

63-F-15

PATROL YARD

AT

LONG SAULT

Mr. F. E. Cavell,
Superintendent,
Special Services Section.

Mr. A. G. Stermac,
Principal Foundation Engr.,
Foundation Section,
Materials & Research Division.
February 11, 1963

RE: PROPOSED PATROL GARAGE AT LONG SAULT, DIST. #9, OTTAWA.
W.J. 63-F-15 -- W.P. (N11)

A patrol garage is planned to be built at the D.H.O. yard at Long Sault. In order to determine the subsoil conditions at this site and decide on the type of footings to be recommended, an investigation consisting of two sampled borings and four dynamic cone penetration tests, was carried out. Attached to this report are detailed sketches showing the boring locations and subsoil profile.

Soil conditions at the site, are uniform and very favourable. Underlying a thin layer of topsoil, is a thick overconsolidated layer of till material, consisting of clayey silt, fine sand and gravel. This till material is in a very dense to dense state of compactness. It is brown in color and desiccated at the top 10' to 15', and then the color changes to grey. It was investigated to a depth of 21 feet below the ground surface. Water level was encountered at a depth of 20 feet, and this water rose to a maximum of 3'-8" depth below the ground surface, in the open borehole.

Spread footings are recommended. A safe bearing load of 3 T.S.F. can be used. The minimum footing depth, to provide for adequate frost protection, would be four feet below the ground surface. No dewatering problems are anticipated.

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Mr. F. E. Cavell, Supt.,
Special Services Section.

February 11/63

In the area of service roads, parking lots and all areas to be paved, a minimum of 12" of soil should be stripped and an allowance be made for 18" of sand cushion, topped with 6" of G.B.C. Class 'A'.

A 3½" thickness of asphalt is recommended for all paved areas. This should be comprised of a 2" layer of HL-8 and 1½" layer of HL-3.

The field work, performed on Tuesday, February 5, 1963, together with the preparation of this report, was carried out by Mr. B. M. Chadiali, under the general supervision of Mr. K. G. Selby, Foundation Section, D.H.C.

Equipment was owned and operated by Johnston Drilling Co., Ottawa.

We trust the above given recommendations are sufficient for your future design work. However, should there be any additional questions you would like to discuss, please feel free to call on our Office.

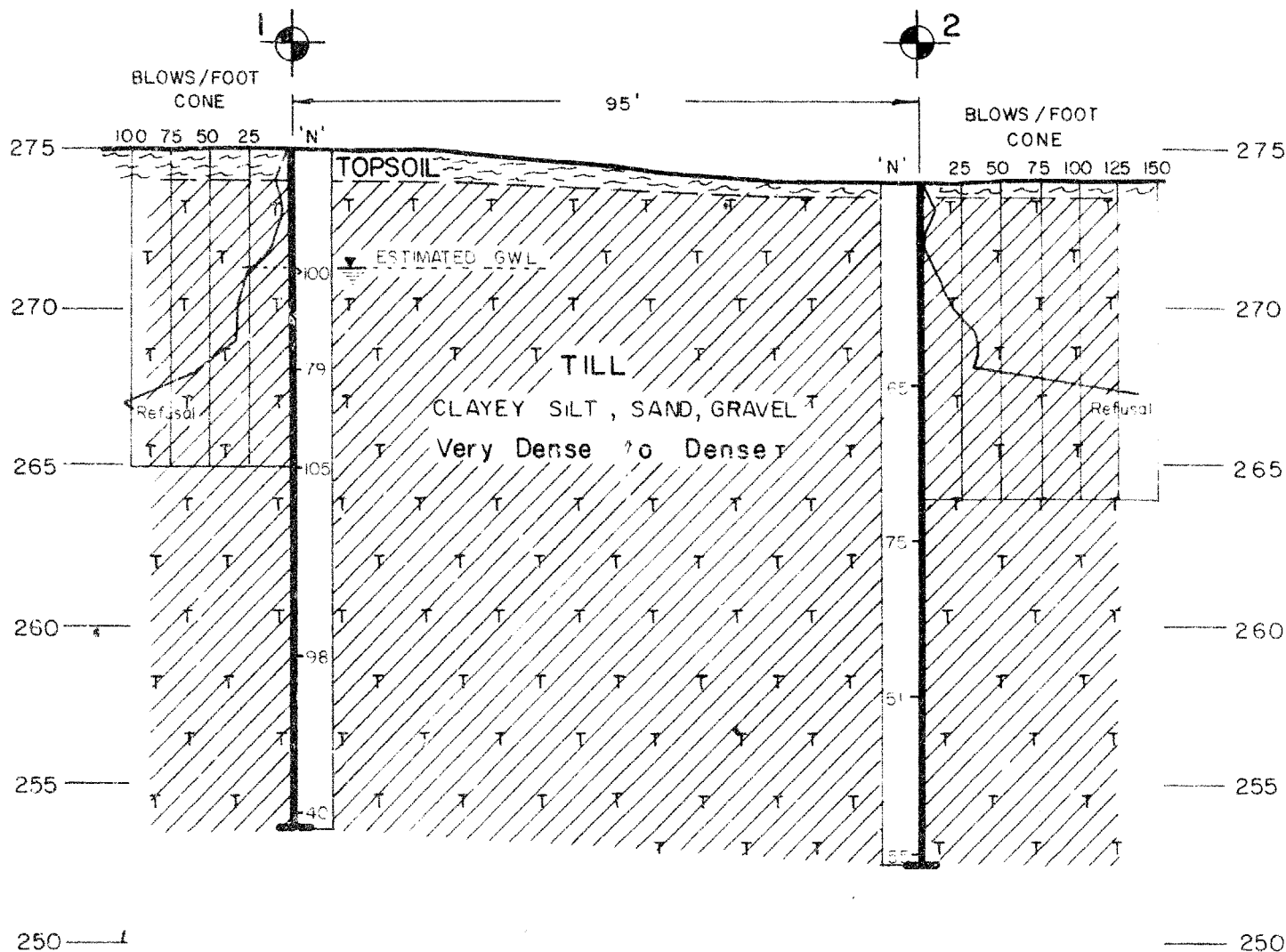
LHG/MdeF
Attach.

cc: Messrs. F. E. Cavell (4)
E. A. Tregaskes
H. D. McMillan
L. I. Walker

syf
K. Y. Lo,
SUPERVISING FOUNDATION ENGR.
For:
A. G. Stermac,
PRINCIPAL FOUNDATION ENGR.

