Agenda - Executive Policy Committee - December 10, 2003

REPORTS

Item No. 16 2003 North Kildonan Traffic Study
File ST-7

STANDING COMMITTEE RECOMMENDATION:

On November 28, 2003, the Standing Policy Committee on Public Works recommended to the Executive Policy Committee that appropriate funding for the partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard be included in the 2004 Capital Budget.

Further, the Standing Policy Committee on Public Works requested the Director of Public Works to provide the estimated costs for the partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard to the Executive Policy Committee, for its meeting scheduled for December 10, 2003.

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On November 28, 2003, the Standing Policy Committee on Public Works recommended to the Executive Policy Committee that appropriate funding for the partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard be included in the 2004 Capital Budget.

Further, the Standing Policy Committee on Public Works requested the Director of Public Works to provide the estimated costs for the partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard to the Executive Policy Committee, for its meeting scheduled for December 10, 2003.

On November 4, 2003, the Standing Policy Committee on Public Works concurred in the administrative recommendations, as amended, namely:

1. That the extension of Chief Peguis Trail to Lagimodiere Boulevard be referred to the 2005-2009 Capital Budget deliberations.

2. That a partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard be referred to the 2004 Capital Budget deliberations.

3. That turn restrictions or closures on Lagimodiere Boulevard at Knowles Avenue, Bonner Avenue or McIvor Avenue be referred to the Administration in consultation with the Ward Councillor to consider options such as partial prohibitions and access for Emergency Response vehicles until such time as the Chief Peguis Trail is extended to Lagimodiere Boulevard and to report back to the meeting of the Standing Policy Committee on Public Works scheduled for December 9, 2003.

4. That the Public Works Department review the current Snow Route designations for Knowles Avenue, Bonner Avenue and McIvor Avenue in consultation with the Fire Paramedic Services.

5. That speed humps be considered on Knowles Avenue east of Gateway Road if there is support from at least 70% of the residents on Knowles Avenue between Gateway Road and De Vries Avenue.

6. That traffic circles be considered on Knowles Avenue and Bonner Avenue at intersections with local residential streets and on McIvor Avenue east of Gateway Road

DECISION MAKING HISTORY (continued):

at intersections with local residential streets if supported by at least 70% of residents in a one-block radius.

On June 10, 2003, the Standing Policy Committee on Public Works amended its decision of March 11, 2003, namely:

3. That a traffic study be undertaken immediately to determine the effects of the following:

- Closing De Vries Avenue, Knowles Avenue, south of Knowles Avenue, and McIvor Avenue to traffic traveling southbound on Lagimodiere Boulevard,

- Closing the northbound left and westbound through movements at Knowles Avenue and McIvor Avenue,

- Limiting traffic at McIvor Avenue and De Vries Avenue with a right-turn only restriction to exit onto Lagimodiere Boulevard,

said funds for the study to be included in the 2003 Preliminary Operating Budget. That the Administration be requested to report back to the meeting of the Standing Policy Committee on Public Works scheduled for April 15, 2003.

File: E-01;OG-02B

Re: **2003 North Kildonan Traffic Study**

For Submission To: **The Standing Policy Committee on Public Works**

Original Report Signed By: **J. A. Thomson, P. Eng.**
Director, Public Works

Report Date: **October 27, 2003**

Recommendations:

1. That the extension of Chief Peguis Trail to Lagimodiere Boulevard be considered in the formulation of the 2005-2009 Capital Program.

2. That a partial connection of Sun Valley Drive between De Vries Avenue and Lagimodiere Boulevard be considered for inclusion in the 2005-2009 Capital Program.

3. That turn restrictions or closures on Lagimodiere Boulevard at Knowles Avenue, Bonner Avenue or McIvor Avenue NOT be implemented until such time as the Chief Peguis Trail is extended to Lagimodiere Boulevard.

4. That the Public Works Department review the current Snow Route designations for Knowles Avenue, Bonner Avenue and McIvor Avenue in consultation with the Fire Paramedic Services

5. That speed humps be considered on Knowles Avenue east of Gateway Road if there is support from at least 70% of the residents on Knowles Avenue between Gateway Road and De Vries Avenue.

6. That traffic circles be considered on Knowles Avenue and Bonner Avenue at intersections with local residential streets and on McIvor Avenue east of Gateway Road at intersections with local residential streets if supported by at least 70% of residents in a one block radius.

REPORT SUMMARY:

Key Issues:

- Fewer intersections along Lagimodiere Boulevard are desirable, preferably only intersections with collector streets.
- There is an existing congestion and collision problem at the intersection of Springfield Road/Molson Street/De Vries Avenue/Lagimodiere Boulevard.
- The Sun Valley Drive extension to Lagimodiere Boulevard is consistent with future plans but is required at this time to relieve the intersection of Springfield Road/Molson Street/De Vries Avenue/Lagimodiere Boulevard.
- The extension of Chief Peguis Trail to Lagimodiere Boulevard will address many traffic issues in this area.

