

# 65-F-77

HWY # 86 &

CANAGAGIGUE

RIVER BRIDGE

Mr. B. F. Davis,  
Bridge Engineer,  
Bridge Division.

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

Attention: Mr. W. D. Birch,  
Bridge Maintenance  
Engineer

September 27, 1965

FOUNDATION INVESTIGATION REPORT  
For  
Proposed Bents at  
Canagagigue River Bridge, Hwy. 86  
Elmira, Ont., Dist. 3 (Stratford)  
W.S. 65-F-77 -- W.P. (Nil)

A request for a foundation investigation at the site of proposed bents for support of the main span, where transverse cracks were observed in all of the concrete beams, at Canagagigue River Bridge, Hwy. 86, near the Town of Elmira, was received from Mr. W. D. Birch, Bridge Maintenance Engineer, in a memo dated July 2, 1965. Subsequently, a foundation investigation consisting of 2 sampled boreholes and 2 cone penetration tests, was carried out at the site.

A verbal recommendation for a safe bearing capacity of 2 tons/sq.ft. has already been given to your Office at an earlier date.

As for recording purposes, we are sending you the locations, elevations of the boreholes and the inferred subsoil stratigraphy which are shown on Drawing No. 65-F-77A.

Should further information be required in connection this project, please feel free to contact our office.

MYL/MdeF  
Attach.

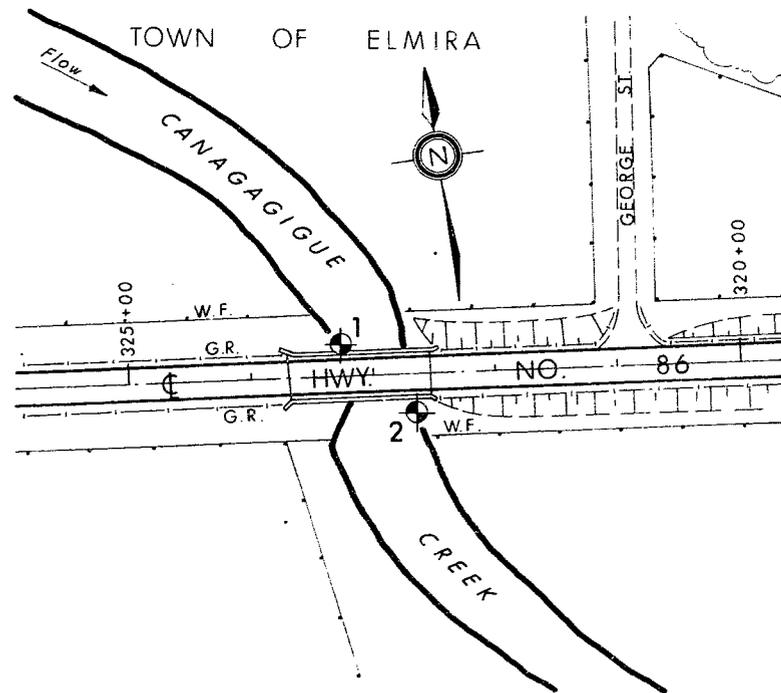
cc: Foundations Office  
Gen. Files

*K. Y. Lo*  
K. Y. Lo,  
SUPERVISING FOUNDATION ENGR.  
For  
M. G. Sternac,  
PRINCIPAL FOUNDATION ENGR.

