Folder Title: Highway Engineering Project - Ghana - Credit S007 - P000839 - Negotiations - Volume 1

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THIS FILE IS CLOSED AS OF

DECEMBER 1968.

FOR FURTHER CORRESPONDENCE SEE:

1969 - 1971.

RECORDS MANAGEMENT SECTION
February 1969

GuRds

December 31, 1968

Mr. Morris.
~~SCREENED~~
1/7 GMM

Public Works Department
P.O. Box 136
Accra, Ghana

JAN 7 1969
Projects Dept. Correspondence
ANS'D BY letter
DATE Jan 23, 1969

Attention Mr. E. Y. S. Engmann
Engineer-in-Chief

Dear Sirs,

TAKORADI-KUMASI ROAD
DETAILED ENGINEERING AND DESIGN
YOUR REF: GHS/RDS. 1/VOL. 2/325 & 328
OUR PROPOSAL OF DECEMBER 24, 1968

Our proposal for the detailed engineering design and preliminary engineering services for the subject project was produced under the great time pressure of the pre-Christmas days. As a consequence we wish to correct forthwith an inconsistency and some minor errors and omissions which escaped our attention.

1. On page TA18, the man months of Canadian Senior Staff should read "90" instead of "94". The inconsistency originated by carrying over part of our initial attempt to estimate the manpower requirements for the final and preliminary design combined within a 12 month period. We attach a corrected page for insertion.

copy amended

ACK Jan 23

copy amended

2. Correspondingly, the personnel schedule for Takoradi-Kumasi Road should be amended as shown on the chart attached for insertion.

3. The preliminary studies on the Takoradi-Kumasi Road have been estimated on the assumption that the study is carried out by the same Engineer awarded the final design for the road. Therefore, the time shown for the Project Director, Chief Road Engineer and Chief Surveyor in December on the Personnel Schedule for the Pre-engineering Services Takoradi and Kumasi is accounted for in the estimates for the final design.

4. Following page TA18 we describe the engineering experience of Mr. H. W. H. Casperd. We mention in the last line his assignment to the construction supervision which FENCO undertook for the IADB (not IBRD) in Brazil.

We sincerely regret any inconvenience our oversight may have caused you.

Yours very truly,
FOUNDATION OF CANADA ENGINEERING
CORPORATION LIMITED

H. G. von Cube
MANAGER
FOREIGN OPERATIONS

HGVC/lb

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We sincerely regret any inconvenience our oversight may have caused you.

Yours very truly,
FOUNDATION OF CANADA ENGINEERING
CORPORATION LIMITED

H. G. von Cube
MANAGER
FOREIGN OPERATIONS

HGVC\jb

Ltr. No. 508

December 27, 1968

Mr. Franz Lutolf
IBRD Permenent Mission in Western Africa
B. P. 1850
Abidjan, Ivory Coast

Dear Franz, Re: Ghana Proposed Highway Engineering Project, Highway Maintenance

I am sending you a copy of a memorandum dated December 20, 1968 from Mr. Morris, prepared at my request, on the status of highway maintenance in Ghana. This is the detail of the condition we have brought to the attention of the government in our letter of December 20, 1968, of which you will already have received a copy. It was known that road maintenance was poor towards the end of 1966 when we were preparing the draft terms of reference for the UNDP-financed study. We therefore included a study of highway organization and maintenance in our original draft, but this was later omitted for various reasons.

In carrying out the field supervision of the UNDP study your staff has made reasonably frequent visits to Ghana, but the length of the visits was usually only a few days, too short to obtain a firm opinion of the state of maintenance on a country-wide basis.

I would like to suggest that in future, missions should be instructed to review carefully the condition of the country's road system, say on an annual basis, even when carrying out only a supervision of studies, to insure that our information on roads is up-to-date. This will require extending the stay of some missions, but we think that the additional time taken would be worthwhile for the awareness of existing conditions you and we would have when pursuing the preparation and appraisal operations. Please let me know what you think.

Come soon.

A.K.

Enclosure: 1

MORRIS/HRYoungiva

Cleared with & cc: Mr. Hornstein
cc: Messrs. North, Engelmann

GH ROADS ENG.

IDA | IBRD | IFC

FORM NO. 92 (4-68)

CORRESPONDENCE RECORD FORM

FROM	DATED
Foundation of Canada Engineering Corporation Limited Toronto	Dec 24, 1968

SUBJECT

Encl. copies of proposals for study for detailed engineering and design for proposed Takoradi-Kumasi road in Ghana

ADDRESSED TO	ROUTED TO	DATE RECEIVED
Mr. Engelmann	Files/Projects A424	Dec 30, 1968mt

Gh Rds Eng.

December 24, 1968

Mr. C.W.O. Sackeyfio
Principal Secretary
Ministry of Works and Housing
P.O. Box M43
Accra, Ghana

Accra-Kumasi and Takoradi-Kumasi Roads:
Detailed Engineering

Dear Sirs:

We wish to thank you for the assistance given by your Ministry and the other Ministries and organizations concerned to our recent mission consisting of Messrs. P.R. Morris and M.S. Parthasarathi.

The appraisal mission is now preparing a report for a possible project for detailed engineering of the proposed new Accra-Kumasi and Takoradi-Kumasi roads. Some of the information required by the appraisal mission to complete its work, as discussed during their visit, has been received from the consultants Kjessler and Mannerstrale (who carried out the UNDP feasibility study) with their letter dated December 10, 1968. A copy of our reply to them seeking further clarification of a few points is attached for your information.