IMPLICATIONS OF THE RECOMMENDATION(S):

General Implications:

	None
	For the organization overall and/or other departments
x	For the community and/or organizations external to the City
	Involves a multi-year phase in process

Comments:

Construction of Chief Peguis Trail to Lagimodiere Boulevard and implementing a plan of collector street intersections along Lagimodiere Boulevard will change traffic patterns in North Kildonan and significantly alleviate problems caused by through traffic.

Policy Implications:

	No
X	Yes

Comments:

The extension of Chief Peguis Trail is currently not included on Policy Plate B of Plan Winnipeg.

Environmental Implications:

[ ] No
[X] Yes

Comments:

If the extension of Chief Peguis Trail is included in the 2005-2009 Capital Program, an environmental assessment will be undertaken as part of the design process.

Human Resource Implications:

[x] No
[ ] Yes

Comments:

Financial Implications:

[ ] Within approved current and/or capital budget
[X] Current and/or capital budget adjustment needed

Comments:

- If the extension of Chief Peguis Trail is included in the 2005-2009 Capital Program, adjustments will be required to accommodate its inclusion. The estimated cost of this project is $22,000,000.
- This project, in the opinion of the Department, would be its second-highest priority for Capital Project funding.
- If the partial connection of Sun Valley Drive to Lagimodiere Boulevard is included in the 2005-2009 Capital Program, an adjustment will have to be made to accommodate its inclusion. The estimated cost of this project is $1,042,000 (including land acquisition costs).

REASON FOR THE REPORT:

At its March 11, 2003 meeting, the Standing Policy Committee on Public Works concurred in the recommendation of the East Kildonan-Transcona Community Committee, as amended, namely:

1. That McIvor Avenue be re-routed to Strongberg Drive and closed permanently at De Vries Avenue as per Development Agreement AG 13/2000, and as recommended by the "1984 North Kildonan Traffic Study" and "Revised North Kildonan Traffic Study" dated December 17, 2002.

2. That funding for the preliminary design and public consultation be allocated from the 2003 Capital Estimates for the extension of the Chief Peguis Trail from Henderson Highway to Lagimodiere Boulevard.

3. That a traffic study be undertaken immediately to determine the effects of closing De Vries Avenue, Knowles Avenue, south of Knowles Avenue, and McIvor Avenue to traffic traveling southbound on Lagimodiere Boulevard as well as limiting traffic at McIvor Avenue and De Vries Avenue with a right-turn only restriction to exit onto Lagimodiere Boulevard, said funds for the study to be included in the 2003 Preliminary Operating Budget.

4. That the intersection at Lagimodiere Boulevard, Springfield Road, Molson Street, and De Vries Avenue be reviewed with the intention of improving traffic safety and coordinating traffic flows between Lagimodiere Boulevard, Springfield Road, Molson Street, and De Vries Avenue. That the Administration be requested to report back to the meeting of the Standing Policy Committee on Public Works scheduled for April 15, 2003.

5. That traffic calming measures such as speed humps, serpentines, narrowing, medians and/or other relevant measures be reviewed and considered for implementation on Knowles Avenue, Bonner Avenue and McIvor Avenue.

At its April 15, 2003 meeting, the Standing Policy Committee on Public Works concurred in the administrative recommendation that the report entitled *Work Plan for the Revised North Kildonan Traffic Study* be received as information. The *Work Plan* report outlined a work plan and schedule for completing the traffic study requested by the Committee at its March 11, 2003 meeting.

At the June 10, 2003 meeting, the Standing Policy Committee on Public Works amended item 3. of the disposition of March 11, 2003 as follows:

3. That a traffic study be undertaken immediately to determine the effects of the following:

- Closing De Vries Avenue, Knowles Avenue, south of Knowles Avenue, and McIvor Avenue to traffic traveling southbound on Lagimodiere Boulevard,
- Closing the northbound left and westbound through movements at Knowles Avenue and McIvor Avenue,
- Limiting traffic at McIvor Avenue and De Vries Avenue with a right-turn only restriction to exit onto Lagimodiere Boulevard,

Said funds for the study to be included in the 2003 Preliminary Operating Budget.

HISTORY:

Disposition Item 1. from the March 11, 2003 meeting of the Standing Policy Committee on Public Works:

> "1. That McIvor Avenue be re-routed to Strongberg Drive and closed permanently at De Vries Avenue as per Development Agreement AG 13/2000, and as recommended by the "1984 North Kildonan Traffic Study" and "Revised North Kildonan Traffic Study" dated December 17, 2002."

was implemented as of April 23, 2003.

Disposition Item 2. from the March 11, 2003 meeting of the Standing Policy Committee on Public Works:

> "2. That funding for the preliminary design and public consultation be allocated from the 2003 Capital Estimates for the extension of the Chief Peguis Trail from Henderson Highway to Lagimodiere Boulevard."

was referred to Executive Policy Committee by Standing Policy Committee on Public Works at the March 11, 2003 meeting. At its meeting of March 25, 2003, Executive Policy Committee received this matter as information.

