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BRICKMAKING MATERIALS AT "BOWENWOOD," KINGSTON

by M. J. Longman.

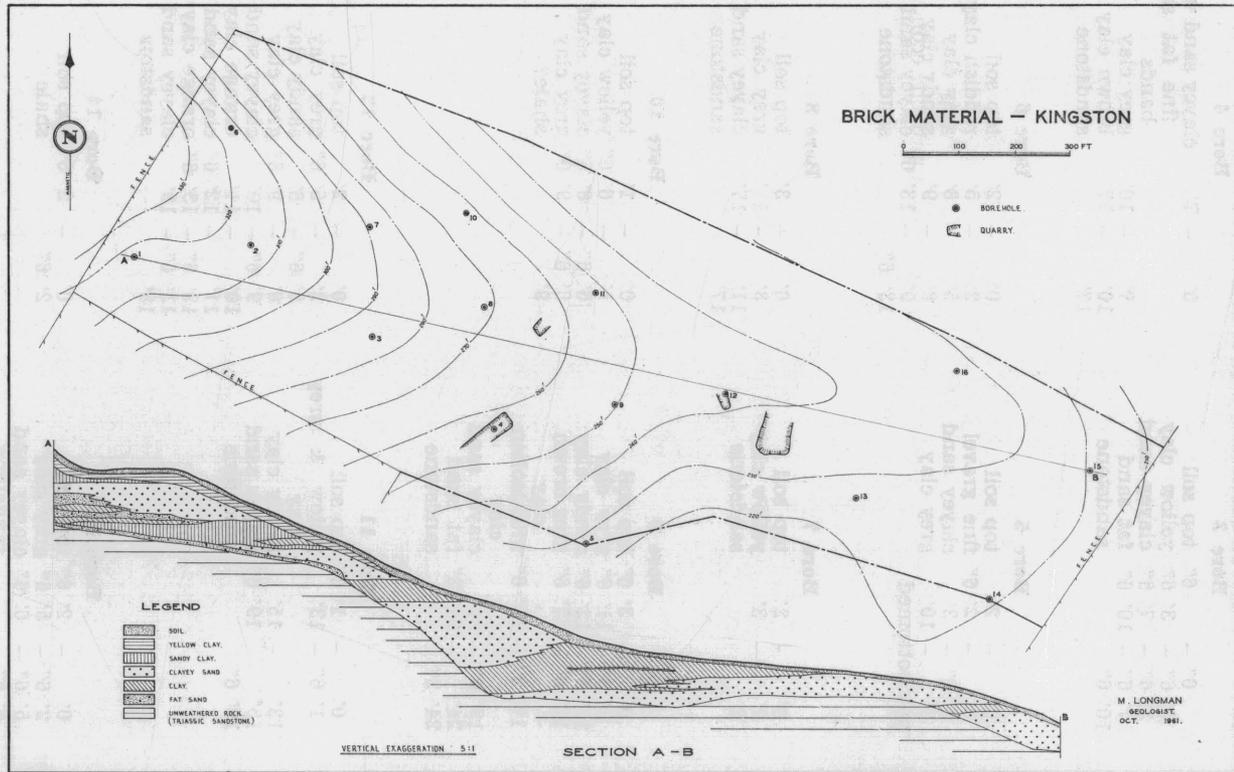
At the request of the owner of "Bowenwood", Mr. W. C. Hodgman, a hand boring campaign was designed to determine the quantity of brick-making material available on a 20 acre section of his property along the top of a gently sloping ridge between Browns River and an unnamed creek flowing into Dunns Creek. The area was reported on previously by Blake (1961).

The brickmaking materials are semi-consolidated sands, clayey sands and clays formed by the weathering of interbedded Triassic sandstone and shale. In this area the bedding is horizontal and the weathered zone restricted to the ridge top.

