



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: Public Works and Transportation Committee **DATE:** October 23, 2000
FROM: Gordon Chan, P. Eng. **FILE:** 8060-01
 Manager, Transportation
**RE: CITY OF RICHMOND TRAFFIC BYLAW AMENDMENT – PROVISION FOR
 REVERSE TURNS**

STAFF RECOMMENDATION

That Bylaw 7182, which amends Traffic Bylaw 5870 to allow reverse turns (U-turns) at the six (6) intersections along the #98 B-Line bus route on No. 3 Road, as set out in the report by the Manager, Transportation be given first, second and third reading.

Gordon Chan, P. Eng.
Manager, Transportation

Att. 1

FOR ORIGINATING DIVISION USE ONLY		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Community Bylaws and Administration	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Fire Rescue	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
R.C.M.P.	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
City Clerk	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Law	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

STAFF REPORT

ORIGIN

The proposed amendment to Traffic Bylaw 5870 arises from a requirement to allow for reverse turns (U-turns) along the section of the #98 B-Line route on No. 3 Road (Granville Avenue to Sea Island Way). As part of the design of the new #98 B-Line service, northbound and southbound exclusive bus lanes, separated from the general traffic by two raised centre medians, will be provided between Sea Island Way and Firbridge Way on No. 3 Road. To accommodate the #98 B-Line operations and to address traffic safety concerns, the current continuous centre left turn lane along some sections of No. 3 Road will be eliminated. The reverse turns proposed to be permitted at selected signalized intersections are necessary to allow motorists to access various businesses located on both sides of No. 3 Road once the dedicated bus lanes are put in place. The reverse turn requirement was identified in a previous staff report submitted to Council (*Richmond-Vancouver Rapid Bus Project – Tender for No. 3 Road Improvements*) in December, 1999.

This report seeks Council's approval for the amendment of Traffic Bylaw 5870 to effect the permission of reverse turns at selected signalized intersections along No. 3 Road.

ANALYSIS

1. **Provision for Reverse Turns**

The specifics of the proposed reverse turn regulation are summarized as follows (extract from the December, 1999 staff report to Council: *Richmond-Vancouver Rapid Bus Project – Tender for No. 3 Road Improvements*):

1.1 Selected Signalized Intersections Where Reverse Turns are Proposed to be Permitted

Upon assessment of the traffic operational impacts anticipated as a result of the Rapid Bus (#98 B-Line) improvements along No. 3 Road, the project consultant has concluded that U-turns should be permitted where they can be safely accommodated. The following locations have been identified for the provision of U-turns:

- No. 3 Road at Capstan Way (northbound and southbound);
- No. 3 Road at Yaohan access (southbound only);
- No. 3 Road at Browngate Road extension (northbound and southbound);
- No. 3 Road at Leslie Road (northbound and southbound);
- No. 3 Road at Lansdowne Mall access (northbound and southbound); and
- No. 3 Road at Ackroyd Road (southbound only).

1.2 Traffic Control Requirement

It is expected that these U-turn movements would be facilitated in conjunction with left-turn signal indications in the corresponding directions with special signage indicating "U-TURN ALLOWED – EXCEPT TRUCKS" and "U-TURN SIGNAL". It was concluded that U-turns by trucks could not be accommodated at the above intersections as these vehicles require a much greater turning radius (in the case of No. 3 Road, the required truck turning path would exceed the available road width).

With the proposed U-turns, it would also be necessary to ban "right-turn on red" from the side streets at these locations where conflicts with the U-turning vehicles are expected. Public education efforts on the legalized U-turn movement at selected signalized intersections on No. 3 Road will be carried out by TransLink, RCMP, ICBC, and the City.

2. **Public Education**

Subject to the approval of the above amendments to Traffic Bylaw 5870 by Council, an education campaign will be launched to make the public aware of the ability to make U-turns at selected intersections along No. 3 Road. The campaign will also provide instructions to motorists and pedestrians on the interpretation of the new signage, traffic signal operations, and other traffic control devices related to the U-turn regulation and how to conduct themselves as a road user in a safe manner. The education efforts will also include notices in local newspapers as well as a special section on the City's web site.

