DOMINION SOIL INVESTIGATION LIMITED

7[illegible] ROCKFORD BOULEVARD - SCARBOROUGH ONTARIO CANADA - TELEPHONE 751-6565

BRANCH
369 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 8-3851

FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
34 BRENTFORD ROAD,
KINGSTON 5, JAMAICA, WEST INDIES
TELEPHONE: 66696

6th February 1967.

Department of Highways, Ontario,
Materials and Testing Division,
Downsview Avenue,
Downsview, Ontario.

Attention: Mr. A. Barsvary, P.Eng.

Re: Our Ref. No: 6-12-13
Your Ref: W.J. 66-F-103

Dear Sirs,

Enclosed please find two copies of the Geotechnical Data sheets and Grain Size Distribution sheets for boreholes No. 25, 30 and 37.

Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

J. Hewitt, P.Eng.

JH/me
Enclosures.

DOMINION SOIL INVESTIGATION LIMITED

7[illegible] ROCKFORD BOULEVARD - SCARBOROUGH ONTARIO CANADA - TELEPHONE 751-6565

BRANCH
569 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 3-3851

FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
34 BRENTFORD ROAD,
KINGSTON 5, JAMAICA, WEST INDIES
TELEPHONE: 66596

7th February 1967.

Department of Highways, Ontario,
Materials and Testing Division,
Downsview Avenue,
Downsview, Ontario.

Attention: Mr. A. Barsvary, P.Eng.

Re: Our Ref. No: 6-12-13
Your Ref: N.J. 66-F-103

Dear Sirs,

Enclosed please find two copies of the Geotechnical Data sheets and Grain Size Distribution sheets for boreholes No. 24 and 34.

Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

J. Hewitt, P.Eng.

JH/me
Enclosures.

DOMINION SOIL INVESTIGATION LIMITED

7[illegible] ROCKFORD BOULEVARD - SCARBOROUGH ONTARIO CANADA - TELEPHONE 751-6565

BRANCH
369 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 3-3851

FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
34 BRENTFORD ROAD,
KINGSTON 5, JAMAICA, WEST INDIES
TELEPHONE: 66896

10th February 1967.

Department of Highways, Ontario,
Materials and Testing Division,
Downsview Avenue,
Downsview, Ontario.

Attention: Mr. A. Barsvary, P.Eng.

Re: Our Ref. No: 6-12-13
Your Ref: W.J. 66-F-103

Dear Sirs,

Enclosed please find fourteen (14) copies of the Geotechnical Data Sheets and Grain Size Distribution sheets for boreholes No. 8 to 38 inclusive.

Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

J. Hewitt, P.Eng.

JH/me
Enclosures.

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

TO: Mr. A. Stermac,
Principal Foundation Engineer,
Room 107, Lab. Bldg.

Attention: Mr. A. Barsvary

FROM: Bridge Division,
Downsview, Ontario.

DATE: June 7th, 1967.

OUR FILE REF.

IN REPLY TO

SUBJECT: Bridge No. 6, W P. 279-64-5, Site No. 37-796,
Dundas St. Overpass at E. Mall, District No. 6.

60F103

Attached for your information is one copy of bridge site plan #6797 for Bridge No. 6.

J. C. McAllister

RDT/aw
Attach.

J. C. McAllister,
for W. S. Melinyshyn,
Regional Bridge Location Engineer.

Department of Highways Ontario

Copy for the information of
Mr. A. Stermac,
Principal Foundation Engineer

Mr. W. Kelinyshyn,
Reg. Bridge Location Engineer,
Central Region,
Administration Building

Bridge Division,
Downsview, Ontario

September 13, 1967

Bridge No. 6
Dundas St. Over the East Mall
W.P. 279-64-S, Site No. 37-796
Dundas & Hwy. 27 Interchange
District No. 6

Attached herewith are prints of the Preliminary Bridge Plan Drawing D6201-P1 for the above-mentioned structure.

The estimated cost of the proposed structure is $309,000. This cost includes tender, materials, engineering and sundry construction.

Any comments or revisions you may have should be submitted within three weeks.

C.S. Grebski,
Bridge Design Engineer

CSG:rd

Attach.

c.c. S. McCombie
A. Stermac
W. Wigle
R. Forrest
E. Cross

No Comment: Oct 12th '67

H. L. Selly

Bridge #6 (W.P. 279-64-5)

No comments.

Bridge #7 (W.P. 279-64-2)

No comments.

Bridge #8 (W.P. 277-66)

Pile lengths are not marked on the design drawings. We recommend pile lengths to be provided as follows:

Location	No.	Type	Pile Lengths
East Abutment	32	12 BP @ 53	22 Ft.
West Abutment	30		20 Ft.

Above lengths are valid provided that scour does not affect the soil beneath El. 355 ft.

The given lengths include a one-ft. allowance for buckling during driving.

Bridge #9 (W.P. 279-64-6)

Our foundation report called for spread footings to be placed at or below El. 406.0 ft. The designer, however, has placed the footings at higher elevations, ranging from 407.5 ft. to 412.0 ft. It should be ensured that no organics or loose material remains below the footings in this case.

Bridge #10 (W.P. 32-68)

No foundation investigation was requested along this temporary pedestrian overpass, thus no comments can be given.

Bridge #16 (W.P. 278-64-3; W.J. 65-F-104)

No comments.

K. G. Selby

KGS/MdeF

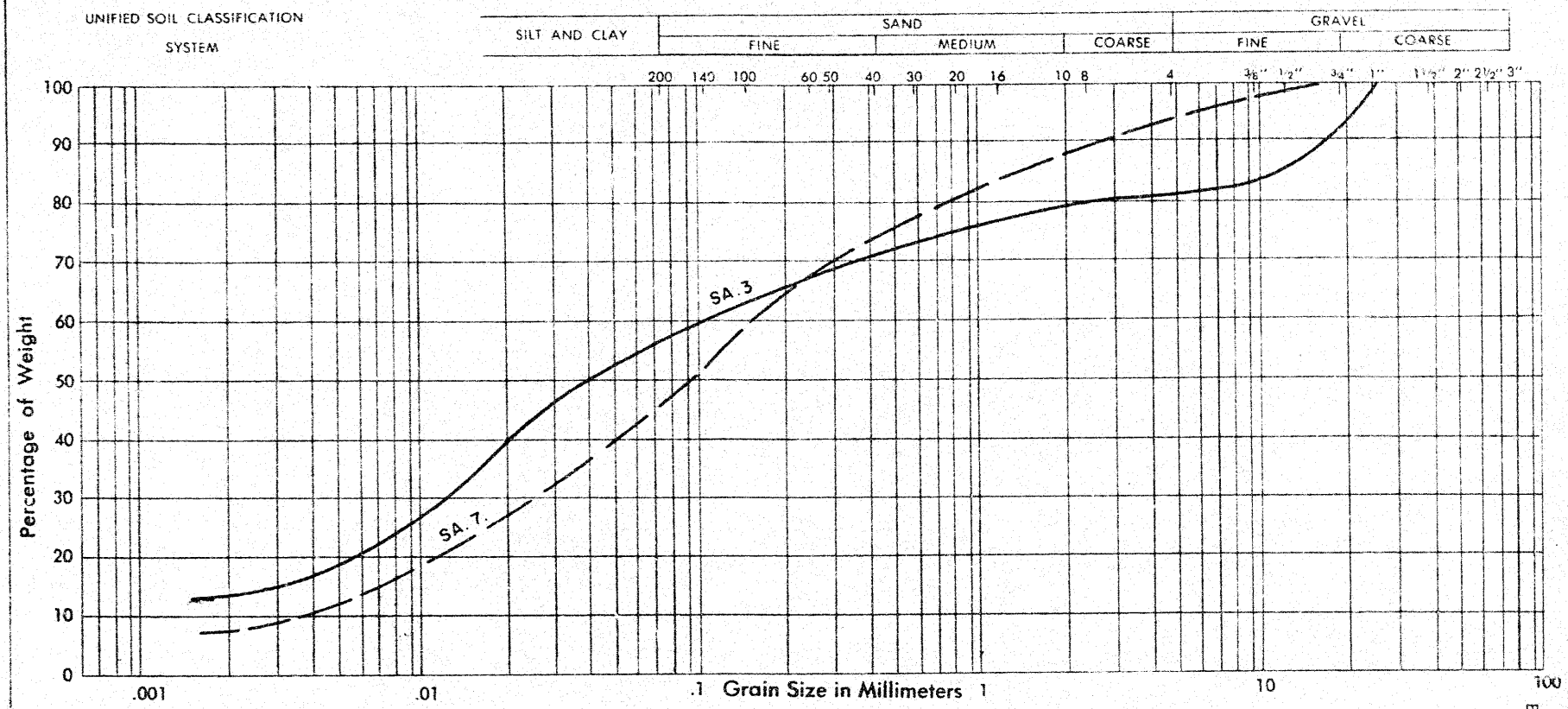
K. G. Selby,
SUPERVISING FOUNDATION ENGR.
For:
A. G. Stermac,
PRINCIPAL FOUNDATION ENGR.

cc: Foundations Files
Gen. Files

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO. 6-12-13



PROJECT: W.J. 66-F-103

LOCATION: ETOBICOKE, ONT.

BOREHOLE NO.:	33	
SAMPLE NO.:	3	7
DEPTH OF SAMPLE:	15'	35'
ELEVATION OF SAMPLE:	398.1	378.1

COEFFICIENT OF UNIFORMITY	SA. 7.	42
COEFFICIENT OF CURVATURE		1.12

PLASTIC PROPERTIES:

LIQUID LIMIT	% =	NON PLASTIC
PLASTIC LIMIT	% =	
PLASTICITY INDEX	% =	
MOISTURE CONTENT	% =	
ACTIVITY =		

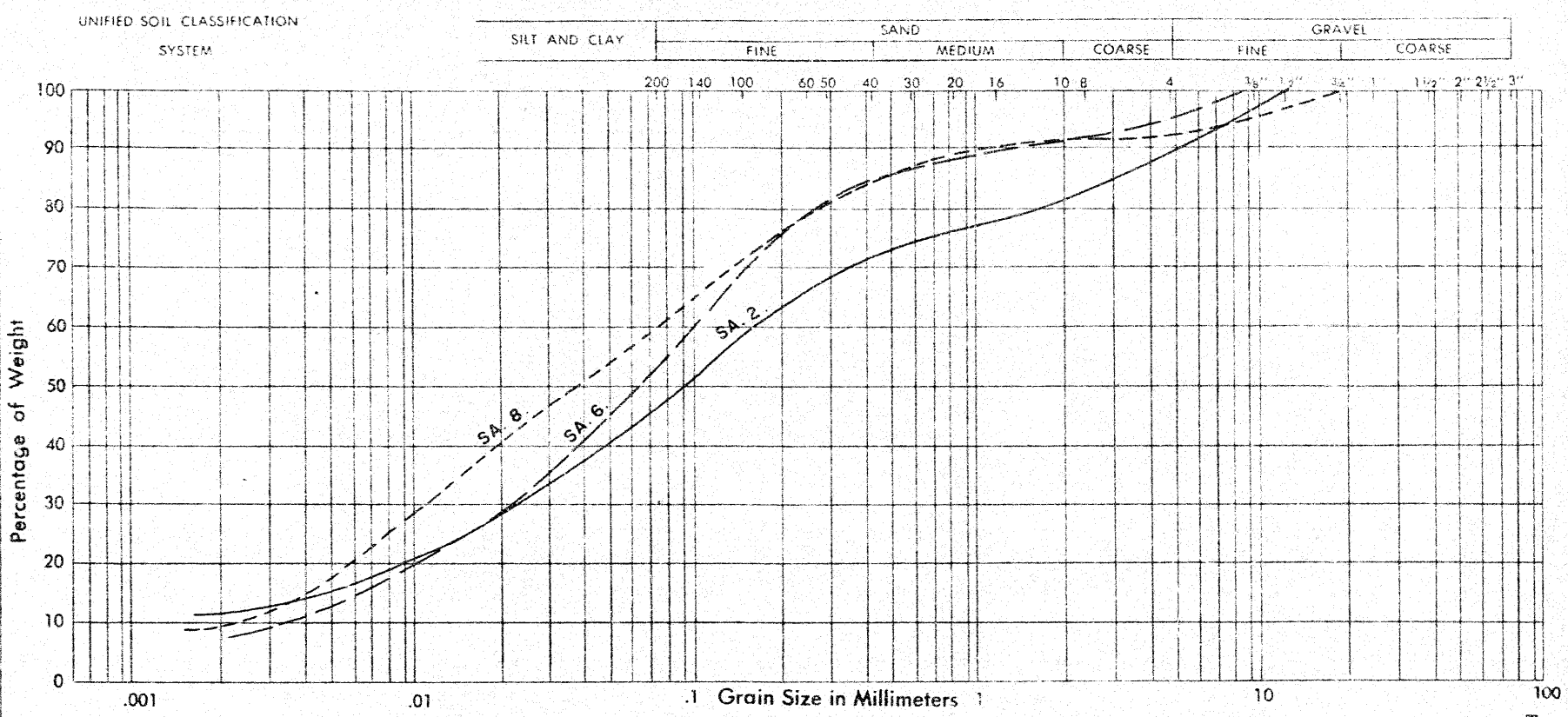
Enclosure No.

