street the service road could be removed and a right-in/right-out access provided to Action Rentals at their north property line. Hertz and Ackland Grainger would have driveway access 24 meters back for the Gaetz Street intersection at the cross streets.

The signalization of 79 Street rather than 78A Street was investigated in response to comments from the business community of Northlands Industrial Park. The pros and cons were thoroughly reviewed before the recommended plan of signalizing the 78A intersection was incorporated into the drawings and report. A summation of the public open house and the advantages and disadvantages of positioning the lights at 79 Street vs 78A Street is included in Appendix 'A'.

On the west side of Gaetz Avenue the large service road bulb could be reduced to a small bulb given the projected traffic volumes have been estimated at 2070 VPD.

On the west side of Gaetz Avenue no other options were considered. Redevelopment of the property in this block may dictate that other options be considered.



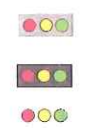
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May 2005
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Stantec

Legend:



Existing Traffic Signals
 Future Traffic Signals
 Removal of Traffic Signals



New Construction
 Removals



Client/Project

THE CITY OF RED DEER
 GAETZ AVENUE REDEVELOPMENT
 STUDY

Figure No.

5.11

Title

Option 5
 Gaetz Avenue & 32nd Street

Staging

The construction of the west leg access of 80 Street to Kingsgate subdivision will trigger the need for construction of the service road bulb. The enlarged service road bulb as shown on the drawings or a small 24 meter bulb may be implemented at any time in conjunction with the redevelopment of the U-Haul property.

The requirement for the installation of the service road bulbs at 80 Street is more directly related to the installation of the light at 80 Street than the widening of Gaetz Avenue. The new light at 80 Street will encourage more traffic from development on both sides of Gaetz Avenue to use this intersection. This will create a condition similar to other existing locations on the corridor where service road separation to Gaetz Avenue is not adequate.

Redevelopment of the access on the east and west sides of Gaetz Avenue between 79 and 78A Streets would be implemented in conjunction with the widening of this section of Gaetz Avenue.

5.9.4 78A Street to 77 Street

Design Plan

Although service road bulbs at the properties of Pheonix Construction and Bumper to Bumper have an impact on parking, leaving the service road in place may be the best form of access for the block. Should property owner concerns regarding the loss of the service road be overcome by shared access or individual access these alternatives may be considered.

The property owners of Center 77 between 78 Street and 77 Street on the east side of Gaetz Avenue were not in favor of shared access. The service road is shown to remain in place with the service road ending at the southernmost entry into the Center 77 parking lot. Both north and southbound access from Gaetz Avenue at 78 Street is provided, however traffic leaving the businesses wishing to travel southbound on Gaetz Avenue will need to travel around the block to the east to the light at 78A Avenue. The removal of the light at 78 Street will be important to maintain the proper spacing of signalized intersections that will provide the proper traffic flow on Gaetz Avenue through the intersections from Highway 11A to 77 Street. The proximity of the 78 Street intersection to 77 Street does not provide adequate vehicle storage for southbound vehicles waiting at the light at 77 Street. The loss of all turns access at the 78 Street intersection is a concern of business owners in the North Lands Industrial Park. The plan provides for a slotted left turn access in both the north and southbound directions on Gaetz Avenue at 78 Street. The 78 Street through movements along with the east and westbound left turn movement will be closed. This measure is a compromise to a right-in/right-out access at this location. The northbound and southbound permitted left turn at the 78 Street may be provided with a stop condition to Gaetz Avenue traffic improving the movement.

Rear property driveway access to 77 Street could be provided, The potential for the short cutting of traffic from 78 Street will need to be addressed by either a fence or traffic control measures. There is some grade separation between the roadway of 77 Street and the Center 77 parking



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Stantec

Legend:



Existing Traffic Signals
 Future Traffic Signals
 Removal of Traffic Signals



New Construction
 Removals



Client/Project

THE CITY OF RED DEER
 GAETZ AVENUE REDEVELOPMENT
 STUDY

Figure No.

5.12

Title

Gaetz Avenue
 & Delburne Road

lot, however it is believed that suitable entrance grades can be obtained if in the future the property owner desire this access.

On the west side of Gaetz Avenue the service road remains in place providing access to Totem and Best Buy Homes. These businesses rely on the service road for large truck access to their respective properties.

Options Considered

A right-in/right-out access would serve the properties on the east side of Gaetz Avenue between 78A Street and 78 Street. Corner properties would have driveway access to the cross streets. The location of the driveway will be 24 meters from the new curb line on Gaetz Avenue providing for vehicle storage at the cross street intersection with Gaetz Avenue. This is more critical at 78A Street as the cross street volumes are expected to be higher here than on 78 Street. Two right-in/right-out accesses may be considered, one at the property line of Rogers AT&T and Liquidation Center the other at Carline Muffler. Eclipse would require shared access across the Carline Muffler property for use of the right-in/right-out access. All property owners between 78A and 78 Street on the east side of Gaetz Avenue would have the option to purchase a portion of the service road land.

Should the property owners of Eclipse and Carline Muffler on the east side of Gaetz Avenue between 78A Street and 78 Street not wish to share access between properties, the right-in/right-out access locations could be adjusted so that each building in the middle of the block has a point of access. The purchase of the service road lands would be at the discussion of each property owner.

Staging

When the widening occurs the distance between the service road intersection and the Gaetz intersection would be reduced causing unsafe condition. For the east side block between 78A and 78 Street, construction of the service road bulbs would coincide with the widening of Gaetz Avenue. The alternative methods of access could also be implemented at the time widening of Gaetz Avenue occurs.