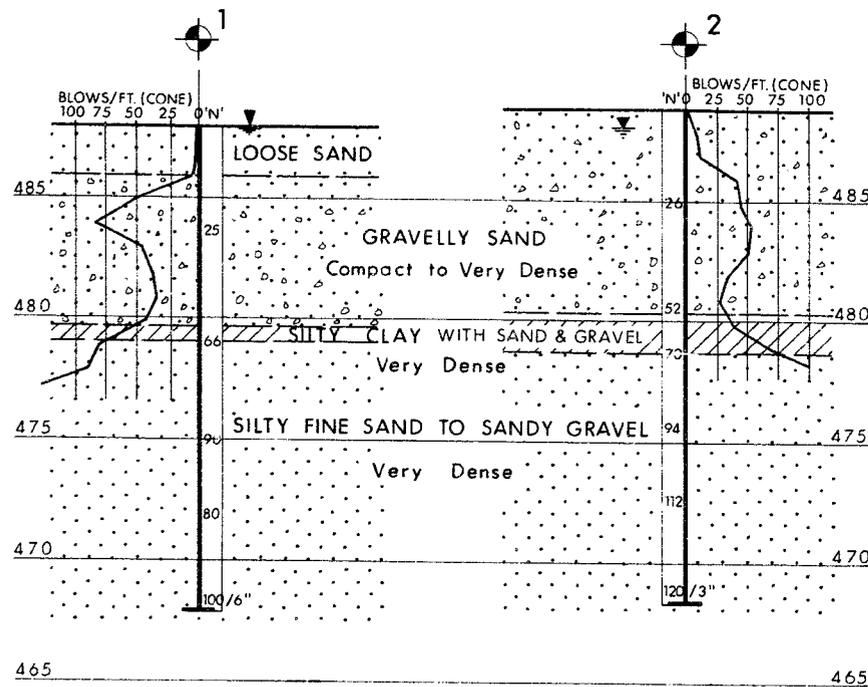
APPENDIX I



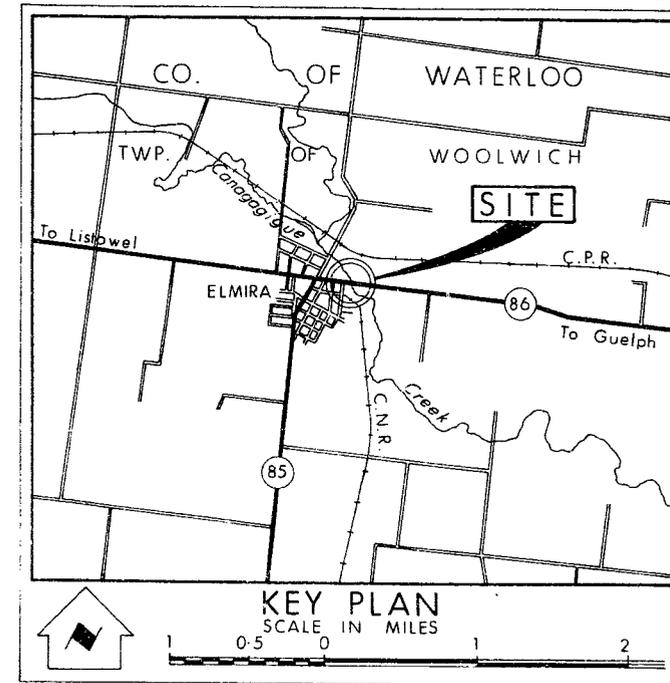




PLAN  
SCALE  
100 50 0 100 200 FEET



BORE HOLE DETAILS



LEGEND

-  Bore & Cone Penetration Hole
-  Water Level ( 8 July 1965 )



DEPARTMENT OF HIGHWAYS  
MATERIALS and  
TESTING  
DIVISION  
ONTARIO

CANAGAGIGUE CREEK  
BRIDGE  
HWY. 86 - ELMIRA, ONTARIO

REF. NO. B-267-3

DATE 20 AUG. 1965

APPROVED *D. Smith*

DRAWING NO. 65-F-77A

65-F-77

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. K. Y. Lo, Supervising Foundation Engineer, Room 107, Lab. Bldg. FROM: Bridge Division, Downsview, Ontario.

Attention: Mr. M. Devata, Senior Foundation Engineer. DATE: July 2, 1965.

OUR FILE REF. IN REPLY TO

SUBJECT: Investigation of soil conditions for proposed bents at Canagagigue River Bridge, Hwy. 86 (Elmira)

Cracks have appeared in all of the concrete beams of the main span of this structure at points shown in red on the enclosed print.

It is proposed to place steel bents under the main span at these points. These bents would be supported on spread footings placed in the river bed.

Since piles have been used in the abutment foundations it is thought that soil conditions at this site may not be favorable for spread footings.

Your assistance in determining the conditions present is therefore requested and would be appreciated.

BC/im

*B. Carney*  
B. Carney,  
for W. D. Birch,  
Bridge Maintenance Engineer.