DISCUSSION:

The remainder of this report will focus on amended disposition item 3 from the June 10, 2003 meeting of the Standing Policy Committee on Public Works, and disposition items 4 and 5 from the March 11, 2003 meeting of the Standing Policy Committee on Public Works as noted in "Reason" above.

DISPOSITION ITEM #3:

That a traffic study be undertaken immediately to determine the effects of the following:

- *Closing De Vries Avenue, Knowles Avenue, south of Knowles Avenue, and McIvor Avenue to traffic traveling southbound on Lagimodiere Boulevard,*
- *Closing the northbound left and westbound through movements at Knowles Avenue and McIvor Avenue,*
- *Limiting traffic at McIvor Avenue and De Vries Avenue with a right-turn only restriction to exit onto Lagimodiere Boulevard.*

1) Review of Existing Traffic Conditions at the Intersection of Springfield Road/ Lagimodiere Boulevard/Molson Street/De Vries Avenue

With the recent closure of McIvor Avenue west of De Vries Avenue, there has been an increase in traffic volumes at the intersection of Springfield Road/Lagimodiere Boulevard/Molson Street/De Vries Avenue. The following data tables show traffic statistics before and after this closure. (The "after" data provides existing traffic conditions.)

Table 1
Total Approach Vehicular Traffic Volume at the Intersection of Springfield Road and Lagimodiere Boulevard Before and After the Closing of McIvor Avenue West of De Vries Avenue

	Number of Vehicles		
Time period	Before	After	Difference
A.M. peak hour	3116	3430	+314
P.M. peak hour	4225	4560	+335
8 hours total	24725	27342	+2617

The traffic volumes increased by approximately 10%.

Table 2
8-hour Vehicular Traffic Volume at Springfield Road and Molson Street/De Vries Avenue Before and After the Closing of McIvor Avenue West of De Vries Avenue

	Number of Vehicles		
Roadway	Before	After	Difference
Springfield Road	7839	8871	+1032
Molson St./ De Vries Ave.	1196	1358	+162

The traffic volumes increased by approximately 13%.

Table 3

Volume-to-capacity Ratio at the Intersection of Springfield Road and Lagimodiere Boulevard Before and After the Closing of McIvor Avenue West of De Vries Avenue

	Volume-to-capacity ratio*	
Time period	Before	After
A.M. peak hour	0.97	1.07
1400-1500 hour	0.80	0.84
P.M. peak hour	1.29	1.42
*A volume-to-capacity ratio (v/c) of less than 1.0 generally indicates a desirable level of service. A v/c of greater than 1.0 indicates an undesirable level of service characterized by frequent stops, long vehicle queues and delays in excess of one signal cycle. A v/c of greater than 1.3 indicates a condition of significant congestion with greater than 95% probability that drivers will be delayed longer than one signal cycle during the hour.		

Due to the increase in traffic volume, the level of delay to motorists has increased significantly during the peak hours. The level of service at Lagimodiere Boulevard and Springfield Road is very poor during the P.M. peak hour (both before and after). This normally warrants implementation of improvements to the intersection capacity, i.e., more traffic lanes. However, this is not recommended as this intersection will be eliminated in its current form when Chief Peguis Trail is extended eastward from Henderson Highway, cutting across Springfield Road and intersecting Lagimodiere Boulevard as a new signalized intersection just south of Springfield Road. See Figure 1.

Table 4:

Reported Collisions at the Intersections of Springfield Road/Lagimodiere Boulevard and Springfield Road/Molson Street/De Vries Avenue in the Last 3 Years

	Number of reported collisions			
Intersection	In 2000	In 2001	In 2002	Total
Lagimodiere Boulevard and Springfield Road	26	31	44	103
Springfield Road and Molson St./De Vries Av	13	19	14	47

Table 5
Number Collisions By Type of Collision in the Last 3 Years

Collision type	Springfield at Lagimodiere	Springfield at Molson/De Vries
Rear end	77*	4
Left with opposing through	5	1
Right Angle	6	41**
Sideswipe	4	0
Other	11	1
*43 eastbound (35 within the yield-controlled right turn cutoff), 13 southbound, 11 northbound, and 10 westbound **28 north with west, 5 north with east, 5 south with east, and 3 south with west		

The frequency of right-angle collisions involving northbound with westbound vehicles at Springfield/Molson/De Vries intersection is above average. It is believed that these collisions are due in part to the visibility restriction caused by eastbound vehicle queues created by the traffic control signals at Lagimodiere Boulevard.

Traffic collisions and congestion at these intersections can be expected to increase with further increases in volume.

Due to the very close proximity of the intersection of Springfield Road/Molson Street/De Vries Avenue to Lagimodiere Boulevard, it is not feasible to install either additional eastbound and westbound stop signs or traffic control signals in order to reduce the right-angle collisions at this location.