On the west side of Gaetz Avenue the service road bulbs located at 78A Avenue would be installed with the widening of this section of Gaetz Avenue.

The installation of the service road bulb and access at the Centre 77 would be completed in conjunction with the widening of Gaetz Avenue from 71 Street to 77 Street and the light at 80 Street.

A staged implementation plan is recommended in order to provide time for patrons and employees of the businesses within the Industrial subdivision to adjust to the changes in access at 78 Street. The plan would be comprised of the following steps.

Stage 1

- Installation of traffic signalization at 80 Street (2005).
- Restricted parking at the corners of the 80 Street intersection and restricted parking on 49 Avenue between 80 Street and 79 Street.
- Reconfiguration of 49 Avenue and 79 Street intersection would be recommended to redirect the existing flow of traffic and allow 49 Avenue to become the direct link to the ring road and therefore improve traffic flow from 80 Street.
- Monitor traffic flow at 78 Street after installation of traffic signalization at 80 Street. This analysis would monitor traffic flow and volume changes at the 78 Street intersection. The signal could remain at 78 Street if significant redistribution of traffic to 80 Street occurs.

Stage 2

- Installation of traffic signalization at 78A Street (Future).
- Restricted parking at the corners of the 78A Street intersection and restricted parking on 49 Avenue between 79 Street and 78 Street (Future).
- Coordination of signals at 78A Street with all other signals to ensure proper traffic flow is achieved along Gaetz corridor. If redistribution of traffic from 78 Street to 78A Street occurs then the signalization at 78 Street could remain.

Stage 3

Due to the close proximity of the intersection of 78 Street to 77 Street, the storage capacity is limited on Gaetz Avenue. Eventually the traffic volume on Gaetz Avenue will increase to a point where the signalization at 78 Street will need to be removed.

5.9.5 77 Street and Gaetz Avenue Intersection Design

The Gaetz Avenue Widening and Highway 11A Functional Plan report included improvements to the intersection of 77 Street and Gaetz Avenue, which have been incorporated into the road geometrics of this report. The most significant upgrades involved at the intersection are the widening of the intersection for 6 lanes of through traffic on Gaetz Avenue, a new dual left turn bay northbound on Gaetz Avenue and the development of right turn laneways.

5.9.6 77 Street to 76 StreetDesign Plan

On the east side of Gaetz Avenue for the Center 76 block the service road is shown as being removed with the provision of a right-in/right-out access at mid block. The property is all one owner, facilitating access throughout the block.

The configuration and dimensions for a new mid block left turn bay for southbound traffic on Gaetz Avenue to access Center 76 has been shown on the drawings. The turn bay storage requirement of 90 meters for the dual left turn at 77 Street has been provided. This requirement is based on the 115, 000 population horizon. There will 25 meters of storage for left turn bay at Center 76 with 75 meters radius tapers. Although site generation traffic volumes for Center 76 are not available it is expected that 25 meters of storage will be adequate for the left turn bay. The taper design is below the TAC guideline standards for Gaetz Avenue. The compromised turn bay taper may cause some vehicle deceleration to occur in the through lanes on Gaetz Avenue reducing capacity and moderately increasing accident risk. Deceleration on the through lanes of Gaetz Avenue will be most prominent when the left turn bays are nearly full of vehicles. In order to extend the turn bay for 77 Street should it be required some time in the future the slotted left turn access would have to be removed.

The owners and managers of the Centre 76 building may not be interested in the purchase of the surplus service road land. In this instance the existing property line would remain in place and the service road land would be landscaped with grass.

The service road on the west side in front of Saturn Isuzu and the North Hill Plaza will be maintained and a 24 meter diameter service road bulb installed at the Saturn Isuzu dealer. This configuration maintains good access to all the businesses in this block. The cross street volumes on the west side of 76 Street are projected to be 2450 AADT. Based on these cross street volumes it is expected that the small service road bulb will be adequate in this situation.

Options Considered

An alternative solution would be to maintain the existing service road from 76 Street. to the mid point of the south building. In this situation a 24m bulb would have to be constructed at 76th St. that would negatively impact the property. In order to do this the service road would be narrower than it is with the parking lane removed. The cross street volumes on 76 Street of 6010 AADT are such that a median would be required at the location of the service road intersection. A right-in/right-out access would be provided at mid block where there is currently a driveway connection to the existing service road. No access to 77 Street would be provided. This configuration would allow for the closure of the service road without any disruption to the property.

A large 45 meter bulb at 76 Street impacts the building. A 24 meter bulb which is below the required standard would compromise the business front parking. Therefore service road bulbs are an impractical option and not in the best interest of the property owner.

GAETZ AVENUE REDEVELOPMENT STUDY

Redevelopment Plan

May 6, 2005

On the west side of Gaetz Avenue a right-in/right-out access connection where the service road bends was considered. Businesses in the block were concerned that northbound traffic on Gaetz Avenue would have a considerable distance to travel to get to their properties. Traffic would need to travel through to 77 Street, turn left on 77 and enter the service road off of 77 Street. Grade separation in the area of the right-in/right-out is fairly significant, although would be able to meet a 6% maximum slope requirement. Opening the access to an uncontrolled left turn movement was found to be unacceptable due to the proximity to the major intersection of 77 Street and the geometrics of the left turn bays at 77 and Gaetz Avenue.

