

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf. **25 23-97-R017AH**
Your File/V/Réf.

DATE 18 July 1997

TO/DEST. Co-ordinator Transportation Committee

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

SUBJECT/OBJET **MODIFICATIONS TO HUNT CLUB ROAD AND MERIVALE
ROAD TO SERVE THE CROSSROADS HOME CENTRE**

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee recommend Council approve:

- 1. the installation of traffic control signals at West Hunt Club Road and the existing Beaver Lumber Access/Proposed Crossroads and the construction of the associated roadway modifications along Merivale Road and West Hunt Club Road as illustrated in Annexes D and E, subject to the owner, 1204325 Ontario Limited;**
 - a. funding the total cost of the proposed road works which would include paying the annual maintenance costs for the traffic control signals until such time as they meet the Ministry of Transportation of Ontario installation warrants and Council approves the assumption of the costs;**
 - b. executing a legal agreement with respect to the above;**
- 2. Authorize the initiation of the public hearing process as required by Sections 297 and 300 of the Ontario Municipal Act.**

BACKGROUND

The Crossroads Home Centre is being developed by 1204325 Ontario Limited and will occupy approximately 30 acres of a total of 39 acres of land which forms the basis for the City of Nepean Merivale/Hunt Club Intersection Area planning concept in the northwest quadrant of West Hunt Club Road and Merivale Road. The lands are bounded by West Hunt Club Road on the south, Merivale Road on the east, the Tanglewood community on the north and the Ontario Hydro right of way on the west. The location of the lands included in the development is shown in an area

context in Annex A. The site plan for the proposed Crossroads Home Centre site is provided in Annex B.

EXISTING CONDITIONS

Pedestrians

Concrete sidewalks exist on both sides of Merivale Road between West Hunt Club Road and Roydon Place. Along West Hunt Club Road in the vicinity of the Crossroads Home Centre, sidewalks are provided beside the right-turn lanes and the bus bays which were provided for future bus stop use. The relatively low pedestrian volumes in this area are summarized in the table shown in Annex C which used the most recent counts available.

Pedestrian volumes crossing the intersecting roadways and driveways are very low.

Bicycles

There are bicycle lanes provided on both sides of West Hunt Club Road in the vicinity of the Crossroads Home Centre; however, there are no lanes to facilitate cyclists on Merivale Road. Recent bicycle volume counts are summarized in the table provided in Annex C and it can be seen that these volumes are very low.

Transit

Transit service is provided to and through the area by OC Transpo with one "Regular" route (Route 176) and two "Peak Period" routes (Routes 56 and 116) operating on Merivale Road southbound and northbound on typical headways. Currently, there are no routes operating on West Hunt Club Road.

The existing bus stops, in the area of this proposed development, are located on Merivale Road "near side" southbound at West Hunt Club Road and "far side" northbound approximately midway between the Price Club driveway and Roydon Place.

Automobiles

West Hunt Club Road is a four lane divided arterial roadway with a posted speed limit of 80 km/h. Traffic volumes recorded in May 1997 indicate an annual average daily traffic (AADT) of 14,100 and 15,300 vehicles eastbound and westbound respectively.

A continuous median, nominally five m in width, exists on West Hunt Club Road between Woodroffe Avenue and Merivale Road. Approximately 400 m west of Merivale Road there is a median break to serve the Cleopatra/Lancelot intersection which is controlled by traffic signals. In addition, a median break has been provided to facilitate the Beaver Lumber store located on the southwest quadrant of the intersection of Merivale Road and West Hunt Club Road. The intersection of West Hunt Club Road and Merivale Road is controlled by traffic signals.

Merivale Road adjacent to the site is a four lane divided arterial roadway with a posted speed limit of 60 km/h. Traffic volumes recorded in May 1997 indicate an AADT of 16,200 vehicles northbound and 16,000 vehicles per day southbound on the section of road adjacent to the site.

On Merivale Road, north of West Hunt Club Road, the median is variable in width and is broken to facilitate access to the Price Club store which is situated on the east side of Merivale Road which is controlled by traffic signals. At this median break, southbound left-turning traffic is accommodated by dual left-turn lanes.

