

RE: BOUNDARY ROAD - 29TH AVENUE (FIR STREET) TO
THURSTON STREET (B.C. HYDRO OVERPASS)

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Planning & Building Inspection be adopted.

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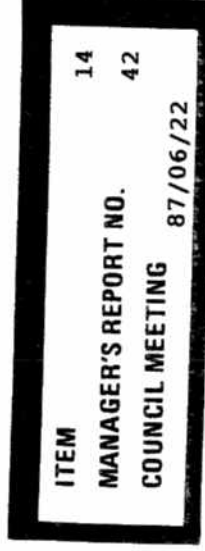
TO: MUNICIPAL MANAGER 1987 June 16

FROM: DIRECTOR PLANNING & BUILDING INSPECTION Our File: 08.640

SUBJECT: BOUNDARY ROAD - 29TH AVENUE (FIR STREET) TO
THURSTON STREET (B.C. HYDRO OVERPASS)

RECOMMENDATIONS:

1. THAT Council approve in principle the arterial road concept shown on Figures 2 and 3 for that section of Boundary Road between 29th Avenue (Fir Street) and Thurston Street (B.C. Hydro Railway Overpass).
2. THAT the concept of providing a noise attenuation fence between Fir Street and Thurston Street as typically shown in Figure 4 be incorporated as a component of the Boundary Road improvement as outlined in this report.
3. THAT Council authorize the closure of Fir Street at Boundary Road and the lanes north and south of Fir Street as part of the improvement to Boundary Road.
4. THAT a copy of this report be forwarded to all those property owners who received a copy of the 1986 Open House notification and to those residents on Moscrop, Warren, Cardiff, Price and Burke Streets between Boundary Road and Smith Avenue for their comment on the proposed design concept for Boundary Road from Fir to Thurston Streets.
5. THAT following receipt of the citizens' comments, a recommended concept for Boundary Road between Fir Street and Thurston Street be forwarded to Council for final approval.
6. THAT a copy of this report be forwarded to Mr. W. Curtis, City Engineer, City of Vancouver.



SUMMARY

152

This report provides Council with a recommended design concept for the improvement of Boundary Road from Thurston Street to Fir Street (29th Avenue). It reports on a previous Open House held on the topic and the results of subsequent reviews of the subject. The report proposes a 2 travel lane plus parking lane standard with a landscaped central median and boulevards together with a noise attenuation fence at the edge of the road right-of-way and the abutting property line. The concept advanced provides for the improvement of the 29th Avenue intersection, including the closure of Fir Street and the adjacent lanes at Boundary Road. It also provides for a realignment of the Burke Street/Wellington Avenue intersection at Boundary Road to enable proper left hand turn movements.

The report recommends approval in principle of the proposed design concept and authority to distribute copies of this report to those residents who received notification of the previous Open House on the subject as well as to those Burnaby residents on local side streets extending from Boundary Road to Smith Avenue. A report is to be prepared incorporating comments received back and recommending final approval of a design standard for Boundary Road in advance of its proposed improvement by the City of Vancouver and Burnaby during 1987 and 1988 with the assistance of approved Revenue Sharing funds.

R E P O R T

1.0 INTRODUCTION

On 1986 May 29 an Open House authorized by Council on 1986 May 05 was held in the Cascade Heights Elementary School for the Burnaby property owners on Boundary Road between Fir and Thurston Streets and on Fir Street between Boundary Road and Smith Avenue.

The attached Figure 1 was forwarded to affected property owners in a brochure form prior to the Open House. The Open House provided the participants with more detailed information on the standard of roadway proposed for Boundary Road for the section between Fir Street and Thurston Street.

2.0 OPEN HOUSE SUMMARY

As a result of the Open House, there was general support for the upgrading of Boundary Road in recognition of its substandard condition and the need for safety related improvements. There was also support for the closure of Fir Street at Boundary Road as well as the lanes immediately to the north and south of Fir Street as part of the Boundary Road improvement. However, of the two alternatives presented, no consensus emerged as there was an almost equal support indicated for each.

3.0 SUBSEQUENT REVIEW

3.1 Ministry of Transportation and Highways

Following the Open House, the Director Engineering further reviewed the proposed Boundary Road pavement standard with the Ministry of Transportation and Highways in relation to the Revenue Sharing Act Roads Program fund. The Ministry has indicated its preference for an alternative that has the future potential to accommodate more than just 2 travelling lanes on both the Vancouver and Burnaby sides.

