

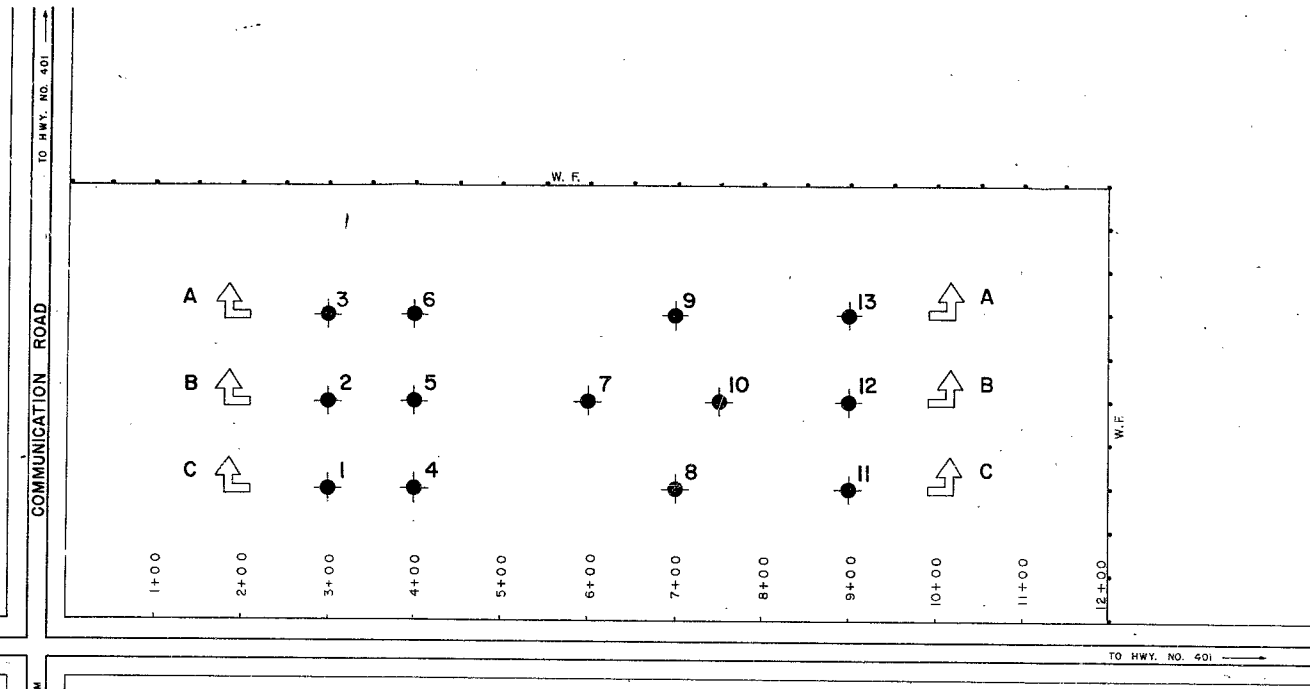
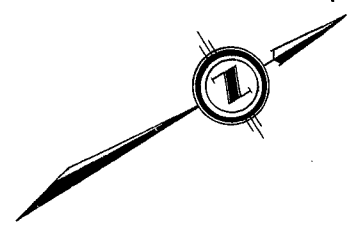
62-F-42