DESIGN PROPOSAL

Automobiles

The site plan proposes three main accesses to the abutting Regional roads:

1. on Merivale Road opposite the existing Price Club driveway;
2. on West Hunt Club Road opposite the existing Beaver Lumber driveway; and
3. on West Hunt Club Road using the Lancelot Drive/Cleopatra Drive intersection.

In order to mitigate, as much as possible, the potential adverse impacts to the adjacent Regional Roads from this proposed development, approval is requested for roadway modifications along both West Hunt Club Road and Merivale Road. The following road works encompass changes proposed for Merivale Road, from the northerly limit of the Crossroads site south to West Hunt Club Road and for West Hunt Club Road, from the westlery limit of the site east to Merivale Road.

1. Road widenings are necessary to create an additional lane on the west side of Merivale Road and the north side of West Hunt Club Road across the frontage of the site.
2. At the intersection of West Hunt Club Road and Cleopatra Drive/Lancelot Drive/Crossroads access, Lancelot Drive will be widened to 13 m and a westbound right-turn lane will be provided as part of the additional lane along the north side of West Hunt Club Road from the west limit of the site to Merivale Road.
3. Traffic control signals are proposed at West Hunt Club Road and the Beaver Lumber/Crossroads access. In addition, the geometric modifications at this intersection will include an access to the Crossroads Home Centre comprised of two outbound lanes and one inbound lane, the provision of an eastbound left-turn lane and a westbound right-turn lane (as part of the additional lane along the site's frontage on West Hunt Club Road).
4. At Merivale Road and West Hunt Club Road a number of changes must be carried out to mitigate the site's impact on this busy intersection. An additional eastbound left-turn lane will be provided by converting the existing adjacent eastbound through lane to a left-turn lane and designating the existing eastbound right-turn lane to be a combined through and right-turn

lane which can be accomplished by relocating southwards, the channelizing islands located in the southeast and southwest quadrants of the intersection. In addition, it will be necessary to provide another westbound lane through the intersection to connect with the proposed additional westbound lane across the frontage of the Crossroads site. This can be accomplished by removing the island in the northeast quadrant and modifying the island located in the northwest corner of the intersection.

5. An additional southbound lane is proposed along the west side of Merivale Road between West Hunt Club Road and the northerly limits of the Crossroads site.
6. At the signalized intersection of Merivale Road and the Price Club/Crossroads access, a double northbound left-turn lane with a total length of 80 m will be required to accommodate the projected volumes into the Crossroads site. This can be achieved by reducing the length of the existing southbound double left-turn lane on the approach to West Hunt Club Road by 20 m, thereby retaining a total of 120 m left-turn storage which is sufficient to facilitate the forecast traffic demand.

The proposed modifications at the intersection of Merivale Road and West Hunt Club Road and the intersection of West Hunt Club Road and Beaver Lumber/Crossroads access are illustrated in Annex D. Annex E illustrates the proposed modifications to the intersection of Merivale Road and Price Club/Crossroads access.

Pedestrians

Because there are very few pedestrians using the road system in this area and since the site plan will make provision for pedestrian movements within the site, no modifications are proposed to the “on-road” pedestrian facilities other than to relocate the existing sidewalk section where necessary. Overall, pedestrians will benefit with the provision of an additional “protected” crossings opportunity across West Hunt Club Road at the proposed signalized intersection with the Beaver Lumber/Crossroads access.

Bicycles

The existing bicycle facilities will be retained with the bicycle lanes on West Hunt Club Road integrated into the design modifications previously described. Cyclists will have convenient access to the site from both Merivale Road and West Hunt Club Road.

Transit

Transit service and accessibility will not change and will not be compromised by the proposed roadway modifications to serve the site.

FINANCIAL STATEMENT

Should Regional Council approve the proposed roadway modifications, traffic control signal installation and related works, the owner/developer, 1204325 Ontario Limited, will be responsible

for 100 % of all costs. The owner/developer will also be responsible for the annual operation and maintenance costs of the proposed traffic control signals at the intersection of West Hunt Club Road and Beaver Lumber/Crossroads access until such time as the Ministry of Transportation of Ontario traffic signal installation warrants are met and Regional Council approves the assumption of these costs.