2) Review of Traffic Conditions Expected With Proposed Closures At Lagimodiere Boulevard and Knowles Avenue, Bonner Avenue and McIvor Avenue

During May and June of 2003, traffic studies were conducted to determine the volume of traffic currently making the directional movements which would be affected by the proposed closures/turn restrictions. The reason for this was to predict where these traffic volumes would shift and whether it would be feasible from both a traffic operating and traffic safety perspective to shift these movements elsewhere.

From a neighbourhood traffic management perspective, it is desirable to close direct vehicular access between Lagimodiere Boulevard, a major north/south

arterial street and the east/west residential streets, namely, Knowles Avenue, Bonner Avenue and McIvor Avenue. However, vehicular traffic diverted as a result of such closures cannot be adequately accommodated at De Vries Avenue and Springfield Road at this time and any additional traffic would increase congestion and collisions significantly.

A re-assignment of the displaced traffic volume indicates that the volume-to-capacity ratio at Springfield Road and Lagimodiere Boulevard is estimated to increase from 1.42 (a very poor level of service) to 1.72 (an extremely poor level of service) during the P.M. peak hour. This significant reduction in an already very poor level of service at this major intersection would not only further exacerbate the delay but also likely result in an increase in collisions.

It is also noted that physical closures at Lagimodiere Boulevard and Knowles Avenue, Bonner Avenue and McIvor Avenue would negatively impact response times for emergency services as access between the east and west sides of Lagimodiere Boulevard would be restricted to Springfield Road.

DISPOSITION ITEM #4:

That the intersection at Lagimodiere Boulevard, Springfield Road, Molson Street, and De Vries Avenue be reviewed with the intention of improving traffic safety and coordinating traffic flows between Lagimodiere Boulevard, Springfield Road, Molson Street, and De Vries Avenue.

It is noted that the proposed closures/turn restrictions identified in amended Disposition 3. (closures of Knowles Avenue, Bonner Avenue and McIvor Avenue at Lagimodiere Boulevard) are not recommended prior to the extension of Chief Peguis Trail to Lagimodiere Boulevard due to the adverse impact on the Springfield Road/Lagimodiere Boulevard/Molson Street/De Vries Avenue intersection which is currently operating above capacity.

As noted previously, it is also not recommended that any physical improvements be undertaken to the intersection of Springfield Road/Lagimodiere Boulevard/Molson Street/De Vries Avenue as Springfield Road will be disconnected at such time as Chief Peguis Trail is extended to Lagimodiere Boulevard (Figure 1).

However, it is desirable to provide alternative access between Lagimodiere Boulevard and De Vries Avenue north of Springfield Road. The 1984 North Kildonan Traffic Study identified such access points as Sun Valley Drive (an existing east/west collector street) and Headmaster Row (a future east/west collector street). The Sun Valley Drive extension to Lagimodiere Boulevard could ultimately replace Springfield Road as the access point between the residential community and Lagimodiere Boulevard (the major north/south thoroughfare). **A**

partial connection could be built prior to the Chief Peguis Trail extension to alleviate the Springfield Road/Lagimodiere Boulevard/Molson Street/De Vries Avenue intersections (Figure 2). The initial design would be Stop sign controlled at DeVries Avenue and require prohibition of the eastbound left turn movement at Lagimodiere Boulevard since it is not desirable to have traffic control signals operating on Lagimodiere Boulevard at both Springfield Road and Sun Valley Drive due to their close proximity. All other movements at Sun Valley Drive and Lagimodiere Boulevard would be permitted. This partial connection is estimated to cost $1,042,000 (including land acquisition costs) and could be considered for inclusion in the 2005-2009 Capital Program.

DISPOSITION ITEM #5:

That traffic calming measures such as speed humps, serpentines, narrowing, medians and/or other relevant measures be reviewed and considered for implementation on Knowles Avenue, Bonner Avenue and McIvor Avenue.

1) Review of Traffic Calming Measures

Speed Humps

The City's speed hump policy, approved in 2002 and revised in 2003, is as follows:

1. The street must be a local residential street and not a Transit Route, Snow Route or residential collector street.
2. Submission of a petition representing a minimum of 70% of the residents in a block in support of speed humps.
3. At least one of the following speed criteria is met:
    (i) Average speed exceeds the speed limit (50 km/hour); or
    (ii) At least 15% of vehicles exceed the speed limit by 5 km/hour or more (55 km/hour); or
    (iii) At least 10% of vehicles exceed the speed limit by 10 km/hour or more (60 km/hour).

Streets with ditch drainage and oil treated/chip-seal surfaces were excluded from consideration under the original speed hump policy. However, on June 25, 2003 Council concurred with the Standing Policy Committee on Public Works' recommendation to amend the policy to include these types of streets.

