

REGION OF OTTAWA-CARLETON  
RÉGION D'OTTAWA-CARLETON

REPORT  
RAPPORT

Our File/N/Réf.                   **50 23-00-R073-D**  
Your File/V/Réf.

DATE                               13 July 2000

TO/DEST.                         Co-ordinator Transportation Committee

FROM/EXP.                        Director Mobility Services and Corporate Fleet Services  
Environment and Transportation Department

SUBJECT/OBJET                 **MODIFICATIONS TO PRINCE OF WALES DRIVE TO  
ACCOMMODATE THE CHAPMAN MILLS AREA 4  
SUBDIVISION**

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### DEPARTMENTAL RECOMMENDATIONS

**That the Transportation Committee recommend Council approve the installation of traffic control signals at the intersection of Prince of Wales Drive (Old Highway 16) and Waterbridge Street (Winding Way) and the construction of associated roadway modifications as described in the report and illustrated in Annex B, subject to the proponent, Minto Developments Incorporated:**

- 1. funding the total cost for the roadway modifications and the associated utility relocations which would include paying the total cost for the traffic control signal installation and their annual maintenance costs until such time as the signals meet the Ministry of Transportation of Ontario installation warrants and Council approves the assumption of the costs; and,**
- 2. executing a legal agreement with respect to the above.**

### BACKGROUND

Minto Developments Incorporated are in the process of developing a 73.5 hectare site located on the northwest quadrant of the intersection of Prince of Wales Drive (Regional Road 73) and the future extension of Strandherd Road. The site location is shown in Annex A.

This proposed development will be developed in eight stages, and will consist of a mixture of single, townhouse and multiple units. There will be a small portion of the site designated as commercial and institutional land uses. To facilitate access and egress from the development, four access points are proposed, with two access points onto Prince of Wales Drive, and two onto the future Strandherd Road extension. The main access to the subdivision will be provided by Waterbridge Street which will form the westerly leg of the intersection with Prince of Wales Drive. The future realignment of Winding Way will form the easterly leg of this intersection. Details on these proposed roadway modifications are discussed further in this report.

### EXISTING CONDITIONS

Currently, this portion of Prince of Wales Drive (Old Highway 16) is a two-lane rural highway with a pavement width of 8.6 m, 3.8 m travel lanes, 2.6 m shoulders and ditches of varying depths on both sides. The speed limit in this area is 80 km/h.

#### Pedestrians

Traffic volumes were recently counted on 17 May 2000 on Prince of Wales Drive at Woodroffe Avenue which is the nearest surveyed location to the proposed intersection with Waterbridge Street. This survey indicates no pedestrian activity along Prince of Wales Drive or Woodroffe Avenue within the eight-hour study period. In view of this, it can be reasonably assumed that pedestrian volumes along this portion of Prince of Wales Drive are very light.

#### Bicycles

Prince of Wales Drive in the vicinity of the site is identified for on-road cycling facilities in the Transportation Master Plan and the Official Plan. Currently, bicycle lanes are not provided along this section of roadway in the area of the proposed development.

Similar to the pedestrian activity in this area of Prince of Wales Drive, bicycle volumes can be described as very light along this section of roadway. Over an eight-hour period on 17 May 2000 at Prince of Wales Drive and Woodroffe Avenue, only one southbound cyclist was detected.

#### Transit

Transit service is not provided along this section of Prince of Wales Drive.

### Automobiles

The above-mentioned traffic volume survey revealed that approximately 3,900 motorists travel in each direction over a selected eight-hour period. A combined total of approximately 13,000 motorists travel along this section of roadway over a 24-hour period.

### DESIGN PROPOSAL

To safely accommodate the projected increase in traffic volume entering and exiting the Chapman Mills Area 4 subdivision, modifications are proposed for Prince of Wales Drive at the main site access (Waterbridge Street). These modifications consist of the following features:

1. the installation of traffic control signals (TCS);
2. the provision of northbound and southbound left-turn lanes;
3. the provision of a southbound right-turn lane;
4. the provision of a southbound bicycle lane or pocket between the right-turn lane and the through lane; and,
5. the construction of an easterly leg to the intersection for an eventual connection to a future re-aligned Winding Way

These proposals are illustrated in Annex B.