COST ESTIMATE

The following cost estimates which have been developed by McLean Transportation Engineering Consultants are at a conceptual stage and are provided solely for the information of the Transportation Committee and Regional Council.

<u>Item</u>	<u>Cost Estimate</u>
Construction	\$540,000
Traffic Control Signals	\$115,000
Utilities	\$ 75,000
Engineering	\$ 58,000
<u>Contingencies</u>	<u>\$ 70,000</u>
TOTAL ESTIMATED COST	\$858,000

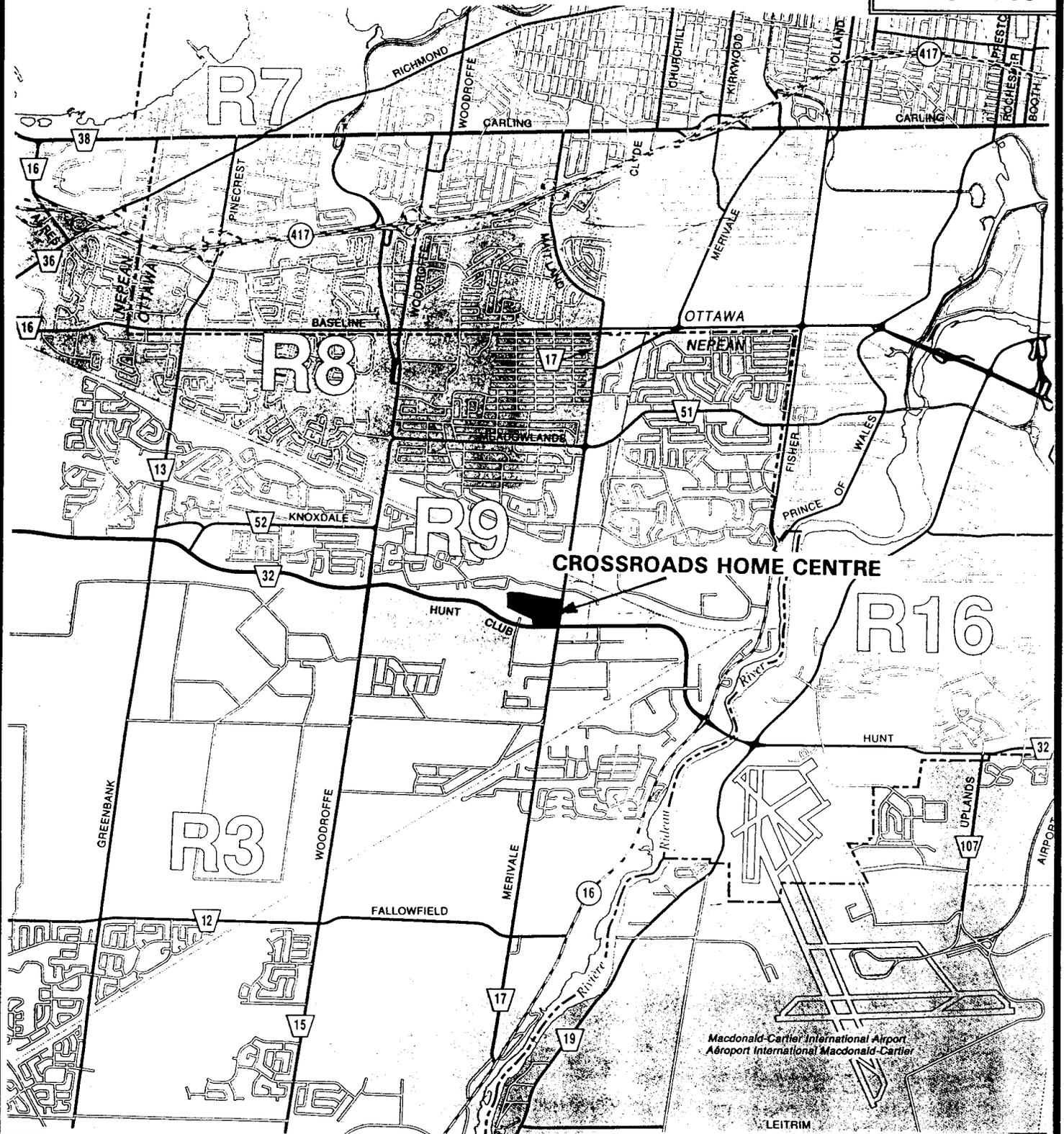
CONSULTATION

The opportunity for general public input will be provided via the public hearing process.

COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP

This report will be presented to the Regional Cycling Advisory Group (RCAG) at their meeting on 12 August 1997. Although this report is being considered by the Transportation Committee on 6 August 1997, RCAG will have ample opportunity for input through the public hearing process should they have any concerns with any of the proposals in this report.