Staging

The provision of the right-in/right-out access and driveway entries to the Center 76 property would take place as part of the Gaetz Avenue widening project in 2005.

Ideally the service road bulb near Isuzu Saturn at 76 Street would be constructed as part of the Gaetz Avenue widening project in 2005, however budget constraints may require that the improvements be completed at another time under a separate project and budget. Another reason that implementation of service road improvements or removals will not be occurring as part of the Gaetz Avenue widening project in 2005 as property owners are unwilling to sell land to the City.

5.9.7 76 Street to 74 StreetDesign Plan

The cross street volumes on 76 Street and 74 Street indicates that large bulbs would be required at the service road intersections. A small bulb has been shown on the drawings as a compromise with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition.

Even a small bulb has a significant impact on the parking area at Kindopp's. Leaving a portion of the service road in place between Kindopp's and Kickers Saloon maintains the existing form of access for the businesses in this portion of the block. Red Deer lighting would have access off of the corner of the mid block service road bulb. A right-in/right-out access would be provided to Central Alberta Glass. Air Liquide has direct driveway access to 74 Street. The mid block right-in/right-out service road bulb at Kickers Saloon could be a 18-meter bulb rather than one at 24 meters to lessen the impact on the property if business owners did not require access for WB-15 vehicles.

On the west side of Gaetz Avenue, a portion of the service road remains in place; the section in front of Boston Pizza would be removed. Corner properties inherently have good access to the all turns intersection, such as the case with the Boston Pizza. In providing a mid block right-in/right-out access at the landscaped area in front of Aladdin Plaza, the Super 8 motel buildings are the least impacted. The Super 8 motel has direct access from corner of the service road bulb and, as with other businesses in the block, access is available at 74 Street to an all turns intersection where a small bulb would be installed. The cross street volumes on 74 Street

dictate that a 45m bulb be installed at the Toyota dealership, however this is not possible with the building in the present location and a 24m bulb has been shown at this time with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition.

Options Considered

On the east side of Gaetz Avenue, shared access or individual access with right-in/right-outs is an option that may be considered. Right-in/right-out access within the block provides more direct access to businesses. If the property owners and business interests in this block are receptive to shared access, owners would have the opportunity to purchase service road land for additional parking. The existing service road is currently used as the main route for truck access to some of the businesses. Rear access is important to this block as many need truck access to the back of their buildings. An informal shared access at the rear of the building currently exists. In particular the Glentel business has expressed the need for access to the rear of the building. Without rear access, under a shared access or individual access arrangement, trucks entering the Glentel site would need to approach the block from the south using the right-in/right-out access at their property line. The right-in/right-out entries could be aligned with the space between buildings to provide rear access. An access at the rear of the building through the Kindopp's property would allow trucks to enter the Glentel property from an all turns intersection at 76 Street.

On the east side of the block a laneway at the rear of the properties, located on the Atco Gas service easement was considered. The gas company however, would not consider a lease of this land for roadway access to the properties. Any such access needs to be located with the property boundaries.

A large service road bulb at the corner of 76 and Gaetz would significantly impact the Boston Pizza parking lot. Similarly a large bulb at the 74 Street in the location of the Toyota dealer has a high impact on the property for show casing vehicles. Shared access in this block could be considered, however given the diversity of the type of businesses involved, shared access was found to be impractical for the design plan.

Staging

Ideally the service road bulb near Kindopp's at 76 Street would be constructed as part of the Gaetz Avenue widening project in 2005, however budget constraints may require that the improvements be completed at another time under a separate project and budget. Another reason that implementation of service road improvements or removals will not occur as part of the Gaetz Avenue widening project in 2005 is the unwillingness of property owners to sell land to the City.

A small bulb is recommended to be constructed at this time with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition. The cross street volumes on 74 Street and the subsequent traffic analysis of the intersection indicate that a 45 meter bulb is needed

5.9.8 74 Street to 71 StreetDesign Plan

The results of the 74 Street traffic analysis and the TAC guidelines were used to determine the appropriateness of the smaller 24 meter bulb in each situation. The location of the Red Deer Veterinary Clinic will require a large meter radius bulb in accordance with the results of the traffic analysis for the intersection. A small bulb however is recommended to be constructed at with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition. A mid block service road access is provided in a location that is least disruptive to property. This mid block bulb could be reduced to a 18 meter bulb in order to lessen the impact on property if business owners do not require access for WB-15 vehicles. The property of Sam's Café will have a driveway with direct access to 71 Street. The service road in front of the Esso property and Sam's Café, is shown to be removed, providing opportunity for the surplus land to be sold these owners.

On the west side of Gaetz Avenue a mid block right-in/right-out access can be provided at the Burger King location with connection to the existing service road. A 24 meter bulb would be installed at 71 Street with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition. The North Hill Inn may purchase the surplus service road land in front of their property for customer tractor-trailer parking.

Options Considered

A joint access agreement would not easily be facilitated for the block on the east side of Gaetz Avenue, as the types of businesses and the existing setback distance of some buildings do not lend themselves to common access.

Shared access and individual access options were considered for the west side of the block, however the owner of the Ford Dealership preferred direct right-in/right-out access to the service road that is left in place. If the service road were removed and right-in/right-out access provided, these accesses would need considerable throat distance to overcome the grade separation.

Staging

Ideally the service road revisions would be constructed as part of the Gaetz Avenue widening project in 2005, however budget constraints may require that the improvements be completed at another time under a separate project and budget. Another reason that implementation of service road improvements or removals will not occur as part of the Gaetz Avenue widening project in 2005 is the unwillingness of property owners to sell land to the City.