### Pedestrians

At this time, sidewalks are not proposed along either side of Prince of Wales Drive in this area. The subdivision site plan provides for sidewalks within the site that link the subdivision to Prince of Wales Drive.

The proposed TCS will have push button actuation to assist in pedestrian crossings. Audible signals will also be installed.

### Bicycles

Because of the generous pavement width (8.6 m) on Prince of Wales Drive, the proposed modifications do not include the construction of cycling lanes across the entire frontage of the development site. However, a 2 m bike lane or “pocket” will be provided between the southbound through lane and the parallel section of the proposed southbound right-turn lane. In addition, the provision of TCS at the intersection of Prince of Wales Drive and Waterbridge Street will enable cyclists to safely cross the roadway.

### Transit

The proposed roadway modifications will not adversely affect future transit service that OC Transpo may provide for the area.

### Automobiles

In view of the high speed operation of the roadway and the infrequency of acceptable gaps in traffic during the A.M. peak period, the provision of TCS and auxiliary turning lanes at the main site access will significantly enhance motorist safety at this location.

## CONFORMITY TO THE TRANSPORTATION MASTER PLAN

The guiding principle from the Transportation Master Plan (TMP) is the provision of a modal hierarchy with the emphasis on walking, cycling and transit usage. This principle is reflected in the following design features.

1. The provision of traffic control signals will provide pedestrians with safe and convenient opportunities to cross Prince of Wales Drive especially during the A.M. and P.M. peak periods. This conforms directly with 2.2.2 of the TMP.
2. The construction of a southbound cycling lane or “pocket” along the parallel section of the right-turn lane conforms to 2.3.4, item 2 of the TMP.

## FINANCIAL STATEMENT

Should Regional Council approve the proposed roadway modifications to Prince of Wales Drive to accommodate the Chapman Mills Area 4 subdivision, then Minto Developments Incorporated will be responsible for 100% of the costs.

Cost Estimates

The following preliminary cost estimates are based on the functional design details, and are provided solely for the information of the Transportation Committee and Regional Council.

<u>Item</u>	<u>Cost Estimate</u>
Construction	\$180,000
Traffic Control Signals	\$100,000
Engineering	\$18,000
Contingencies	<u>\$20,000</u>
Total Estimated Cost Before GST	\$318,000
GST @ 7%	<u>\$22,000</u>
TOTAL ESTIMATED COST	<u>\$340,000</u>

CONSULTATION

Notice of the proposed Prince of Wales Drive modifications to accommodate the development of the Chapman Mills Area 4 subdivision has been placed in Le Droit, the Ottawa Citizen and the Ottawa Sun for four consecutive weeks.