3. **Experience from Other Jurisdictions**

3.1 City of Toronto

Similar U-turn regulations are presently in place in the City of Toronto. The regulation allows motorists to make U-turns at a number of signalized intersections along Spadina Avenue in the City of Toronto (Attachment 1). It is noted that exclusive median bus lanes, similar to those being constructed along No. 3 Road for the #98 B-Line service, are provided on Spadina Avenue. The objective of the Spadina Avenue U-turn regulation is to maintain local business access, through the use of special traffic signs and signals. Based on recent feedback from City of Toronto staff, these intersections (where U-turns are allowed) are functioning well without any traffic safety or operational problems.

3.2 State of California

Discussion with the California Department of Transportation revealed that the City of Sacramento, among other jurisdictions, has signalized U-turn intersections and that there have been no reported problems. The California Department of Transportation is also looking into the installation of U-turn signals on a state highway in District 7, Los Angeles.

FINANCIAL IMPACT

The cost for the traffic signs and signals to facilitate the proposed reverse turn regulation would be included within the #98 B-Line project. The cost related to public education on the permitted U-turn regulation, which can potentially be cost shared with ICBC, would be accommodated within the Year 2000 Minor Capital Program.

CONCLUSION

The proposed amendments to Traffic Bylaw 5870 are required to accommodate the introduction of the #98 B-Line service and to maintain convenient access to businesses located between signalized intersections along No. 3 Road. A public education campaign will be carried out to familiarize motorists and other road users on the proper usage of this new regulation.



Doug Newton
Traffic Technician I

**CITY OF RICHMOND
 BYLAW 7182
 TRAFFIC BYLAW NO. 5870, AMENDMENT BYLAW 7182**

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Traffic Bylaw No. 5870 is amended by adding the following as Part XIII:

PART XIII – REVERSE TURNS

43. REVERSE TURNS

43.1 *Reverse turns will be permitted on No. 3 Road at the following intersections:*

- (a) *Capstan Way*
- (b) *Yaohan Access*
- (c) *Browngate Road*
- (d) *Leslie Road*
- (e) *Lansdowne Mall access*
- (f) *Ackroyd Place*