We note that you have called for proposals from a number of consulting firms for carrying out the detailed engineering work. It was agreed that you will send out amendments to the terms of reference calling for estimates of the foreign exchange costs of construction and in the case of the Takoradi-Kumasi road, to include a feasibility study of the approximately 7-mile-long Beposo spur, with a new bridge crossing of the Pra River; this additional study would be taken to the stage of preliminary engineering only.

We understand that you expect to complete your review of the consultants' proposals and to send your summary of the evaluation, with your proposed selections, to the Bank by early February 1969. On this basis, the negotiation of draft contracts with the consultants could be completed by, say, mid-March 1969.

We wish to confirm the mission's discussions with Mr. E.N. Omaboe, the Commissioner of Economic Affairs, and with Mr. Isifu Ali, the Commissioner of Works and Housing, on the importance of improving highway maintenance. From the field trips undertaken by the mission, it is clear that there is a very large backlog of road maintenance work to be carried out. In the case of periodic maintenance, such as surface dressing of bituminous roads and reshaping and resurfacing of gravel roads, very little work seems to have been carried out for several years.

Ack. Feb. 13

We are glad to learn that the contract with the firm of consultants is expected to be signed shortly under a USAID financed transportation study, which will include highway organization and maintenance and problems of transport coordination. While this study would focus on long term measures to improve the organization and methods of maintenance operations, Ghana would, as I know you are aware, have to attend immediately to the task of completing urgently needed and extensive repairs to its highway system. The mission has suggested that it would be desirable to draw up a phased program for getting all special repairs completed within a reasonable period of time say in 4 years, and make specific annual appropriations for this purpose. In view of the shortage of staff and equipment in the Public Works Department, you may find it necessary to use the services of consultants and contractors to supplement the work Public Works Department could directly undertake. You may wish to consider the desirability of setting up a special section within the Public Works Department to prepare and carry out that program. We would appreciate the Government treating this as a matter of high priority and advising us of the steps they propose to take.

My best regards.

Sincerely yours,

Roger A. Hornstein
Western Africa Department

GBL

PRMorris/Parthasarathi/Ram:cn

Mr

cc: Mr. B.K. Mensah
Principal Secretary
Ministry of Economic Affairs
P.O. Box M76
Accra, Ghana

Cleared with and cc: Messrs. North/Morris and Parthasarathi

cc: Messrs. Bennett, Clyde

Ack. Feb. 13

Gh Rds Cy

IDA	IBRD	IFC

FORM NO. 92 (4-68)

CORRESPONDENCE RECORD FORM

FROM	DATED
Kjessler & Marmerstrale ab Stockholm	Dec.20,1969

SUBJECT

Kumasi Accra and Takoradi Kumasi Roads. Copy of letter to Public Works Dept.Accra,Ghana with proposals for project

ADDRESSED TO	ROUTED TO	DATE RECEIVED
Mr.Engelmann Files	Transportation Proj.	Jan18,1969

AOK FEB 4

Ch. Rds Eng.

Messrs. H.R. Young/J.D. North December 20, 1968

P.R. Morris

GHANA: Proposed Highway Engineering Project:
Highway Maintenance

1. I refer to your memorandum of December 5, 1968 requesting a note on the status of highway maintenance in Ghana.

2. As briefly described in our Back-to-Office report of December 2, 1968, the recent mission consisting of Mr. Parthasarathi and myself found that highway maintenance is inadequate. This view is based on our field trip on the existing roads between Accra-Kumasi (both routes, via Koforidua and via Kibi), Kumasi-Takoradi, Takoradi-Accra, Accra-Kade, and Accra-Tema-Akosombo (Volta River Dam).

3. Virtually the whole of the approximately 500 miles of main paved highways seen are overdue for resealing, all have substantial numbers of potholes and, on some older sections of roads, lengths varying from 50 yards to half a mile have collapsed and require total reconstruction. Only about 35 miles of main gravel road were seen, but this section was in such a bad state as to be impassable in some places. Our own vehicle only got through by reason of being towed by an agricultural tractor. It was not raining at the time, though there had been rain previously. Since the roads inspected are some of the most important in Ghana, it seems reasonable to assume that the rest of the 2000 miles of paved roads and over 3000 miles of gravel surfaced national roads are not likely to be in better condition.

4. The mission believes that virtually the whole of the bituminous paved road system will need extensive patching, reconstruction of some lengths, and all will need resealing. The gravel roads will all need extensive reshaping, improvement of drainage, and regraveling. In other words, a complete cycle of periodic maintenance has been omitted, very little of such work having been done since about 1960. The backlog of maintenance work on the national road system must be of the order of US$20 million or more.

5. The mission found that the PWD organization, staffing, equipment and financial allocations are inadequate to cope with the volume of work required. The financial position is much less favorable than indicated by the budget, since a substantial part of the funds so allocated are not in fact released to the PWD.

6. The organizational and equipment situation had been greatly aggravated by the previous Government having broken up the then PWD organization and incorporated it into the Ghana National Construction Corporation which was mainly concerned with construction. After the change of government in February 1966, the GNCC was split again into the PWD (Ministry of Works and

Housing) and the State Construction Corporation. However, by that time the equipment had mostly worn out as there seems to have been little or no provision for replacement. In spite of a few recent purchases of new equipment, the PWD is extremely short of serviceable equipment. It is only at about 50% strength in professional staff.

