#64-F-16

Hwy. #11 :

Smooth Rock

Falls Patrol

Garage

64-F-16

64-F-16

P.R. 63-2820

1 MILE ±
to Smooth Rock Falls

THE KING'S HIGHWAY No 11

ENTRANCE

290'±

TREATED SAND PILE PAD

SALT SHED

DEVELOPED AREA

SAT. GARAGE

It is proposed to move this building as shown

UNDER UNDERGROUND TO HYDRO ELECTRIC

ROAD

PORTION 'A'

Nov 15/63 [signature]

15/11/63. D. G. Drake

HARRY MALSEED
LOT 21 CONCESSION 8 (WITH EXCEPTIONS)
ITEM NUMBER OF PARCEL N 1490 NEL
(ABSOLUTE TITLE)
AREA DIVERSION = 8.246 ACS.

ALFRED LAVOIE
LOT 20 CONCESSION 8 (WITH EXCEPTIONS)
PARCEL 1762 NEL
(ABSOLUTE TITLE)
AREA DIVERSION = 3.092 ACS.

LUCIEN COU
LOT 20 CONCESSION 8
PARCEL 2462 NEL
(ABSOLUTE TITLE)
PORTION 'A' - AREA DIVERSION
PORTION 'B' - AREA DIVERSION
TOTAL AREA

LOT 21

LOT 20

CONCESSION 8

TOWNSHIP OF KENDREY

VDREY

SOME DEFECTS IN NEGATIVE DUE

TO CONDITION OF ORIGINAL DOCUMENTS

Dist 29-16
Foundations Office COCHRANE

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. C. S. Moase,
Manager,
Special Services Section.

From: Foundation Section,
Materials & Research Div.,
Room 107, Lab. Bldg.

Date: March 10, 1964

Our File Ref.

In reply to

Subject:

FOUNDATION INVESTIGATION REPORT
For
Smooth Rock Falls Patrol Garage,
Hwy. #11, District #16, Cochrane.
W.J. 64-F-16 -- W.P. (Nil)

1. INTRODUCTION:

A foundation investigation consisting of one borehole and two dynamic cone penetration tests was recently carried out by North Bay Regional Soils Section at the site of the proposed D.H.O. Patrol Garage at Smooth Rock Falls, Hwy. #11. Following is a summary of subsoil conditions at the site, together with recommendations pertaining to the proposed construction.

2. SUBSOIL:

Subsoil consists of a heterogeneous mixture of clayey silt, sand and gravel, probably of glacial origin. Below a depth of about six feet the material has a very stiff to hard consistency. No water was observed in the borehole carried out at the proposed garage location which was drilled to a depth of about twelve feet. The locations and elevations of the borehole and penetration tests, together with the inferred subsoil stratigraphy are shown on the attached Drawing No. 64-F-16A.

cont'd. /2 ...

3. BUILDING FOUNDATIONS:

Proposed buildings should be founded at a sufficient depth below ground level for frost protection. At a depth of about six feet below ground level, or below this level, a safe bearing capacity of 2 T.S.F. may be assumed for design purposes.

4. SAND PILE:

The proposed sand pile may be constructed without danger of base failure.

5. GRADING:

Recommendations as to grading given to us by Mr. K. Howe of North Bay Regional Soil Section, are as follows:

It is recommended that a minimum depth of 30 inches of granular material be used for all roadways, parking areas and sand pile pads, this depth to consist of 24 inches of Sand Cushion and 6 inches of G.E.C. Class 'A' or 5/8" crushed gravel type 'A'.

Material suitable for Sand Cushion and crushed gravel should be available in the Departure Lake area, 6 miles west of Smooth Rock Falls.

6. PAVING:

For all paved areas, a 3-inch thickness of HL-4 is recommended, the latter to consist of 1½" base course and 1½" surface course.

cont'd. /3 ...