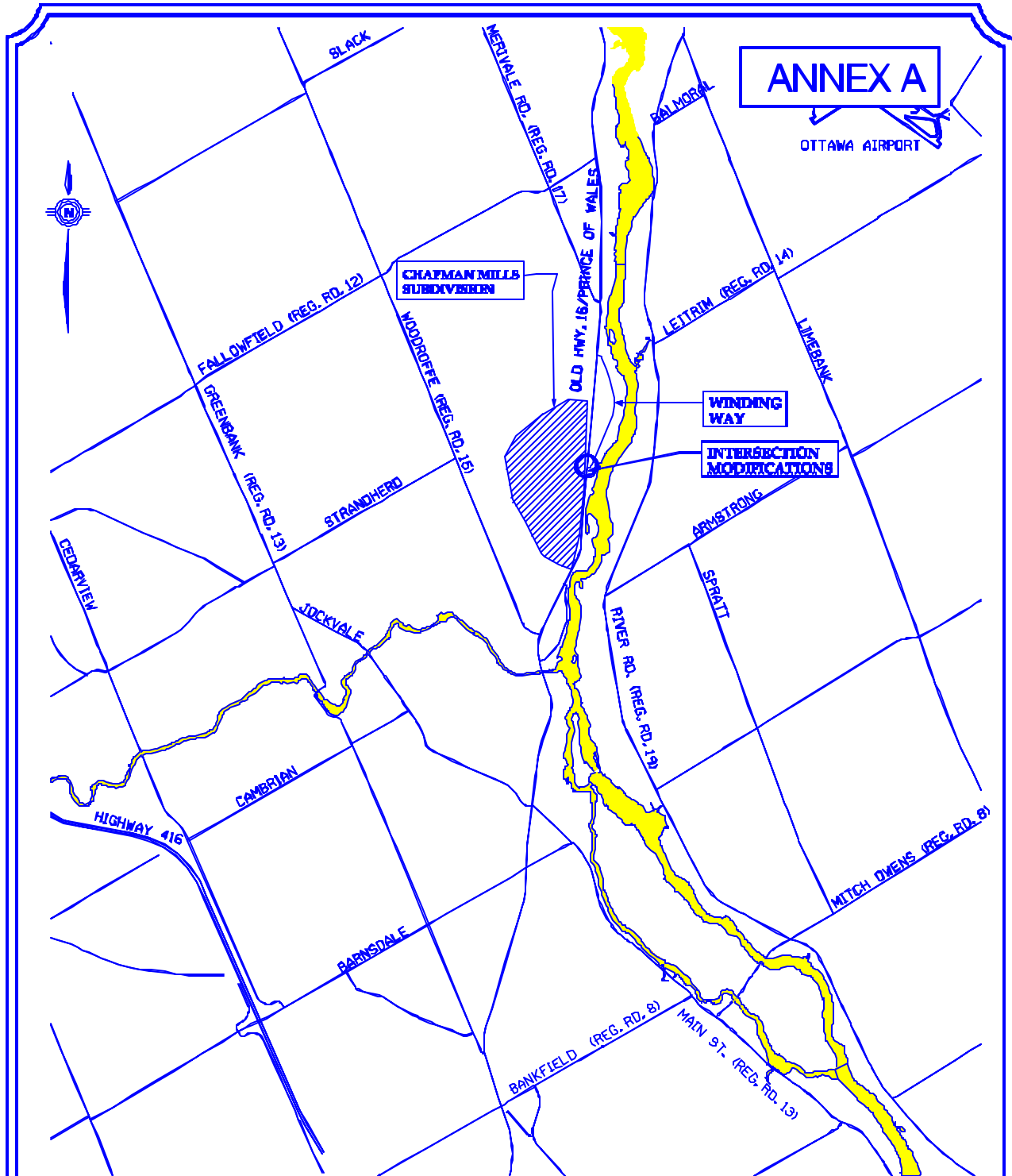
COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP


A draft conceptual drawing of the proposed roadway modifications will be provided to the Regional Cycling Advisory Group for their Planning Sub-committee meeting on 18 July 2000. Staff has requested that their comments be made available for the Transportation Committee meeting.