3.2 The EMME 2 Transportation Model

In addition, this department took advantage of the recently completed EMME 2 Transportation Model to test the effects of the widening of Boundary Road under both a 4 lane and 6 lane scenario. As might be expected, the widening of Boundary Road from its present standard to a 4 lane standard proves worthwhile. The further improvement from a 4 to 6 lane arterial is however almost as beneficial as the incremental improvement to a 4 lane standard. The model tests indicate that a 6 lane roadway is a more desirable standard for handling peak hour (particularly in the north bound p.m. direction) traffic flows resulting from future anticipated Metropolitan development. Until this increased demand occurs in the future, the curbside lane would be used for residents parking as requested by almost half of the Burnaby residents adjacent to Boundary Road.

The original proposal had the potential to accommodate the future widening of Boundary Road to a 6 lane facility by the strategic placing of street lighting and boulevard trees. However, in view of the updated traffic projections, it would be beneficial to adopt a 2 lane plus parking standard at the outset to more effectively respond to anticipated peak hour traffic flows.

4.0 THE RECOMMENDED CONCEPT

The recommended concept for Boundary Road is a variation from both alternatives previously put forward for review. It provides for a 2 travel lane plus parking lane standard on both the Vancouver and Burnaby side from Thurston Street to Fir Street (29th Avenue). A continuous, central median as shown on the attached Figure 2 is incorporated along the length of the project with the following exceptions from south to north:

- Wellington Avenue/Burke Street

This break in the median reflects a proposed realignment of Burke Street to line up with Wellington Avenue. This is necessary to permit adequate storage for northbound left turns into Wellington Avenue in view of the proposed restriction of left turns north of Wellington Avenue to 29th Avenue. This realignment involves the proposed total, rather than the previous partial, acquisition of the property situated at 3701 Burke Street. This acquisition should be a cost shared item with the City of Vancouver and the Province of British Columbia in view of the benefits this provides in assisting the proper functioning of Boundary Road as a primary arterial.

- Moscrop Street

This opening allows for southbound left turns from Boundary Road to Moscrop Street with channelization for adequate storage. Southbound left turns onto Boundary Road from Moscrop Street is also provided for.

- 29th Avenue

The recommended concept provides for a major realignment of 29th Avenue and Boundary Road to create a right angle intersection. This will more easily accommodate northbound left turns from Boundary Road to 29th Avenue at a signalized intersection and also allow for two

left turn lanes onto Boundary Road. Pedestrian crossings are also more easily accommodated by this realignment. Fir Street and the lanes on either side of Fir Street are to be closed as part of this intersection improvement.

154

All other street openings onto Boundary Road on both the Vancouver and Burnaby sides along the length from Thurston Street to 29th Avenue are local residential streets and would be restricted to right-turn-in and right-turn-out movements onto this primary arterial route. On the Burnaby side, left-turn movements between 29th Avenue and Thurston Street would be restricted to Moscrop Street and Burke Street.

The attached Figure 3 illustrates a typical cross section of the recommended standard at a point immediately south of Price Street. The following describes the major characteristics as related to the Burnaby side of the right-of-way:

- an 8 foot landscaped central median. This is reduced from the previous width of 14 feet to gain additional width in the boulevard area on both sides of the street. The 8 foot width is the minimum width needed to support the proposed landscape treatment
- a 32.5 foot pavement width from the central median to the boulevard curbing allowing for two travel lanes and a parking lane that could be used in the future as a peak hour travel lane
- a 13.5 foot boulevard accommodating a separated side-walk and landscape treatment
- a 6 foot noise attenuation fence and retaining walls as may be necessary at the property line of some properties with stairs and a gate provided for access to and from individual properties. The attached Figure 4 portrays the application of this concept. Fencing is provided on the Burnaby side from Thurston Street to Fir Street to help mitigate the impact of increased traffic on this widened arterial as is provided for in the adopted Burnaby Transportation Plan. Access stairs and landings where required would be located inside the adjacent property line and be part of the road improvement program.

5.0 CURRENT STATUS

The improvement of Boundary Road from 29th Avenue to Price Street, including the Burnaby side of the road, is to be undertaken by the City of Vancouver during the latter part of 1987. Revenue Sharing funds have been allocated to the City of Vancouver for this project. The Municipality of Burnaby has also been advised that its request for Revenue Sharing funds for its section of the roadway works from Price Street to Thurston Street have also been approved. The Director Engineering advises that Burnaby's work is intended to take place during 1987 and 1988 in view of extensive property acquisitions and utility reconstruction during the first year.