5.9.9 71 Street to 68 StreetDesign Plan

A small service road bulb is shown to be implemented on the east side of Gaetz Avenue at the KFC 71 Street. The projected cross street volumes are 3810 AADT on 71 Street, ultimately requiring a 45 meter bulb. It is understood however that to implement a 45 meter bulb, the KFC building would need to be redeveloped. In order not to disturb the KFC drive through with the 24 meter bulb the diameter must be reduced by an additional 2 meters.

On the west side of Gaetz Avenue, the service road intersection with 71 Street has been closed. A bulb at this location would significantly impact the Mac's Store. The service road is to remain in place for the remainder of the block, with the service road ending at the driveway of Macs and Pizza Hut, and a service road bulb at Arby's near 68 Street. A small bulb is recommended to be constructed at Arby's with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition. The owners of the Gaetz Plaza north are agreeable to the construction of a mid block right-in at their property frontage providing that there is relaxation on their landscaping requirements.

Options Considered

On the east side of Gaetz Avenue the Kipp Scott property was recently redeveloped and the service road removed. The other businesses in the block were not interested in similar redevelopment at that time. The service road remains in place for the remainder of the block.

A shared access on the west side of Gaetz Avenue would be very difficult given the number of properties and varying business types. Individual access cannot be applied here as the number of right-in/right outs that would be too close together.

Staging

The extensive discussions with property and business owners on the east side of Gaetz Avenue indicate that they prefer to have the service road remain in place as shown in the design plan. The small bulb is acceptable to the owner of the KFC property.

Ideally the service road revisions would be constructed as part of the Gaetz Avenue widening project in 2005, however budget constraints may require that the improvements be completed at another time under a separate project and budget. Another reason that implementation of service road improvements or removals will not occur as part of the Gaetz Avenue widening project in 2005 is the unwillingness of property owners to sell land to the City.

5.9.10 68 Street to 67 Street

Design Plan

The projected cross street volumes at 68 Street are 4300 AADT on Piper and 6250 AADT on Nash streets. Based on volumes of this magnitude a large 45 meter offset bulb design would be required at the property of the Pines Plaza on the east side of Gaetz Avenue and Equipment Rentals on the west. A large service road bulb will have a significant impact on parking and on buildings at both properties. A small bulb is recommended to be constructed with the understanding that it will not meet the TAC guidelines; it will however provide significant improvement over the existing condition. The existing right-in/right out mid block access to the service road on the west side of Gaetz Avenue functions under current conditions and will remain in place.

Options Considered

Maintaining only a portion of the service road, closing it at the south entrance to the Pines Plaza was considered. Although this option provides the opportunity for the Pines Plaza to purchase some of the service road land, it is expected that traffic would short cut through the property to gain access to 68 Street.

Shared access and individual access is not a viable option for the west side of Gaetz Avenue within this block. The proximity to 67 Street and the number of properties make it difficult to provide the right-in/right out access at the strategic points within the block. The design plan represents the only viable option. No other options have been considered for the west side of Gaetz Avenue.

Staging

The redevelopment of access to this block would take place in conjunction with the City's planning of capital projects. The redevelopment is not part of the widening of Gaetz Avenue

from 71 Street to 77 Street, however could take place with the widening project from 77 Street to Highway 11A.

5.10 SOUTH GAETZ INTERSECTIONS AND BUSINESS ACCESS

The development of the plan for the south Gaetz Avenue corridor is based on the same principals as the north Gaetz Avenue corridor. The plan reflects the desires of the property owners and businesses wherever possible in meeting the design criteria. The majority of the service roads are to be removed, facilitating the most practical use of the land from a business and traffic perspective. Service road bulbs are provided in a few instances where joint access or individual access is not practical, and where businesses prefer to have the service road remain in place. The main design elements of the south Gaetz Avenue plan are described in the following subsections.

5.10.1 Base of the South Hill / 37 Street to 34 Street

Design Plan

On the west side of Gaetz Avenue north of 37 Street, if the 27 meter offset shown on the Gaetz Avenue cross section were applied, the new property line would fall west of the existing property line. In this location it is recommended that the design boulevard width be reduced and the existing property line left in place. If 50A Avenue remains in place after the widening, the boulevard where 50A approaches 37 Street will be approximately 1 meter wide. Therefore, the design plan provides for 50A Avenue to end at the south property line of South Crest Manor. The closed portion of the roadway will provide for a more adequate boulevard width and only a small section between 50A Avenue and Gaetz Avenue will require a concrete barrier. It is anticipated that the three existing residential properties will be redeveloped into one commercial property or high density housing as in the case with the neighboring property to the north. The reconfigured corner property would have access to 37 Street with a driveway entry at a minimum of 24 meters from the Gaetz Avenue curb line.

Participation in the public consultation process by the business in this block was extensive. The configuration of joint accesses and the mid block right-in/right-out driveways were developed in partnership with the business and property owners. Equal access to the all turns intersections at 36 and 34 Street is significant to business interests on both sides of Gaetz Avenue. The existing boulevard width in this section of the roadway is less than anywhere else in the corridor.

