

REGION OF OTTAWA-CARLETON
RÉGION D'OTTAWA-CARLETON

REPORT
RAPPORT

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| Our File/N/Réf. Your File/V/Réf. | 50 23-99-R034-F |
| DATE | 30 April 1999 |
| TO/DEST. | Co-ordinator Transportation Committee |
| FROM/EXP. | Director Mobility Services and Corporate Fleet Services Environment and Transportation Department |
| SUBJECT/OBJET | ST. JOSEPH BOULEVARD (REGIONAL ROAD 34) MEDIAN MODIFICATIONS TO ACCOMMODATE ALL-DIRECTIONAL ACCESS TO THE PROPOSED REGIONAL POLICE FACILITY |

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee recommend Council approve:

- 1. The modification to the median on St. Joseph Boulevard approximately 125 m east of Tenth Line Road (Regional Road 47) and associated changes to the access at the CHS Access Road A as illustrated in Annex B;**
- 2. The initiation of the public hearing process as required by Sections 297 and 300 of the *Ontario Municipal Act*.**

BACKGROUND

The Ottawa-Carleton Regional Police Services are in the process of developing a new police facility utilizing a vacant 2.05 ha. site located in the City of Cumberland. The site is bounded by St. Joseph Boulevard to the south, Tenth Line Road (new alignment) to the west, and CHS "Access Road A" to the east. The northern boundary of the site is formed by the eastbound off ramp from Regional Road 174 (old Highway 17) at the interchange with Tenth Line Road. The site location, in an area context, is shown in Annex A.

Because of the nature of the service, the proposed new police facility will require unrestricted access to St. Joseph Boulevard which will be provided by the CHS Access Road A. This roadway's current access to the eastbound lanes of St. Joseph Boulevard is restricted by a raised median and channelized, right-in/right-out intersection geometry.

EXISTING CONDITIONS

Pedestrians

Asphalt sidewalks exist along both sides of St. Joseph Boulevard in the area of the proposed police facility. Immediately west of the site, concrete sidewalks are provided on both sides of Tenth Line Road.

Pedestrian traffic is very light in this area. Traffic volumes recorded on 15 July 1998 at Tenth Line Road at St. Joseph Boulevard revealed that, over an eight-hour period, a total of 28 pedestrians travelled along St. Joseph Boulevard in the vicinity of the proposed site.

Bicycles

St. Joseph Boulevard. is identified in Map 1 of the Transportation Master Plan for an on-road cycling facility. Currently, no bicycle lanes exist along this section of St. Joseph Boulevard.

Bicycle volumes recorded over an eight-hour period on 15 July 1998 indicated that 14 bicycles travelled westbound and 17 bicycles travelled eastbound on St. Joseph Boulevard at the intersection with Tenth Line Road.

Transit

Regular, daily bus service nearby is provided by route 120 running on nominal headways.

Local a.m. and p.m. peak period transit service is provided by route 193 along with the express routes 30, 35 and 36 serving downtown travelers for that same time period.

Automobiles

The existing CHS Access Road A which will serve as the access to the proposed site is situated on St. Joseph Boulevard approximately at the mid-point (approximately 125 m) between the intersections of Tenth Line Road and Old Tenth Line Road (Regional Road 47A) intersections. CHS Access Road A is a two-lane, undivided roadway consisting of channelized right-in/right-out lanes separated by a throat island at its intersection with St. Joseph Boulevard.

Westbound traffic operations on St. Joseph Boulevard in the vicinity of the CHS Access Road A is comprised of two left-turn lanes, two through lanes and a right-turn lane at its approach to Tenth Line Road. Eastbound on St. Joseph Boulevard two lanes are provided that are separated from the westbound lanes by a raised median.

AM peak hour volumes recorded between 07:30 and 08:30 on 15 July 1998 for St. Joseph Boulevard in this area consisted of 82 vehicles eastbound and 247 vehicles westbound. PM peak hour volumes recorded between 17:00 and 18:00 consisted of 279 eastbound vehicles and 346 westbound vehicles. The current posted speed limit on this section of St. Joseph Boulevard is 60 km/h.

DESIGN PROPOSAL

The proposed conceptual roadway modifications to facilitate all-directional access to the future Regional Police facility consist of the following features. These proposed changes are illustrated in Annex B.

1. Construct an opening in the median on St. Joseph Boulevard that would include an eastbound left-turn lane and taper.
2. Provide a westbound bicycle lane from the CHS Access Road west to the Tenth Line Road (new alignment).
3. Remove the right-turn channels on the CHS Access Road at St. Joseph Boulevard and, in addition to the single northbound lane, construct separate southbound left-turn and right-turn lanes.

Pedestrians

The proposed removal of the right-turn channels at the throat of CHS Access Road A may induce right-turning motorists to reduce their speed which may lower the hazard to east-west pedestrians; however, pedestrians will no longer have any refuge in the middle of the intersection and will now have traffic approaching from several directions. However, this is a common situation throughout the Region.