Curb Extensions and Chicanes(Serpentines)

Traffic calming measures such as curb extensions and chicanes (a series of curb extensions on alternating sides of a roadway, also referred to as "serpentines") which effectively narrow the roadway are not considered appropriate on streets which do not have a curb. Similarly, these devices are not appropriate on streets which do not have a sidewalk as pedestrians must share the roadway with motorists. Curb extensions and chicanes narrow the roadway and require drivers to steer from one side of the roadway to the other. As such, the safety of pedestrians on the roadway is reduced, particularly under winter driving conditions.

It is also noted that as drivers of vehicles maneuver through the curb extensions/chicanes, drivers cannot anticipate or predict the maneuvering movement of cyclists. Cyclists may veer farther away from the curb extensions/chicanes than what a driver of a vehicle may anticipate, increasing the potential for bicycle-vehicle conflicts. This is particularly true on streets with a rural cross-section. On streets with an urban cross-section a provision for cyclists can be accommodated in that the street pavement is defined by a curb and contains a wider pavement.

Curb extensions and chicanes result in a loss of some on-street parking due to the resultant pavement narrowing.

Other Traffic Calming Measures

Raised median islands are constructed on the centerline of a two-way roadway to reduce the overall width of the adjacent travel lanes. When used in a traffic calming context, their purpose is generally to reduce vehicle speeds. The use of raised median islands may restrict access to driveways from one direction and may increase snow removal costs. Their use is not recommended for streets with a rural cross section without sidewalks due to the narrowed roadway width and the need for pedestrians to share the roadway with motorists.

A traffic circle is a raised island located in the center of an intersection. Vehicles are required to travel through the intersection in a counter-clockwise direction around the island. Stop signs are not used with traffic circles. The purpose of a traffic circle is to reduce vehicle speeds and reduce vehicle-vehicle conflicts at intersections. Traffic circles are not recommended on major emergency access routes or at intersections with high pedestrian volumes.

2) Traffic Levels on Knowles Avenue, Bonner Avenue & McIvor Avenue

Traffic speed and volume studies were conducted in May and June 2003 on Knowles Avenue, Bonner Avenue and McIvor Avenue in order to review the appropriateness of different types of traffic calming measures for these streets. A summary of these traffic studies is provided in Tables 6, 7 and 8.

Table 6
Traffic Statistics For Knowles Avenue

Knowles Avenue:					
Location	**Average Weekday Volume (vehicles/day)**	**85th Percentile Speed* (km/hour)**	**Average Speed (km/hour)**	**Percentage of Vehicles Traveling 55 km/hour or more**	**Percentage of Vehicles Traveling 60 km/hour or more**
West of De Vries Avenue	2410	60	53	41%	21%
East of Gateway Road	2482	60	51	37%	18%
West of Raleigh Street	1222	54	46	18%	6%
East of Rothesay Street	1428	53	45	15%	5%
West of Rothesay Street	1243	54	45	17%	6%
East of Henderson Highway	1377	54	42	19%	9%

* The 85th Percentile Speed is the speed at which 85% of traffic is traveling at or below and 15% of the traffic is traveling at or above.

Table 7
Traffic Statistics For Bonner Avenue

Bonner Avenue:					
Location	**Average Weekday Volume (vehicles/day)**	**85th Percentile Speed (km/hour)**	**Average Speed (km/hour)**	**Percentage of Vehicles Traveling 55 km/hour or more**	**Percentage of Vehicles Traveling 60 km/hour or more**
West of De Vries Avenue	1598	58	49	29%	14%
East of Gateway Road	1755	59	49	31%	15%
West of Raleigh Street	1944	54	45	17%	6%
East of Rothesay Street	2713	54	47	18%	7%
West of Rothesay Street	2562	59	51	34%	15%
East of Henderson Highway	2609	54	47	19%	7%

* The 85th Percentile Speed is the speed at which 85% of traffic is traveling at or below and 15% of the traffic is traveling at or above.

Table 8
Traffic Statistics For McIvor Avenue

McIvor Avenue:					
Location	**Average Weekday Volume (vehicles/day)**	**85th Percentile Speed (km/hour)**	**Average Speed (km/hour)**	**Percentage of Vehicles Traveling 55 km/hour or more**	**Percentage of Vehicles Traveling 60 km/hour or more**
West of De Vries Avenue	376	54	44	17%	8%
East of Gateway Road	998	57	48	26%	12%
West of Raleigh Street	4598	58	51	32%	13%
East of Rothesay Street	5133	54	48	20%	6%
West of Rothesay Street	6903	53	45	15%	5%
East of Henderson Highway	6948	53	46	15%	5%

* The 85th Percentile Speed is the speed at which 85% of traffic is traveling at or below and 15% of the traffic is traveling at or above.

As shown in Table 6, 7 and 8, speeds are relatively high on all three of these streets. However, in considering particular traffic calming measures, it is necessary to also consider the physical characteristics of these streets. All three streets have an urban cross section (curb and gutter) and concrete pavement west of Raleigh Street. However, east of Gateway Road, each of these streets has ditch drainage and an oil treated/chip-seal surface. Sidewalks are located on the north side of McIvor Avenue between Henderson Highway and Raleigh Street. There are no sidewalks on McIvor Avenue east of Gateway Road. There are no sidewalks on Bonner Avenue or Knowles Avenue between Henderson Highway and De Vries Avenue.

