

#65-F-116

Hwy #41 & #60

EGANVILLE

PATROL

YARD

MEMORANDUM

To: Mr. D. W. Farren
Road Design Engineer

From: M&T Division, Kingston

Date: September 7, 1965

Our File Ref.

In Reply To

Subject: Re: Eganville Patrol Yard

Attached is the Soils design report for the proposed patrol yard located 2 miles North of Eganville and east of the intersection of Hwys. 41 & 60.

Should you have any queries regarding the report or the recommendation contained therein, please contact this office.

H. A. Gruspier
J. E. Gruspier
Regional Materials Engineer

JEG/jfj

c.c. L. E. Walker
C.S. Moase
G. M. Wrong
A. G. Sternac ✓
J. Ford

File

Essexville Parcel Yard

Two Mi. North of Essexville at the
Intersection of Hwy. 41 & Hwy. 50

Proposed Grading, Drainage, Granular Base Course & Paving Project

GENERAL DATA

This site is located in the Twp. of Wilberforce on the Canadian Shield in an area where the Precambrian bedrock is covered by bouldery sandy soils. Grading of the site may be easily accomplished due to the sloping nature of the terrain and the porous nature of the subsoils.

INVESTIGATION

A soil investigation was carried out at this site on August 31, 1963. Four auger borings were placed to a minimum depth of 4' at various locations within the yard as indicated on the attached plan.

The foundation soils consist of slightly silty fine to medium sands with some large boulders imbedded flush with the surface.

BORROW MATERIALS

At the rear of the proposed site there are two small lake formations which contain sandy soils acceptable for earth borrow use. The average haul distance for earth borrow will be approximately 1,000'.

GRANULAR MATERIALS

Large quantities of crushable gravel are located within an average 4 mile haul distance of the site. These deposits are located close to the Pennschoore River southeast of Essexville.

Limited quantities of material acceptable for Sand Cushion use are located on the site in the more southerly kame. Alternative sources are located within an average haul distance of 2 miles.

RECOMMENDATIONS

1. Type of Granular Materials

Based on the availability of materials, it is recommended that the granular materials on this project consist of GBC Class "A" and Sand Cushion.

2. Depth and Width of Granular Materials

The granular material should be placed full width to a 15" total depth on both the parking areas and access roads. This should consist of 6" GBC Class "A" over 9" of Sand Cushion.

3. Stripping

Due to the sandy nature of the topsoil on the site stripping need only be carried out where the total fill depth will not exceed 3' unless additional topsoil is required.

For design estimating purposes an average topsoil stripping depth of 6" may be assumed.

4. Drainage

It is recommended that drainage be provided to a minimum depth of 3' below the finished grade.

5. Pavement Type

It is recommended that the pavement consist of the following:

Binder Course - 2" HL4 Top Course - 1½" HL4

Prepared by:

Ross L. Smith
Ross L. Smith
Project Soils Supervisor

Reviewed by:

J. A. Meyer
J. A. Meyer
Senior Soils Engineer

September 7, 1965

Eganville Patrol Yard

Borehole #1

0 - 7"
7" - 24"
24" - 50"

Si. Sa. Tops.
Lt. Br. Sl. Si. F. Sa. (65-LK-1020)
Med. Sa.

Borehole #2

0 - 8"
8" - 60"

Si. F. Sa. Tops.
Med. Co. Sa.

Borehole #3

0 - 7"
7" - 30"
30" - 60"
60"

Si. F. Sa. Tops.
F. Sa. U.G. (Some Stones & Cobbles)
F. Sa.
NFP Blds.

Borehole #4

0 - 8"
8" - 24"
24" - 60"

Si. Sa. Tops.
Lt. Gr. Si. F. Sa.
Lt. Gr. F. Sa. (Sl. Sty.) (65-LK-1021)

Borehole #5

0 - 10"
10" - 48"
48"

Si. Sa. Tops.
Mod. Si. F. Sa.
NFP Blds.

Borehole #6

0 - 7"
7" - 14"
14" - 48"

Si. Sa. Tops.
Lt. Br. Si. F. Sa. U.G.
Lt. Br. Si. F. Sa. (Sty. & Cbly)

Borehole #7

0 - 8"
8" - 20"
20"

Tops.
Pr. Si. F. Sa.
NFP Blds.

Borehole #8

0 - 12"
12" - 60"
60"

Tops.
Br. Si. F. Sa. U.G. (65-LK-102-2)
NFP Blds.

Borehole #9

0 - 12"
12" - 60"
60"

Tops.
Br. Si. F. Sa. U.G.
NFP Blds.

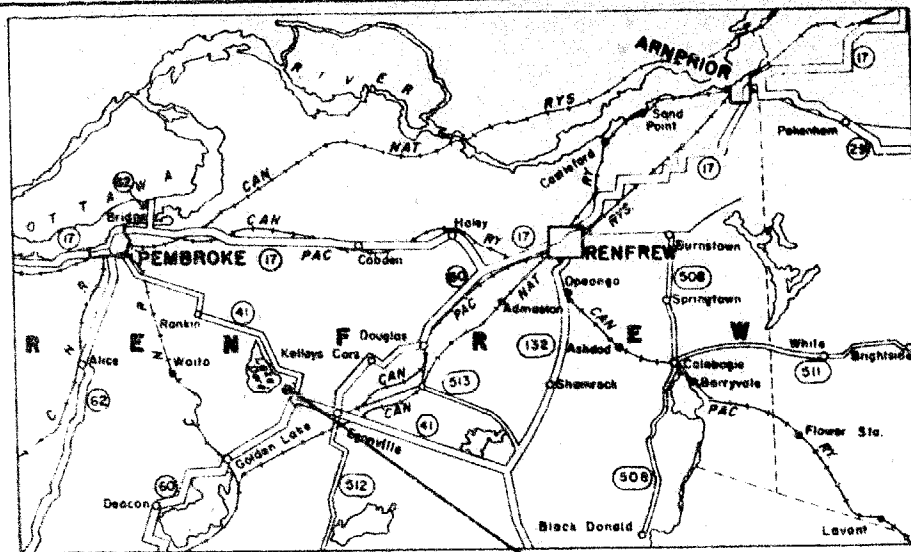
Borehole #10

0 - 8"
8" - 48"
48" - 60"
60" - 96"
96"

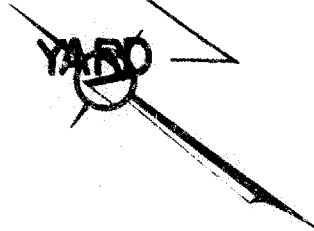
Tops.
Moist Br. Si. F. Sa.
Br. Sa. Si.
Moist Br. Si. F. Sa.
NFP Blds.

R. L. Smith
Project Soils Supervisor

RLS/jfj



EGANVILLE PATROL YARD



PROVINCE OF QUEBEC