On the east side of Gaetz Avenue the shared access in front of the Aurora building, The Worx Salon and Café' Tiffany will maintain access to 36 Street for the businesses located north of 37 Street. A shared access agreement would allow a similar traffic route to continue. A small strip of land would be available for purchase by the property owners between 37 Street and 36 Street with the closure of the service road. This land will be valuable in providing a drive isle through the front of the properties in this location. In order to provide a drive lane access and still maintain the required parking area, the property owners may need more of the boulevard land, compromising the standard boulevard width identified in the cross section. A slotted

southbound left turn bay at 37 Street would alleviate some of the through traffic on the shared access in front of the businesses south of the intersection.

Between 36 Street and 35 Street on the east side of Gaetz Avenue, the service road is removed from in front of Black Knight Tuxedos. The service road remains in place from 35 Street to 34 Street. A small 24 meter service road bulb would be installed at the end of 34 Street when the Boyle law office property is redeveloped or the widening of Gaetz Avenue takes place.

On the west side of Gaetz Avenue between 37 Street and 34 Street, if the 27 meter offset shown on the Gaetz Avenue cross section were applied, the new property line would fall west of the existing property line. The City would need to purchase a small strip of land from each of the property owners. The City's purchase of this strip of land for boulevard space would significantly affect the ability of the property owners in this block to provide shared access. It is likely that the design boulevard width will need to be compromised. The existing property line is shown on the drawing to remain in place.

This block will have a mid block right-in/right out access at locations that are the most beneficial to property owners and meet the TAC guidelines with respect to spacing and distance from intersections. The driveway entries at the cross streets are shown to be 24 meters from the curb line of Gaetz Avenue.

Options Considered

One further option for rectifying the problem of the reduced boulevard between 50A Avenue and Gaetz Avenue north of 37 Street, would be to close 50A Avenue at the north property line of the South Crest Manor; turn the east side of 50A Avenue into boulevard, and allow the owner of the South Crest Manor to purchase the west side of the avenue for use as a driveway.

Leaving two direction service roads in place has a high impact on the corner properties on either side of Gaetz Avenue within this block. The depth of the property in this area is such that the remaining land would not be developable. The lots cannot accommodate individual right-in/right-out access, as the accesses would be too close together in order to meet TAC guidelines for spacing.

Rather than a shared access in front of the Aurora building, The Worx Salon and Café Tiffany a one-way southbound service road may be an advantage. Similarly on the west side of Gaetz Avenue a one way service road between 34 and 37 Street may be preferable to businesses rather than shared access agreements.

In the block between 35 Street and 34 Street on the east side of Gaetz Avenue a shared access could be implemented between properties. Property owners have indicated through the public consultation process that they are not in favor of this option.

Relocation of the traffic signal at 36 Street to the realigned 37 Street was considered. A light at this location and the removal of the light at 36 Street would provide better spacing of the lights for better traffic flow on Gaetz Avenue. The businesses on the west side of Gaetz Avenue north

of 37 Street would have improved access over the implementation of shared access to the all turns intersection at 36 Street. The length of the grade slope of Gaetz Avenue to the north of the intersection would require investigation to determine if the visual site lines and room for a left turn bay are available. The realignment of 37 Street would pass through the Las Palmeras property and building. This property would need to be purchased by the City for redevelopment and a new land parcel created in the location of the existing 37 Street roadway. The access provided to other businesses in the block, particularly those that use the light at 36 Street would need to be reviewed carefully with the participation of landowners. At the time that Gaetz Avenue requires widening or if property owners indicate a desire to revise the relocation of the light to the 37 Street access, options may be reviewed again.

5.10.2 34 Street to 30 Street

Design Plan

The business block between 34 Street and 49 Avenue and 51 Avenue will be treated similarly to the section north of 34 Street. Maintaining the service road with 24 meter bulbs is not a practical use of land in this area. Therefore, the implementation of shared access agreements is desirable.

On the east side of Gaetz Avenue the Red Deer Chamber of Commerce will require a shared access agreement with Community Savings in order to access their parking area at the front of the building.

5.10.3 32 Street and Gaetz Avenue Intersection

For the 32 Street / Gaetz Avenue intersection, five geometric designs were created to potentially improve the level of service. From here, the two most favorable Options 4 and 5 were analyzed in further detail to determine a suitable geometric design. The following is a description of both options:

Option 4: (shown in Figure 5.10) This option reconfigures Gaetz Avenue as a one-way couplet while the East and West Ring Roads provide through access both northbound and southbound; the East Ring Road provides the northbound movement while the West Ring Road provides the southbound movement. 32 Street provides all applicable movements at both ring roads and at Gaetz Avenue. Gaetz Avenue provides access to commercial businesses within the ring roads. Signalized intersections are located on 32 Street at both the East and West Ring Roads while an un-signalized intersection is located at 32 Street / Gaetz Avenue intersection. Gaetz Avenue will be widened to six lanes to accommodate future growth. 32 Street though, will remain four lanes.

Option 5: (shown in Figure 5.11) This option retains the existing geometry, with the exception of the 51 Avenue Ring Road. The north portion of 51 Avenue has been eliminated. The road right of way for 51 Avenue would be transferred to the adjacent property owners. Capri Hotel, located in the northwest portion of intersection, favors this option because currently 51 Avenue separates the hotel from their parking lot with no designated pedestrian crossing.

Similarly Pike Wheaton Chevrolet at the southwest corner of the intersection owns property on both sides of 51 Avenue. In this instance the owner may or may not wish to purchase the 51 Avenue right of way. The service road could remain in place pending the decision of the owner of Pike Wheaton Chevrolet.