Knowles Avenue between Henderson Highway and Gateway Road, Bonner Avenue between Henderson Highway and De Vries Avenue, and McIvor Avenue between Henderson Highway and De Vries Avenue are designated Snow Routes. These streets have been placed in Schedule "B" of the Snow Route By-law and function as Priority 2 Snow Routes. It is recommended that the inclusion of these streets as Snow Routes be formally reviewed to confirm whether their designation as Snow Routes is still considered necessary. (It is noted that with the recent closure of McIvor Avenue at De Vries Avenue, McIvor Avenue

between Clearview Drive and Strongberg Drive carries approximately 380 vehicles per day.) However, it should be noted that in a preliminary discussion with the Fire Paramedic Service it was indicated that since Winnipeg has no official emergency routing system for streets, the Fire Paramedic Service relies solely on the Snow Route By-law as a measure to provide routes for emergency purposes. They also indicated that Knowles Avenue, Bonner Avenue and McIvor Avenue are considered valuable routes for the Fire Paramedic Service to service the North Kildonan area in the event of an emergency.

3) Traffic Calming Options

Knowles Avenue

As there are currently no sidewalks on Knowles Avenue, traffic calming measures which narrow the roadway (such as curb extensions, chicanes and median islands) would not be appropriate due to the increased potential for pedestrian-vehicle conflicts. (East of Gateway Road, narrowing the roadway would be expected to have an even greater impact on the potential for pedestrian-vehicle and bicycle-vehicle conflicts due to the rural cross section.) If supported by the residents (in a one block radius from the intersection), traffic circles could be considered at particular intersections (excluding Gateway Road, Raleigh Street and Rothesay Street where vehicle volumes are high). Traffic circles may be appropriate at intersections with local residential streets which currently have unwarranted stop signs. Since Knowles Avenue west of Raleigh Street is a Snow Route, only the section east of Gateway Road could qualify for speed humps. To fulfill the requirements for speed humps, at least 70% of the residents between Gateway Road and De Vries Avenue would have to support the installation.

Bonner Avenue

As there are currently no sidewalks on Bonner Avenue, traffic calming measures which narrow the roadway (such as curb extensions, chicanes and median islands) would not be appropriate due to the increased potential for pedestrian-vehicle conflicts. (Similar to Bonner Avenue, east of Gateway Road, narrowing the roadway would be expected to have an even greater impact on the potential for pedestrian-vehicle and bicycle-vehicle conflicts due to the rural cross section.) If supported by the residents (in a one block radius from the intersection), traffic circles could be considered at particular intersections (excluding Gateway Road, Raleigh Street and Rothesay Street where vehicle volumes are high). Traffic circles may be appropriate at intersections with local residential streets which currently have unwarranted stop signs. Since Bonner Avenue between Henderson Highway and De Vries Avenue is a Snow Route, it does not meet the warrant criteria for installation of speed humps.

McIvor Avenue

Based on preliminary discussions with the Fire Paramedic Service, traffic calming measures on McIvor Avenue between Henderson Highway and Raleigh Street may not be appropriate due to the fire station located at the corner of McIvor Avenue and Rothesay Street. If the residents of McIvor Avenue west of Raleigh Street were to request traffic calming measures involving a roadway narrowing such as curb extensions, chicanes, or median islands, or traffic circles, it would be necessary to further consult with the Fire Paramedic Service as to the need to protect this section of McIvor Avenue as a major emergency access route. East of Gateway Road, roadway narrowing is not recommended due to the lack of sidewalks and rural cross section. Traffic circles may be appropriate east of Gateway Road, particularly at intersections with unwarranted stop signs. Since McIvor Avenue between Henderson Highway and De Vries Avenue is a Snow Route, it does not meet the warrant criteria for installation of speed humps.

As noted above, it is recommended that the current designation of Knowles Avenue between Henderson Highway and Raleigh Street, Bonner Avenue and McIvor Avenue as Snow Routes be reviewed to determine if they still are required as snow routes. However, as previously noted, preliminary discussions with the Fire Paramedic Service seem to indicate that the current designations of Bonner Avenue and Knowles Avenue as well as McIvor Avenue from Henderson Highway to Gateway Road are still necessary. Should any of these locations be removed as Snow Routes, the use of speed humps should be reconsidered if supported by a minimum 70% supporting petition from the residents.

It should be noted that if the proposed closures/turn restrictions identified in Disposition #3 (on Lagimodiere Boulevard at Knowles Avenue, Bonner Avenue and McIvor Avenue) are implemented, traffic levels on Knowles Avenue, Bonner Avenue and McIvor Avenue would be expected to change from that shown in Tables 6, 7 and 8. As such, it would be recommended to re-evaluate the need for traffic calming measures on these streets.