In view of the fact that there is a common approach proposed for the sections of the road to be built independently by the City of Vancouver and Burnaby, it is important that both jurisdictions work closely together in coordinating the various features of the roadway. Examples in this regard include:

- ° a common landscaping and plant material approach for the central median and boulevards on both sides of the route from 29th Avenue to Thurston Street
- ° a consistent approach to the construction and finish of required retaining walls and noise attenuation fencing on the Burnaby side of Boundary Road from 29th Avenue to Thurston Street. To this end, it is intended that construction details be forwarded to the City of Vancouver as to the type and treatment of retaining walls and fencing required on the Burnaby side as related to their first phase construction of 29th Avenue to Price Street.

6.0 THE NEXT STEPS

It is proposed that a copy of this report be forwarded to all those property owners who received a copy of the original 1986 Open House notification as well as to those residents on local side streets extending from Boundary Road to Smith Avenue requesting comment on the proposed road improvement concept as described in this report. Following receipt of these comments, a further report will be submitted to Council for final approval of a recommended standard for Boundary Road.

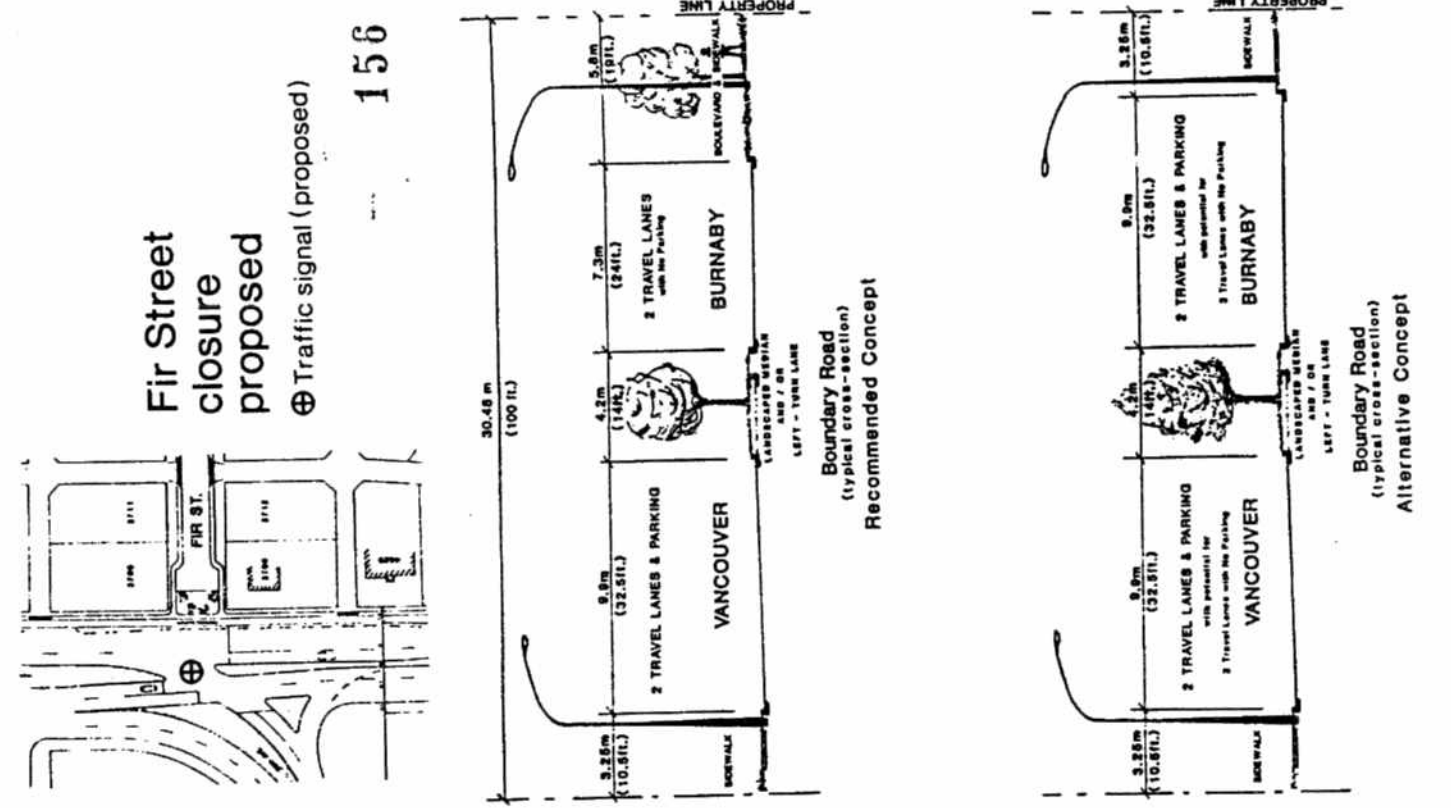
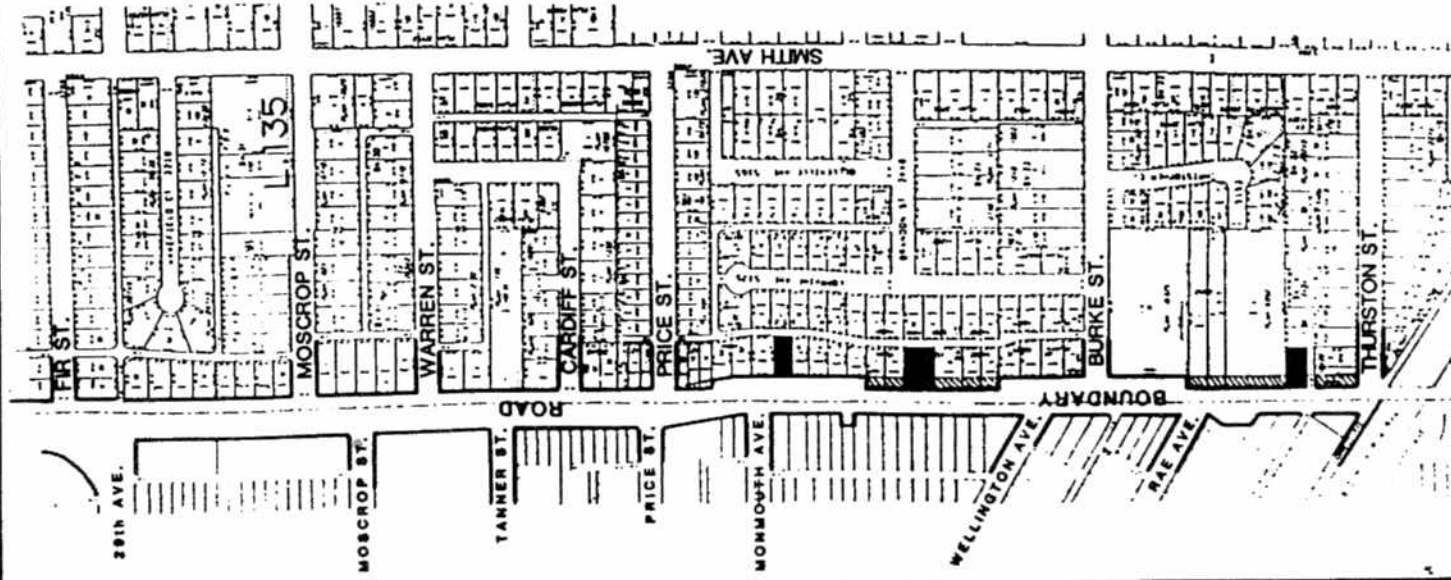
The City of Vancouver proposes to also invite public comment from local Vancouver residents on the proposed modified standard prior to commencing construction on their initial phase of the road improvement.

AmL
JSB/mcb
Attachs:

cc: Director Engineering
Director Finance

A.L. Parr
A.L. Parr
DIRECTOR PLANNING &
BUILDING INSPECTION

ITEM 14
 MANAGER'S REPORT NO. 42
 COUNCIL MEETING 87/06/22



Fir Street
 closure
 proposed

⊕ Traffic signal (proposed)

156

Boundary Road
 Fir St. to Thurston St.