7. The mission had extended discussions with the Commissioner for Economic Affairs, Mr. E.N. Omaboe, the Commissioner for Housing and Works, Mr. Isifu Ali, with their principal secretaries, and with the Engineer in Chief and a number of other senior officers in the Public Works Department.

8. The mission stated their findings as to the condition of road maintenance and made suggestions as to how the arrears of work might be carried out. The shortest practicable time for this is about four years. In view of the condition of the PWD, the services of consultants and contractors would be needed to supplement the limited amount of work which could be carried out by departmental forces. The mission suggested that the Government engage a suitable firm of consultants to set up and staff a "special maintenance" section in the PWD to assist in drawing up a works program, preparing contracts and supervising the work. "Operation Backlog" is seen as operating in a manner very similar to a construction program. Contracts could be prepared for sizable lengths of road, or groups of roads, to include (in the case of paved roads) heavy patching, reconstruction of lengths where necessary, and resealing; for gravel roads, the contracts would include heavy reshaping and regraveling, as well as drainage works required. Individual sections of road would be taken over from the PWD maintenance forces for the duration of the contract and handed back after completion. Resident Engineers would be required in the main regional headquarters, to supervise groups of contracts, on each of which would be stationed appropriate supervisors.

9. The need for longer term measures to improve highway administration, organization and maintenance was also discussed with the Commissioners of Economic Affairs and of Works and Housing, as well as with the Public Works Department and with the USAID Mission in Ghana. All agreed that the proposed USAID financed transport study should include highway administration, organization and maintenance. The USAID Director, Mr. R.M. Cashin and the Assistant Director for Programs, Mr. G.W. Evans, stated that negotiations for a contract with Robert R. Nathan and Associates for carrying out the study were almost completed and their team was provisionally due to arrive in Ghana on January 13, 1969. The previous negotiations with Stanford Research Institute had been broken off owing to failure to reach agreement with the Government on the terms of the contract. The study is to be carried out in two phases. Phase I (five months) will define in detail the scope of work for Phase II (about thirteen months) which will include the organization and highway maintenance studies. The Phase II report should therefore be available about mid-1970, which should be in time for consideration by the Bank and the Government at the time of an appraisal of a future highway construction project.

10. The recently completed UNDP financed highway study covered only feasibility studies of the two highways, Accra-Kumasi and Takoradi-Kumasi. The original terms of reference drafted by Mr. Bickers and myself, dated November 30, 1966, had included a study of highway administration and maintenance, including preparation of detailed proposals for a program and budget for highway maintenance for the years 1968 through 1970 and general outlines of maintenance requirements for the following three years; the program was to differentiate between routine and periodic maintenance. The report was also to cover staffing, maintenance methods and equipment. However, this part of the terms of reference was omitted from the request to UNDP submitted at the end of 1966. I understand this was at the request of the Government, supported by the Abidjan Office and agreed by Bank headquarters on the understanding that the reduced cost would enable the UNDP to deal quickly with the application under its contingency financing arrangements and that the highway administration and maintenance studies would be carried out under the USAID financed transport study which was already under discussion. At meetings in the Bank on February 2, 1967 and at USAID (Washington) on June 19, 1968, copies of our original terms of reference for highway administration and maintenance were given to the USAID representatives, who undertook to include similar terms of reference in their proposed transport study. The USAID Mission in Ghana confirmed to the Bank mission that they have a copy of our draft terms of reference and that when terms of reference are prepared for Phase II of their transport study, they will incorporate our proposals.

11. Although the long term reorganization would have to await the USAID study report, the mission impressed on the Government that urgent action should be taken in the meantime to improve highway maintenance on the lines of "Operation Backlog" referred to above, primarily to minimize further serious deterioration of the roads and also to avoid future difficulties which would arise when the Bank came to appraise a future construction project. Such an appraisal might take place late in 1970, by which time the Bank would probably expect to see substantial progress on the backlog of road maintenance work.

PRM

PRMorris/kms

cc: Mr. Geolot
Mr. Parthasarathi

Gh. Rds Gen

In case of reply the number and date of this letter should be quoted.

My Ref. No. GHS/RDS.1/Vol.3/384

Your Ref. No.

Ghana Highway Study,
Public Works Dept.
P. O. Box 136,
Accra,

6th December, 1968.

GHANA: Proposed Highway Engineering Project.

See letter of Jan 7, 69 in reply P.R.M. 1/7/69

Dear Sir,

ADDENDA

PROPOSED ACCRA/KUMASI AND TAKORADI/KUMASI TRUNK ROADS
TERMS OF REFERENCE FOR DETAILED ENGINEERING

---- For your information and record purposes, I attach hereto, copy of Addenda which I circulated to the six Firms being requested to submit proposals for the above-mentioned Road Project.

2. Many thanks for your co-operation.

Yours faithfully,

(S.F. KWAKU)
AG: ENGINEER-IN-CHIEF

ACK JAN 7

THE INTERNATIONAL BANK
FOR RECONSTRUCTION & DEVELOPMENT,
1818 H. STREET, N.W.,
WASHINGTON D.C.,
U.S.A. 20433.

(2)

ADDENDA

PROPOSED ACCRA/KUMASI, AND TAKORADI/KUMASI TRUNK ROADS - TERMS OF REFERENCE FOR DETAILED ENGINEERING

related to new Takoradi-Kumasi Rd.

