

DOCUMENT MICROFILMING IDENTIFICATION

G.I.-30 SEPT. 1976

GEOCRES No. 41J-15

DIST. 18 REGION Northwestern

W.P. No. 247-66-02

CONT. No. 74-78

W. O. No. 72-F-115

STR. SITE No. \_\_\_\_\_

HWY. No. 129

LOCATION Stability Reports

===== : =====

OVERSIZE DRAWINGS TO BE INCLUDED WITH THIS REPORT. \_\_\_\_\_

REMARKS: ~~BAND~~ DOCUMENTS TO BE UNFOLDED

BEFORE MICROFILMED.

MEMORANDUM

TO: Mr. A. G. Stermac,  
 Principal Foundations Engineer,  
 Foundations Office,  
 Downsview.  
 ATTENTION: Mr. K. Selby,  
 Supervising Foundations Engineer.  
 OUR FILE REF.

FROM: Materials and Testing,  
 Northwestern Region.

DATE: October 4, 1972.

IN REPLY TO

72-1114

72-1115

SUBJECT:

Core Drilling On Work Projects 16-68-01 and 247-66-02

Further to your discussion with Mr. R. D. Gunter, Senior Soils Supervisor, we are requesting core drill work on two Work Projects in Sault Ste. Marie District.

On Work Project 16-68-01, Highway 548, St. Joseph's Island, several of the cuts require additional sampling in order to locate bedrock and to determine the usability of the cut material. The routine power and hand auger investigation carried out during August did not provide sufficient information regarding the subsoil in these cuts because penetration was stopped by boulders. We will require a continuous identification of the subsoil and representative samples from each of the hole locations shown on the Profile (No. 548TB18-3) forwarded previously. The holes should be advanced to four feet below profile grade unless bedrock is encountered. The issue date for the Soils Design Report is November 29, 1972 and we would appreciate the information by mid-November.

On Work Project 247-66-02, Highway 129, a 20-foot fill is to be widened out over a fine medium clay subsoil. At this location, we require a recommendation regarding the stability of the proposed fill widening. The area to be widened is in the Township of Wells between Stations 636+00 and 640+00 and is marked out on the plan which you now have.

If we can be of any further assistance to you in this matter, please do not hesitate to contact this office.

*Bruce Adamson*

R. B. ADAMSON,  
 PROJECT SOILS ENGINEER,

For:

R. MORGENROTH,  
 REGIONAL MATERIALS ENGINEER.

RBA/le

c.c.: Mr. G. R. Browning.

Design Services Branch,  
1201 Wilson Avenue,  
Downsview 464, Ontario.

October 19, 1972.

Telephone: 248-3282.

Master Soil Investigation,  
104 Kenhar Drive,  
Woodbridge, Ontario.

Dear Sirs:

This letter confirms our request of October 13, 1972,  
for the supply of a mounted auger drill together with all  
necessary equipment, as specified under the terms of our  
Contract Agreement, at Sault Ste. Marie on October 18, 1972.

Mobilization will be from North Bay.

Our Project Numbers are W.O. 72-11114 and W.O. 72-11115.

Yours truly,

*K. G. Selby*

K. G. Selby,  
Supervising Foundations Eng.,  
For: A. G. Sternac,  
Principal Foundations Eng.

KGS/ao

cc: W. W. Fry  
(Attn: Mrs. M. Andrews)

Foundations Files ✓  
Documents

Mr. R. Morgenroth,  
Regional Materials Engineer,  
Northwestern Region,  
Thunder Bay, Ontario.

Foundations Office,  
Design Services Branch,  
West Bldg., Downsview.

December 7, 1972.

Mr. R. B. Adamson

Embankment Stability  
Hwy. #129  
Sta. 637+60  
W.P. 247-66-02  
W.O. 72-11115

41 J-15  
FROM

Borings were carried out at the following locations:

B.H. #1	Sta. 637+66	73' RT.
B.H. #2	Sta. 637+66	118' RT.

Apart from the black surficial organic material (3 ft. deep) the subsoil at above locations was found to be a very dense sand and gravel deposit for a minimum depth of 20 ft. where refusals to normal testing procedures were reached.

No stability problems are anticipated for the proposed 20 ft. high fill widening constructed with 2:1 standard slopes.

The topsoil stripping, together with the construction of the benches between the existing and the new fill, should be in accordance with the current M.T.C. standards.

*P. Payer*

PP/ao

cc: Foundations Files ✓  
Documents

For: P. Payer,  
Project Foundations Engineer,  
K. G. Selby,  
Supervising Foundations Engineer.

DESIGN SERVICES BRANCH

FOUNDATIONS OFFICE

## RECORD OF BOREHOLE NO 1

JOB 72-11115LOCATION STA: 637+66; 73' RTORIGINATED BY PPW.P. 247-66-02BORING DATE OCT. 19, 1972COMPILED BY PP

DATUM \_\_\_\_\_

BOREHOLE TYPE CONT. FLIGHT AUGER

CHECKED BY \_\_\_\_\_

SOIL PROFILE			SAMPLES			ELEV. SCALE	DYNAMIC PENETRATION RESISTANCE BLOWS / FOOT					LIQUID LIMIT — $W_L$ PLASTIC LIMIT — $W_P$ WATER CONTENT — $W$			BULK DENSITY $\gamma$ P.C.F.	REMARKS
ELEV. DEPTH	DESCRIPTION	STRAT. PLT	NUMBER	TYPE	BLOWS/FOOT		20	40	60	80	120	$W_P$	$W$	$W_L$		
894.2	GROUND LEVEL															
891.4	TOP OF SAND & GRAVEL															
891.4	BLACK ORGANICS															
888.8	SANDY TILL		1	SS	48	890										WL
885.0	SAND & GRAVEL		2	SS	55 1/2											
			3	SS	72 1/2											
	VERY DENSE		4	SS	131											36, 61, 3
						880										
						870										
866.8	END OF BOREHOLE (REFUSAL)					860										

DESIGN SERVICES BRANCH

FOUNDATIONS OFFICE

# RECORD OF BOREHOLE NO 2

JOB 72-11115

LOCATION STA: 637+66; 118' 2"

ORIGINATED BY PP

W.P. 247-66-02

BORING DATE OCT. 19. 1972

COMPILED BY PP

DATUM \_\_\_\_\_

BOREHOLE TYPE CONST. FLIGHT AUGER

CHECKED BY \_\_\_\_\_

SOIL PROFILE			SAMPLES			ELEV. SCALE	DYNAMIC PENETRATION RESISTANCE		LIQUID LIMIT ——— $W_L$		BULK DENSITY	REMARKS
ELEV. DEPTH	DESCRIPTION	STRAT. PLOT	NUMBER	TYPE	BLOWS/FOOT		BLOWS / FOOT	SHEAR STRENGTH P.S.F.	PLASTIC LIMIT ——— $W_P$	WATER CONTENT ——— $W$		
							O UNCONFINED + FIELD VANE • QUICK TRIAXIAL X LAB VANE	$W_P$ ——— $W$ ——— $W_L$ WATER CONTENT % 10 20 30				
888.7	GROUND LEVEL											
0.0	SAND WITH BLACK ORGANICS											
2.0			1	SS	104							
6.7	CLAYEY SILT		2	SS	10	880						
7.5	SAND & GRAVEL		3	SS	100/13							
	VERY DENSE		4	SS	79							
			5	SS	101							
867.9			6	SS	100/15	870						
20.8	END OF BOREHOLE (2800 GAL.)					860						

WL 

7.5, 88

49, 46, 5