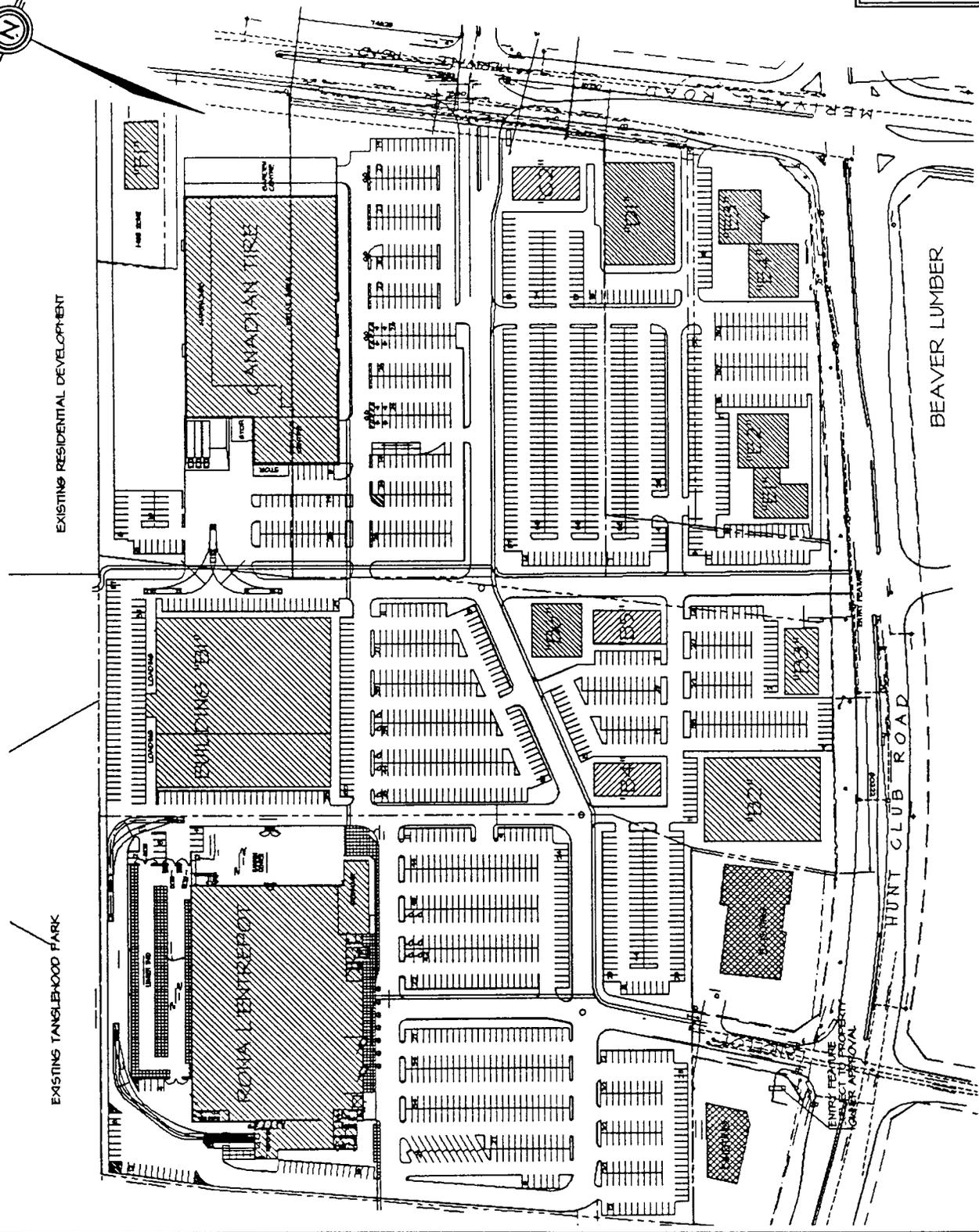
*Approved by
Doug Brousseau*



LEGEND

CROSSROADS HOME CENTRE

SITE LOCATION



LEGEND

CROSSROADS HOME CENTRE

**PROPOSED
SITE PLAN**

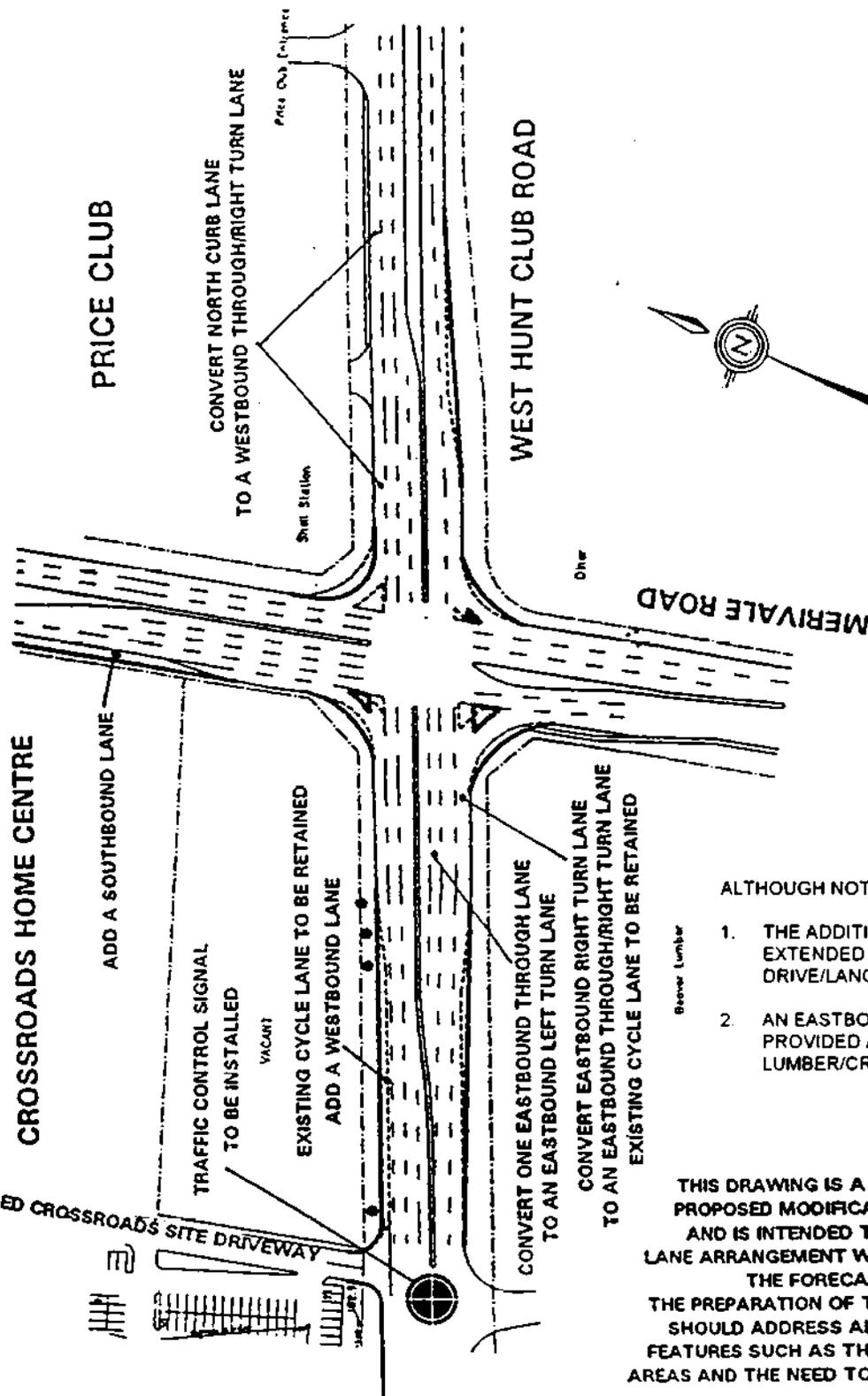
PEDESTRIAN TRAFFIC VOLUMES

INTERSECTION	PEDESTRIANS CROSSING ON THE:			
	EAST SIDE OF CLEOPATRA	WEST SIDE OF CLEOPATRA	NORTH SIDE OF W. HUNT CLUB RD	SOUTH SIDE OF W. HUNT CLUB RD