Classification of Sample and Group Symbol:	
SANDY SILT with some Clay and Gravel **SM**	SILTY SAND with traces of Clay and Gravel **SW-SM**
SA. 3.	SA. 7.

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO. 6-12-13



Enclosure No.

PROJECT:	W. J. 66 – F – 103		
LOCATION:	ETOBICOKE, ONT.		
BOREHOLE NO.:	34		
SAMPLE NO.:	2	6	8
DEPTH OF SAMPLE:	5'	25'	35'
ELEVATION OF SAMPLE:	408.9	388.9	378.9

COEFFICIENT OF UNIFORMITY
COEFFICIENT OF CURVATURE
NOT APPLICABLE

Classification of Sample and Group Symbol:
SAND and SILT
with some Clay and Gravel
SA. 2. & 6. & 8. **SM-CL**

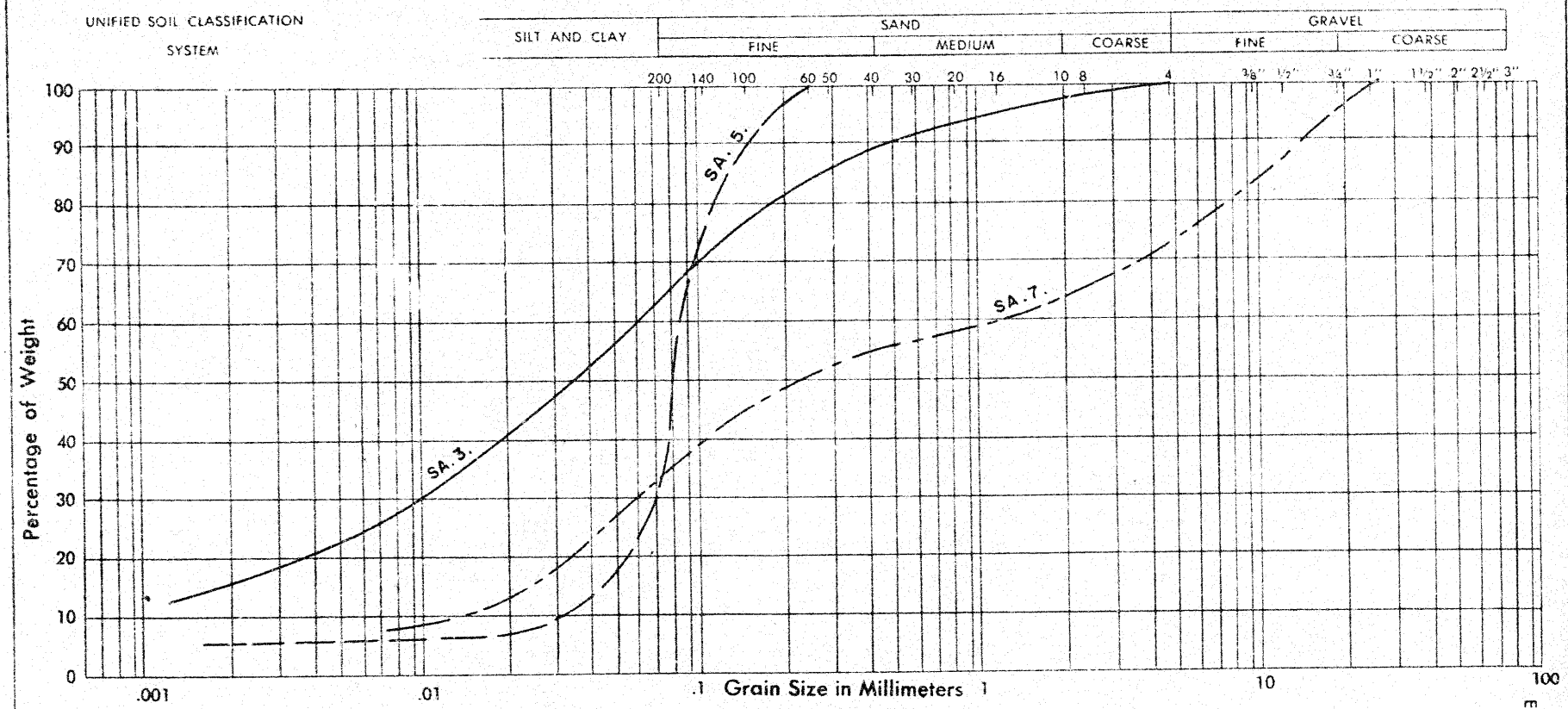
PLASTIC PROPERTIES:

LIQUID LIMITED	% =	
PLASTIC LIMIT	% =	NON
PLASTICITY INDEX	% =	PLASTIC
MOISTURE CONTENT	% =	
ACTIVITY =		

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO 6-12-13



Enclosure No.

PROJECT:	W. J. 66 - F - 103		
LOCATION:	ETOBICOKE, ONT.		
BOREHOLE NO.:	35		
SAMPLE NO.:	3	5	7
DEPTH OF SAMPLE:	10'	20'	30'
ELEVATION OF SAMPLE:	403.1	393.1	383.1

COEFFICIENT OF UNIFORMITY SA. 7. ~100

COEFFICIENT OF CURVATURE 0.2

Classification of Sample and Group Symbol:

SANDY SILT with some CLAY	SILTY FINE SAND with a trace of CLAY	SILTY SAND with GRAVEL and a trace of CLAY
SM-ML	SP-ML	SP-ML
SA. 3.	SA. 5.	SA. 7.

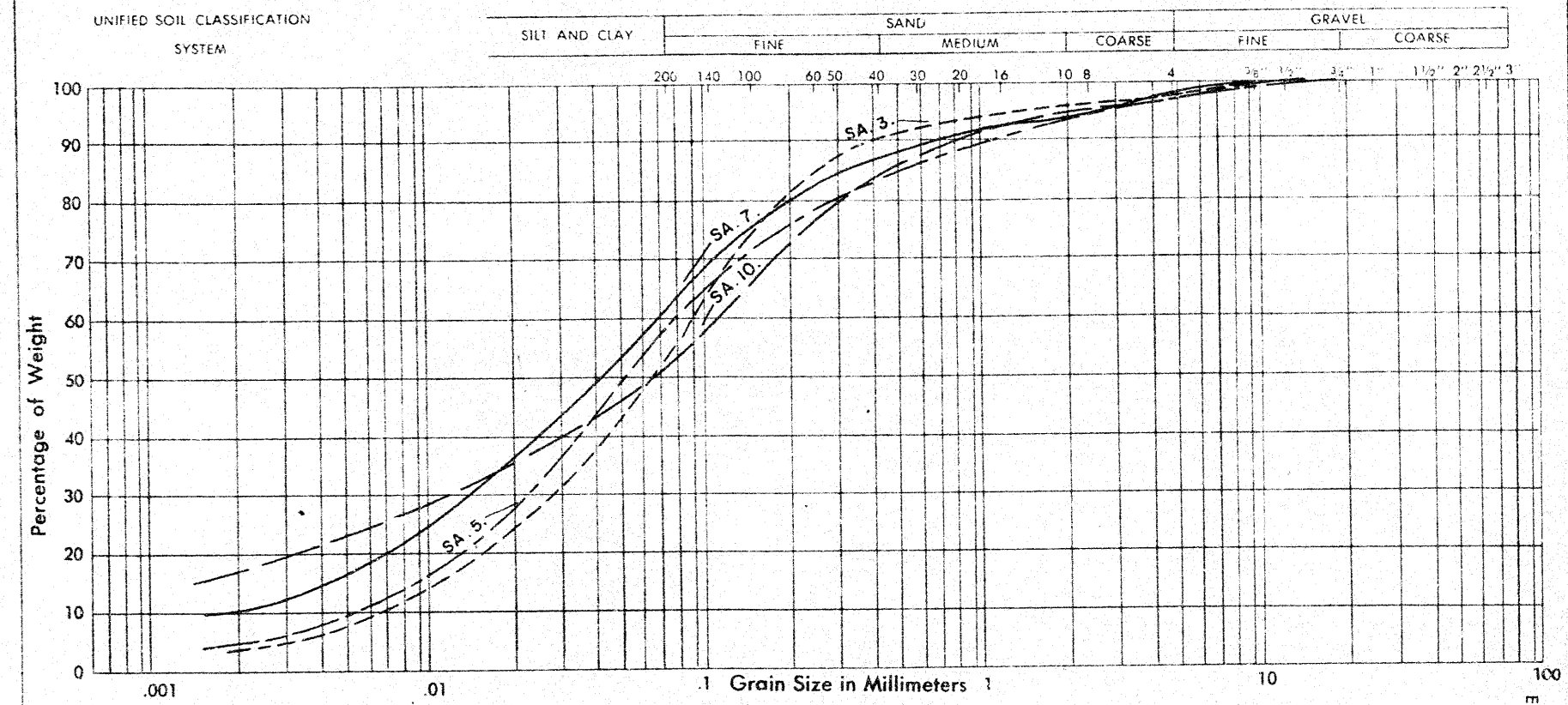
PLASTIC PROPERTIES:

LIQUID LIMIT	% =	
PLASTIC LIMIT	% =	NON
PLASTICITY INDEX	% =	PLASTIC
MOISTURE CONTENT	% =	
ACTIVITY =		

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO. 6-12-13



PROJECT: W. J. 66 - F - 103

LOCATION: ETOBICOKE, ONT.

BOREHOLE NO.: 36

SAMPLE NO.:	3	5	7	10
DEPTH OF SAMPLE:	10'	20'	30'	45'
ELEVATION OF SAMPLE:	404.4	394.4	384.4	369.4

COEFFICIENT OF UNIFORMITY
COEFFICIENT OF CURVATURE — NON APPLICABLE

PLASTIC PROPERTIES:		ML	CL-ML
LIQUID LIMIT	%	= 13.8	15.4
PLASTIC LIMIT	%	= 9.8	10.4
PLASTICITY INDEX	%	= 4.0	5.0
MOISTURE CONTENT	%	= 11.6	6.9
ACTIVITY	=	= 0.36	0.3

Enclosure No.