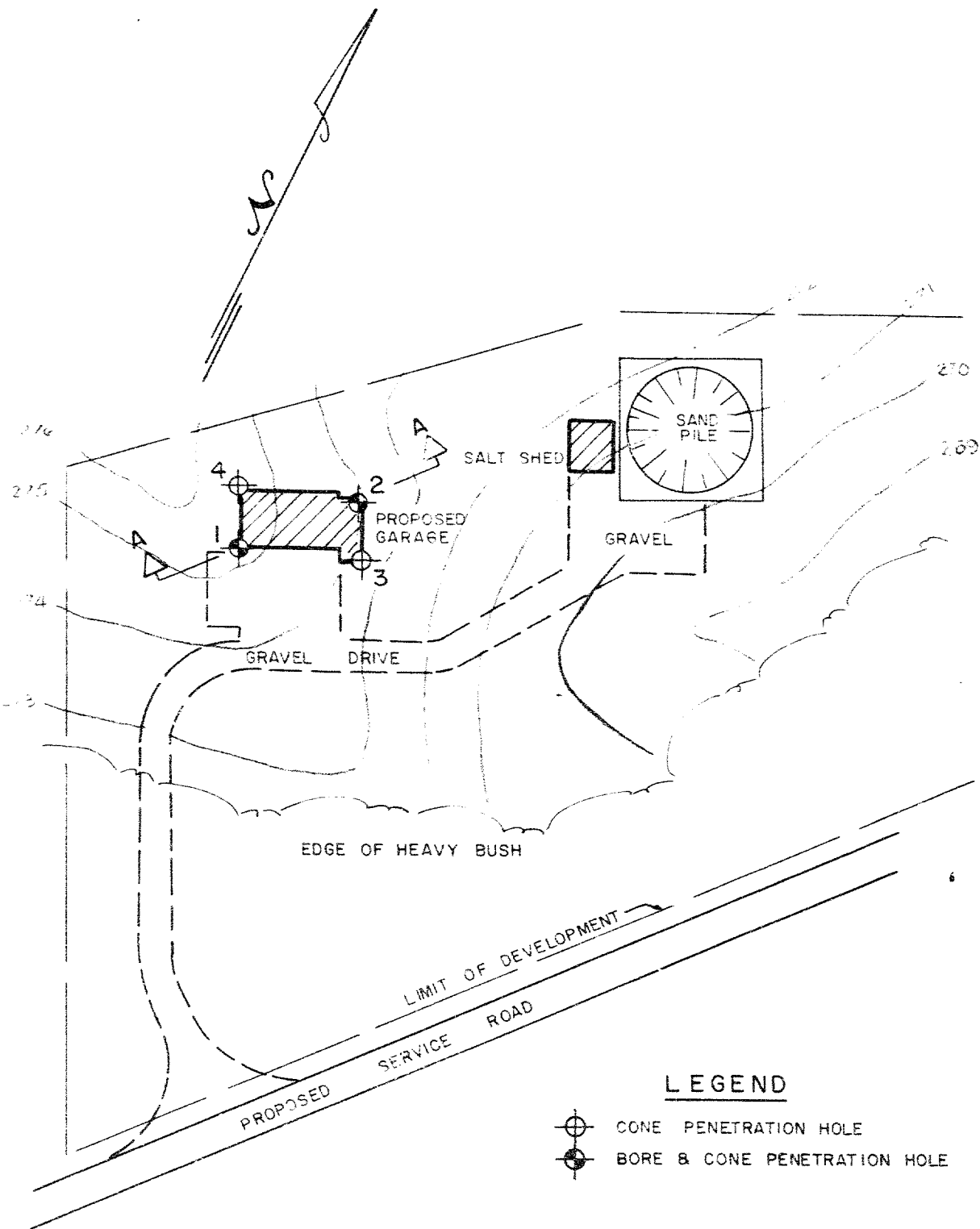
Foundations Office ✓
Gen. Files.

ORIGINATED BG
 DRAWN FC
 CHECKED
 APPROVED
 DATE FEB. 8, 1963
 DEPARTMENT OF HIGHWAYS - ONTARIO
 MATERIALS & RESEARCH SECTION
 LONG SAULT PATROL YARD
 JWP. CORNWALL, LOT 38, CON III, RANGE 6 DWG. NO. 63-F-15B
 SCALE 1" = 100 FT.
 JOB NO. 63-F-15



A - A

SUB - SOIL STRATIGRAPHY



ORIGINATED B.G.	DEPARTMENT OF HIGHWAYS - ONTARIO	SCALE 1 IN. = 100 FT.
DRAWN F.C.	MATERIALS & RESEARCH SECTION	W. P. NO. —
CHECKED <i>HR</i>	LONG SAULT PATROL YARD	JOB NO. 63-F-15
APPROVED <i>Althman</i>	TWP. CORNWALL, LOT 38, CON. III, RANGE 6	DWG. NO. 63-F-15A
DATE FEB. 7, 1963		