WEST HUNT CLUB ROAD & CLEOPATRA/LANCELOT (12 HOUR COUNT) 1995	26	6	0	6
WEST HUNT CLUB ROAD & MERIVALE ROAD (11 HOUR COUNT) 1996	41	40	19	40
MERIVALE ROAD & PRICE CLUB/CROSSROADS (11 HOUR COUNT) 1996	25	N/A	1	6

BICYCLE TRAFFIC VOLUMES

INTERSECTION	BICYCLES APPROACHING:			
	NORTHBOUND ON CLEOPATRA	SOUTHBOUND ON LANCELOT	EASTBOUND ON W. HUNT CLUB RD	WESTBOUND ON W. HUNT CLUB RD
WEST HUNT CLUB ROAD & CLEOPATRA/LANCELOT (12 HOUR COUNT) 1995	11	1	28	36
WEST HUNT CLUB ROAD & MERIVALE ROAD (11 HOUR COUNT) 1996	61	65	49	44
MERIVALE ROAD & PRICE CLUB/CROSSROADS (11 HOUR COUNT) 1996	74	68	N/A	1

BASE PLAN OF EXISTING ROAD:
PROVIDED ON DISKETTE BY
CUMMING COCKBURN LTD



ALTHOUGH NOT SHOWN:

1. THE ADDITIONAL WESTBOUND LANE WILL BE EXTENDED WESTWARD TO CLEOPATRA DRIVE/LANCELOT DRIVE.
2. AN EASTBOUND LEFT-TURN LANE WILL BE PROVIDED AT THE ACCESS TO BEAVER LUMBER/CROSSROADS SITE.