The Gaetz Avenue / 32 Street intersection is a signalized intersection whereupon all movements are provided. There are dual left turn movements in all directions at this intersection. As well, the 32 Street / intersection with 49 Avenue is signalized with all movements provided. To accommodate the increased traffic throughout this study area, both Gaetz Avenue and 32 Street will ultimately be widened to six lanes.

The business owners in the vicinity of Gaetz and 32 Street expressed several concerns regarding the potential changes to access. The plan provides reasonable access to each of the properties within the area of the intersection. The requirement to provide proper roadway geometrics and safe roadway design places limitation on desired access locations.

Slotted left turns have been provide at the intersections of 49 Avenue and 51 Avenue with Gaetz Avenue. The positioning of these left turn bays do not impose on the required storage lengths for the proper functioning of the 32 Street intersection. The turn bay tapers will however need to be compromised in order to fit the space available. The turn bay tapers will not meet current TAC design standards. It is expected that because of this some vehicle deceleration will occur in the through lanes on Gaetz Avenue causing minor delay to traffic flow. Vehicles decelerating in the through lanes on Gaetz Avenue may also be subject to higher risk of rear end collisions. In the event that safety concerns arise, as traffic volumes in Gaetz Avenue increase these type of left turn installations may need to be removed.

Right-in/ right-out access to businesses from either Gaetz Avenue or 32 Street within the blocks of 49 Avenue and 51 Avenue are not recommended. This would create a traffic safety issue for the vehicles potentially weaving across 3 lanes to access the right-in/right-out after making a left turn at the main intersection.

5.10.4 30 Street to Molly Banister Drive

The service road in front of the row of hotels on the east side of Gaetz Avenue between 30 Street and Molly Banister Drive is shown to remain in place. Service road bulbs with a 24 meter diameter would be required at 30 Street and Molly Bansiter Drive.

On the west side of Gaetz Avenue, a service road bulb is located at 30 Street near MGM Lincoln. In this instance the service road was of value to the business owners who perceived that shared access was not in their best interests. A 24-meter service road bulb would also be required at 28 Street near the Southside Dodge. Access to an all turns intersection is provided for all businesses at 30 Street.

5.10.5 Molly Banister Drive to 22 Street

On the east side of Gaetz Avenue, the Bower mall has recently purchased and redeveloped the land once occupied by the service road adjacent to Gaetz Avenue. In the block between Bennett Street and Boyce Street, similar treatment is shown in the redevelopment plan for the Bower Plaza. The service road in front of Value Village was previously removed.

One of the most problematic service road intersections in the south corridor is on the west side of Gaetz Avenue at Bennett Street. Presently this location does not have enough vehicle storage for the traffic volumes, even though 24 meter offset bulbs have been installed. Queuing vehicles often block the intersection or accumulate on the service roads. The congestion of the intersection is the cause of significant delays in clearing the vehicle queues on the service roads. The Plan recommends the closure of the service road both north and south of this intersection. A private property drive lane would pass through the present location of the Central Animal Clinic property and building. Right-in/right-out entry to shared access corridors provide access to and from Canadian Tire, Wendy's, MacDonald's, Computer Trends and Gaetz Avenue Crossing. Traffic leaving these businesses will be routed to the east/west private drive lane aligned with Bennett Street. Area businesses such as Wendy's, McDonald's, Canadian Tire and Peavey Mart would continue to use the right-in/right-out access to Gaetz Avenue. A shared access agreement will be required between McDonalds, Wendy's, the redeveloped parcel of land at the Central Animal Clinic, Computer Trends and the north portion of Gaetz Avenue Crossing.

The service road intersection on the west side of Gaetz Avenue near Chapters is another location that frequently experiences congestion at peak times. The current volume of traffic at this intersection on 22 Street is 6730 AADT with an expected increase to 8040 AADT at a City population of 115,000. According to TAC Guidelines, a 45 meter diameter bulb is a requirement at this location, however, the space requirements for a 45 meter bulb are not available as the Chapters building is located at this corner. The Chapters building is new and redevelopment of the property is highly unlikely. The preferred plan shows the service road being closed in this location. New right-in/right-out accesses to the Gaetz Avenue Crossing retail complex have been provided on Gaetz Avenue and on 22 Street near Taylor Drive. The installation of lights at the all turns intersection on 22 Street will improve the overall access to the site.

5.10.6 Boyce Street to 19 Street

A 24 meter offset service road bulb currently exists at Boyce Street. The projected traffic volumes on the cross street for the 115,000 population are in the order of 5800 vpd. This location was investigated closely for the requirement of a larger 45 meter diameter bulb. The Mac's and Vision businesses at the corner have a driveway entry onto Boyce Street approximately 50 meters back from the intersection with Gaetz Avenue. Traffic from these two businesses, and a small percentage from Earls, use this driveway, thus reducing the traffic impact of the service road intersection with Boyce. The distribution of traffic on the service road is also split equally with businesses south of the public utility corridor who utilize the all turns access to Gaetz Avenue that is across from South Point Common. Although the cross street

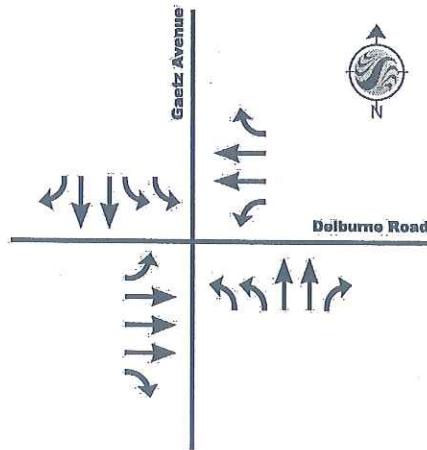
volume is nearing 5000 AADT, it was determined that the existing small bulb would continue operate at an acceptable level based on field observations of current operating conditions.

