

ITEM	23
MANAGER'S REPORT NO.	17
COUNCIL MEETING	93/03/22

TO: CITY MANAGER

DATE: 1993 03 17

FROM: DIRECTOR ENGINEERING

FILE: SD #104/90

SUBJECT: BRIDGE BUSINESS PARK LTD. - NORTH ARM OF STILL CREEK

PURPOSE: To advise Council of a proposed plan to be undertaken by the developer to remediate a creek bank stability problem on the Bridge Business Park site.

RECOMMENDATION:

1. THAT Council receive this report for information purposes.

REPORT

1.0 BACKGROUND

Council has granted final approval to the development known as Bridge Business Park on the south side of Loughed Highway between Boundary and Gilmore. This site is underlain by variable fill over soft compressible peat and silt. The development of this site requires significant amounts of fill placed over most of the site. The area adjacent to the North Arm of Still Creek (see figure 1) is particularly sensitive to the loading created by the fill due to the lack of bank support within the creek. As the preload fill was applied during 1992, significant straining and heaving in and adjacent to the creek occurred causing a bank stability problem in the area west of Gilmore. This filling has also created a partial blockage of the creek and geotechnical monitoring indicates that this movement has been ongoing for several months and very likely is still ongoing. As the creek blockage is removed to maintain proper drainage flow, the bank stability problem is further exacerbated with the removal of the blockage.

2.0 REMEDIAL MEASURES

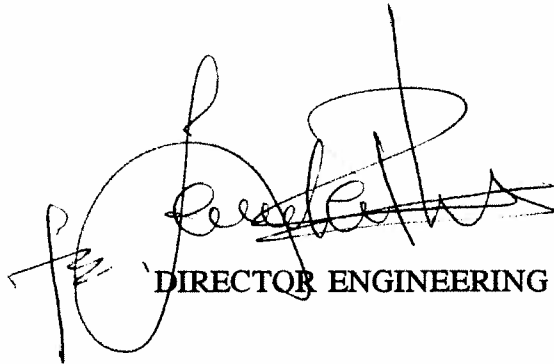
The developer and his geotechnical consultant have reviewed a number of options for remediating this problem.

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The basic solution is to load the toe of the fill area (ie. the creek) to create a counter weight and thereby eliminate the heaving of the creek. The geotechnical Consultant's recommendation is to install temporary culverts to allow loading over the creek area to provide the necessary stability. This filling will be done in a controlled manner and monitored so that maximum settlement is achieved within a minimal time. At that time the culverts will be removed and the creek restored and landscaped as per the terms and conditions of the rezoning.

The developer has received approvals from the GVS & DD, and the Ministry of Environment. Each approval is subject to its own conditions, for instance, the GVS & DD has stipulated the minimum number and size of culverts, the Ministry of Environment has stated that restorative planting and siltation control must be addressed both during and after the installation of the temporary culverts. The Engineering and Planning Departments of the City are prepared to approve the temporary installation on the condition that this is an operational procedure and the temporary culverts will be removed as soon as the area has stabilized.

Unless otherwise directed by Council, staff will work with the developer and the concerned agencies to ensure that this stability problem is remediated and the original design concept is implemented.



DIRECTOR ENGINEERING

VNW:mp
Attach.

cc: A/Director Planning & Building Inspection

SEE PAGE 21-A

PLAN 79213

PCL 1
1977

B.C.H. & P.A.
NEW PLAN 28459

PLAN 4957

LDUGHEED HWY. 1310

WENNING DR. 1330

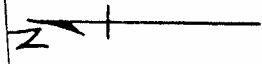
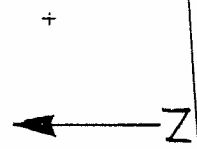
L. 118

BRIDGE BUSINESS
PARK SITE

EXISTING
NORTH ARM
STILL CREEK

APPROXIMATE
LIMITS OF
TEMPORARY
CULVERT
INSTALLATION

110 M ±



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FIGURE 1



THE CORPORATION
OF THE DISTRICT OF

BURNABY

SCALE	1 : 2000
DATE OF	1/10
APPROVED BY	

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