

RE: TRAIN WHISTLE NOISE IN METROTOWN
MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Acting Director Engineering be adopted.

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TO: MUNICIPAL MANAGER 1989 AUGUST 25
FROM: ACTING DIRECTOR ENGINEERING
SUBJECT: TRAIN WHISTLE NOISE IN METROTOWN
PURPOSE: To report to Council on the implications of bringing down an Anti-Whistling Bylaw for the Southern Railway of B.C. operation in Burnaby.

RECOMMENDATION:

1. THAT this report be sent to Mr. Walt Harris, 2101- 4350 Beresford, Burnaby, B.C., V5H 4K9; and to Mr. Herb Davis, 2106 - 4350 Beresford, Burnaby, B.C., V5H 4K9.
2. THAT a copy of this report be sent to Mr. F.H. Christensen, P. Eng., Chief Inspecting Engineer, Ministry of Municipal Affairs, Recreation and Culture, Suite 245, 4299 Canada Way, Burnaby, B.C., V5G 1H9, and Mr. G. Stevenson, President, Southern Railway of B.C., 5935 Glover Road, Langley, B.C., V3A 4B5, for review and comment.

REPORT

1.0 INTRODUCTION/SUMMARY

At its meeting of 1989 July 10, Council received a report from the Acting Director Engineering regarding train whistle noise in Metrotown (Manager's Report No. 47, Item 14). That report included the exchange of correspondence between the Municipality and the Southern Railway of B.C. One of the items in our dialogue with Southern Railway related to its hours of operation. In its response to our enquiry, the Southern Railway of B.C. indicated that their operating hours were predetermined by an agreement with B.C. Transit. Members of Council asked staff to obtain further information regarding the nature of this agreement. The staff report also indicated that we were awaiting further response from the Provincial regulatory agency that governs the operation of the Southern Railway of B.C. We were anticipating that that correspondence would provide us with the information which we required to determine the implications of an Anti-Whistling Bylaw. Both of these matters are addressed in this report.

2.0 RAILWAY HOURS OF OPERATION

Attached as Exhibit A is correspondence from B.C. Transit regarding its agreement with the Southern Railway of B.C. which constrains the Railway's hours of operation. The correspondence suggests that the rescheduling of train operating hours in order to mitigate the effects of whistling is not something that B.C. Transit would be willing to pursue. Even without the agreement however the choice of operating hours would be the Railway company's.

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3.0 ANTI-WHISTLING BYLAW

Attached as Exhibit B is a copy of the letter of 1989 August 14 from the Engineering & Inspection Branch, Ministry of Municipal Affairs & Culture, the agency responsible for regulating the Southern Railway of B.C., Central Park Branch. We have spoken with staff from the Engineering & Inspection Branch to clarify some of the issues raised in their letter.

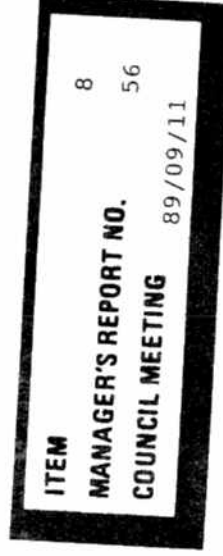
Firstly, we wished to determine what time table would be required for the complete implementation of the Anti-Whistling Bylaw. It would appear that once the initial anti-whistling block of line was implemented, the pace at which it was enlarged would be up to the Municipality. However, if the Anti-Whistling block were expanded the Municipality could not "skip over" crossings.

Secondly, staff asked what controls would be needed at each of the railway crossings. In this, Ministry staff were quite explicit. We would require signals as well as control gates at every road crossing. The only exception to this requirement would be at pedestrian crossings where signing would be considered sufficient. However, the "approval" of the Southern Railway would be required for each crossing protection proposal.

4.0 COST IMPLICATIONS

On the basis of this information we have pursued some of the cost implications that arise from consideration of an Anti-Whistling Bylaw. It would appear that at streets that are already signalized, additional costs of putting in gates would be approximately \$20,000 per crossing. Thus, if an initial Anti-Whistling block in Metrotown were implemented extending from say, Central Boulevard to Patterson, the capital cost could be as low as \$60,000 if the Municipality closed the railway crossing at Wilson Avenue as suggested by Mr. Harris, an area resident. If Council did not close Wilson Avenue, signals and gates would be required at that crossing.