7. SALT CONTAMINATION:

Since the upper portion of this type of subsoil deposit is usually fairly permeable, the danger of local wells being contaminated by run-off from the sand pile must be presumed to exist.

8. MISCELLANEOUS:

The field work was carried out under the supervision of Mr. K. Howe, North Bay Regional Soils Section. This report was written by Mr. K. G. Selby, Senior Foundation Engineer.

We believe that you will find the factual data and recommendations contained therein, adequate for your design requirements. Should further information be required, please feel free to contact our Office.

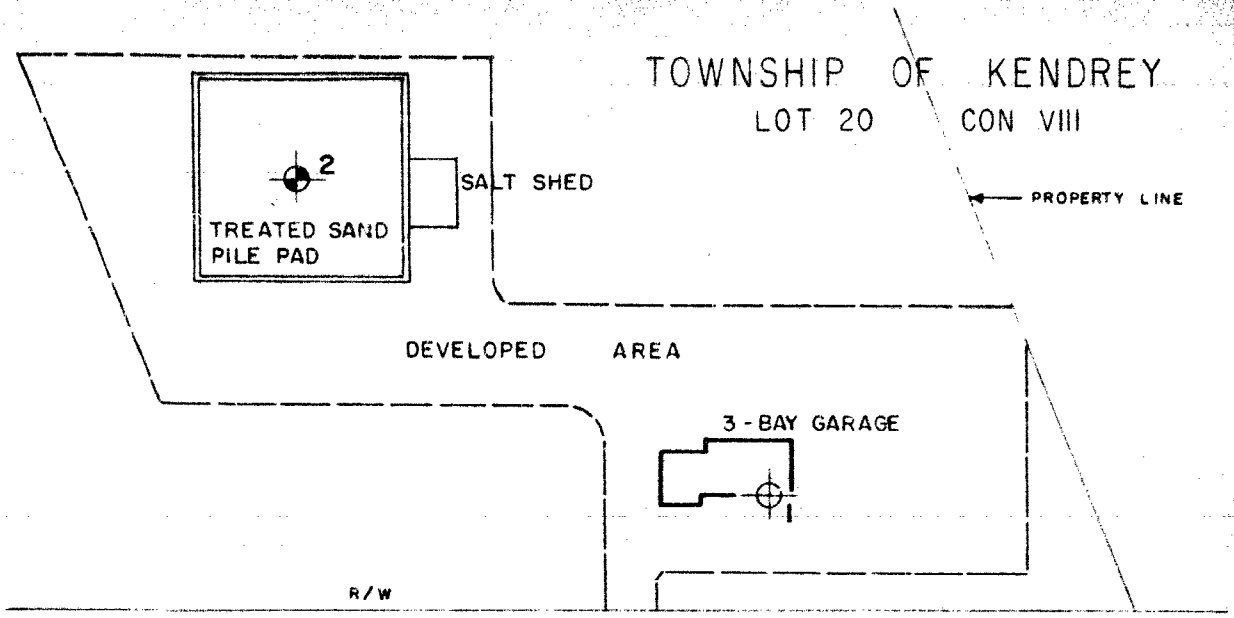
KGS/MeF
Attach.

cc: Messrs. C. S. Moase (4)
E. J. Orr
H. D. McMillan
J. D. Foster
E. R. Saint
A. Watt

Foundations Office
Gen. Files

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

APPENDIX I.