▨ PROPERTY REQUIRED FOR ROAD R/W
 ■ CORPORATION PROPERTY North
 Burnaby Planning Department 1986 May

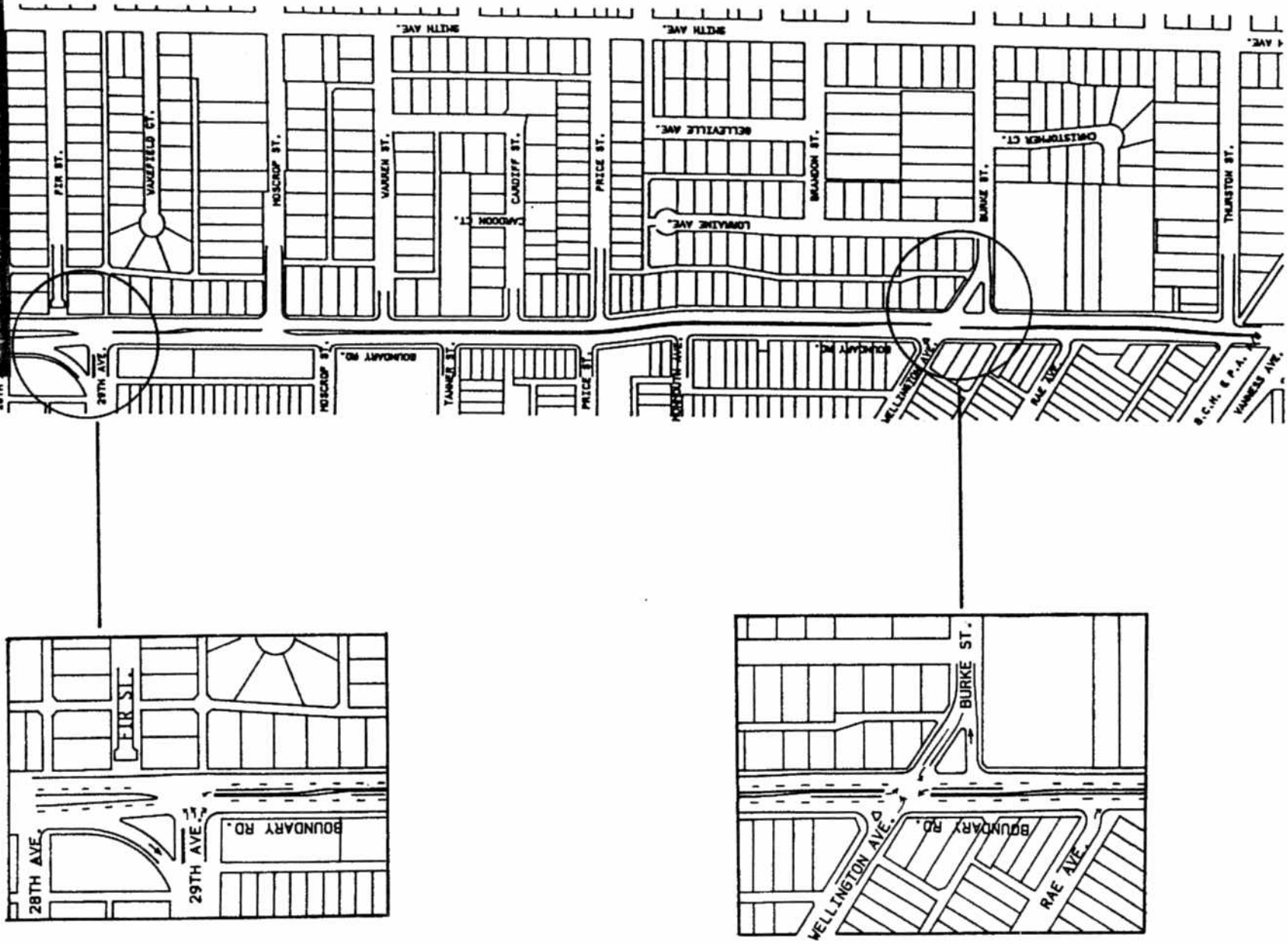


Previously Proposed Boundary
 Road Improvement Concepts

(Forwarded to the Public 1986 May)

FIGURE 1

ITEM 14
 MANAGER'S REPORT NO. 42
 COUNCIL MEETING 87/06/22



BURBURY
 Planning &
 Building Inspection
 Department



Proposed Improvement Of Boundary Road -
 Thurston Street To Fir Street (29th Ave.)

