

62-F-137

W.P. # 68-61

Hwy. # 401

Hwy. # 10

UNDERPASS

Mr. S. McCombie,
Bridge Planning Engr.

Attention: Mr. F. DeVisser.

W.P. 68-61
23-66-293.
Mr. A. G. Stermac,
Principal Foundation Engr.,
Foundation Section,
Materials & Research Division.

January 17, 1963

Widening of Underpass at Hwy. #10 &
Hwy. #401, Toronto, District No. 6.
W.P. 68-61 -- W.J. 62-F-137

A meeting took place on December 12, 1962, between the writer and Mr. Eric Saar of A.D. Margison & Associates, Ltd., the Consultants responsible for designing the above-mentioned structure.

It was felt that information regarding subsoil conditions at the site was somewhat inadequate and, therefore, it was decided to carry out additional borings at the site. Two borings were subsequently carried out, and the information obtained from these, is plotted on the borelog sheets attached to this memo.

Subsoil at the site consists of a heterogeneous mixture of clayey silt, sand and gravel of glacial origin, extending to at least 14' below ground level. It was observed that apart from a few feet near the surface, the stratum is in a very dense state.

Our recommendations pertaining to the proposed structure foundations are as follows:

The new structure should be supported at or about el. 626.0 on a spread footing type foundation. A design load of 3 t.s.f. may be used. No dewatering problems are anticipated with regard to the excavations necessary to carry out the above proposals.

If you have any further queries in connection with this matter, please contact this Office.

KGS/MdeF
Encls.

cc: Foundations Office ✓
Gen. Files.

K. G. Selby
K. G. Selby,
SENIOR FOUNDATION ENGR.
For:
A. G. Stermac,
PRINCIPAL FOUNDATION ENGR.

DEPARTMENT OF HIGHWAYS - ONTARIO MATERIALS & RESEARCH DIVISION		RECORD OF BOREHOLE NO. 6		FOUNDATION SECTION	
JOB 62-1-137	LOCATION Hwy. 401 & Hwy. 10 (Sta. 16+54.55' H.T.)	ORIGINATED BY B.K.			
W.P. 68-01	BORING DATE 13/12/62	COMPILED BY B.K.			
DATUM 633.1	BOREHOLE TYPE Auger	CHECKED BY A.S.			

SOIL PROFILE			SAMPLES			ELEV. SCALE	DYNAMIC PENETRATION RESISTANCE			LIQUID LIMIT ——— WL PLASTIC LIMIT ——— WP WATER CONTENT ——— W			BULK DENSITY P.C.F.	REMARKS
ELEV. DEPTH	DESCRIPTION	STRAT. PLOT	NUMBER	TYPE	BLOWS / FOOT		BLOWS / FOOT			WATER CONTENT %				
							SHEAR STRENGTH P.S.F.			WP	W	WL		
633.4 0.0	Groundlevel													
	Fill sand and gravel													
631.4 2.0	Clayey silt with sand and gravel. Compact becoming denser to v. dense at elev. 627.4'.													
			1	SS	13	630								
			2	SS	49									
			3	SS	182									
			4	SS	236									
623.9 9.5	End of Borehole													
						620								

DEPARTMENT OF HIGHWAYS - ONTARIO
MATERIALS & RESEARCH DIVISION

RECORD OF BOREHOLE NO. 7

FOUNDATION SECTION

JOB 62-E-137 LOCATION Hwy. 401 - H.Wy. 12 (Sta. 14+12 65' Lt.) ORIGINATED BY B.K.
W.P. 68-61 BORING DATE 13/12/62 COMPILED BY B.K.
DATUM 633.9' BOREHOLE TYPE Auger CHECKED BY K.S.

