

1926

472

KENN

X 4803
7 JUN 1926

FROM
GOV'S DEPT
NORTH COTE

486

DATE
12th May 1926

FOR CIRCULATION

Mr.

Mr.

Mr.

Asst. U.S. of S.

CONSTRUCTION OF EARTH ROADS
States that the
question of --- is receiving careful consid.
and encloses copy minute by the Director of
Public Works.

Perm. U.S. of S.

Perm. U.S. of S.

Secretary of State

Previous Paper

60-2928

X Ca MINUTE
1. Ca. Mr. Allen 4/6
Mr. Tolson 4/6
X Ca. 4/6

538

347

60-2928

Subsequent Paper

P.A. 6065

Mr. Bottomley

You will see from 2026 that we have not yet got the Engineer, and that as it has been necessary to communicate with Canada and New Zealand there was bound to be some delay. If however we had nothing before the end of July the Crown Agents might be asked by a minute what is the position. The memorandum of the Director of Public Works makes it clear that the local authorities are fully alive to this question of earth roads versus metal roads, and this paper might, therefore, be put by but I think it would be courteous to acknowledge receipt. So proceed.

Noted

W. Miller

16/6/26

As the office has matters stand about the

engineer.

W. Miller 16.6.26

ha

Barnes Street,
26 June, 1936.

592

887
I have the honour to acknowledge the receipt of your despatch No. 495 of 22nd June, enclosing an extract from a minute of the Director of Public Works on the subject of the construction of earth roads in Kenya.

2. I take this opportunity to inform you that the question of the appointment of a Road Engineer has been referred by the Government for the Colonies to the Governments of Canada and New Zealand with a view to the nomination, by them, of suitable candidates for the post, but that replies have not yet been received. The Government also propose to advertise the vacancy in this country in order that they may consider the candidates thus obtained with any which may be put forward by the Dominion Governments.

I have the honour to be,

Sir,

Your most obedient
humble servant,

FOR

LIEUTENANT COLONEL SIR E. V. L. BRIGG, K.C.V.O., J.E.C., D.S.O.

etc.,

etc.,

etc.

reference 21/6
all of 21/6

200
X 4803
26 Kenya

22 JUN
405

St. Harding
St. George
St. Michael
St. Peter
St. Paul
St. James
St. John
St. Andrew
St. Barnabas
St. Christopher
St. David
St. Eustace
St. Felix
St. Giles
St. Helier
St. James
St. John
St. Julian
St. Luke
St. Mark
St. Martin
St. Matthew
St. Nicholas
St. Oswald
St. Peter
St. Paul
St. Quentin
St. Richard
St. Roch
St. Valentine
St. Vincent
St. Yves

26 June 1926

Sir,

I have etc to ack.

Sub

the rec. of your despatch to

AFT.

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486 of the 12th of May
enclosing an extract
from a minute by the
Dir. of Public Works on
the subject of the
construction of earth



X. 4303
GOVERNMENT HOUSE
JUN 1926
NAIROBI

477

KENYA

No. 486

KENYA.

12th May, 1926.

Sir,

With reference to paragraph 2 of your despatch No. 208 of the 23rd of February, I have the honour to inform you that the policy of constructing earth roads as against partly metalled roads is receiving careful consideration and has done so in the past. In this connection an extract from a minute on the subject by the Director of Public Works dated the 6th of April is enclosed for your information.

Extract.
(74 256)

Gov
750
26

I have the honour to be,

Sir,

Your most obedient, humble servant,

J. A. M. ...
GOVERNOR'S DEPUTY.

HONOURABLE

NANT COLONEL L.C.M.S. AMERY, P.C., M.P.,

SECRETARY OF STATE FOR THE COLONIES,

DOWNING STREET, LONDON, S. W.,

Referring to paragraph 2 of despatch No. 208, an earth road is ever very satisfactory under traffic. Earth roads are especially unsatisfactory if the soil is clay and the climate humid. The degree to which such roads are unsatisfactory is independent of the latitude. In addition to the nature of the soil, it depends to some extent also on the way in which the roads are made. An earth road, if drained and formed to camber and maintained up to the standard of construction, will dry up more quickly than a flat track.

If however the road is on heavy clay, no amount of draining or forming will enable it to be used continuously in all weathers. It is entirely immaterial from this point of view whether the earth road is "formed" by road grader or manual labour.

In this country, the soil of most of the highlands is clay, and there is usually no sand readily available to mix with it and make a "sand-clay" road - a type of road common in America and often made at great expense. Nor is there sufficient wood fuel readily available to make "burnt-clay" roads. It is very doubtful if the earth roads of America are any better than those of this country. I have never visited America, but was recently informed by a

a man, who had travelled much in that country and also in Kenya, that in general those in America (not the hard-clay roads) were worse than those in this country. I know from experience that the main country roads of South Africa are in general no better than those in Kenya. Mr. Lewis, the Director of Irrigation of South Africa, agreed with me. In South Africa, the climate is more humid and the soil is usually less clayey. In consequence, the periods during which they are unusable or can only be used with difficulty, are shorter than in Kenya, and the degree to which traffic is impeded is not so great.

B. The standard to which any particular road can be constructed and maintained up to standard, is purely a question of finance. We have about 4,000 miles of country roads, generally recognised as public, in this Colony and Protectorate, about 2,019 miles of these are main roads. To metal these public roads with water-bound macadam and without treatment with tar or other protective coating, would cost between £1,000,000 and £2,000,000, according to the width of carriageway, and whether a foundation course was laid or not. To metal the 2,019 miles of main roads would cost from £2,000,000 to £4,000,000. The cost of maintenance under fast moving traffic would be high, for water-bound macadam does not wear well under motor traffic. The average cost of maintaining the macadamed country roads of Jamaica and Ceylon is between £70 and £80 per mile. In this country the average cost in 1925 of maintaining the earth roads as dry season roads was £13 per mile and of the main roads £18 per mile.

3. I do not contend that no country roads should be metalled with water-bound macadam. Where the soil is clay and the traffic is such as to justify the construction of an "all-weather" road, the object can only be achieved by laying a surface of material which does not "guddle" under traffic; where the soft ironstone called murrum is obtainable close at hand, this forms the best material (taking cost into consideration) for surfacing unless steel tyred traffic is common on the road.

Where murrum does not occur in the neighbourhood, metalling with water-bound macadam has to be resorted to.

4. The fact that Government is endeavouring to secure an "expert" on earth roads does not necessarily mean that it is the intention to concentrate on earth roads in all cases. Roads must go through this stage of evolution, and when the country's finances permit and the traffic justifies it, higher standards can be gradually attained. There will, however, always be earth roads in this Colony on routes where the traffic does not justify higher standards and especially those parts of the roads where clay can be avoided by selection of alignment. An experienced road engineer, who has a knowledge of American methods of making earth roads with a minimum of manual labour, will, if he is a suitable man, be experienced in all other types of road as well, and also bridge design and construction.

5. With reference to paragraph 4 of the Secretary of State's despatch, the appointments are for the ordinary establishment, not for loan works.