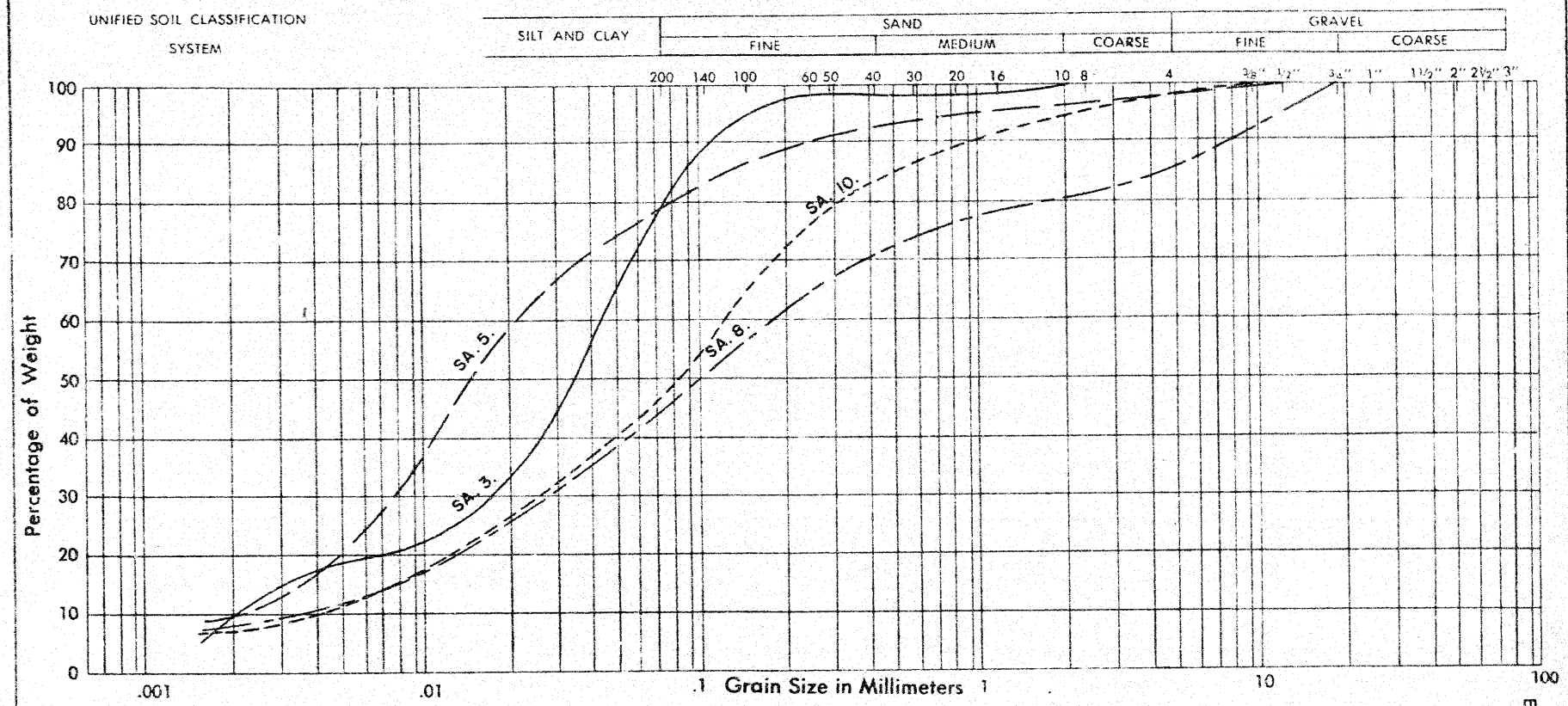
Classification of Sample and Group Symbol:

SANDY SILT with a trace of Clay and Gravel SM	SANDY SILT with some Clay and trace of Gravel ML	CLAYEY SILT with SAND and a trace of Gravel CL-ML
SA. 3 and 5.	SA. 7.	SA. 10.

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO. 6-12-13



PROJECT: W. J. 66 – F – 103

LOCATION: ETOBICOKE ONT.

BOREHOLE NO.:	37			
SAMPLE NO.:	3	5	8	10
DEPTH OF SAMPLE:	10'	15'	30'	40'
ELEVATION OF SAMPLE:	405.3	400.3	385.3	375.3

COEFFICIENT OF UNIFORMITY

COEFFICIENT OF CURVATURE

NOT APPLICABLE

Classification of Sample and Group Symbol:

SANDY SILT with some Clay and trace of Gravel	SAND and SILT with some Gravel and trace of Clay
SA. 3. & 5. ML	SA. 8. & 10. SM

PLASTIC PROPERTIES:

LIQUID LIMIT % =

PLASTIC LIMIT % =

PLASTICITY INDEX % =

MOISTURE CONTENT % =

ACTIVITY =

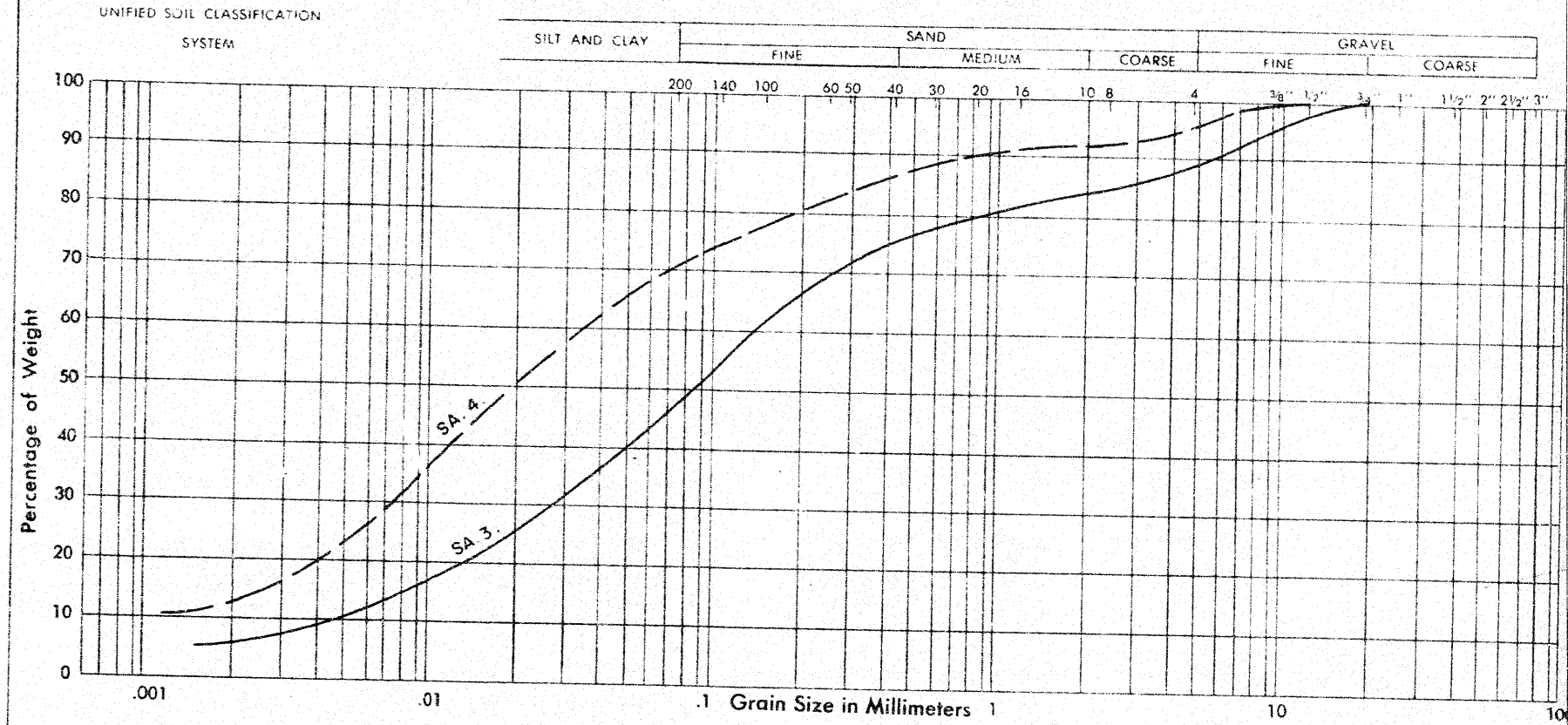
NON PLASTIC

Enclosure No.

DOMINION SOIL INVESTIGATION LIMITED

GRAIN SIZE DISTRIBUTION

OUR REFERENCE NO. 6-12-13



PROJECT: W. J. 66-F-103

LOCATION: ETOBICOKE, ONT.

BOREHOLE NO.: 38

SAMPLE NO.:	3	4
DEPTH OF SAMPLE:	15'	20'
ELEVATION OF SAMPLE:	398.4	393.4

COEFFICIENT OF UNIFORMITY

COEFFICIENT OF CURVATURE — NON APPLICABLE

Classification of Sample and Group Symbol:	
SAND and SILT SM	SANDY SILT with a trace of CLAY SM-ML
SA.3.	SA.4.

PLASTIC PROPERTIES:

LIQUID LIMIT	% =	NON
PLASTIC LIMIT	% =	
PLASTICITY INDEX	% =	PLASTIC
MOISTURE CONTENT	% =	
ACTIVITY =		

Enclosure No.

GEOTECHNICAL DATA SHEET FOR BOREHOLE . . 33 .

OUR REFERENCE NO. 6 - 12 - 13
Your Ref. Nº W.J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF C.P.R. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184, 436 N 208, 522 E
DATUM ELEVATION: G. S. C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 ½"
DATE: DEC. 23 - 29, 1966
W. P. 275 - 64 - 2

ENCLOSURE NO

ELEVATION ft.	DEPTH ft.	STRATIFICATION DESCRIPTION	STRATIFICATION SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES N or Advancement of Sampler	PENETRATION RESISTANCE blows per foot (2.0 4.0 6.0 8.0 10.0) / SHEAR STRENGTH lbs/sq ft	CONSISTENCY water content % (WP W WL) (2.0 4.0 6.0 8.0)	REMARKS
413.1	0	GROUND SURFACE							
		6" TOPSOIL							
410		SILTY SAND (glacial till) Brown Compact Very Dense cobbles, boulders		1	S.S.	11 8			
405.6	~7.5								
405	5								
	10	CLAYEY SILT with SAND (glacial till) Hard - Grey		2	S.S.	100/3"			
400									
399.6	13.5								W.L. El. 399.1 ft. Jan. 5, 1967
	15			3	S.S.	100/3"			19 24 43 14
395		SANDY SILT with some Clay and Gravel (glacial till) Very Dense Grey							W.L. El. 396.1 ft. Dec. 29, 1966
	20			4	S.S.	100/6"			
390									
	25			5	S.S.	100/5"			
385		cobbles and boulders							
	30			6	S.S.	100/5"			
380.6	~32.5								
380		SILTY SAND with traces of Clay and Gravel (glacial till) Very Dense							
	35			7	S.S.	100/3"			6 48 38 8
375	~37.5								
	40	CLAYEY SILT with SAND and some Gravel (glacial till) Hard		8	S.S.	100/2"			
370									
	45			9	S.S.	100/1"			
365									
362.9	50			10	S.S.	100/2"			
	50.2	END OF BOREHOLE							
360									GR SA SI CL — per cent —

VERTICAL SCALE: 1 IN. TO 5 FT.

DOMINION SOIL INVESTIGATION LIMITED

MADE: D. A. M. CH'D:

GEOTECHNICAL DATA SHEET FOR BOREHOLE . . 34 . .

OUR REFERENCE NO: 6 - 12 - 13
Your Ref Nº W.J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF C.P.R. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184, 450 N 208, 560 E
DATUM ELEVATION: G. S. C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 1/2"
DATE: DEC. 27 - 29, 1966 & JAN. 13. 1967.
W. P. 275 - 64 - 2
ENCLOSURE NO

ELEVATION ft	DEPTH ft	STRATIFICATION DESCRIPTION	SAMPLES NUMBER	TYPE	N or Advancement of Sampler	REMARKS
413.9	0	GROUND SURFACE				
		4" TOPSOIL				
		CLAYEY SILT with SAND (glacial till) Hard layered	1	S.S.	35	
410	~4.5					
409.4	5		2	S.S.	71	10 43 35 12
		cobbles				
405	10		3	S.S.	100/6"	
		SAND and SILT with some Clay and Gravel (glacial till) Very Dense				
400	15		4	S.S.	80/5"	W.L. El. 399.4 ft. Dec. 29, 1966
395	20		5	S.S.	70/4"	
390	25		6	S.S.	80/4"	5 38 48 9
385	30		7	S.S.	70/3"	
380	35		8	SS	80/5"	8 32 50 10
		cobbles				
375	40		9	SS	90/3"	
373.6	40.3	END OF BOREHOLE				
370	45					GR SA SI CL — per cent —

PENETRATION RESISTANCE blows per foot: 2.0 4.0 6.0 8.0 10.0
SHEAR STRENGTH lbs. sq. ft.
CONSISTENCY water content %: W_P W W_L; 2.0 4.0 6.0 8.0

VERTICAL SCALE: 1 IN. TO 5 FT.