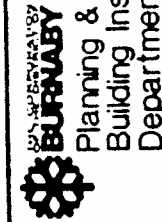
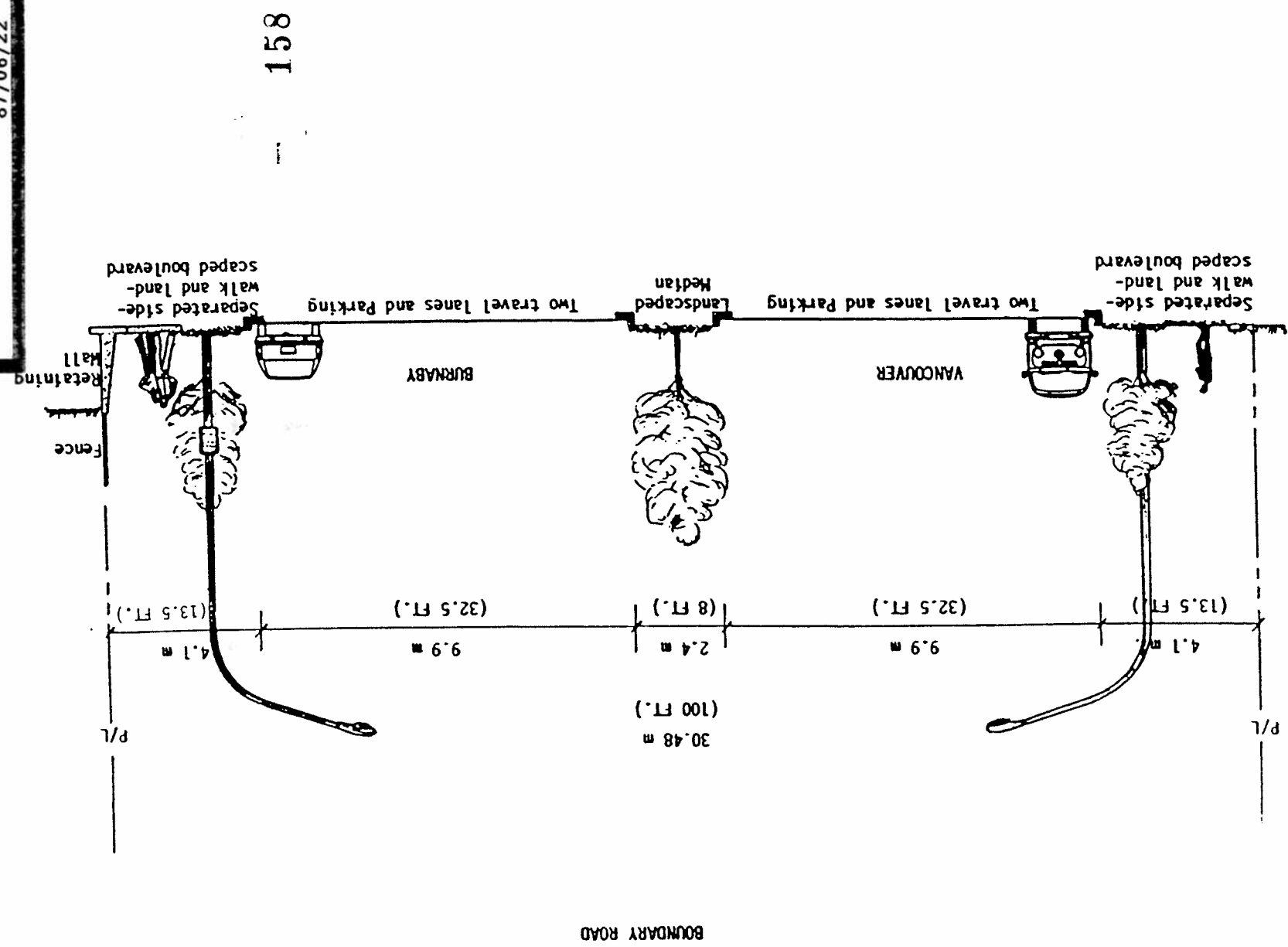
Plan View

157

FIGURE 2

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Scale:	N.T.S.
Drawn By:	