Bicycles

St. Joseph Boulevard is identified in Map 1: Cycling Transportation Network of the Transportation Master Plan (TMP) for an on-road cycling facility. In recognition of this, a westbound bicycle lane on St. Joseph Boulevard is proposed across the frontage of the future police facility.

In addition to the on-road cycling facility for westbound cyclists, the proposed modifications will provide eastbound cyclists with the ability to safely turn left into and out of CHS Access Road A at St. Joseph Boulevard.

Transit

Current transit operations will not be affected by the proposed modifications to St. Joseph Boulevard. OC Transpo will advise on the need for a bus stop located adjacent to the site.

Automobiles

As mentioned earlier, the proposed police facility requires that a readily available all-directional access be provided. This will necessitate the opening of the median on St. Joseph Boulevard at CHS Access Road A to allow eastbound and southbound left turns.

Although there is increased hazard associated with a median opening, the following factors mitigate against the decrease in safety:

1. The vast majority of motorists who will be exposed to the operational requirements of this intersection will be employed with the Regional Police Services who, by and large, are better trained to deal with these types of traffic hazards.
2. Traffic control signals are provided on either side and in relative close proximity to the intersection with CHS Access Road A; therefore, acceptable gaps in traffic will be provided to safely allow left-turning motorists to access the site.
3. For southbound left-turning motorists out of the site, the median break will provide a zone so that the vehicle can be safely stopped before entering the eastbound flow of traffic.

An illustration of these proposed changes is provided in Annex B.

Westbound Left-turn Storage at St. Joseph Boulevard and Tenth Line Road

Currently, two westbound left-turn lanes provide sufficient storage for over 650 left-turning vehicles per hour; however, only 23 westbound left-turning motorists were recorded during the highest hour between 5:00 p.m. and 6:00 p.m. In view of this, it is possible to substantially reduce the length of these lanes to provide for more than adequate eastbound left-turn storage and taper to the proposed police facility without jeopardizing the future capacity of the intersection.

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 intersection design features that will incorporate cycling facilities and simple intersection geometry.

1. As mentioned previously, the proposed roadway modification directly conforms to the TMP (Section 2.3 and illustrated in Map 1) with the provision of an on-road cycling facility across the frontage of the proposed development.
2. Wherever possible, the elimination of right-turn channels has been endorsed by the Transportation Committee and the Department feels that pedestrian safety will not be compromised in the proposed design.

FINANCIAL COMMENTS

Should Regional Council approve the proposed roadway modifications to St. Joseph Boulevard at the CHS Access Road A, the Region will be responsible for 100% of the cost of the modifications.

Cost Estimates

The following preliminary cost estimates, prepared by Stantec Consulting Ltd., 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 | \$67,500.00 |
| Contingencies | \$16,000.00 |
| Engineering | <u>\$14,800.00</u> |
| Total Cost Before GST | <u>\$98,300.00</u> |
| G.S.T. @ 7% | \$6,900.00 |
| TOTAL ESTIMATED COST | <u>\$105,200.00</u> |

CONSULTATION

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

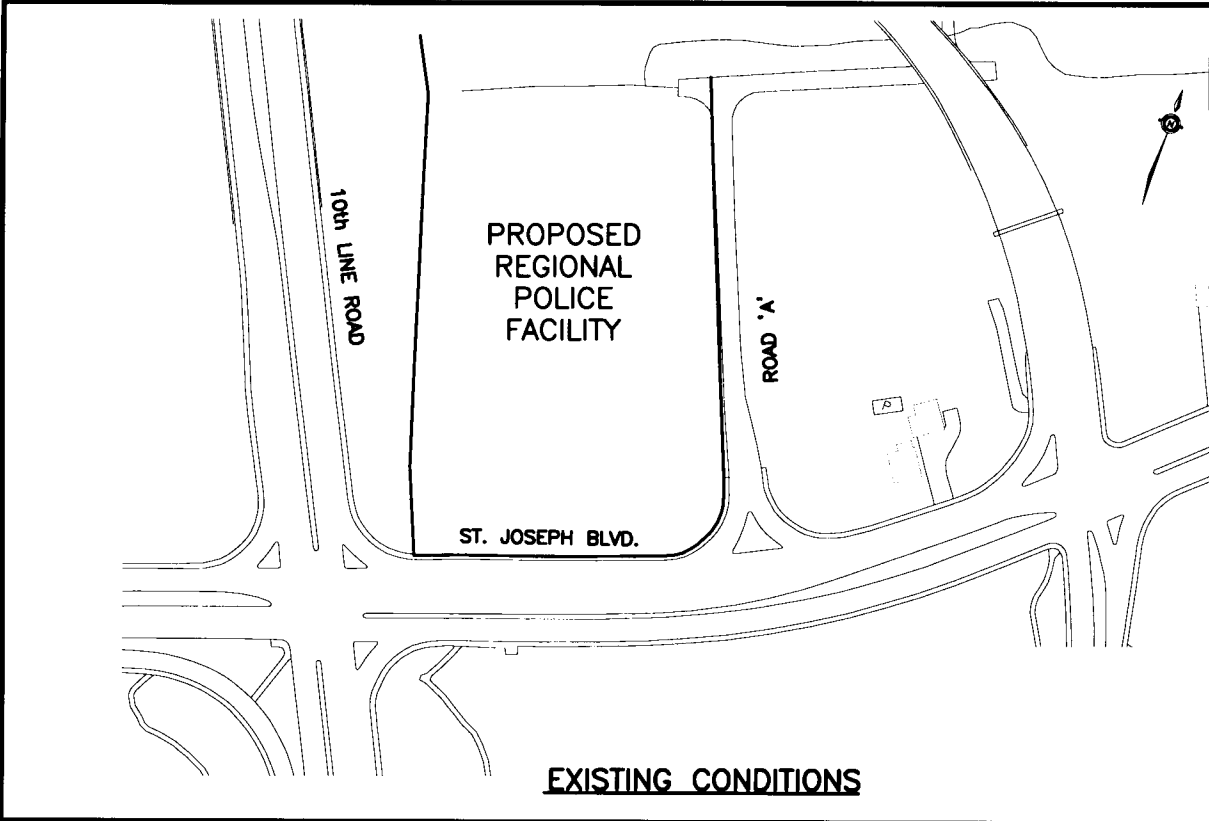
COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP

This report was provided to the Regional Cycling Advisory Group for its meeting on 04 May 1999. Their comments will be available at the next Transportation Committee meeting.

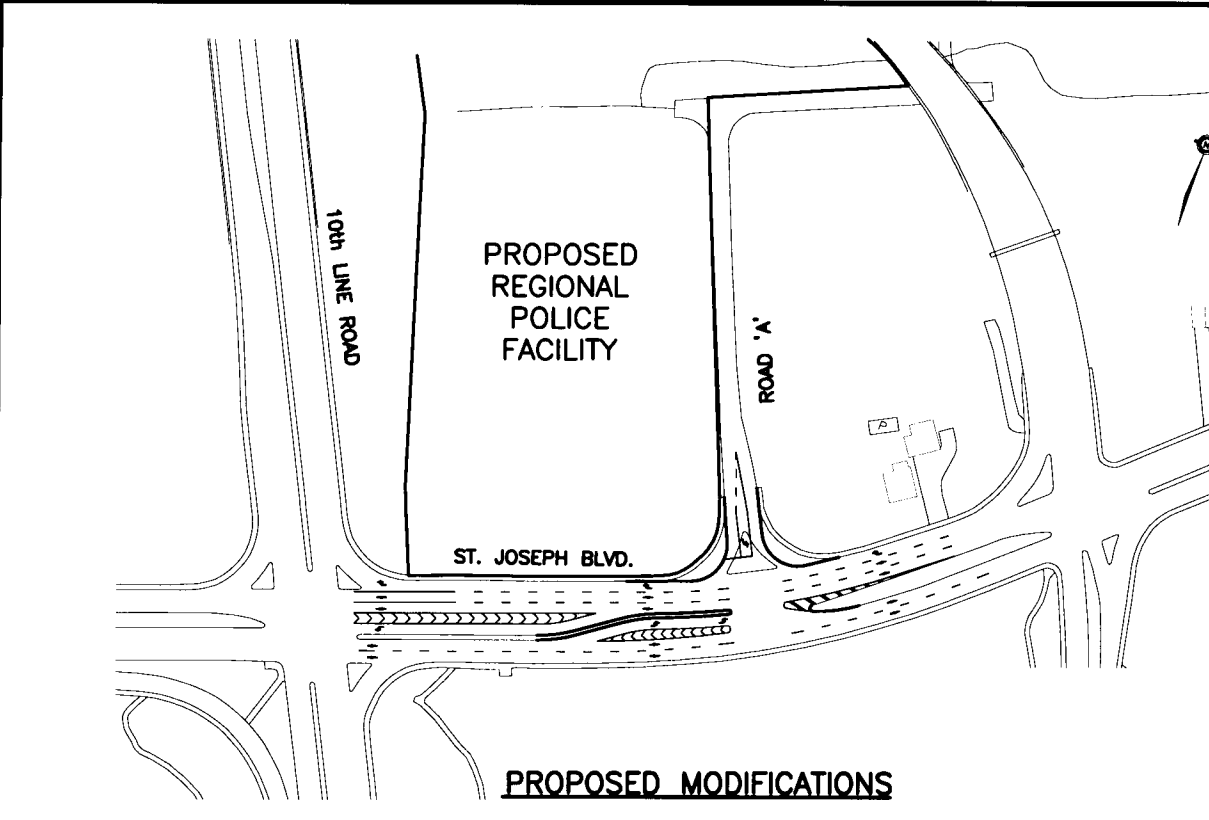
*Approved by
Doug Brousseau*

WJ/gc

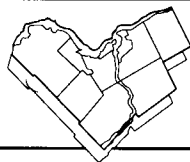
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EXISTING CONDITIONS



PROPOSED MODIFICATIONS



Ottawa-Carleton

REGIONAL POLICE FACILITY
 PROPOSED MODIFICATIONS TO ST. JOSEPH BLVD.
 AND ACCESS ROAD A

DATE:
 MARCH 1999

SCALE:
 N.T.S.