DOMINION SOIL INVESTIGATION LIMITED

MADE: D. A. M. CH'D:

GEOTECHNICAL DATA SHEET FOR BOREHOLE . . 35 . .

OUR REFERENCE NO. 6 - 12 - 13
Your Ref. № W. J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF C.P.R. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184,476 N 208,678 E
DATUM ELEVATION: G.S.C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 1/2"
DATE: DEC. 23 - 27, 1966 & JAN. 13. 1967.
W. P. 275 - 64 - 2

ENCLOSURE NO

ELEVATION ft	DEPTH ft	STRATIFICATION DESCRIPTION	SAMPLES NUMBER	TYPE	N of Advancement of Sampler
413.1	0	GROUND SURFACE			
410	5	Mixed FILL consisting of Gravel, Sand, Silt and Clay with cobbles some Organic matter	1	S.S.	9 2
			2	S.S.	7
406.6	6.5	SANDY SILT with some CLAY brown grey Very Dense	3	S.S.	90/2"
405	10				
400	13				
	15		4	S.S.	70/3"
395	~18	SILTY FINE SAND with a trace of Clay Very Dense Wet	5	S.S.	60/3"
	20				
390	23	SILTY SAND with GRAVEL and a trace of Clay Very Dense Wet	6	S.S.	50/4"
	25				
385	30		7	S.S.	70/3"
380	~33	CLAYEY SILT with SAND Hard Dry	8	SS	85/6"
	35				
375	40		9	SS	90/6"
372.6	40.5	END OF BOREHOLE			
370	45				

PENETRATION RESISTANCE blows per foot: 2.0 4.0 6.0 8.0 10.0
SHEAR STRENGTH lbs/sq ft

CONSISTENCY water content %: W_P W W_L; 2.0 4.0 6.0 8.0

REMARKS:
- 0 36 49 15
- W.L. El. 401.8' Dec. 27, 1966 4:15 p.m. W.L. El. 400.3' Dec. 29, 1966
- 0 62 33 5
- 27 38 ~30 ~5
- GR SA SI CL — per cent —

VERTICAL SCALE: 1 IN TO 5 FT.

DOMINION SOIL INVESTIGATION LIMITED

MADE D. A. M. CH'D

GEOTECHNICAL DATA SHEET FOR BOREHOLE . 36 . .

OUR REFERENCE NO. 6 - 12 - 13
Your Ref. No. W. J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF C.P.R. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184,342 N 208,718 E
DATUM ELEVATION: G. S. C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 1/2"
DATE: DEC. 23 - 27, 1966
W.P. 275 - 64 - 2

ENCLOSURE NO.

ELEVATION ft	DEPTH ft	STRATIFICATION DESCRIPTION	SAMPLES NUMBER	TYPE	N — Advancement of Sampler	PENETRATION RESISTANCE blows per foot (20 40 60 80 100) / SHEAR STRENGTH lbs/sq ft	CONSISTENCY water content % (Wp W WL) (2.0 4.0 6.0 8.0)	REMARKS
414.4	0	GROUND SURFACE						
		FILL Sand and Silt with traces of Gravel Loose	1	S.S.	8			
410.4 / 410	4 / 5	CLAYEY SILT with SAND (glacial till) Very Stiff	2	S.S.	23			
406.4	~8							
405	10	SANDY SILT with a trace of Clay and a trace of Gravel (glacial till) Very Dense — yellow grey	3	S.S.	100/6"			2 43 51 4
400	15		4	S.S.	65/6"			W.L. El. 400.6 ft. Dec. 29, 1966
395	20	cobbles or boulders	5	S.S.	100/4"			9 38 54 5
390	25		6	S.S.	100/2"			
386.4	~28							
385	30	SANDY SILT with some Clay and traces of Gravel and Shale fragments (glacial till) Very Very Dense	7	S.S.	100/4"			2 35 32 11
380	35		8	S.S.	100/3"			
375	40		9	S.S.	100/1"			
471.4	43							
370	45	CLAYEY SILT with SAND and a trace of Gravel and Shale fragments (glacial till) Hard	10	S.S.	100/4"			4 43 36 17
365	50		11	S.S.	100/4"			
364.1	50.3	END OF BOREHOLE						GR SA SI CL — per cent —

VERTICAL SCALE: 1 IN TO 5 ft

DOMINION SOIL INVESTIGATION LIMITED

MADE D. A. M. CHD

GEOTECHNICAL DATA SHEET FOR BOREHOLE . 37 . .

OUR REFERENCE NO. 6 - 12 - 13
Your Ref. № W.J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF C.P.R. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184,330 N 208,688 E
DATUM ELEVATION: G. S. C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 1/2"
DATE: DEC. 27 - 28, 1966 & JAN. 16. 1967.
W. P. 275 - 64 - 2
ENCLOSURE NO

ELEVATION ft.	DEPTH ft.	STRATIFICATION DESCRIPTION	SAMPLES NUMBER	TYPE	N Advancement of Sampler	REMARKS
415.3	0	GROUND SURFACE				
		4" TOPSOIL Gravelly SAND (FILL) Compact	1	S.S.	15	
410.8	4.5					
410	5	CLAYEY SILT with SAND and trace of Gravel (glacial till) Hard Brown	2	S.S.	39	
407						
405.3	10					
405			3	S.S.	110/6"	0 20 70 10
		Brown Grey	4	S.S.	90/6"	W.L. El. 401.0 ft. DEC. 29. 1966. and JAN. 5. 1967.
400	15	SANDY SILT with some Clay and trace of Gravel (glacial till) Very Dense	5	S.S.	100/6"	2 19 69 10
395	20		6	S.S.	50/2"	
392.3	~23					
390	25	SAND and SILT with some Gravel and trace of Clay (glacial till) Very Dense	7	S.S.	100/6"	
385	30		8	S.S.	100/6"	14 41 37 8
380	35		9	SS	80/3"	
375	40		10	SS	90/3"	2 50 40 8
	40.3	END OF BOREHOLE				
370	45					GR SA SI CL — per cent —

PENETRATION RESISTANCE blows per foot: 20 40 60 80 100
SHEAR STRENGTH lbs/sq ft.

CONSISTENCY water content %: W_P W W_L; 20 40 60 80

VERTICAL SCALE: 1 IN TO 5 FT.

DOMINION SOIL INVESTIGATION LIMITED

MADE: D. A. M. CH'D

OVER

GEOTECHNICAL DATA SHEET FOR BOREHOLE . . 3.8 .

OUR REFERENCE NO. 6 - 12 - 13
Your Ref. Nº W.J. 66 - F - 103
CLIENT: D. H. O.
PROJECT: FROM N. OF CPR. O'HEAD TO N. OF BLOOR ST.
LOCATION: 184,286 N 208,570 E
DATUM ELEVATION: G. S. C.

METHOD OF BORING: AUGERING
DIAMETER OF BOREHOLE: 3 1/2"
DATE: DEC. 22, 1966 & JAN. 13. 1967.
W. P. 275 - 64 - 2

ENCLOSURE NO.

ELEVATION ft	DEPTH ft	STRATIFICATION DESCRIPTION	STRATIFICATION SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES N or Advancement of Sampler	PENETRATION RESISTANCE blows per foot / SHEAR STRENGTH lbs/sq ft	CONSISTENCY water content % w_P W w_L	REMARKS
413.4	0	GROUND SURFACE							
	2	GRAVEL, SAND FILL							
410	5	CLAYEY SILT with SAND (glacial till) hard - brown		1	S.S.	42			
405	9 10			2	S.S.	100/5"			
400	15	Grade SAND and SILT to SANDY SILT with a trace of CLAY probably layered structure (glacial till) traces of Gravel Very Dense Grey		3	S.S.	90/6"			W.L. El. 399.1 Dec. 29, 1966 & JAN. 5. 1967.
									11 41 42 6
395	20			4	S.S.	100/5"			5 24 58 13
									W.L. El. 391.4 Dec. 22, 1966
390	25			5	S.S.	100/4"			
385	30			6	S.S.	100/5"			
380	35			7	S.S.	100/2"			
		cobbles							
375	~38 40	CLAYEY SILT with SAND Hard (glacial till)		8	S.S.	90/6"			
	40.5	END OF BOREHOLE							
370	45								GR SA SI CL — per cent —

VERTICAL SCALE 1 IN TO 5 FT

DOMINION SOIL INVESTIGATION LIMITED

MADE: D. A. M. CH'D Rocko

66-F-103

W. R. Sterman,
Principal Foundation Engineer,
Room 1[illegible] Res. Building.
Attention Mr. R. Selby

Bridge Division,
Downsview, Ontario.

September 30, 1965.

Preliminary Foundation Investigation
for Bridge Structures on Highway #27
between Q.E.W. and Kleinview Side Rd.
S.P. 27[illegible]-3 District # 6.

This is an extension of the preliminary foundation investigation of the intersection of Q.E.W. and Highway 27 etc.

Confirming our telephone conversation with Mr. Selby of September 30, this investigation would include 4 structures along Highway 5 (Dundas Street) and one each at Bloor St., Burnhamthorpe Road, and Eastern Road.

It was agreed upon that the only available information at this time, namely the Functional Planning Report, will be sufficient for this preliminary investigation.

Kmd/ky
c.c. E. McCabe
R. Forrest

C. J. Jones,
for J. . Curtis,
Regional Bridge Location Engineer.

FOUNDATION INVESTIGATION REPORT
For
The Proposed Dundas St. and Hwy. #27
Interchange and Bloor St. Underpass,
Hwy. #27 -- District #6 (Toronto)
W.J. 66-F-103 -- W.P. 275-64-2

1. INTRODUCTION:

A memo by the Regional Bridge Location Engineer, Mr. W. S. Melinyshyn, dated December 8, 1966, was received by this Section, requesting a foundation investigation at the site of the proposed Hwy. #27 and Dundas Street interchange and Bloor Street underpass.

The request calls for investigations at the site of seven structures, all of which are delineated in Contract #5, which in turn, is part of the several contracts covering the proposed improvement of Hwy. #27.

A limited scale field investigation, containing some 7 boreholes, was already carried out at the site by the Foundation Section in 1965, and some of these boreholes are also incorporated in this report. The recent field work as well as the laboratory testing and the compilation of the geotechnical data sheets, were performed by Dominion Soil Investigation Ltd.

Presented in this report are the results of this investigation, together with recommendations pertaining to the foundations of the structures.

In the first part of the report, a general description of the site and subsoil conditions are given; the second part deals with each individual structure separately, presenting a short description of the soils and detailed recommendations for the footings.

cont'd. /2 ...

PART ONE

2. DESCRIPTION OF THE SITE:

Contract #5 covers the section of Hwy. #27 from north of the C.P.R. overhead to north of Bloor Street. The vicinity of the existing highway is generally flat, urban development with residential and light industrial buildings.

The area belongs to the "Iroquois Plain" physiographic region, formed by undulating till plains above the lowland, bordering Lake Ontario. This low-lying terrain was inundated by a body of water known as Lake Iroquois in late Pleistocene times. At this portion of the region, some alluvial terrace lands may be found behind huge baymouth bars.

3. FIELD AND LABORATORY INVESTIGATION PROCEDURE:

Thirty-seven boreholes, and adjacent to the holes, 37 cone penetration tests were carried out at the site of the ten proposed structures, during the recent field investigation.

The general layout of the site, showing the proposed structures, may be seen on attached Drawing #66-F-103A.