(i) BEPOSO BRIDGE:

The Engineer shall carry out feasibility study up to and including preliminary engineering for the realignment of about 7-mile section of the existing Takoradi/Accra road in the vicinity of the Pra River. The work shall include engineering investigations culminating in the selection of a site for the erection of a new 2-lane bridge to replace the existing one-lane suspension bridge at Beposo, built in 1934. The object of the study is partly to select a bridge site and partly to shorten or improve the horizontal alignment of the Takoradi/Accra road which curves sharply inland shortly after taking-off at Sekondi.

Consultants are advised to read Section 3.7.1 of the Final Report on Feasibility Study for the Accra/Kumasi, and Takoradi/Kumasi Roads prepared by Kjessler & Manherstrale AB.

(ii) SUPERVISION OF CONSTRUCTION WORKS:

Consultants shall embody in their proposals an outline of their terms for supervision for the Accra/Kumasi, and Takoradi/Kumasi road project. The award of the contract for supervision is subject to the construction contract being awarded and the Government deciding to implement the Project.

(iii) FOREIGN CURRENCY COMPONENT:

The Engineer shall identify the foreign and local currency components of the basic construction cost for the two roads.

Back-to-Office Report

On Rds Eng.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

TO: Mr. Robert Sadove DATE: December 2, 1968

FROM: P. R. Morris and M.S. Parthasarathi

R. SADOVE

SUBJECT: GHANA: Highway Engineering Credit Appraisal Mission Back-to-Office Report

Introduction

1. In accordance with the terms of reference dated November 15, 1968, an appraisal of the proposed project for the detailed engineering of the Accra-Kumasi and Takoradi-Kumasi highways was carried out between November 19 and 28, 1968.

Findings

2. The mission inspected the existing roads and reviewed with the Government and the consultants the UNDP financed feasibility studies of the two proposed highways which were carried out by the Swedish consultants, Kjessler and Mannerstrale. The consultants agreed to clarify a number of points on which the information was available only in their Stockholm office. The mission's tentative conclusions are:

(i) the preliminary engineering has been carried out satisfactorily; and
(ii) both highways would have an adequate economic return.

3. The detailed engineering would be for 235 miles of new roads, which could be constructed over a period of three years starting in 1971. The engineering would cost about US$2 million, of which about US$1.5 million would be the foreign exchange component. The cost of a construction project for the two roads would be about US$45-50 million.

4. The Government has invited proposals from six consulting firms and expects to present the evaluation and proposed selection to the Bank by early February 1969.

5. The mission directed the Government's attention to the following:

(i) Road maintenance is inadequate. There is a backlog of periodic and routine maintenance which would involve US$20 million equiv. or more. Urgent action should be taken to step up road maintenance, employing contractors, the State Construction Corporation and consultants, to enable the work to be carried out as quickly as practicable, say, within four years;

(ii) The present PWD organization, staffing, equipment, as well as the financial allocations, are inadequate;

(iii) There is no machineryfor coordinating transport policy and investments.

6. The mission was informed by USAID, Ghana, that an overall transport study, which they are to finance, is expected to start in January 1969, and be completed by about mid-1970. The study would include the subjects listed in para. 5 above. The findings are expected to be available before the construction project is appraised, and should be taken into consideration in the appraisal and for any conditions that should be attached to the construction project loan/credit.

7. The implications for the Government's budget of the possible construction project as well as a program to deal with the large backlog of maintenance were discussed. The Government believes that the local currency costs of both programs could be financed through its budget.

Action

8. Letters should be sent to the Government confirming the findings of the mission and to the Consultants concerning the additional information requested. An appraisal report is being drafted.

IBRD/IDA
PRMorris/MSParthasarathi:mp

cc: Messrs. Chadenet, Baum, Sadove, Hornstein, Ram, Clyde, Petretti, Young
Messrs. Lipkowitz, Piccagli, Lind, Rovani, Miss van Gasse
Op Files, Div Files, Chron Files
Mr. Lutdy (Abidjan)

GHANA: Proposed Highway Engineering Project
Op. File
Gu Rds Eng

-copy-

Public Works Department,

P. O. Box 136,

Accra,

Ref.No. GHS/RDS.1/Vol.2/326

15th November, 1968.

This copy given to me by P.W.D., in Accra, Nov. 20, 1968
P. R. Morris

Dear Sir,

ACCRA/KUMASI AND TAKORADI/KUMASI ROADS - PROPOSALS FOR DETAILED ENGINEERING & DESIGN

The Government of Ghana wishes to retain Consultants to carry out the complete final detailed engineering and design for -

(a) a proposed Accra-Kumasi road, about 134 miles long. The limits of this project are Chainage 0+000 on the Southern By-Pass at the Kumasi end, and Chainage 697+000 on the existing Accra-Takoradi road. These points have been established in the field and are defined in the Appendices of the Final Report prepared by Kjessler & Mannerstrale AB, a Swedish Firm commissioned by the Ghana Government to prepare feasibility study and preliminary engineering report for the above mentioned project. Copies of this report are being made available to Consultants for the study in Accra.

(b) a proposed Takoradi-Kumasi road, about 110 miles (including spurs, and a 13 mile stretch from Kokobin to Kumasi. A preliminary study to locate the most suitable alignment on this stretch, using the same criteria as were used in the Feasibility Studies of the main project would form part of the terms of reference for the detailed engineering). The limits of the 100 mile stretch from Takoradi to Dunkwa (including spurs) are Chainage-(0+950) on the existing Takoradi-Accra road at the Takoradi end, and Chainage 47+200 on the existing Dunkwa Kumasi Road, at the Dunkwa end.