HWY 401

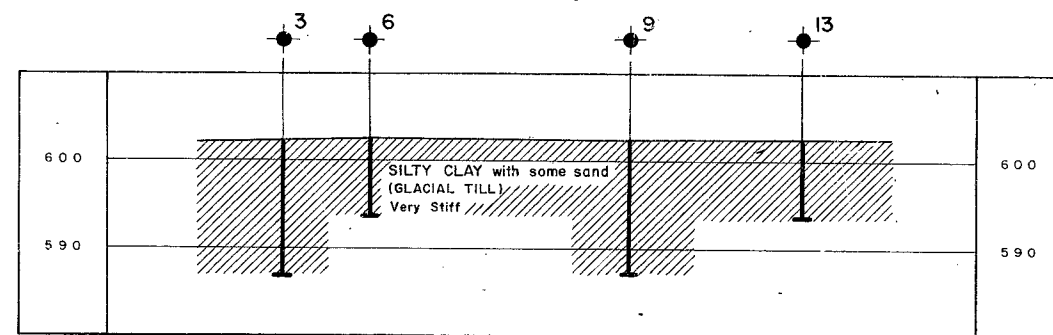
KENT CENTRE

PATROL YARD

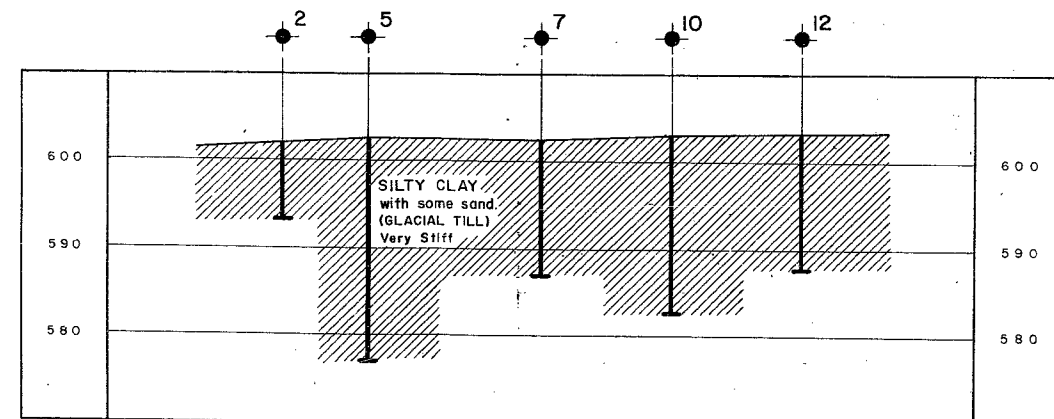
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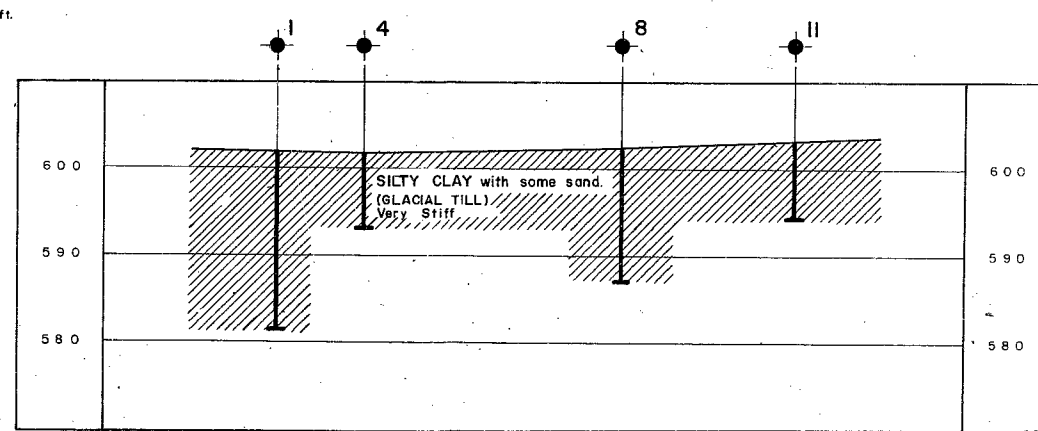
P L A N
 Scale: 1 in. = 100 feet



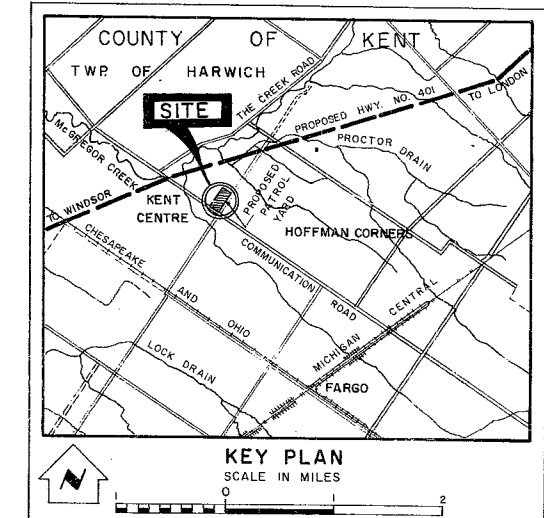
A - A
 Scale: Vert. 1 in. = 10 ft.
 Horiz. 1 in. = 100 ft.



B - B
 Scale: Vert. 1 in. = 10 ft.
 Horiz. 1 in. = 100 ft.



C - C
 Scale: Vert. 1 in. = 10 ft.
 Horiz. 1 in. = 100 ft.