The borings were carried out by means of two conventional diamond core rigs adapted for soil sampling purposes, and two continuous flight augers. 2-in. O.D. split-spoon samplers were used to recover soil samples. The number of hammer blows necessary to advance the sampler one foot under an impact of 350 ft.-lbs. was recorded as the standard penetration 'N' value.

cont'd. /3 ...

3. FIELD AND LABORATORY INVESTIGATION PROCEDURE: (cont'd.) ...

Soil samples were visually examined and identified upon recovery and again in the laboratory. Laboratory tests of natural moisture content, Atterberg limits and grain-size distribution, were performed on representative soil specimens. The results of the laboratory and field tests are compiled on the geotechnical data sheets accompanying this report, together with the grain-size distribution curves.

4. GENERAL SOIL CONDITIONS:

The overburden within the entire area investigated was found to be a heterogeneous mixture of glacial till. Due to the nature of such glacial drifts, the classification of the various strata based on the individual samples, could sometimes be misleading. From the practical point of view, two main bodies of the glacial overburden may be differentiated. The coarse-grained portion was variously identified as silty sand to sandy silt, fine sand, silt, gravelly sand, etc. The fine-grained or cohesive portion is a clayey silt with some gravel and sand. At a few locations the uppermost ten-ft. zone exhibited firm to stiff consistency or loose to compact relative density. Otherwise, the deposit was found to be very dense or hard, corresponding to Standard Penetration 'N' values of much in excess of 100 blows/ft.

In order to ascertain the depth of the overburden, several boreholes were advanced into the bedrock. The bedrock was identified to be shale with intermittent limestone, the upper, approx. 8 - 10 ft. thickness of which was usually badly weathered. The surface of the weathered bedrock lies around el. 367 - 370 ft. The sound rock commences at el. 357 - 356 ft. Some 5 - 7 ft. depth of the sound rock was proved in a few locations by diamond drilling. The bedrock at the proposed crossing at Etobicoke Creek was observed to be somewhat lower.

cont'd. /4 ...

7. DUNDAS STREET UNDERPASS AT WEST MALL: (cont'd.) ...
(W.P. 279-64-2)

7.2) Recommendations: (cont'd.) ...

In contemplating perched abutments, the footings for the abutments may be placed at or below el. 410 ft., using the same design load of 4 t.s.f. Footing excavation below el. 403 - 405 ft. will be within the sand and silty sand stratum, where dewatering problems will likely arise.

8. DUNDAS STREET OVERPASS AT EAST MALL - (VICKERS ROAD):
(W.P. 279-64-5)

8.1) Soil Conditions:

A total of six boreholes was placed at the site of the proposed overpass. The holes were numbered 33, 34, 35, 36, 37 and 38.

A 3 - 7 ft. thick layer of mixed fill, occasionally contaminated with organic matter was found to be the surficial deposit in most of the boreholes. Underlying the fill, a stratum of clayey silt with sand and traces of gravel (glacial till) was encountered, the lower boundary of which ranges between el. 400 and 409 ft. The consistency of the clayey silt is very stiff to hard. A 30 - 35 ft. thick sandy silt to silty sand with some clay and gravel deposit follows the clayey silt, exhibiting very dense relative density. Boreholes #34 and 37 were terminated within the sandy silt at el. 373 - 375 ft. The rest of the borings penetrated into a second stratum of clayey silt with gravel of hard consistency, at around el. 371 - 380 ft.

No bedrock was observed within the investigated approx. 50 ft. depth.

The groundwater level was found to be at el. 399 - 401 ft. at the time of the field work.

The locations and elevations of the borings, with three subsoil cross sections are plotted on Drawing #66-F-103H.

cont'd. /8 ...

8. DUNDAS STREET OVERPASS AT EAST MALL - (VICKERS ROAD):

(W.P. 279-64-5)

8.2) Recommendations:

A three-span structure is proposed above the future East Mall (existing Vickers Rd.). The design grade of Dundas St. will be around el. 418 - 419 ft.; consequently, the finished grade of the East Mall is estimated to be around el. 400 ft., some 13 - 14 ft. deeper than the existing ground level.

The entire structure may be supported on spread footings at a minimum depth of four ft. below finished grade of the proposed East Mall. Up to 4 t.s.f. design load may be assumed on the footing bases.

Footings for spill-through type abutments may be placed higher, but not above el. 406 ft. at the east abutment and not above el. 407 ft. at the west. A safe pressure of 4 t.s.f. may also be utilized at or below the suggested elevations.

Dewatering problems may be experienced in the footing excavations within the sandy silt to silty sand stratum.

9. NORTHBOUND BASKET-WEAVE JUST SOUTH OF BLOOR STREET:

(W.P. 266-66)

9.1) Soil Conditions:

Boreholes drilled at the site of the structure were numbered 13 - 16, inclusive.

Below a 3 - 4 ft. thick clayey and sandy, slightly organic silt fill, the cohesive glacial till was encountered. The consistency of the 4 - 8 ft. clayey silt stratum improves with depth, being very stiff at the top and hard beneath. From el. 412 - 419 ft. a very dense sandy silt to silty sand with some clay and gravel was observed extending to el. 375 - 387 ft. The total thickness of the deposit is about 40 ft. B.H.'s #15 and 16 were terminated in a second layer of clayey silt with sand, having hard consistency and containing large size boulders.

cont'd. /9 ...

TABLE OF CONTENTS

PART ONE

PART TWO

GEN. FILES

23-67-83

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. B. R. Davis,
Bridge Engineer,
Bridge Division,
Admin. Bldg.

Attention: Mr. S. McCombie

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

Date: February 21, 1967

Our File Ref.

In Reply To:

FEB 28 1967

Subject:

FOUNDATION INVESTIGATION REPORT
For
The Proposed Dundas St. and Hwy. #27
Interchange and Bloor St. Underpass,
Hwy. #27 -- District #6 (Toronto)

W.J. 66-F-103 -- W.P. [illegible]

Attached, we are forwarding to you, our detailed foundation investigation report on the subsoil conditions existing at the above structure sites.

We believe that you will find the factual data and recommendations contained therein, adequate for your design requirements. Should additional information be required, please do not hesitate to contact our Office.

A. G. Stermac
PRINCIPAL FOUNDATION ENGINEER

AGS/RdeF
Attach.
cc: Messrs. B. R. Davis (2)
H. A. Tregaskes
D. W. Farren
G. K. Hunter (2)
P. Allen
W. B. Melinyshyn
T. J. Kovich
B. A. Singh

Foundations Files
Gen. Files ✓

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. A. Stermac,
Principal Foundation Engineer,
Room 107, Lab. Bldg.

From: Bridge Division,
Downsview, Ontario.

Date: November 24, 1966.

Our File Ref.

In reply to

Subject: W.P. 275-64-2, Contract #5,
Dundas and Hwy. #27 Interchange and Bloor St. Underpass,
District No. 6.

This will confirm my verbal request for foundation investigation to be carried out for the structures within the Dundas interchange and the Bloor St. Underpass as delineated in Contract #5.

I have approached the consultants for drawings (100' scale) of this interchange and have been promised them by 30th Nov. 1966. Three copies will be forwarded to you as soon as mark up is completed.

The contract schedule of November 16, 1966 calls for a foundation report ~~by 1st~~ March 1966. In view of the work already done here and the reasonable time available consideration should be given to completing an individual report for each structure prior to preliminary structure plans. Within a few days after 1st December, 1966 we can supply you with borehole locations for the proposed structures. I trust you will give this your consideration.

J. C. McAllister

JCMcA/im
cc. A. Crowley

J. C. McAllister,
for W. Melinyshyn,
Regional Bridge Location Engineer.

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. A. G. Stermac,
Principal Foundation Engineer,
Room 107,
Lab. Building.

From: Bridge Division,
Downsview, Ontario.

Date: December 8th, 1966.

Our File Ref.

In Reply to

Subject: W.P. 275-64-2, Contract #5,
Dundas and Hwy. #27 Interchange
and Bloor Street Underpass,
Hwy. #27, District #6.

Attached are three prints of 100' schematic drawing of the proposed interchange at Dundas Street marked up to show the approximate location of bridge footings as promised in my memo of 24th November, 1966.

You will notice that the layout of the proposed structures differs somewhat from the structures indicated on Mr. Strain's program dated 16th, November 1966. Dundas Street at the west mall has been combined with S.B. ramp of Hwy. #27 under West Mall. (i.e. W.P. 279-64-2 and -3 are combined). Also a grade separation is now called for East of Hwy. #27 on Dundas Street as shown on the plan.

Mr. Strain will be revising his program in the near future. When it is available a copy will be forwarded to you.

The alignment for the widening or replacement is not yet decided. When it is, a layout will be forwarded to you for investigation.

J. C. McAllister,
for W. S. Melinyshyn,
Regional Bridge Location Engineer.

JCMcA/cew
Attach.

Contract 5 (Rambis)

W. P. 279-54-2	CDGB Pav.	From N. of C. P. R. O'Head to N. of Bloor St.
W. P. 279-64-1	Struct.	Hwy. 27 O'Pass at Dundas St.
W. P. 279-64-2	Struct.	Dundas St. U'Pass at West Mall and S. Bd. ramp ~~Hwy.~~
W. P. 279-64-5	Str. St.	Dundas St. O'Pass at E. Mall.
W. P. 256-66	Struct.	N. Bd. Basketweave just S. of Bloor St.
W. P. 267-66	Struct.	S. Bd. Basketweave just S. of Bloor St.
W. P. 37-65	Struct.	Hwy. 27 U'Pass at Bloor St.
W. P. 277-66	Struct.	~~Widening~~ present Etobicoke Creek Bridge on Dundas Street just W. of Hwy. 27.

Program

Start Construction		Expend. 1968	2,000,000
Comp. Construction	Nov. 15/70	Expend. 1969	2,500,000
		Expend. 1970	1,500,000
		Total Value	6,500,000

Pre-Engineering Schedule

	Comp. Date
Planning	Comp.
Struct. Geometrics	Feb. 15/67
Foundation Report	Mar. 1/67
Preliminary Property Request	Jan. 16/67
Soils Report	Feb. 15/67
Fd. A Property Request	Apr. 12/67
Bridge-Comp. Dg. & Plans	Sept. 13/67
Contraflume - Comp. Dg. & Plans	Oct. 20/67
Regional (RA)	Nov. 6/67
Head Office (HO)	[illegible]
Property Required	[illegible]
Advertise	Apr. 10/68
Award	May 28/68

DOMINION SOIL INVESTIGATION LIMITED

ROCKFORD BOULEVARD - SCARBOROUGH ONTARIO CANADA - TELEPHONE 751-6545

BRANCH
[illegible] QUEEN'S AVENUE
LONDON, ONTARIO
TELEPHONE 6[illegible]

FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
[illegible] BROMPTON ROAD,
KINGSTON 3, JAMAICA, WEST INDIES
TELEPHONE: [illegible]

January 31st, 1967.

Department of Highways, Ontario,
Materials & Testing Division,
Downsview Avenue,
Downsview, Ontario.

Attention: Mr. A. Barsvary, P. Eng.

Re: Your Ref: W.J. 66-F-103
Our Ref: 6-12-13

Dear Sirs:

Enclosed please find two preliminary prints of the Geotechnical Data Sheet and Grain Size Distribution Sheet of the following boreholes:

Nos. 27, 29, 35, 36 and 38

The data sheet of Borehole No. 38 has been modified in accordance with your requirements, therefore it supersedes the one submitted to you on January 23rd, 1967.

Yours truly,

DOMINION SOIL INVESTIGATION LIMITED,

L S Rolko

L. S. Rolko, P. Eng.

LSR/jvm
Encls.

DOMINION SOIL INVESTIGATION LIMITED

ROCKFORD BOULEVARD · SCARBOROUGH ONTARIO CANADA · TELEPHONE 751-8565

BRANCH
365 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GL. 3-3851

FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
84 SHERIFFORD ROAD,
KINGSTON 3, JAMAICA, WEST INDIES
TELEPHONE: 66896

2nd February 1967.