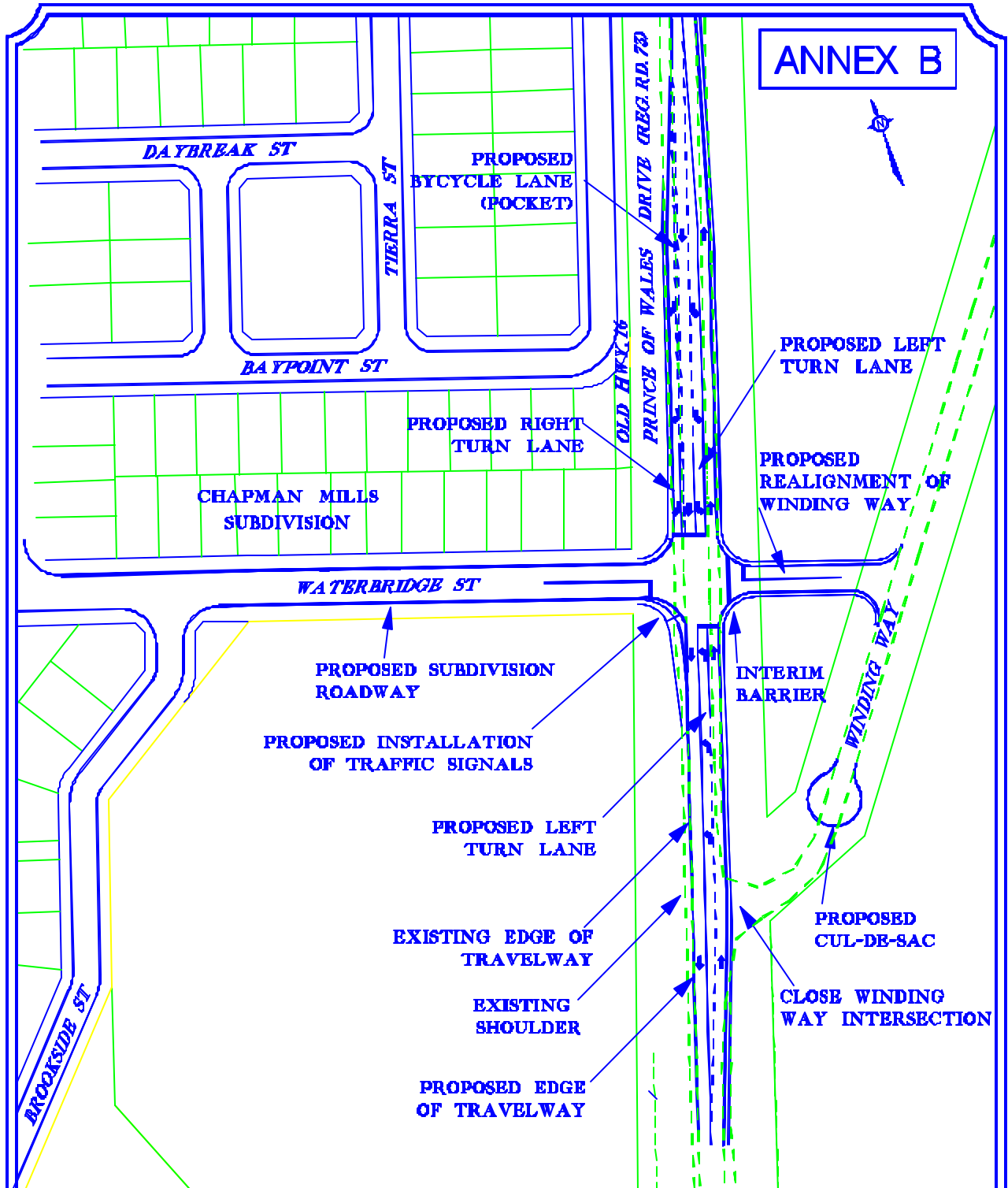
*Approved by*  
*Doug Brousseau*

WJ/gc

Attach. ( 2 )



 <p><b>Ottawa-Carleton</b></p>	<p align="center"><b>KEY PLAN: PROPOSED ROADWAY MODIFICATIONS- OLD HWY. 16/PRINCE OF WALES AND CHAPMAN MILLS SUBDIVISION</b></p>	<p>Checked By: <u>William Joffe, Design Review Coordinator</u></p>	
<p><b>ENGINEERING DIVISION</b></p> <p>Environment and Transportation Department</p>		<p>Compiled By: <u>GEO/and/ces</u></p>	
		<p>Scale: <u>N.T.S.</u></p>	<p>Date: <u>July 08, 2000</u></p>
		<p><small>This map/diagram has been prepared and/or derived from the Geographic Information System of the Region of Ottawa-Carleton and is protected by copyright.</small></p>	<p>Dwg. #1 <b>FM_174</b></p>



 <b>Ottawa-Carleton</b>	<b>Proposed Roadway                  Modifications -                  Old Hwy. 16/ Prince of Wales Dr.                  and Chapman Mills                  Subdivision</b>	Checked By: William Joffe, Design Review Coordinator	
		Compiled By: GEO/and/csm	
ENGINEERING DIVISION Environment and Transportation Department		Date: N.T.S.	Date: July 08, 2000
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