The limits of the 13 mile stretch from Kokobin to Kumasi are to be defined later. Consultants are to study the Appendices to the Final Report referred to above for the definition of these points. Your Firm is one of six from which the Government is soliciting unpriced proposals for preparation of full construction contract documents for these projects, ready to call bids.

Selection of Consultants will be based on the usual practice recommended by the World Bank, as the Government expects to approach the Bank for financial assistance in executing this high-priority project.

/ .... 2.

Attached hereto you will find "Supplementary Information for Consultants" which will guide you in preparing your offers of services. You are expected to submit a draft contract including Terms of Reference, for each of these assignments and it is therefore necessary that a representative of your Firm visit Ghana at your own expense (the Government accepts no financial responsibility whatsoever) to obtain information of the kind you will need to draft your proposals.

A draft outline for the terms of reference for detailed engineering and design is enclosed for use as a guide in preparing your proposal.

Another enclosure is an information sheet titled - "Accra/Kumasi and Takoradi/Kumasi Roads - Detailed Engineering and Design (Guide to sources of Data)". The sheet gives information on the Feasibility Studies and Preliminary Engineering already carried out by Kjessler & Mannerstrale AB, as well as other relevant information. You may also wish to visit the offices of the IBRD in Washington or Abidjan.

Please acknowledge this letter on receipt,

to Engineer-In-Chief,
Public Works Department,
P. O. Box 136,
Accra (Tel.64641)

indicating whether you are interested in these projects.

We expect your proposals, here in Accra, not later than December 30, 1968. Copies should also be submitted to IBRD Washington and Abidjan, by the same date.

The Firms selected after negotiation will be expected to start field work within one month from the effective date of their contract, and to complete all work under the contract within twelve (12) calendar month thereafter.

Two separate unpriced proposals are expected, one for each road.

Sincerely yours,

(Sgd.) E.Y.S. Engmann
ENGINEER-IN-CHIEF

KJESSLER & MANNERSTRALE AB,
VARTAVAGEN 73,
STOCKHOLM,
SWEDEN.

WE/ekb.

GHANA

SUPPLEMENTARY INFORMATION FOR CONSULTANTS

Submitting Unpriced Proposals for Detailed Engineering of Roads.

Proposal

Proposals shall be submitted in septuplicate and shall include the following information:

a. A brief description of the Consulting Firm and an outline of recent experience on projects of similar nature.

b. A draft prepared by the Consultants of the Terms of Reference, and of the engineering contract. All work shall be completed in twelve (12) calendar months from start of field work.

c. The manner in which the Consultants would organize and execute the assignment.

d. The composition of the team of technical personnel which the Consultants propose to provide in Ghana and in the home office, and the tasks which would be assigned to each member of the team.

e. Past experience, in detail, of each staff member to be assigned to the team, including partners and senior officers in the home office who would be responsible for supervision of the team, giving length of time spent on important past assignments and specific responsibilities held by the staff member.

f. Estimates of the total man-months of work required for completion of the consulting services, supported by bar-chart diagrams showing man-months for each expert in Ghana in the home office.

In preparing the proposal, the Consultants should give particular attention to the following:

a. Members of the team should have the requisite experience outside their own country, preferably under conditions similar to those prevailing in Ghana.

Knowledge of English is essential for key personnel to work on this assignment.

b. A majority of the personnel comprising the Consultants' team should be drawn from the permanent staff of the firm.

c. Periodic inspection visits to Ghana should be made by partners or senior officials of the consulting Firm during the course of the assignment.

* thus: Public Works Dept., Accra..... 4 copies)
IBRD, Washington, Att: Mr. W.C. Baum 2 " , to arrive by ~~Nov. 1,~~ Dec. 30 1968.
IBRD, B.P. 1850, Abidjan ..... 1 copy

Proposed Terms of Reference for Detailed Engineering & Design

Proposals are invited from Consulting Engineers for carrying out detailed engineering and design of roads shown on the attached Schedule A and according to the following:-

1. General Scope of Work

The Engineer shall carry out detailed ground surveys in order to locate the roads precisely and subsequently prepare all the necessary plans, specifications and documents required for international competitive bidding and construction by contract in accordance with procedures acceptable to international financing agencies such as the World Bank. Separate drawings and documents shall be prepared for each of the (five ?) sections of road, for which separate contracts would be let.

2. Location and Survey

The routes to be followed by the roads have generally been established and the Engineer will be advised of these by the Department, which will make available full details of the preliminary engineering already carried out.

The Engineer shall, however, be responsible for the detailed location and shall bring to the notice of the Department any improvements or amendments which he considers desirable to the routes.

3. Design Standards

The geometric and loading design standards to be used will be agreed with the Department. The Engineer shall be responsible for the design details within this framework, including that for the pavement and surfacing.

The alignments and right of way shall be staked on the ground and adequately referenced with permanent markers and bench marks placed clear of the construction area.

4. Soils and Materials Investigations

The Engineer shall carry out such investigations of ground conditions as are necessary for the design of the roads and structures.

In addition he shall carry out such investigations as are required to locate, identify and check the availability of suitable materials for the design which he proposes. The investigations shall include but are not restricted to materials for:-

a. Embankment and subgrade
b. Subbase
c. Base
d. Shoulders
e. Surfacing
f. Concrete aggregates

The location of these materials shall be shown on suitable plans and maps together with the test data relevant to them.