Department of Highways, Ontario,
Materials and Testing Division,
Downsview Avenue,
Downsview, Ontario.

Attention: Mr. A. Barsvary, P.Eng.

Re: Our Ref. No: 6-12-13
Your Ref: W.J. 66-F-103

Dear Sirs,

Enclosed please find two copies each of the Geotechnical Data sheets and Grain Size Distribution sheets for boreholes No. 23, 28 and 33.

Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

J. Hewitt, P.Eng.

JH/me
Enclosures.

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. B. N. Davis,
Bridge Engineer,
Bridge Division.
Admin. Bldg.

Attention: Mr. S. McCombie

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

Date: May 26, 1967

Our File Ref.

In reply to MAY 31 1967

Subject:

FOUNDATION INVESTIGATION REPORT
For
The Proposed Bridge #2, Bridge #9,
And W.B. Basketweave,
Hwy. #27 and Dundas St. Interchange,
District #6 (Toronto).
W.J. 66-F-103 -- W.P. 275-64-2

In a memo dated April 25, 1967, Mr. W. S. Helingshyn, Regional Bridge Location Engineer, requested foundation investigations at the sites of three bridges. These structures belong to the proposed Hwy. #27 and Dundas St. interchange, but were recently changed or added; consequently, they were not included in our original Foundation Report W.J. 66-F-103.

Supplementary field and laboratory investigations were therefore undertaken by this Section to enable us to give recommendations for the requested structure foundations.

Attached, we are forwarding to you, our foundation reports for the above bridges, namely: Bridge #2 (W.P. 275-64-2), Westbound Basketweave (W.P. 266-66), and Bridge #9 (W.P. 275-64-3). Please insert these pages and drawings into your copy(s) of the original report W.J. 66-F-103.

Your attention is called to the section entitled: "General Remarks about Foundations" - Part Two (2), page four (4) of the original report. Suggestions given under this heading are valid for the foundations of the bridges sent to you herewith.

A. G. Stevens
PRINCIPAL FOUNDATION ENGINEER

AGS/Kdef
Attach.
cc: Messrs. B. N. Davis (2)
K. A. Trogerlee
D. W. Patton
G. W. Hunter (2)
F. Allen
W. S. Helingshyn
T. J. Kovich
B. A. Singh

Foundations Files
Gen. Files

PART TWO

5. GENERAL REMARKS ABOUT FOUNDATIONS:

5.1) Subsoil within the entire site investigated appears to exhibit sufficient strength for spread type foundations at relatively shallow depths. A four-ft. cover should be maintained above the base of the footings for frost protection.

5.2) Where perched abutments are supported on steel tube piles, it should be specified that no bouldery fill be placed at the locations of the footings. The working load on the piles must be checked during pile driving by means of the Hiley formula - (O.H.D. Standards DD 1218 and 1219).

5.3) Due to the high groundwater levels and the presence of the sandy silt to silty sand stratum, dewatering schemes for the footing excavations within this granular layer are likely to be necessary. Interlocking sheet piles, caissons, or well-point dewatering system, may be used. Sheet-piles or caissons should be lowered to a depth below the base of the excavation equal to the height of water above it, to prevent quick conditions of the soil.

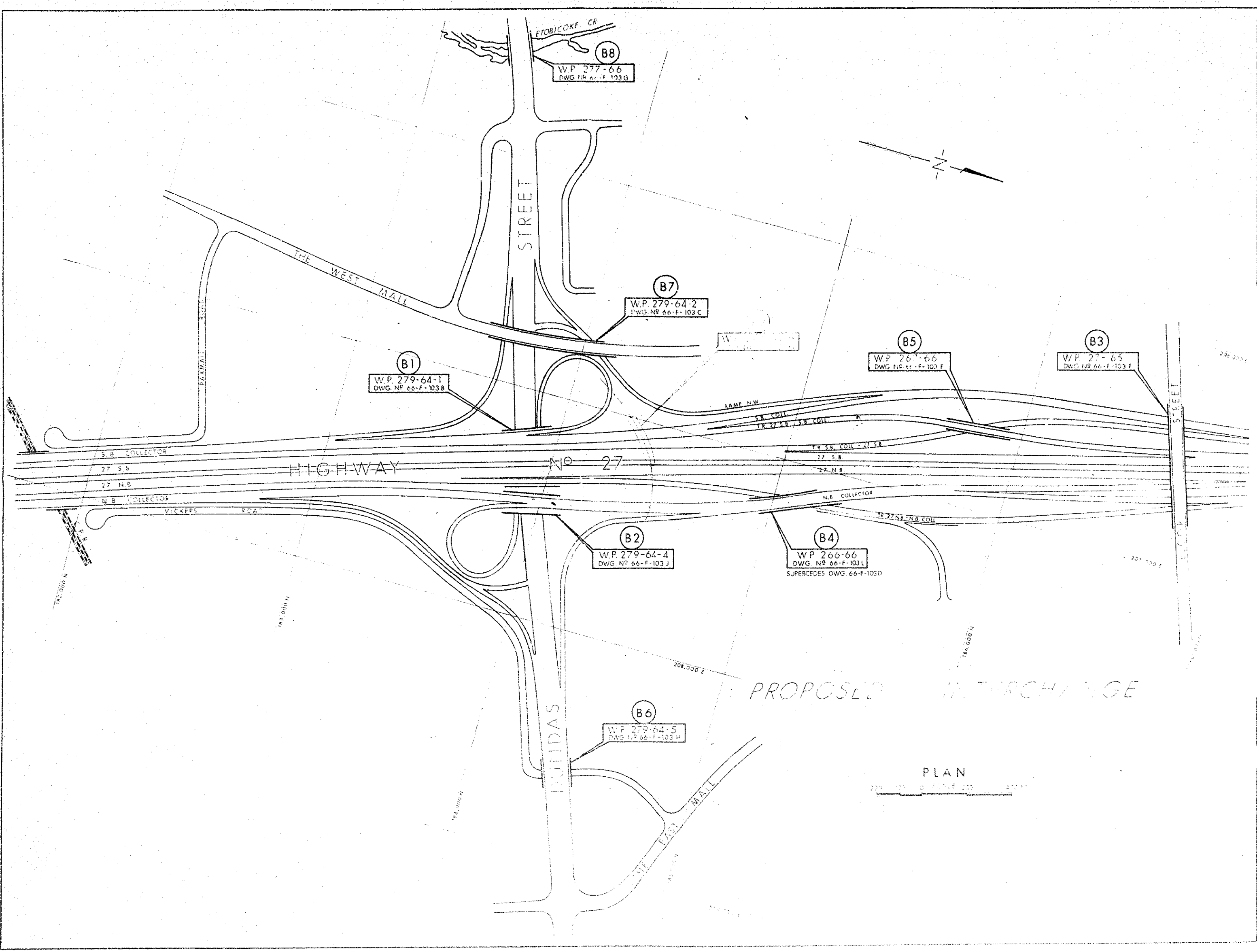
5.4) No stability problems are foreseen for the approach fills and cuts with 2 horizontal to 1 vertical slopes.

6. HWY. #27 OVERPASS AT DUNDAS STREET:
(W.P. 279-64-1)

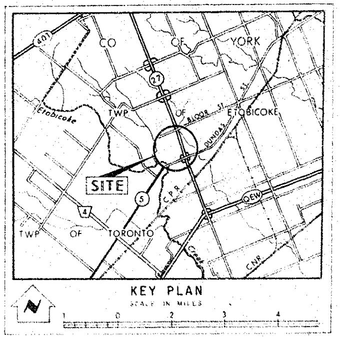
6.1) Soil Conditions:

Some 8 boreholes were drilled at the site of the proposed structure during the recent field investigation, and they were numbered from 25 to 32, inclusive. Two borings numbered 1 and 2, drilled in October 1965, are also incorporated in the stratigraphy. Predominantly silty sand to sandy silt with some gravel and clay material was recovered by the samples. The granular type glacial deposit exhibited very dense relative density in almost every

cont'd. /5 ...



PLAN



KEY PLAN

LEGEND

- ● Bore Hole
- ⊕ Cone Penetration Hole
- Bore & Cone Penetration Hole
- Water Levels established at time of field investigation

NO.	ELEVATION	STATION	OFFSET

- NOTE -

The boundaries between soil strata have been established only at Bore Hole locations. Between Bore Holes the boundaries are assumed from geological evidence and may be subject to considerable error.

BRIDGE 4 MOVED & BRIDGES 2 & Y ADDED, GENERAL LAYOUT ALTERED

DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS - ONTARIO

CONTRACT No.5 - DUNDAS

NORTH of C.P.R. to NORTH of BLOOR STREET

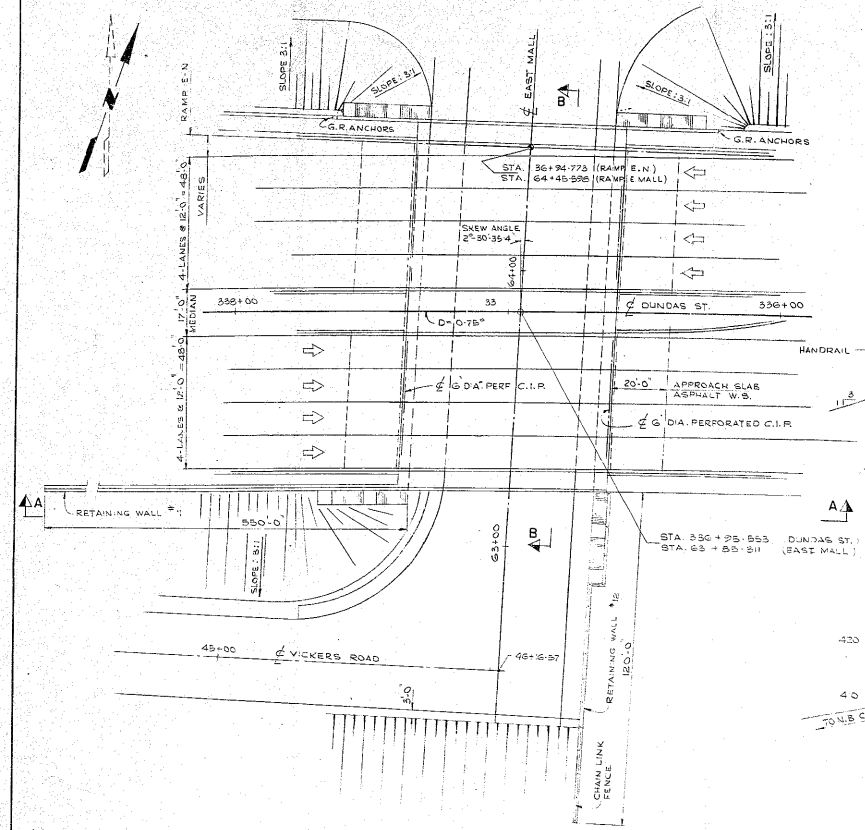
KING'S HIGHWAY NO. 27 IMPROVEMENT DIST NO. 6
CO. YORK METROPOLITAN TORONTO
TWP. ETOBICOKE LOT CON.

