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DONALD INSPECTION LIMITED

INSPECTING AND TESTING ENGINEERS

109 GUY STREET
MONTREAL, QUE.340 RICHMOND ST. W.
TORONTO, ONT.REPORT NO. 164-2119
SHEET 1 OF 1**REPORT OF****SOIL TEST BORINGS**

February 28th, 1964.

30M13-43

GEOCREP No.

For Messrs. Duncan Hopper and AssociatesAddress 1585 Wilson Avenue, Weston, OntarioLOCATION: Proposed Site for Bridge Structure - Elder Mills Side Road, Township of VaughanREPORTED TO: Duncan Hopper & Associates

We report herein results of three soil test borings made at the above site during the week of February 17th, 1964.

Location of bore holes and details of sub-surface stratification are given on the accompanying drawing which forms a part of this report.

DESCRIPTION OF FIELD WORK

The three bore holes were made to depths of 59' (No. 1), 36'-6" (No. 2) and 34'-9" (No. 3), by employing the wash-boring method. At shallow intervals through the soil profile, standard penetration tests were made and soil samples were taken.

The standard penetration test consisted in determining the number of blows required to drive a 2" O.D. split-spoon soil sampler for a depth of 1'-0" into the undisturbed soil by the impact of a 140 lb. hammer dropping freely through a height of 30 inches. Results of penetration tests are plotted under column "N" on the boring logs.

DESCRIPTION OF SUB-SOIL

At the surface, very loose heterogeneous fill consisting of a mixture of sand, silt and clay which extended to depths of 8' (No. 1), 5' (No. 2) and 5' (No. 3).

Below the fill the sub-soil consisted of layers of fine-grained, granular material, fine sand, sandy silt which varied in relative density from loose to medium dense. Details of stratification and relative density are given in the boring logs. Penetration tests reveal that loose and/or medium dense soil extended to depths of 51' (No. 1), 28'-6" (No. 2) and 38' (No. 3). Below depths of 37' (No. 1), 34' (No. 2) and 38' (No. 3), the sub-soil was predominantly a grey, fine to medium sand with some coarse sand which increased in strength with depth.

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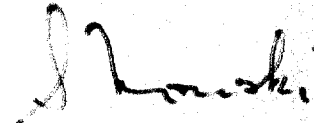
WATER LEVELS

During boring, free water was encountered at depths of 5'-3" (No. 1), 3' (No. 2) and 3'-9" (No. 3). The soil samples below these levels was in a saturated state.

CONCLUSION

The low strength of the sub-soil in the upper 30' of the profile indicate that end-bearing piles should be utilized to provide support for the structural elements of the proposed bridge. We would anticipate that end-bearing to piles would readily develop if driven into the granular sub-soil below 45' (No. 1), 30' (No. 2) and 38' (No. 3).

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S. Nowski, P. Eng.

SN/ba

DOCUMENT MICROFILMING IDENTIFICATION

GEOGRES No. 30 MIS-43

DIST. 6 REGION CENTER

W.P. No. _____

CONT. No. _____

W. O. No. _____

STR. SITE No. 37-120

HWY. No. _____

LOCATION HOOPER RIVER 1 BRIDGE

MILLS & SIDE ROAD

OVERSIZE DRAWINGS TO BE INCLUDED WITH THIS REPORT 1

REMARKS: _____

6-755 514-118