5. Drainage

The Engineer shall study the hydrology and general drainage of the areas affecting the roads and design the waterways and elevation accordingly.

6. Plans and Documents Required

The Engineer shall provide the following detailed engineering drawings, specifications and documents for each road or section of road:-

a. Right of Way Plans - Showing the existing and proposed R.O.W. The Department will provide the necessary information for the former and the latter will be according to the standards shown on the schedule - number required. . ...

b. Roadway - Plans 1 : 1250 horizontal
Profile 1 : 1250 horizontal
1 : 125 vertical
Cross Sections 1 : 125 at appropriate intervals as required but in any case not more than 100 ft.

Typical Cross Sections and Details) As required, to appropriate scales.

c. Structures - Scales as appropriate.

d. Drainage - Scales as appropriate.

For (b), (c) and (d) the numbers required are:-

Original tracings
6 sets full size contact prints
30 sets of half size prints (except for cross sections)
suitably bound and indexed.

e. General and Special Conditions.

f. Specifications - 30 copies.

g. Bidding Document - including Schedules of Quantities - 30 copies.

h. Materials Report - 30 copies.

This does not form part of the bidding documents but will be made available to contractors to assist them during bidding and subsequent development of materials sources during construction. It must therefore be a comprehensive report, including location plans, of what a contractor may reasonably expect to be available for construction of the road.

7. Cost Estimate

The Engineer shall prepare detailed estimates of cost for each section of road based on the Schedule of Quantities.

8. Construction and Expenditure Schedule

In order to assist in evaluating the required construction period and forward budget heads the Engineer shall prepare a construction schedule for each road showing the aniticipated annual expenditures. Due account should be taken of the climatic conditions in the areas concerned.

9. Consultation with the Department

During the course of the work the Engineer shall liase closely with the Department and before finalizing shall reach agreement with the Department on all of the major aspects of the design such as:-

a. Alignment
b. Grade and elevation
c. Location, type and size of structures
d. Typical cross sections
e. Pavement design
f. Intersections
g. The General and Special Conditions

All necessary calculations and data used in the design shall be supplied to the Department.

10. Time for Completion

(A program for carrying out the detailed engineering, to be agreed with the Engineers.)

11. Reports

a. Interim report (after 6 months?) - outlining proposed designs and specifications.
b. Progress reports - to be submitted monthly.
c. Draft final report (after ? months).- Draft drawings, specifications, estimates and bid documents.
d. Final report.

Ref. No.GHS/RDS.20/323

Public Works Department,
P. O. Box 136,
Accra,

..16...November, 1968.

PROPOSED ACCRA/KUMASI, AND TAKORADI/KUMASI
TRUNK ROADS - DETAILED ENGINEERING
(Guide to Source of Data).

A. Introduction:

The information given below is intended to bring to the notice of Consultants submitting proposals for the above-mentioned roads, existing data that might be required for the exercise in hand.

In May, 1967, Kjessler & Mannerstrale AB, a Swedish Firm of Consultants was commissioned by the Government of Ghana to determine the technical and economic feasibility of constructing new or improving existing trunk road connections between Accra and Kumasi, and Takoradi and Kumasi in Southern Ghana.

The assignment termed The Ghana Highway Study was started in June 1967 and completed in August 1968.

The main scope of consulting services were -

(i) Alignment selection.

(ii) Preliminary Engineering.

(iii) Economic Analysis.

The Study was split into two parts;

Phase I - Alignment Selection and

Phase 2 - Preliminary Engineering.

In Phase I, alternative routes were evaluated and the most advantageous alignments for each road selected on the basis of traffic forecasts, reconnaissance field surveys, order-of-magnitude costs estimates, and a preliminary economic analysis.

In Phase 2, following the approval of the proposed alignments by the Government and the Bank, route surveys and soil investigations were conducted, the preliminary engineering design prepared, and based on the resulting more accurate construction cost estimates, the preliminary economic analysis refined.

/ .... 2.

In the course of the work, the Consultants prepared and submitted three main Reports; these are:

(a) The Preliminary Report on Alignment Selection.

(b) The Interim Report.

(c) The Final Report.

Reports (a) and (b) above were submitted during Phase 1 which was completed in December 1967, and Report (c) submitted in October 1967.

Copies of the Final Report will be made available (on loan, and not to be taken outside Ghana) to Consultants for their study. It is not possible to place at the disposal of Consultants copies of the Preliminary Report on Alignment Selection and the Interim Report, however, summaries of these Reports can be found in the Final Report.

The Engineer-In-Chief or his representative will always be available for consultation. Consultants should be free to approach him.

EXISTING DATA:

I. The Preliminary Report on Alignment Selection for the Proposed Roads:

This report which was prepared by Kjessler & Mannerstrale AB, in 1967, will be made available to Consultants selected for the detailed engineering. Summary of the report is contained in the Final Report.

2. The Interim Report on the Proposed Roads:

This Report was prepared in 1967, by Kjessler & Mannerstrale AB. Consultants selected for the detailed engineering will have access to it. A summary of it is contained in the Final Report.

3. The Final Report on the Proposed Roads:

This Report was prepared in 1968 by Kjessler & Mannerstrale AB. Copies will be made available to all Consultants submitting report for the detailed engineering. Consultants are well advised to study the Report in order to acquaint themselves with all the preliminary engineering work that has been accomplished on the proposed roads, and for which Consultants have been requested to submit proposals for detailed engineering work.