GENERAL LAYOUT

66-F-103A

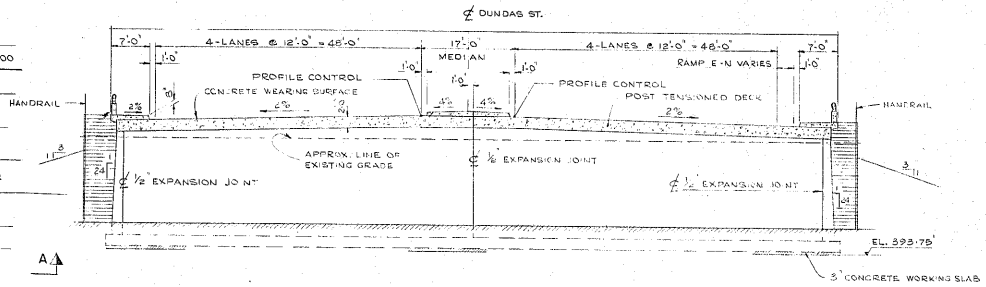
PRINT RECORD		
NO.	FOR	DATE

DEFECTS IN NEGATIVE DUE TO CONDITION OF ORIGINAL DOCUMENT



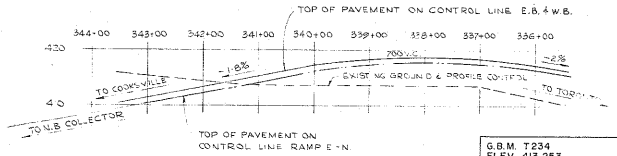
PLAN

SCALE: 1" = 20'-0"



SECTION B-B

SCALE: 1" = 10'-0"



PROFILE OF DUNDAS ST. AND RAMP E-N

SCALE: HORIZ. 1" = 100'-0"
VERT. 1" = 10'-0"

G.B.M. T234
ELEV. 413.253
WEBSTER AND SONS LTD. (BUILDING SUPPLIES) SHIPPING AND RECEIVING OFFICE, A BRICK BUILDING ON SOUTHERLY SIDE OF DUNDAS STREET, 0.4 MILE EASTERLY FROM HIGHWAY No.27 AND OPPOSITE PAULART DRIVE; TARGET IN NORTHERLY OR FRONT CONCRETE FOUNDATION WALL, 12 INCHES FROM NORTH-EASTERLY CORNER AND 2 INCHES BELOW BRICKWORK.

GENERAL NOTES:

CLASS OF CONCRETE:

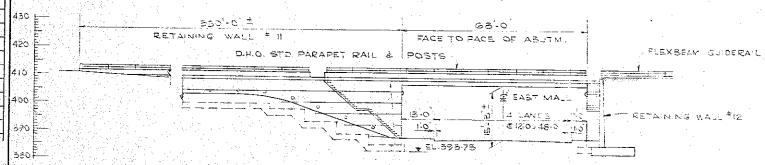
PRESTRESSED DECK	5,000 P.S.I.
MEDIAN, CURB & PARAPET	4,000 P.S.I.
REMAINDER	3,000 P.S.I.

CLEAR COVER ON REINFORCING STEEL:

DECK	TOP	2"
	BTM.	1 1/2"
FOOTINGS, ABUTMENTS & RETAINING WALLS		3"
CURBS		2"
PARAPET WALLS		1 1/2"

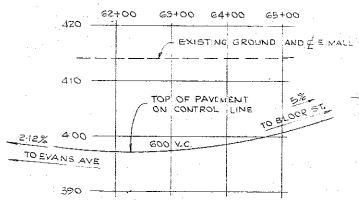
PRINT RECORD

No.	FOR	DATE



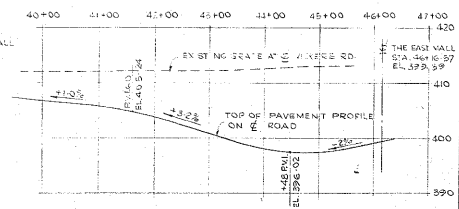
ELEVATION A-A

SCALE: 1" = 20'-0"



PROFILE OF EAST MALL

SCALE: HORIZ. 1" = 100'-0"
VERT. 1" = 10'-0"



PROFILE OF VICKERS ROAD

SCALE: HORIZ.: 1" = 100'-0"
VERT.: 1" = 10'-0"

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS ONTARIO
BRIDGE DIVISION

DE LEUW, CATHER & COMPANY OF CANADA LIMITED
CONSULTING ENGINEERS TORONTO

66-F-103

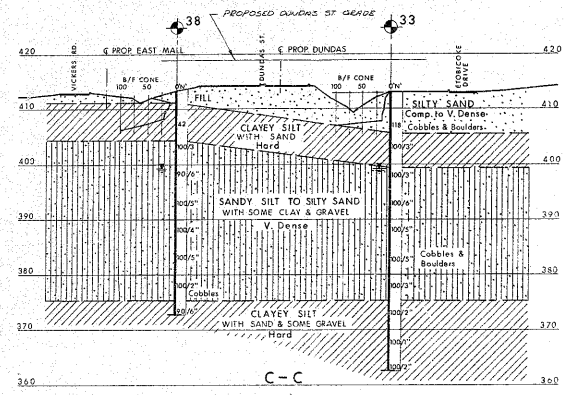
BRIDGE No. 6

DUNDAS ST. OVER THE EAST MALL

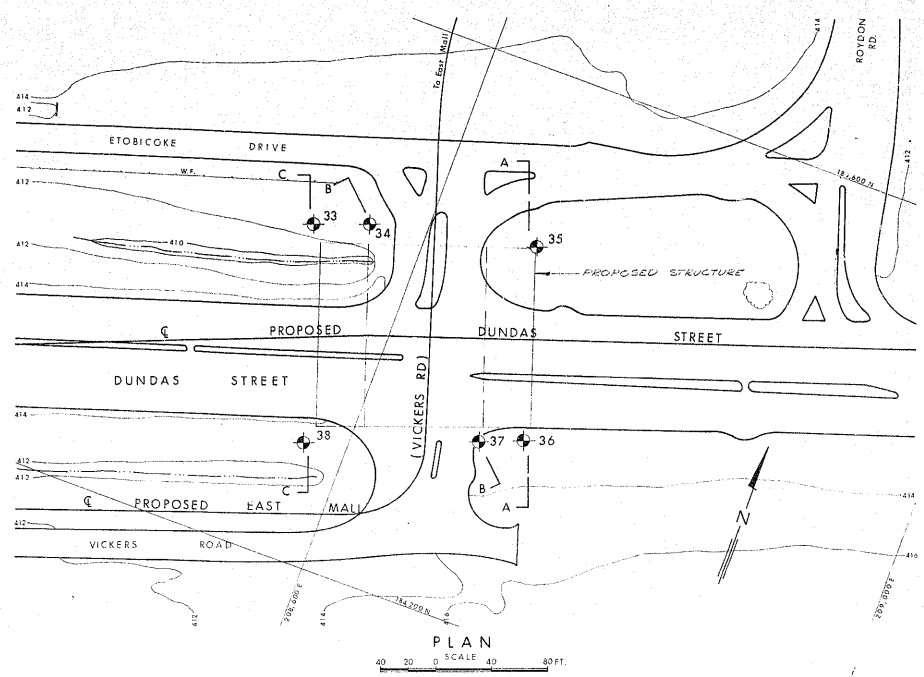
KING'S HIGHWAY No. 5 (DUNDAS ST.) DIST. No. 6
CO. YORK DUNDAS & HWY 27 INTERCHANGE
TWP. ETOBICOKE LOT CON.

PRELIMINARY GENERAL ARRANGEMENT

APPROVED		BRIDGE ENGINEER		SITE No. 37-796	W.P. No. 279-64-S
DESIGN	D.H.	CHECK		CONTRACT No.	
DRAWING	W.W.	CHECK		DRAWING No.	D620.1 - PI
DATE	AUG. 67	LOADING	HS20-44		

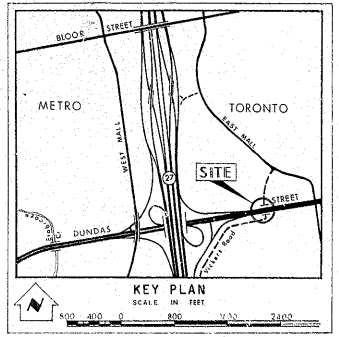


C – C



PLAN

SCALE 40 20 0 40 80 FT.



KEY PLAN

SCALE IN FEET

800 400 0 800 1600 2400

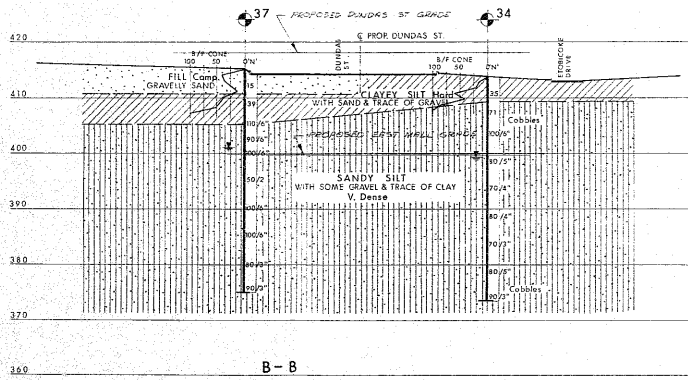
LEGEND

- Bore Hole
- Cone Penetration Hole
- Bore & Cone Penetration Hole
- Water Levels established at time of field investigation. DEC. 66 & JAN 67

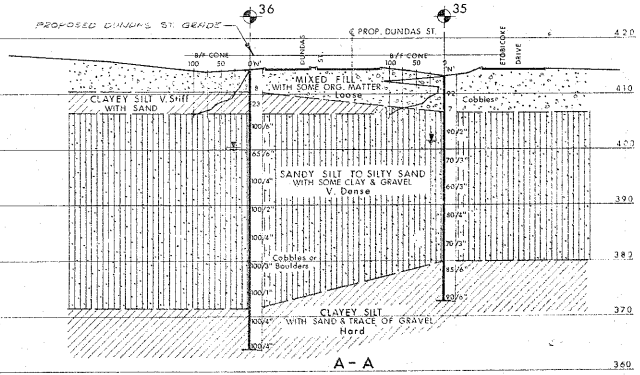
NO.	ELEVATION	CO-ORDINATES NORTH	CO-ORDINATES EAST
33	413·1	184,436	208,522
34	413·9	184,450	208,563
35	413·1	184,476	208,628
36	412·4	184,342	208,218
37	412·3	184,330	208,688
38	413·4	184,266	208,570

– NOTE –

The boundaries between soil strata have been established only at Bore Hole locations. Between Bore Holes the boundaries are assumed from geological evidence and may be subject to considerable error.



B – B



A – A

SECTIONS

SCALE

VERT. 10 5 0 10 20 FT.

HORIZ. 40 20 0 40 80

PRINT RECORD		
NO.	FOR	DATE

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS – ONTARIO

MATERIALS & TESTING DIVISION – FOUNDATION SECTION

DUNDAS STREET OVERPASS AT EAST MALL (VICKERS ROAD)

KING'S HIGHWAY NO. 27 IMPROVEMENT DIST. NO. 6

CO. YORK METRO TORONTO

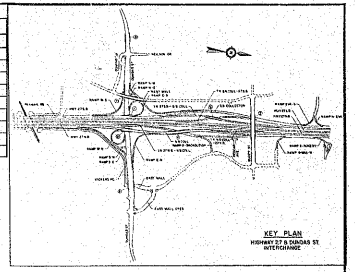
TWP. ETOBICOKE LOT CON.