At the intersection access to Compu Soft and Firestone, the existing 18 meter diameter bulb has been maintained by shifting the service road the same distance as the Gaetz Avenue widening. The installation of a 24 meter bulb in this location would eliminate an entire row of business parking. The volume of traffic using this mid block service road access does not warrant adherence to the 24 meter bulb standard in light of the consequence to the businesses.

On the west side of Gaetz Avenue no changes to the existing condition are required.

5.10.7 19 Street and Gaetz Avenue Intersection

The Gaetz Avenue / Delburne Road (19 Street) intersection, was analyzed for level of service for both the 85,000 and 115,000 population horizons. Figure 5.12 illustrates the lane configurations utilized based on the projected volumes. As can be seen in Figure 5.13 two left turning lanes are required both northbound and southbound as the volumes here are quite large. The eastbound and westbound left turning movements require one left turning lane. All directions have channelized right turns. As well, there are two through lanes in all directions, with the exception of the eastbound through movement, which has three through lanes.

Figure 5.13 Lane Requirements at the 115,000 Population Horizons

5.11 PEDESTRIAN WALKWAYS AND BICYCLE PATHWAYS

5.11.1 Bicycle Paths

A continuous bicycle route has been designated for the west side of Gaetz Avenue. Where the service roads are removed, a bicycle path will be located in the boulevard space meandering through the landscaped area. The minimum distance from the edge of the pathway to the curb line or property line will be 1.5 meters.

When service roads remain in place, the bicycle route will utilize the service road, connecting to the 3 meter pathway in the joining blocks. Crossings at roadway and right-in/right out access are provided at logical locations with respect to safety and visibility.

5.11.2 Walkways

Walkways are 1.5 meters wide located along the property frontages where service roads remain in place. In instances where the service road is removed, a 3 meter wide walkway is located in the boulevard space. All walkways are linked to safe points of crossing at intersections and right-in/right outs. Pedestrian crosswalks are provided at all signalized intersections.

Walkway connections have been provided to current bus stop locations. Sidewalk extensions may be necessary if the location of bus stops change with future development of the transit system.

5.12 UTILITIES

The functional plan identifies locations where existing utilities and the proposed widening may conflict.

Deep utilities, consisting of water, sanitary and storm infrastructure should not be drastically impacted, as significant grade changes are not expected to the vertical alignment of Gaetz Avenue. However, as the roadway is widened and the service road intersections and accesses change, catch basins and the lids and necks of manholes will need adjustment.

Telus utilities are buried in duct structures predominantly encased in concrete. These structures are located on the east side of Gaetz Avenue between the service road and Gaetz Avenue. Manholes are predominantly located near the intersections, but do exist between streets at irregular intervals. In most cases, conduit structures cross Gaetz Avenue near cross street intersections. These structures will have to be adjusted to meet new road and boulevard grades as construction proceeds.

ATCO Gas has service pipelines bordering Gaetz Avenue from Highway 11A to 19 Street. In the north section of Red Deer, an ATCO Gas pipeline crosses Gaetz Avenue at 77, 80 and 71 Streets. The gas pipeline exists in the vicinity of the west service road between 77 Street and 71 Street. This pipeline will have to be located and daylighted prior to the remediation of any service roads to determine relocation requirements. Service to other areas bordering Gaetz Avenue is provided from gas distribution systems originating at least one block outside of the Gaetz Avenue corridor.

In the south section of Red Deer, ATCO Gas has a 114 mm to 219 mm diameter high pressure (340 KPa to 550 KPa) steel pipeline that predominantly occupies the boulevard on the east side of Gaetz Avenue from 37 Street to 19 Street. On the west side of Gaetz Avenue from 37 Street to Molly Bannister Drive, the 114mm diameter medium pressure (100 KPa) ATCO Gas pipeline appears to occupy portions of the service road and the boulevard. From Molly Banister Drive to 19 Street, the pipeline appears to be west of the existing service road.

The spatial conflicts of the ATCO Gas pipeline with the widening of Gaetz Avenue, removal or alteration of services roads and accesses, and removal and addition of plantings will have to be confirmed with a detailed line locate and daylighting of the pipelines. All design grades for work to be done over pipelines will require confirmation of minimum depth requirements. ATCO Gas requires a minimum of 2 meters horizontal separation from any obstruction such as a tree to allow for maintenance on their utility pipelines.

The City's Electric Light and Power (EL&P) department is responsible for the distribution of power to the area along Gaetz Avenue as well as the fixtures such as light standards and traffic control lighting hardware.

The corridor lighting strategy should take into account the location of the light standards with respect to the landscape design. Light standards should be placed in the boulevard where room is available and spaced accordingly so as to provide the appropriate amount of illumination for the walkways, and if required, service roads.

Some of the traffic control poles and hardware are painted and non-galvanized. Replacement structures equipped to house the lights for pedestrian and traffic movement as well as traffic

monitoring cameras will need to be designed to the new configuration of the Gaetz Avenue intersections.

In some locations where the service road or access improvements are required, there are conflicts with existing power cubicles. Depending on the severity of the encroachment of the proposed design, these cubicles may have to be relocated or protected in their current positions.