Financial Impact Statement — Date: September 17, 2003

Project Name: — **First Year of Program** 2004

North Kildonan Traffic Study (File ST)

	2004	2005	2006	2007	2008
Capital					
Capital Expenditures Required					
Less: Existing Budgeted Costs					
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal					
Debt - External					
Grants (Enter Description Here)					
Reserves, Equity, Surplus					
Other - To Be Determined					
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Less: Incremental Revenue/Recovery					
Net Cost/(Benefit)	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Less: Existing Budget Amounts	25,000	25,000	25,000	25,000	25,000
Net Budget Adjustment Required		$ -	$ -	$ -	$ -

Additional Comments:

The amounts included in the Financial Impact Statement above include those costs related to installation and maintenance of the recommended speed humps and traffic circles. The five year capital program in the Department's submitted 2004 capital budget and 2005 - 2009 capital forecast includes $900,000 for preliminary work on the extension of the Chief Peguis Trail in 2009. No costs related to the partial connection of the Sun Valley Drive have been included in the submitted 2004 capital budget or 2005 - 2009 capital forecast. As the capital costs for the Chief Peguis Trail extension and Sun Valley Drive extension are beyond the five year timeframe included in this Financial Impact Statement, their costs are not included above.

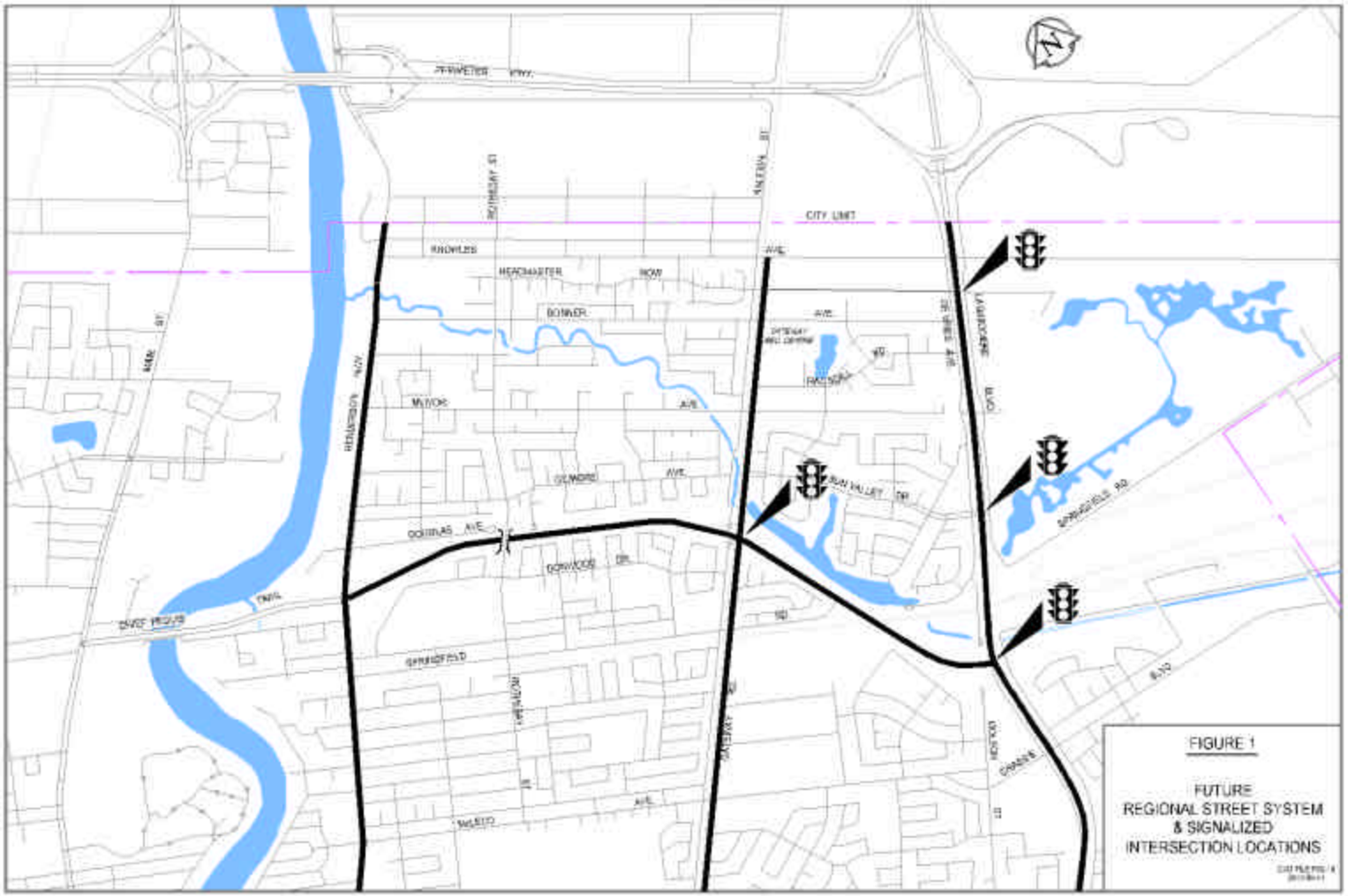
"Original Signed by Darcy Stewart, CA"
Manager of Finance and Administration