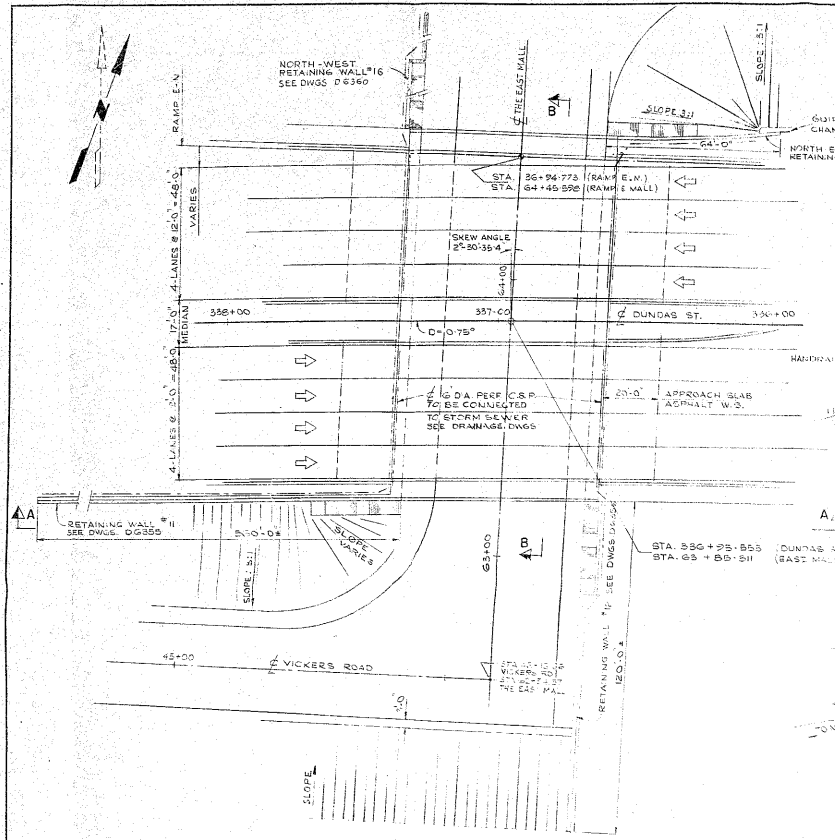
BORE HOLE LOCATIONS & SOIL STRATA

SUBM'D. A.B	CHECKED	W.P. NO. 279-64-5	M.&T. DRAWING NO. 66-F-103H
DRAWN S.O.	CHECKED	JOB. NO. 66-F-103	
DATE 17 FEB. 1967		SITE NO.	BRIDGE DRAWING NO.
APPROVED		CONT. NO.	

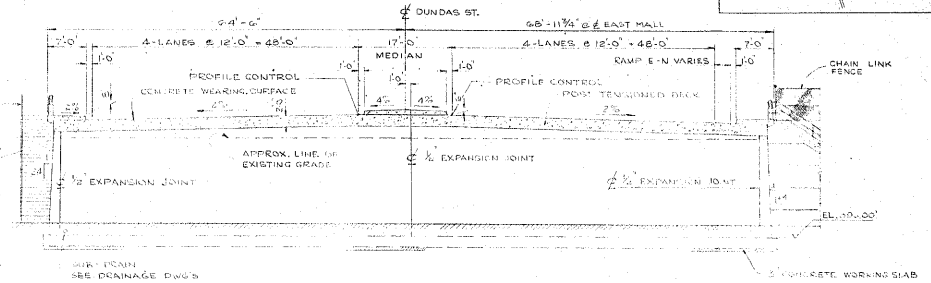
LIST OF DRAWINGS	
DWG. No.	DESCRIPTION
D 6201-1	GENERAL ARRANGEMENT
D 6201-2	FOUNDATION LAYOUT
D 6201-3	EAST ABUTMENT
D 6201-4	WEST ABUTMENT
D 6201-5	DECK ALIGNMENT DETAILS
D 6201-6	DECK
D 6201-7	DECK STRESSING PLAN
D 6201-8	DECK STRESSING DETAILS
D 6201-9	CURBS MEDIANS & PARAPETS

LIST OF DRAWINGS	
DWG. No.	DESCRIPTION
D 6201-10	APPROACH SLABS
D 6201-11	NORTH EAST RETAINING WALL
D 6201-12	N.E. RETAINING WALL REINFORCEMENT
D 6201-13	STANDARD STEEL PARAPET RAIL
D 6201-14	PIPE HANDRAIL TYPE I
D 6201-15	STANDARD DETAILS

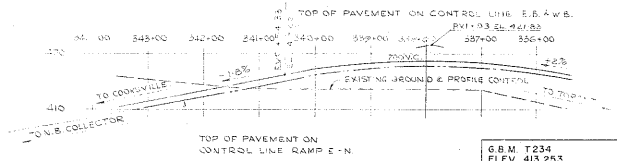




PLAN
SCALE 1" = 20'-0"



SECTION B-B
SCALE: 1" = 10'-0"



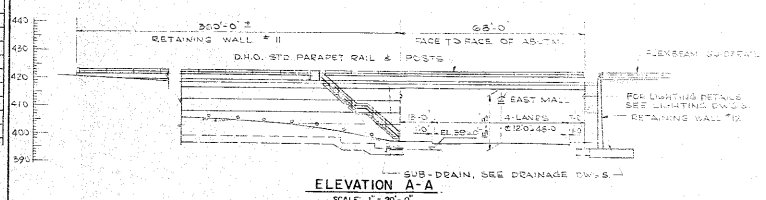
PROFILE OF DUNDAS ST. AND RAMP E-N
SCALE: HORIZ. 1" = 100'-0"
VERT. 1" = 10'-0"

G.B.M. T234
ELEV. 413.253
WEBSTER AND SONS LTD. (BUILDING SUPPLIES) SHIPPING AND RECEIVING OFFICE, A BRICK BUILDING ON SOUTHERLY SIDE OF DUNDAS STREET, 0.4 MILE EASTERLY FROM HIGHWAY No. 27 AND OPPOSITE PAULART DRIVE; TABLET IN NORTHERLY OF FRONT CONCRETE FOUNDATION WALL, 12 INCHES FROM NORTHWESTERLY CORNER AND 2 INCHES BELOW BRICKWORK.

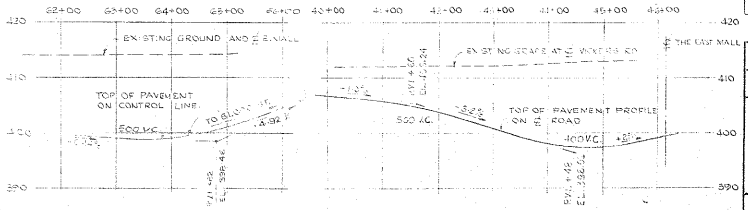
GENERAL NOTES:
CLASS OF CONCRETE:
PRESTRESSED DECK 5,000 P.S.I.
MEDIAN, CURB & PARAPET 4,000 P.S.I.
REMAINDER 3,000 P.S.I.
CLEAR COVER ON REINFORCING STEEL:
DECK TOP 2"
BTM. 1 1/2"
FOOTINGS, ABUTMENTS & RETAINING WALLS 3"
CURBS "
PARAPET WALLS 1 1/2"

CIVIL
D. CUMMING

PRINT RECORD		
No.	FOR	DATE
1	125	29 mc



ELEVATION A-A
SCALE: 1" = 20'-0"



PROFILE OF EAST MALL
SCALE: HORIZ. 1" = 100'-0"
VERT. 1" = 10'-0"

PROFILE OF VICKERS ROAD
SCALE: HORIZ. 1" = 100'-0"
VERT. 1" = 10'-0"

REVISIONS		
DATE	BY	DESCRIPTION

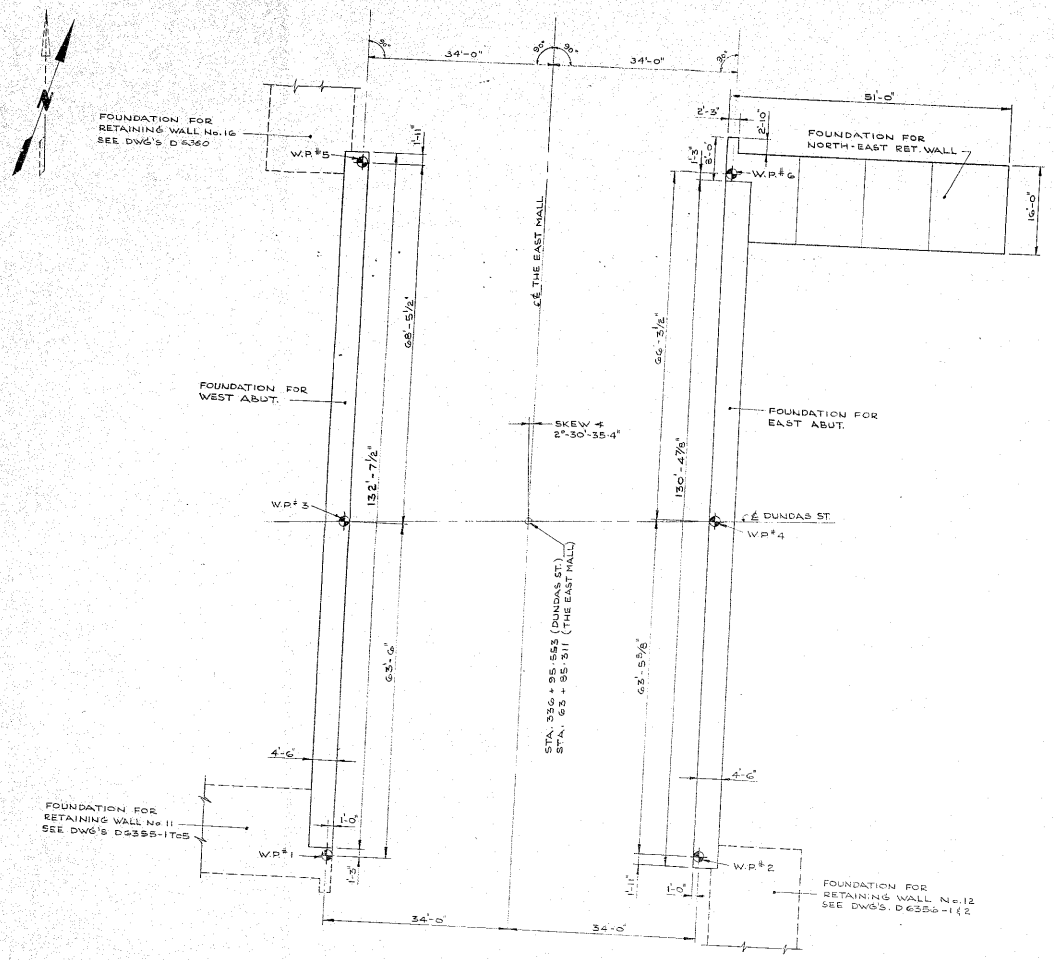
DEPARTMENT OF HIGHWAYS ONTARIO 66-5-43
BRIDGE DIVISION
DE LEUW, CATHER & COMPANY OF CANADA LIMITED
CONSULTING ENGINEERS TORONTO

BRIDGE No. 6
DUNDAS ST. OVER THE EAST MALL

KING'S HIGHWAY No. 5 (DUNDAS ST.) DIST. No. 6
CO. YORK DUNDAS & HWY 27 INTERCHANGE
TWP. ETOBICOKE LOT CON.

GENERAL ARRANGEMENT

APPROVED	BRIDGE ENGINEER			SITE No. 37-796	W.P. No. 279-64-5
DESIGN	D.H.	CHECK	E.F.	CONTRACT Nos.	68-83
DRAWING	W.W.	CHECK		DRAWING No.	D6201-1
DATE	DEC. 67	LOADING	HS20-44		



FOUNDATION LAYOUT

SCALE: 1" = 10'-0"

WORKING POINT CO-ORDINATES		
POINT No.	NORTH	EAST
1	184,315.51	208,621.15
2	184,338.91	208,685.07
3	184,376.04	208,602.00
4	184,399.42	208,665.93
5	184,441.32	208,581.86
6	184,462.63	208,645.94

PRINT RECORD		
No.	FOR	DATE
1	05	29/03

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS ONTARIO 66-F-63
BRIDGE DIVISION

DE LEUW, CATHER & COMPANY OF CANADA LIMITED
CONSULTING ENGINEERS TORONTO

BRIDGE No. 6

DUNDAS ST. OVER THE EAST MALL

KING'S HIGHWAY No. 5 (DUNDAS ST.) DIST. No. 6
CO. YORK DUNDAS & HWY. 27 INTERCHANGE
TWP. ETOBICOKE LOT CON.

FOUNDATION LAYOUT

APPROVED B. CUMMINS BRIDGE ENGINEER

CIVIL B. CUMMINS REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO

DESIGN	D.H.	CHECK	S.F.	SITE No. 37-796	W.P. No. 279-64-5
DRAWING	P.S.	CHECK		CONTRACT Nos.	68-83
DATE	DEC. 67	LOADING	HS20-44	DRAWING No.	D6201-2