The greatest impact on utilities is with the conflict with the location of the overhead power lines on both north and south Gaetz Avenue. The poles used to support the power system are close and sometimes in the right-of-way of Gaetz Avenue. EL&P have expressed their concern with the amount of effort required to redesign and relocate these key distribution lines. To initiate the process, EL&P requires a directive from the City to begin the process. Due to labor and time constraints, the power lines may remain in place for up to five years.

5.13 TRANSFER AND ACQUISITIONS

Where service road bulbs are necessary, land acquisition will be required to incorporate the road works. Service road bulbs on corner lots usually involve acquisition of land from one parcel where mid block bulbs often will require land from several parcels. Where land is acquired for service road bulbs, the areas are often developed as landscaping or parking. Relaxation from the landscaping requirements and parking may be required at many of the locations. The middle of the service road bulbs will provide landscaping area in compensation for loss of landscaping on private property, maintaining the overall appearance.

The closure of service roads will provide the opportunity for businesses to purchase a portion of the land currently occupied by service roads. Where the property owner does not purchase surplus service road land, the lands will be retained by the City and landscaped by the City as part of the comprehensive landscape plan. In some instances where service road lands are available for purchase, shared access between businesses is a requirement for equal access of all businesses within the block. Where properties are served by individual right-in/right out access at adjoining property lines, shared access agreements will be required for the small portion of land at the access point that would allow vehicles from both properties to share the common access.

The redevelopment drawings show property line corner cuts as they are required under the City of Red Deer Standards for the various classification of roadways. The acquisition of these lands would take place when the land is necessary for the redevelopment of an intersection or at such time as a prospective property owner wishes to purchase service road lands. In the second instance, a land trade for the corner cut would be part of the transaction for service road land. Where the acquisition of the corner cut land would have a significant impact on the existing landowner development, the acquisition would be delayed to a time when redevelopment occurs by the property owner or the City.

5.14 BUILDING SETBACK

5.14.1 Existing Conditions

The existing bylaw set back distance is 9 meters for property zoned C2 and 15 meters for property zoned C4. The actual building frontage locations of most of the building developments along the corridor are greater than the minimum setback distance from property line. Some exceptions are fast food restaurants and a few buildings between 34 Street and 37 Street. In most cases developers and property owners have chosen to build further back from their property lines in order to provide room for parking and landscaping at the front of their buildings. In some blocks the distance of buildings from the property lines is fairly consistent while in others there are significant variations.

The existing property line along Gaetz Avenue is fairly consistent where service roads exist along the corridor. As service roads are removed and the landowner purchases the land the property lines are potentially relocated significantly closer to the edge of Gaetz Avenue.

The current bylaw uses the property line as the base point of reference for the offset of the set back. Significant adjustments to the property line necessitate the associated review of the setback criteria in order to meet the objectives of the setback.

5.14.2 Setback Objectives

The main objectives of the building setback and bylaw are to accommodate landscaping, parking and access requirements, maintain sight lines and visibility, enhance aesthetics and maintain continuity in the corridor. The bylaw must be able to implement the setback effectively in a fair and consistent manner conforming to existing policy.

Where the service road remains in place for the entire block, the application of the setback will provide consistency within the block with the exception of the corner properties where bulbs are located. In these situations it may be beneficial to consider a reduced setback to minimize the impact of the bulbs on the property owners and to maintain a more consistent building setback.

The majority of development along the corridor is small independent businesses and buildings with strip mall type establishments. These types of developments require front parking and access. Where the service road is removed the set back distance should account for access and parking provisions.

Where the entire service road is removed and all property owners are provided individual access there is the potential that some property owners within the block may wish to purchase the service road land and others may not. In this instance the property lines could be staggered throughout the block by approximately 10 meters. Under the existing Bylaw the difference in the property line would be reflected in the set back and buildings could potentially be built with a 10 meter difference in building frontages.

In blocks where the service road is only partially removed there is potential that buildings could be located closer to Gaetz Avenue where there is no service road. In these situations there could also be a potential 10 meter difference in building frontages.

Where C2 commercial shopping centers are located in the Gaetz corridor the existing 9 meter set back distance does not allow for access and parking in front of the building. In these developments parking and access is provided internally and from cross road accesses.

5.14.3 Setback Recommendations

The potential for the creation of inconsistent property lines along Gaetz Avenue presents a very difficult problem with respect to establishing a consistent building set back distance from Gaetz Avenue throughout the corridor.

It has been determined that it would be best to maintain a setback distance of 15 meters for the property that is zoned C4 and 9 meters for the property that is zoned C2 except for locations where service road bulbing is required. In these locations the setback distance should be reduced to 6 meters. The reduction in the setback distance will mitigate the impact of the bulb on adjacent property and will provide for a reasonable separation from roadways. Corner properties where bulbs are located have the potential of developing parking on the crossroad side of the property. Maintaining a consistent zoning along each block will maintain a uniform setback from Gaetz Avenue on a block by block basis.

For C4 properties the 15-meter minimum setback distance provides enough space for the implementation of right-in/right out access and the ability to maintain a drive isle with one row of parking. Where formal shared access between businesses is required across the front of the property, it may be necessary to provide additional width beyond the minimum setback to accommodate both parking and a common drive isle. This would have to be determined on a site-specific basis during application for redevelopment or purchase of property.

The majority of the property locations along the corridor would comply with the proposed setback criteria. The orange line on Figures 5.2 through 5.9 illustrates the recommended setback criteria.