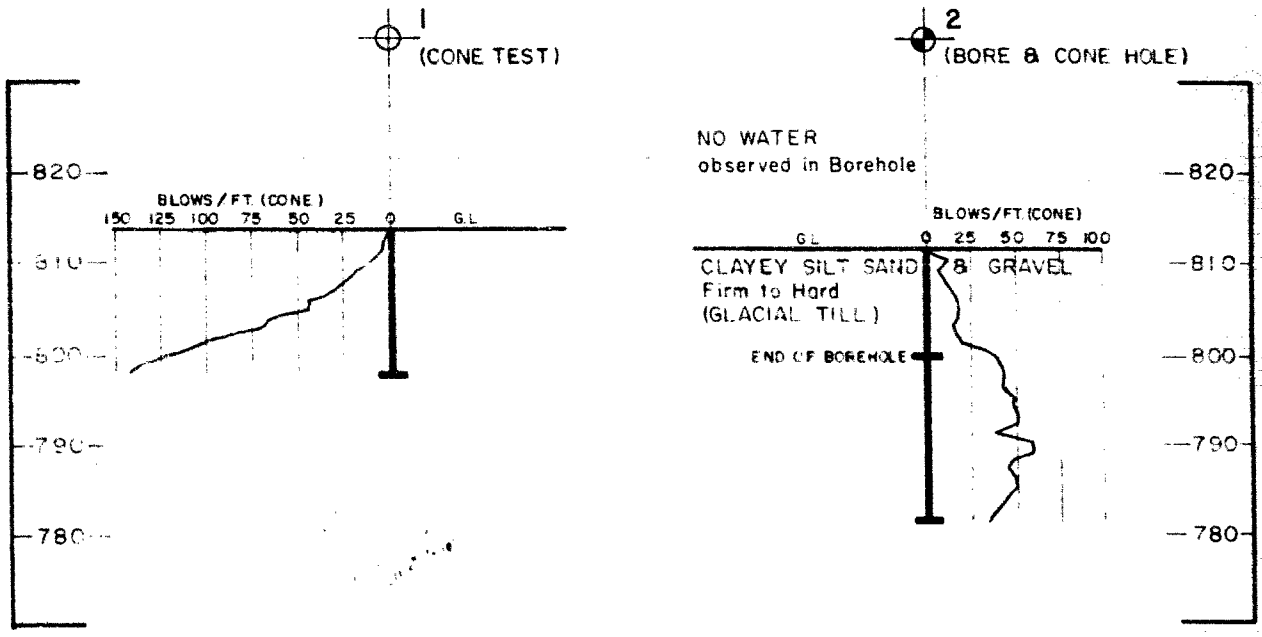


℄ HIGHWAY NO. 11

TO SMOOTH ROCK FALLS
1 MILE

PLAN

SCALE: 1inch=100 feet



BOREHOLE STRATIGRAPHY

SCALE: 1inch=20 feet VERTICAL

ORIGINATED K S	DEPARTMENT OF HIGHWAYS - ONTARIO	SCALE AS SHOWN
DRAWN D.M.	MATERIALS & RESEARCH SECTION	W. P. NO. ——
CHECKED	SMOOTH ROCK FALLS	JOB NO. 64 - F - 16
APPROVED	PATROL YARD	DWG. NO 64-F-16A
DATE 11 MARCH 1964		

64-F-16.

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. A. Stermac
Principal Foundations Engineer
Downsview, Ontario

From: Materials & Research
North Bay, Ontario

Date: February 21, 1964

Our File Ref.

In reply to

Subject: Smooth Rock Falls Patrol Garage L.P.O. H199634

Please find enclosed notes and drawings for the proposed patrol yard located 1 mile east of Smooth Rock Falls on the North side of Hwy. #11.

The two penetration tests indicate that the material which is a clay loam till is quite firm and should present no foundation problems.

Two attempts were made to retrieve an undisturbed sample but in both cases the stiffness of the material made it impossible. The depth of topsoils is 6 inches to 8 inches.

It is recommended that minimum depth of 30 inches of granular type material be used for all roadways parking areas and sand pile pads. This depth to consist of 24 inches of sand cushion and 6 inches of G.B.C. Class "A" or 5/8 crushed gravel type "A".

Material suitable for sand cushion and crushed gravel should be available in the Departure Lake area 6 miles west of Smooth Rock Falls.

K. Howe

for: E.R. Saint
Reg. Mat. Eng.

KH/ef
c.c. File