Sixteen holes were drilled (see Figure 11) and logged as follows:—

Bore 1		Bore 2		
0'	— 2'	top soil	0' — 2'	top soil
2'	— 5'	yellow clay	2' — 5'	yellow clay
5'	— 8'	multicolour sandy clay	5' — 8'	grey clay
8'	— 12'	yellow clayey sand	8' — 9'	sandy clay
12'	— 16'	fat sand	9' — 13' 6"	clayey sand sandstone
16'	— 18' 6"	multicolour clay		
18' 6"	— 20'	fat sand		
20'	— 23'	grey clay		
23'	— 24'	fat sand		
24'		sandstone		

Figure 11.



Bore 3

0" - 6"	top soil
0' 6" - 3' 6"	yellow clay
3' 6" - 7' 6"	clayey sand
7' 6" - 10' 6"	fat sand
10' 6"	sandstone

Bore 4

0' - 7'	clayey sand with fine fat sand bands
7' - 10'	grey clay
10' - 17'	brown clay sandstone
17'	

Bore 5

0' - 2'	top soil
2' - 2' 6"	fine gravel
2' 6" - 3'	clayey sand
3' - 10'	grey clay
not bottomed	

Bore 6

0' - 2'	top soil
2' - 5'	reddish clay
5' - 8'	grey clay
8' - 9'	sandy clay
9' - 13' 6"	clayey sand
13' 6"	sandstone

Bore 7

0' - 2'	top soil
2' - 3'	yellow clay
3'	sandstone

Bore 8

0' - 3'	top soil
3' - 11'	grey clay
11' - 17'	clayey sand
17'	sandstone

Bore 9

0' - 3' 6"	top soil
3' 6" - 11' 6"	grey clay
11' 6" - 12' 6"	sandy clay
12' 6" - 17' 6"	grey brown clay
17' 6" - 19' 6"	multicolour clay
19' 6" - 24'	clayey sand
24' - 24' 2"	fat sand
24' 2"	sandstone

Bore 10

0' - 1'	top soil
1' - 6' 6"	yellow clay
6' 6" - 8' 6"	clayey sand
8' 6" - 9' 0"	grey clay
9'	shale?

Bore 11

0' - 1' 6"	top soil
1' 6" - 13'	yellow & grey clay
13' - 15'	sandy clay
15' - 19' 6"	clayey sand
19' 6"	sandstone

Bore 12

0' - 2'	top soil
2' - 5' 6"	grey clay
5' 6" - 6'	sandy clay
6' - 9' 6"	grey clay
9' 6" - 10'	clayey sand
10' - 11'	orange clay
11' - 12' 6"	clayey sand
12' 6" - 13' 6"	orange clay
13' 6" - 19'	clayey sand
19'	sandstone

Bore 13

0' - 2' 6"	top soil
2' 6" - 5' 6"	grey clay
5' 6" - 6' 6"	clayey sand
6' 6"	sandstone

Bore 14

0' - 2' 6"	top soil
2' 6"	shale

Bore 15		Bore 16	
0'	- 2' 6"	0'	- 2' 6" top soil
2' 6"	- 4'	2' 6"	- 9' 6" clayey sand
4'		9' 6"	- 11' 6" multicolour clayey sand
		11' 6"	sandstone

From this information the following assesment of quantity and distribution (see section AB) was made:—

Overburden.—Sand and soil distributed over the whole area varying in depth from 6" to 3'6".

74,000 cubic yards.

Brick-making Materials.—Red and yellow clay up to 3' thick on the steeper slope, immediately underlying the soil cover.

26,000 cubic yards.

Fat sand, varying in thickness from 6" to 3' overlying the unweathered sandstone and as small lenses in the other materials.

15,000 cubic yards.

Sandy clay, up to 10' thick in the western area and as small bands in the grey clay.

37,000 cubic yards.

Brown and grey clay up to 10' thick distributed in the vicinity of the two larger pits and as smaller bands in the east and west of the area.

100,000 cubic yards.

Clayey sand in the whole area varying in depth from 1' to 15'.

197,000 cubic yards.

Total material

375,000 cubic yards.

Assuming an average weekly production rate of 300 tons there is sufficient material in this area easily removed by bulldozer and loaded directly into trucks for 25 years' production.

REFERENCES.

- BLAKE, F., 1961.—Brick-making Materials at "Bowenwood," Kingston.—*Tas. Dep. Mines Tech. Rep.* 5, pp. 113-114.