Beaver Lumber

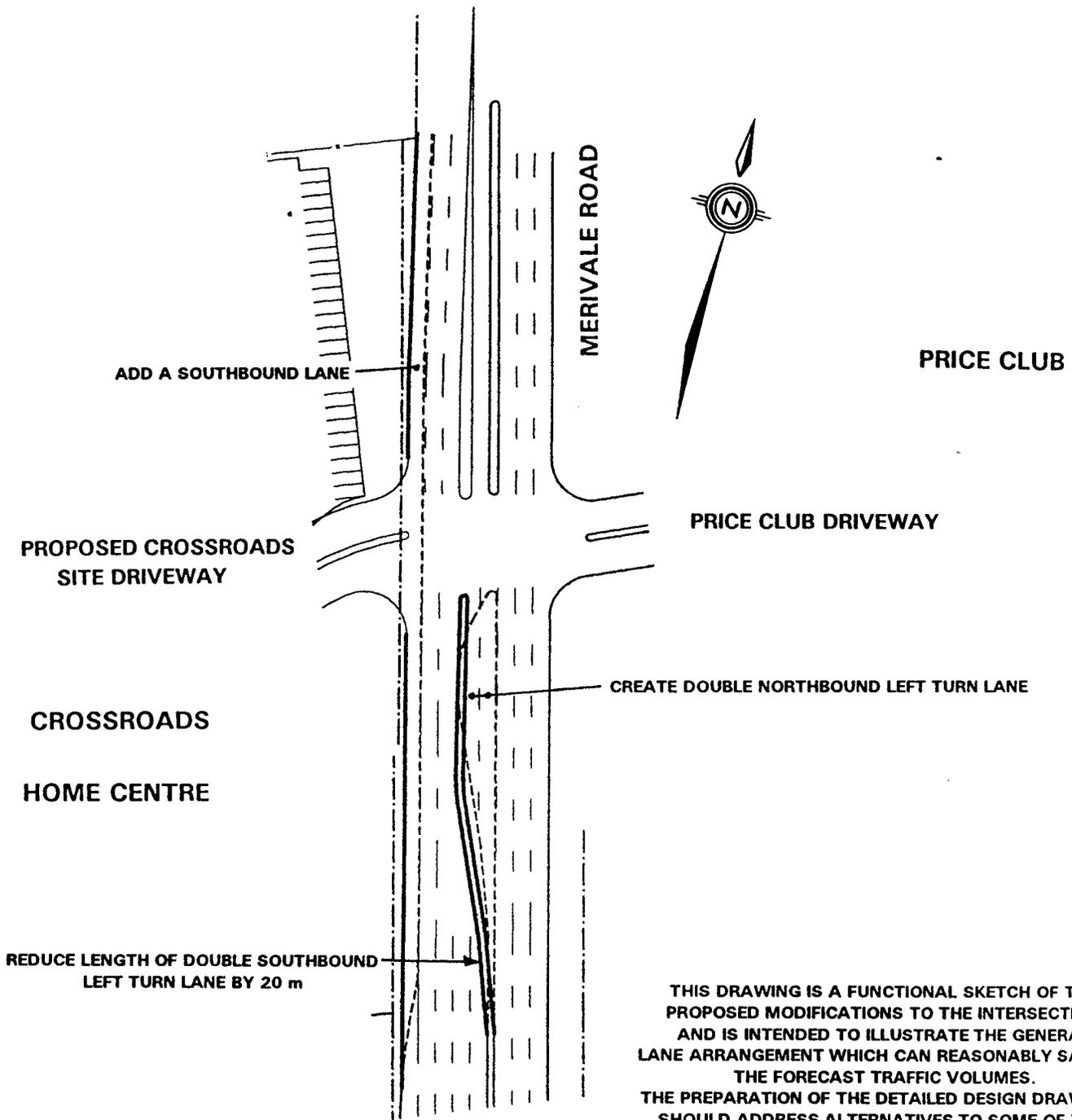
THIS DRAWING IS A FUNCTIONAL SKETCH OF THE PROPOSED MODIFICATIONS TO THE INTERSECTION AND IS INTENDED TO ILLUSTRATE THE GENERAL LANE ARRANGEMENT WHICH CAN REASONABLY SATISFY THE FORECAST TRAFFIC VOLUMES. THE PREPARATION OF THE DETAILED DESIGN DRAWINGS SHOULD ADDRESS ALTERNATIVES TO SOME OF THE FEATURES SUCH AS THE PEDESTRIAN CROSSING REFUGE AREAS AND THE NEED TO RETAIN CHANNELIZATION ISLANDS

LEGEND

- PROPERTY/STREET LINE
- EXISTING CURB TO BE RETAINED
- - - - EXISTING CURB TO BE REMOVED
- NEW CURB LINE

CROSSROADS HOME CENTRE
**PROPOSED INTERSECTION
MODIFICATIONS
WEST HUNT CLUB ROAD
AND MERIVALE ROAD**

BASE PLAN OF EXISTING ROAD:
PROVIDED ON DISKETTE BY
CUMMING COCKBURN LTD



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McLEAN TRANSPORTATION ENGINEERING CONSULTANTS LTD

**CROSSROADS HOME CENTRE
PROPOSED INTERSECTION
MODIFICATIONS
MERIVALE ROAD AND
CROSSROADS/PRICE CLUB DRIVEWAYS**