ITEM 14
 MANAGER'S REPORT NO. 42
 COUNCIL MEETING 87/06/22



Date: 1987 JUNE
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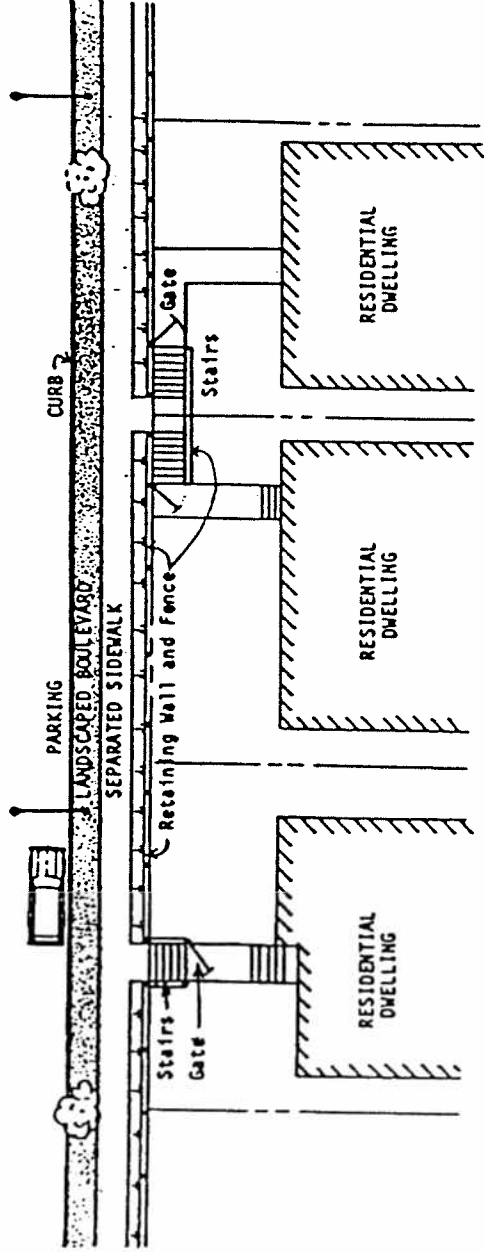
Proposed Improvement Of Boundary Road -
 Thurston Street To Fir Street (29th Ave.)
 Cross-Section Looking North
 Immediately South Of Price Street

ITEM 14
 MANAGER'S REPORT NO. 42
 COUNCIL MEETING 87/06/22

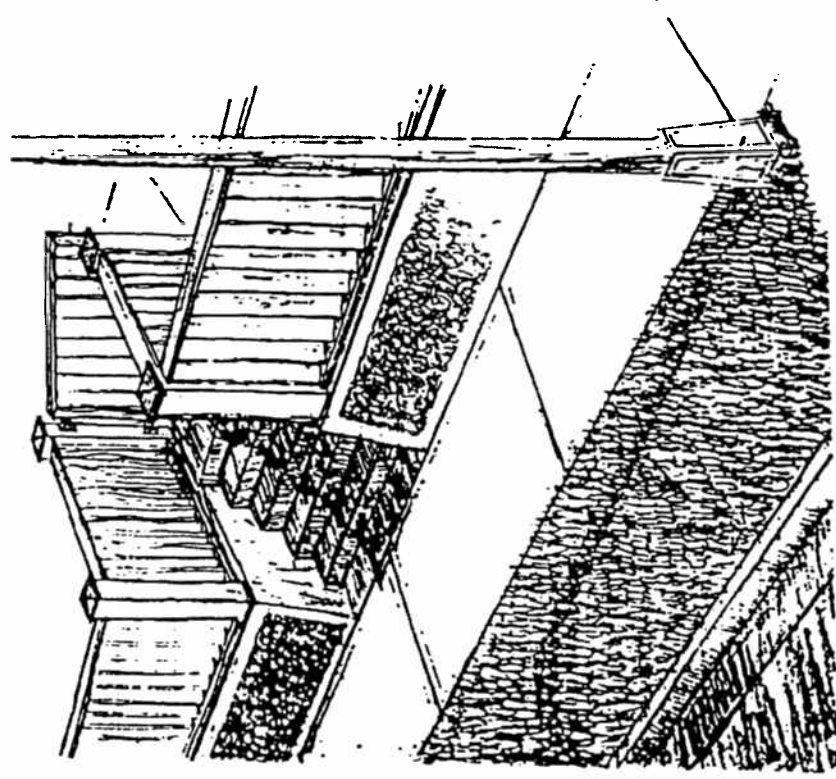
BOUNDARY ROAD



TWO TRAVEL LANES



TYPICAL STAIRWAY DESIGN



Date:
1987 JUNE

 **BURNABY**
 Planning &
 Building Inspection
 Department

159

Scale:
N.T.S.

Proposed Improvement Of Boundary Road -
 Thurston Street To Fir Street (29th Ave.)

Drawn By:

Typical Fencing And Stairway Treatment

FIGURE 4