Approved by Divisional Accountant Trainee: ☑

In preparing this report, there was consultation with the Fire Paramedic Service

This Report Submitted by:

Department:	Public Works
Division:	Transportation
Prepared by:	D. Emerson, W.A. Wardekker, E.D. Schellenberg
Processed by:	Carol Kawaza
Document Name:	NorthKildonanStudy2003Report1.doc
File No.	E-01/OG-02(b)


CITY LIMIT
FIGURE 1
FUTURE
REGIONAL STREET SYSTEM
& SIGNALIZED
INTERSECTION LOCATIONS

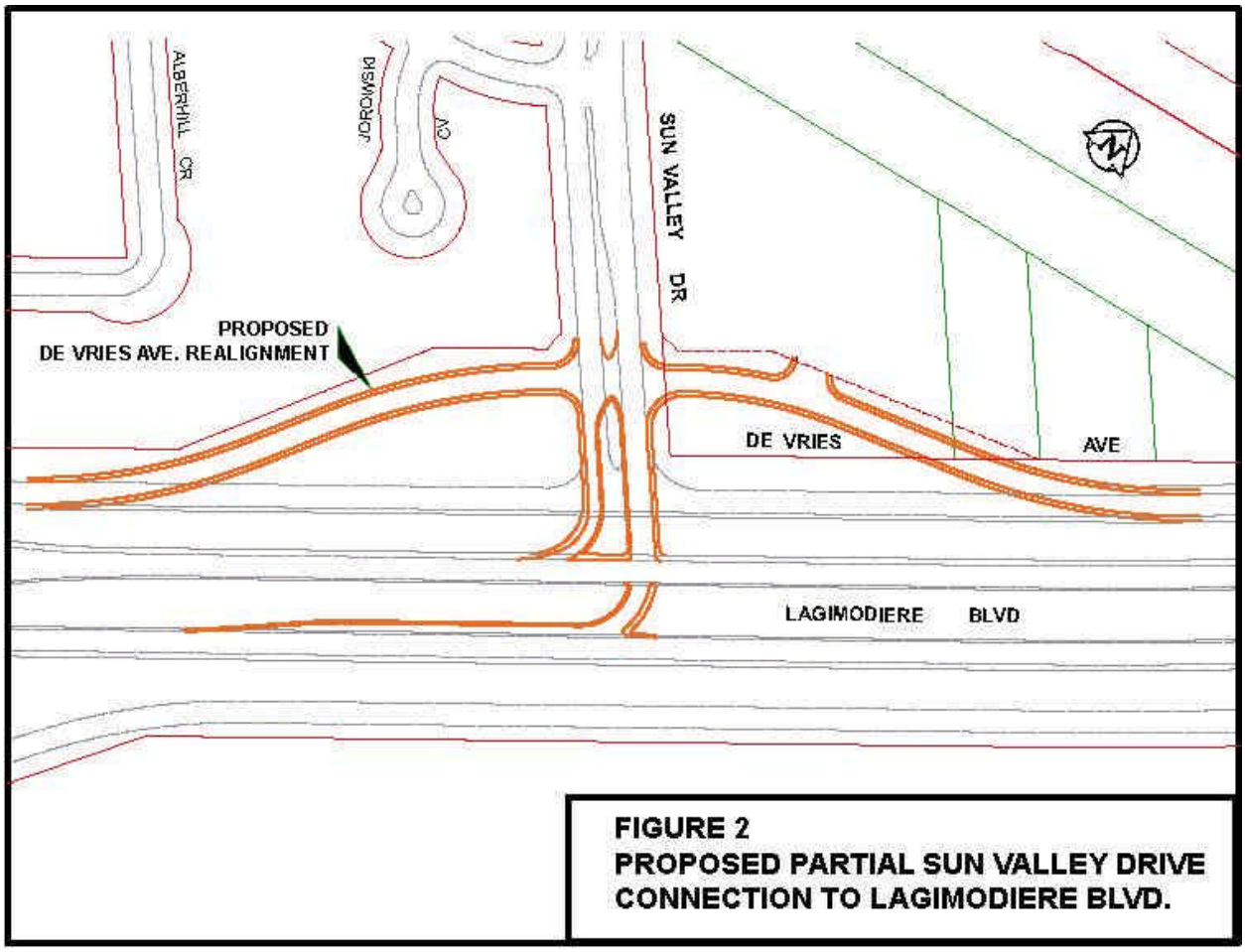


FIGURE 2
PROPOSED PARTIAL SUN VALLEY DRIVE CONNECTION TO LAGIMODIERE BLVD.