Our updated research indicates that the cost of signals, installed, would range between \$100,000-\$150,000 per crossing with an additional \$20,000 for gates. Attached as Exhibit C is a tabulation of crossings of the Southern Railway of B.C. in Burnaby. We have estimated the cost of providing the



4.0 COST IMPLICATIONS (Cont'd.)

required protection at each of those crossing locations. We have assumed a higher cost for Kingsway than the other crossings, because of the width of road, the difficult geometry and the fact that crossing gates would have to clear trolley wires. We have presumed that only the "Safeway Spur" would require protection and that other spur locations would not.

It should be noted that capital cost of crossing protection is not the "bottom line" for assessing the cost implications of an Anti-Whistling Bylaw. Each level crossing that is controlled would be maintained by the Railway which would charge back its costs (including overheads), to the Municipality. Annual maintenance costs per crossing range between \$5,000-\$10,000 per annum on national railways.

5.0 FEDERAL PRACTICE

If the Municipality adopted an Anti-Whistling Bylaw on the Southern Railway Central Park Branch it would be responsible for all of the costs. Factors such as seniority (eg. at Gilley where the road right-of-way is senior) or jurisdiction (eg. at Kingsway where the roadway falls under M.O.T.H.) which otherwise determine cost allocation would appear to be rendered inoperative by an Anti-Whistling Bylaw.

A similar procedure applies to Federally regulated railways, but in practice the Municipality might find it less costly dealing with a Federally regulated railway.

First, National Transportation Agency (N.T.A.), the Federal control body funds 80% of railroad crossing improvements (with the remainder shared 7 1/2% railway and 12 1/2% road authority). Subject to funding availability, the N.T.A. would cost share in a crossing protection improvement program that ultimately leads to an Anti-Whistling Bylaw. The Provincial agency has no cost sharing funds. Note however that crossings must meet a trains x vehicles per day (greater than 12,000) product warrant. In Burnaby the crossings at Wilson, MacPherson, Buller, Stride and 18th do not meet these crossing protection warrants.

Second, although every case must be judged individually the N.T.A. typically does not require gates unless there is double track or high speed trains operating on single track. Accordingly, the level of crossing protection (ie. gates) that appears to be required on the Central Park Branch generally exceeds what is required by the N.T.A. (ie. signals).

6.0 DISCUSSION/CONCLUSION

The potentially substantial capital and operating costs must be weighed against any intangible benefits of reduced exposure to train whistling noise to Burnaby residents. Additional benefits, such as those related to traffic safety, are negligible as the road traffic exposure to risk from this railway is already minimized by night time operation.

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6.0 DISCUSSION/CONCLUSION (Cont'd.)

While the potentially low cost of implementing an Anti-Whistling block through Metrotown appears initially attractive, it must be balanced against the ultimate commitment implicit in the adoption of a Municipal wide Anti-Whistling Bylaw for the Southern Railway. It would be difficult for Council to discriminate in favour of Metrotown residents without extending similar benefit to other areas.

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While we have no firm commitment for the railway operation to cease, staff believe that the life of this railway is limited. This in turn limits "the payback period" for the substantial capital investment that the Municipality would incur. On the basis of our current understanding of this issue staff would not recommend an Anti-Whistling Bylaw. However, it would be desirable for this report to be reviewed by the Southern Railway and the Provincial regulatory agency in order to confirm or clarify staff's interpretation of this issue including detailed matters such as cost estimates.

Upon receipt of comments from Southern Railway and the Provincial Ministry of Municipal Affairs, a further report will be provided to Council advising of the conclusions.

It would be appropriate that a copy of this report be sent to the Burnaby residents, Mr. Harris and Mr. Davis, who have brought their concerns to Council.

W.C. Suter

ACTING DIRECTOR ENGINEERING

PL:je
Attach.

cc: Director Planning & Building Inspection
Traffic Supervisor

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EXHIBIT A

BC Transit

RECEIVED IN
ENGINEERING DEPT.
F-Southern Rail
AUG 22 1989

August 17, 1989

WCS	WS
PL	WS

Mr. W. C. Sinclair, P. Eng.
Acting Directing Engineering
Corporation of Burnaby
4949 Canada Way
Burnaby, BC V5G 1M2

Dear Mr. Sinclair:

Re: Central Park Branch - Southern Railway of B.C.

I am writing in reply to your letter of July 20, 1989 in which you enquired as to the existence of an agreement between BC Transit and Southern Railway concerning the operating hours on the Central Park line. In the same letter you also requested our views on changing the hours of operation.