/ .... 3.

4. Geography of Ghana: The most comprehensive book on this subject is Geography of Ghana, by Professor E.P. Boateng. It can be purchased from the University Bookshop, University of Ghana, Legon, Accra.

5. Maps:

a) Physical Maps: (Showing contours and classified Roads) Maps to a scale of 1:62,500 can be purchased from the Ghana Surveys Division on Giffard Camp Road at 40 Np. each. There is no single map to the said scale which covers the whole area to be studied, but the area has been divided into sections and given code numbers. To cover the whole area under study, maps bearing the numbers listed below should be purchased:

7, 8, 21, 22, 25, 26, 29, 20, 23, 24, 27, 28, 31 32, 33, 47, 41, 51, 52, 55, 56, 59, 60, 49, 50, 53, 54, 57, 58, 61, 62, 85, 86, 89, 90, 93, 94, 97, 98, 87, 88, 91, 92, 95, 96, 99, 125, 126, 129, 130, 133, 134, 137.

There is on sale at the same source a catalogue of maps from which these numbers can be identified. The price is 50 Np.

b) Other maps which are available at the same store, that is, Maps Stores, Ghana Survey Division are:-

Map Publication	Price Per Sheet	Scale
Physical	40 Np.	1: 2,000,000
Administrative	40 Np.	"
Vegetation Zone	40 Np.	"
Great Soil Groups	50 Np.	"
Geological	N¢1.00	"
Agricultural Products	40 Np.	"
Mineral Deposits	40 Np.	"
Annual Rainfall	40 Np.	"
Isogonic Chart	40 Np.	"

c) Road Map: Road Maps of Northern and Southern Sections of Ghana are also available at N¢4.00 each. The two road maps have been combined into a single wall map on a scale of 1: 500,000, and is sold at N¢3.80.

d) Town and City Maps: Pocket and Guide maps of the three principal centres (Accra, Kumasi and Takoradi) to be linked by the roads are available. The pocket maps are priced at N¢1.00 each; and the guide maps at 50 Np. each

/ .... e)

e) Geological Map: A geological map in colour, to the scale of 1: 1,000,000 is available at the Survey Division at N¢2.00 per sheet.

f) Bench Maps: Framework diagram showing traverses and levels are available at N¢1.50 per sheet.

g) Aerial Survey Maps: Very scanty information is available on aerial survey of the area under study at the Survey Division. The areas under study have been photographed by Kjessler & Mannerstrale AB. Consultants should read the section dealing with this in the Final Report.

h) Drainage Map: A drainage map covering the area under study is available at the Geological Surveys. The reference number of the map is 60-3-4 3/4. The Section on Drainage in the Final Report should be read for further information.

6. Population Distribution:

Information on population can be obtained from pages 4 to 6 in the Ghana National Physical Development Plan (1963/70) Book. Tables II, XXXIII, XXXIV and figures (maps) 4a, 4b, 4d, 4e and 4f provide useful information on subject.

Rather unfortunately, copies of the book are not available for sale or distribution from the office of the Chief Town Planning Officer.

For further information on topics treated in the book, readers may get in touch with B.S. Kwiatkowski, of the Town Planning Office located in the Ministries Post Office block. His telephone number is 65421 Ex 652.

Atlas of population characteristics, 1960 is obtainable at N¢3.50 from the Sales Department, State Publishing Corporation, on High Street, near the Black Star Line Offices.

7. Mineral and Timber

In addition to the mineral deposit map which is available at the Surveys Division, readers can gather statistical figures from the following books:

a) Ghana Economic Survey, 1965, which may be purchased at N¢1.00 from the Publication Branch, Ministry of Information, Barns Road, Accra, or for the same source as (b) below.

b) Quarterly Digest of Statistics, December, 1965; obtainable at 72 Np. from State Publishing Corporation (Publication Division), P.O. Box 124, Accra.

c) Statistical Year Book, which is available at N¢1.00 from the same source as (b) above.

/ .... 8.

8. Agriculture

In addition to a map which is available from the Surveys Division, statistical figures can be obtained from the same source 7(a), (b) and (c) above.

9. Industries

Quite apart from the map which is available at the Surveys Division, further information can be obtained from:

(i) Same sources at 7(a), (b) and (c) above.

(ii) Ghana Seven Year Development Plan. Not available on sale, but readers may obtain copies from the Ministry of Information or Ministry of Economic Affairs.

(iii) a) Industrial Statistics 1962-64 at N¢1.00

b) Industrial Census Report Volume I - at N¢4.80

c) Area Sample Survey of Small manufactury establishing 1963, at N¢1.20.

(a), (b) and (c) above are obtainable from the Publication Division, State Publishing Corporation.

For further information on Industrial Statistics Mr. Ampiah of Statistics Department may be contacted.

Mr. K.K. Anti of Ministry of Industries may be approached for further information on Industries. His telephone number is 65421 Ex 742.

10. Labour

Information on Labour can be obtained from the Quarterly Digest of Statistics, December, 1966 at 72 Np. from State Publishing Corporation.

The Economic Survey, 1966 Edition, contains some information on Wages and Earnings.

Readers may like to purchase The Labour Statistics No.8, 1963 at 36 Np. for additional information. It is procurable at the State Publishing Corporation.

/ .... 6.