LEGEND

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

NO.	ELEVATION	STATION	OFFSET S. BOUNDARY
1	602.0	3+00	150 L.T.
2	602.0	3+00	250 L.T.
3	601.9	3+00	350 L.T.
4	602.3	4+00	150 L.T.
5	602.3	4+00	250 L.T.
6	602.4	4+00	350 L.T.
7	602.3	6+00	250 L.T.
8	602.4	7+00	150 L.T.
9	602.4	7+00	350 L.T.
10	603.0	7+50	250 L.T.
11	603.3	9+00	150 L.T.
12	603.1	9+00	250 L.T.
13	602.5	9+00	350 L.T.

- 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.

DEPARTMENT OF HIGHWAYS - ONTARIO
 MATERIALS & RESEARCH DIVISION - FOUNDATION SECTION

CHATHAM PATROL YARD

ORIGINATED I. HOLUBEC	DISTRICT NO. 1	DATE 24 MAY 1962
DRAWN A. SHOPOFF	W.P. NO. —	JOB NO. 62-F-42
CHECKED <i>HR</i>	CONTRACT NO.	DRAWING NO.
APPROVED <i>K. L. D. H.</i>		62-F-42A



ONTARIO
DEPARTMENT OF HIGHWAYS

23-63-295

Memo to Mr. F. E. Cavell, Date May 30, 1962.
Superintendent,
Special Services Section. Subject D.H.O. FOUNDATION INVESTIGATION
REPORT.
From Materials & Research Division, W.J. 62-F-42 -- W.P. (Nil)
(Foundation Section)

RE: KENT CENTRE PATROL YARD PT. LOT 25, CONC. I.E.C.R.,
TOWNSHIP HARWICH, HWY. #401, DISTRICT #1.

A foundation investigation for the proposed Kent Centre Patrol Yard was requested by Mr. F. E. Cavell, Superintendent of Special Services. This site is located approximately 4 miles south east of Chatham.

The foundation investigation was carried out by this Section on May 1st, 1962, to determine the subsoil conditions existing at the site. Boreholes were located at requested locations as marked on plan P3167-47. A total of 13 boreholes were carried out. The elevations of these boreholes were later obtained from plan P3167-47. The locations and elevations of these, together with the estimated stratigraphical profile, may be seen on Drawing 62-F-42A.

The proposed patrol yard is approximately 1/2 mile south east of Hwy. #401 and Communication Road Crossing.

cont'd. /2 ...

APPENDIX I.

It is on Lot 25, Conc. I in Twp. of Harwich. The site is a rectangular field, formerly a corn field, bordered on two sides by intersecting roads. The immediate and surrounding area is flat. The site lies in the St. Clair Clay Plain.

The subsoil at the site is a silty clay with some fine to coarse sand and occasional traces of subrounded gravel. The random distribution of the sand and fine gravel classifies this material as a glacial till. The clayey till was proven to a depth of 25 ft., elev. 577' in B.H. #5. The consistency of the material is very stiff with average 'N' value being 23 blows/ft. at the depth of the recommended foundation. The subsoil is overlain by 6 to 1 ft. of dark brown clayey topsoil.

The ground water level established in the boreholes three days after the investigation varied from 2 to 7 ft. The variation is due to the fact that the water level in the B.H.'s had not stabilized itself at that time. It can be assumed that the approximate ground water level is 2 ft. below the ground surface, i.e. elev. 600'.

It is recommended to found the structures on 2 ft. wide spread footings 5 ft. below the ground surface. A design load of 2 T.S.F. may be used for the building foundations. Due to the impermeable nature of the subsoil, seepage into the foundation excavation can be easily

cont'd. /3...

controlled by pumping.

Any settlement with the recommended design load shall be negligible.

For the roads and parking areas, 18 inches of granular material consisting of 12 inches of sand cushion and 6 inches of G.B.C. class "A" material are recommended. Prior to placing of the granular material, topsoil should be stripped and removed. The surfacing of the paved area should consist of 2 inches of HL-6 Binder Course and 1 1/2 inches of HL-3 Surface Course.

The field work, performed during the period from April 30 to May 2, 1962, together with the preparation of this report, was undertaken by Mr. I. Holubec. The general investigation was carried out under the general supervision of Mr. K. G. Selby who reviewed this report.

cc: Messrs. F. E. Cavell (4)
H. A. Tregaskes
H. D. McMillan
G. U. Howell
T. J. Kovich
J. Roy
J. E. Gruspier
E. R. Saint
F. Norman

Foundations Office✓
Gen. Files.

For :

K. Y. Lo
K. Y. Lo,
SUPERVISING FOUNDATION ENGR.

A. G. Stermac,
PRINCIPAL FOUNDATION ENGR.