In response to your first question, the agreement with Southern Railway limits regular railway operations to the hours of 2:00 a.m. to 5:00 a.m. This agreement is necessary as the railway track passes through the Joyce Station bus loop. Under the agreement BC Transit makes the loop available between 2:00 and 5:00 a.m. for railway operations. I understand that the agreement, however, only entrenched the operating practices which already existed prior to the opening of SkyTrain in 1986.

Insofar as changing the railway operating hours, BC Transit is not supportive of this due to the impact on transit operations and the inconvenience it could cause to transit passengers. The Joyce Station has up to 5 buses parked at the Station at any one time. Service operates as frequently as every 3 minutes. Under these conditions we would have some difficulty in ensuring a safe or reliable transit operation with trains operating through the loop at the same time.

Yours sincerely,

Clive Rock, P. Eng.
Manager - Planning

CR:jc

cc: Mr. G. Stevenson - Southern Railway



Province of
British Columbia

Ministry of
Municipal Affairs,
Recreation and Culture

Engineering and Inspection
Branch
Suite 245
4299 Canada Way
Burnaby, British Columbia
V6G 1H9
Telephone (604) 663-5900

August 14, 1989

File: Southern Railway
of B.C.
Central Park Br.

The Corporation of the
District of Burnaby
4949 Canada Way
Burnaby, B.C.
V5G 1M2

Attention: W.C. Sinclair, P. Eng.
Deputy Director Engineering

Dear Sir:

Re: Train Whistle Noise along the Central Park Branch
of Southern Railway of B.C.

In response to your letter of June 22, 1989 directed to the
Southern Railway of B.C., wherein, by copy of which you
requested the Engineering and Inspection Branch's view on the
problem and the possibility of Burnaby enacting an
anti-whistling bylaw.

Allow me to first advise you that the hours of operation on
this branch line have not been determined by a regulation,
pursuant to the Railway Act of B.C. I presume S.R.B.C. can
advise on what determined the hours of operation.

As to the possibility of Burnaby enacting an anti-whistling
bylaw, I would make the following comments:

1) An application requesting approval of an anti-whistling
bylaw on the Southern Railway's Central Park Branch
should be for the whole of Burnaby, however, the
Engineering and Inspection Branch may recommend to the
Minister, approval of a portion of the line - i.e.
Kingsway to Imperial upon completion of any signal
upgrade required. Additional approvals would be made as
crossing protection was installed, and the
anti-whistling block enlarged until all of Burnaby was
covered.

2) The application shall be processed through the
Engineering and Inspection Branch, with a copy to
Southern Railway of B.C., and shall contain the
following information:

- a) A copy of the bylaw,
- b) A letter from S.R.B.C. indicating their position
and/or concern,
- c) A schedule showing dates crossing protection will
be installed by,
- d) Drawings showing the type, location, etc. of the
proposed protection to be installed,
- e) A confirmation that the Corporation of the District
of Burnaby is responsible for all costs associated
with the installation of additional protection.

If we can be of further assistance, please do not hesitate to
contact this office.

Yours truly,

F.H. Christensen, P. Eng.
Chief Inspecting Engineer

/dgp

c.c. Southern Railway of British Columbia

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EXHIBIT C

Road Crossings of the Southern Railway of B.C. in Burnaby

<u>Road Crossing</u>	<u>Existing Control</u>	<u>Anti-Whistling Bylaw Upgrading</u>
		<u>Capital Cost</u>
		<u>Operating Cost</u>
		<u>\$000's</u>
1. Kingsway (M.O.T.H.)	None	\$ 170 \$10
2. Patterson	Signals	20 2
3. Wilson	Stop Signs	120 7
4. Willingdon	Signals	20 2
5. Central Boulevard	Signals	20 2
6. Imperial	Signals	<u>20</u> <u>2</u>
	METROTOWN SUBTOTAL	\$ 370 \$25
7. Nelson	Stop Sign	120 7
8. Royal Oak	Signals	20 2
9. MacPherson	Stop Sign	120 7
10. Buller	Stop Sign	120 7
11. Gilley	None	120 7
12. Rumble	None	120 7
13. Stride	Stop Sign	120 7
14. 19th/20th/Spur	None	120 7
15. 18th/Spur	None	<u>120</u> <u>7</u>
	TOTAL ADDITIONAL COST	\$1,250 \$83