2. This Bylaw may be cited as “**Richmond Traffic Bylaw No. 5870, Amendment Bylaw No. 7182**”.

FIRST READING

SECOND READING

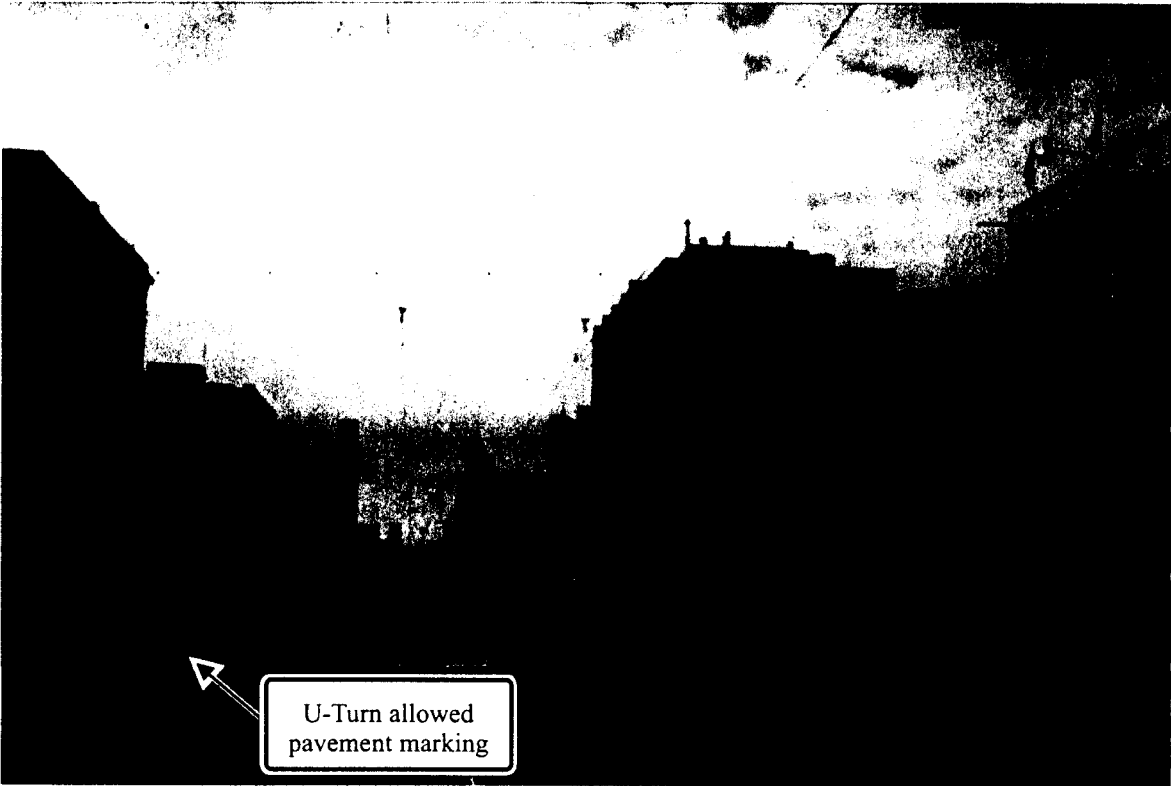
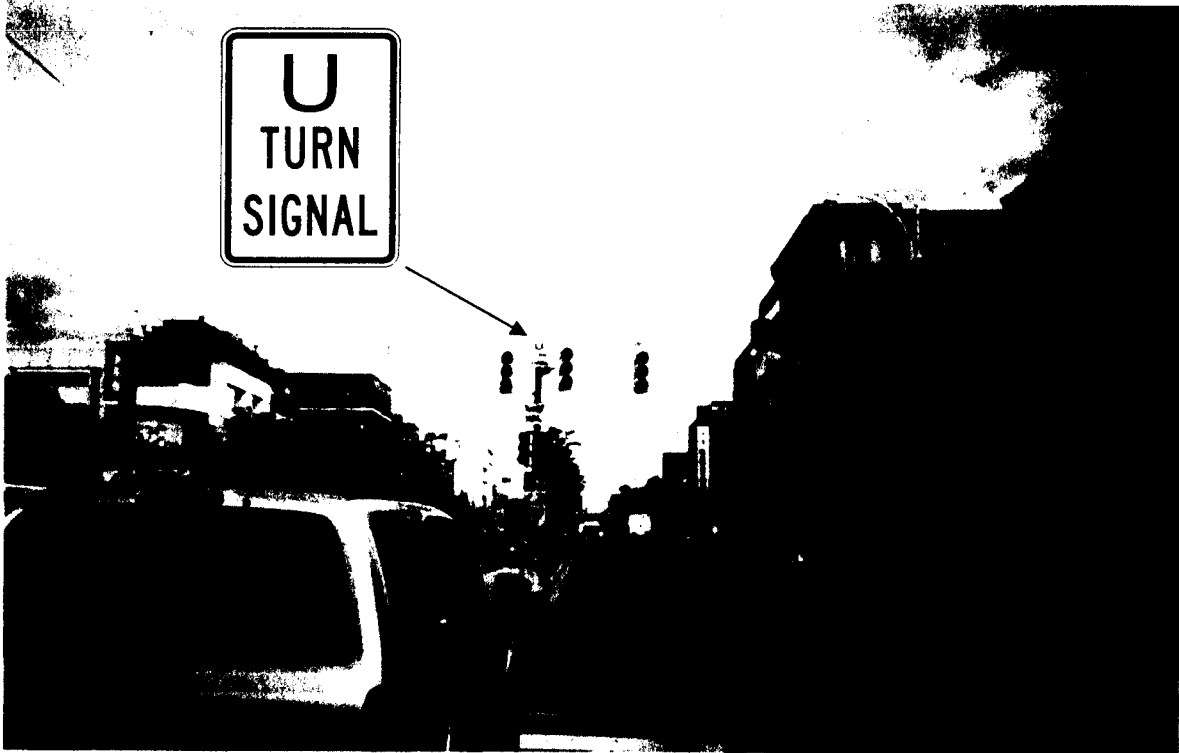
THIRD READING

ADOPTED

 MAYOR

CITY CLERK

CITY OF RICHMOND
APPROVED
for content by originating dept.
APPROVED for legality by Solicitor



PROVISIONS FOR U-TURNS AT SIGNALIZED INTERSECTIONS
EXCLUSIVE BUS LANE OPERATION ON SPADINA AVENUE, TORONTO