11. Infrastructure

a) Water Supply and Sewerage: There is no national map showing the location of these services, notwithstanding, pieces of information can be gathered from the various Regional and District Offices of the Water Supply and Sewerage Corporation. Information relating to these services can be found in:-

(i) The National Physical Development Plan Book 1963-1970.

(ii) Ghana Economic Survey 1966.

(iii) Quarterly Digest of Statistics, 1966, under sub-heading Fuel and Power

(iv) Statistical Year Book, 1967.

b) Electricity: There is no national master map showing the location of cables in the country. As above information on location are obtainable from various Regional and District Office of the Electricity Corporation. Readers may like to refer to the topic from

1) The Economic Survey, 1965, under the heading Industrial Production, starting from page 81.

c) Transport and Communication: Information on these may be found in:-

(i) The National Physical Development Plan 1963-1970.

(ii) The Economic Survey, 1966.

(iii) Quarterly Digest of Statistics, December 1966, under heading Inland Transport.

(iv) Statistical Year Book, 1967.

For further information on statistical figures on above Mr. Awadzi of Statistical Department may be contacted.

As already pointed out maps showing existing Trunk Road Network can be procured at the Survey Division.

12. Fuel:

Statistical information can be found in the Quarterly Digest of Statistics December 1966.

For further information Mr. Ampiah of Statistics Department may be approached.

/ .... 7.

13. Prices:

For information on prices, readers may consult the following books:-

(i) The Economic Survey, 1966

(ii) Statistical Year Book

(iii) Quarterly Digest of Statistics, December, 1966

Mr. Akwagyiram of Statistics Department would be available to provide further information on prices.

14. Geology

It has already been pointed out that maps on the subject are available at the Surveys Division. Similar maps are available at the Geological Surveys, near the Trade Union Congress (T.U.C.) Building. Consultants may like to read Kjessler & Mannerstrale's finding on this topic on the Final Report.

Mr. J.R.H. Schandorf of the Geological Surveys would be available for further discussion on the subject. His telephone number is 64693 Ex 10.

15. Soils, Foundation and Construction Materials

For information and discussion on above, the following may be contacted:

(i) Ag. Chief Materials Engineer, P.W.D.
His office is located at Weija junction at approximately Mile 7 on Accra-Takoradi road.

(ii) The Officer-In-Charge, Soils and Land-Use Survey Department, Headquarters, Kumasi.

(iii) Soils in the Final Report presented by Kjessler & Mannerstrale AB.

16 Traffic

Studies conducted by Kjessler & Mannerstrale AB, and inference made by them are the most reliable information available, and these may be studied in the Final Report.

Miscellaneous

a) Ghana Airways Time Table for Internal Services

There is a daily flight from Accra to Kumasi, but the flight from Accra via Kumasi to Takoradi is on Wednesdays and Sundays only. There are no flights from either Accra or Kumasi to Takoradi on the remaining days.

The fare for flight between Accra and Kumasi, is N¢8.00, the same fare prevails from flight between Kumasi and Takoradi.

/ .... 8.

b) Hire Charges for Taxis and Transport Corporation Vehicles

The official charges for taxi service is about 20 Np. per mile, but it is not unusual to encounter charges such as 30 or 40 Np. per mile. Since most of the taxis do not use taximeter it is often difficult to reconcile the charges with distance travelled. Charges are always bargained with taxi operators.

The State Transport Corporation operates car hiring services. The charges are as follows:- N¢12.50 a day for mileage not exceeding 50, for additional mileage over and above 50 the rate is 25 Np. per mile. The day is reckoned from 7.30 a.m. to 4.30 p.m. After 4.30 p.m. there is an additional charge of 90 Np. per hour.

Road Condition Accra-Kumasi

Although road between Accra and Kumasi is bitumen-surfaced, recent floods have put certain sections of the road in deplorable condition. The distance from Accra to Kumasi is 169 miles via Kibi, and 177 miles via Koforidua.

Kumasi-Takoradi

There are two existing roads to Takoradi from Kumasi. The shorter route via Cape Coast is bitumen-surfaced with total mileage of 184. The other route via Tarkwa is partly bitumenized and partly gravel-surfaced, and is about 199 miles long.

Computer Facilities: There are Computers at University of Ghana, Legon, Accra, and University of Science & Technology Kumasi which can be used for computations.

FINAL REMARK: As already intimated the Engineer-In-Chief or his representative will always be available for consultation.

(WILLIAM EGUAKUN)
FOR ENGINEER-IN-CHIEF

✓ Gu Rds
cc TRR

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

TO: Messrs. P.R.Morris and M.S.Parthasarathi DATE: November 15, 1968

FROM: R. Sadove

SUBJECT: GHANA: Appraisal of a Highway Engineering Project
Terms of Reference

1. You will arrive in Ghana on or about November 19, 1968 and will appraise a proposed project consisting of the detailed engineering of the Accra-Kumasi and Takoradi-Kumasi highways.

2. You will review and discuss with the Government and the consultants the UNDP financed feasibility studies of the two highways carried out by Kjessler and Mannerstrale, for which we have just received the final report. The Government has been requested to have representatives of the firm available to discuss the engineering and economic aspects of the study with you and to accompany you on field inspections of the roads.

3. Since much of the engineering will be on new alignments rather inaccessible from existing roads, it will probably be necessary for you to inspect them by air. Authority for you to hire an aircraft if necessary has been ~~requested from~~ the Director of Administration; ~~his decision will be cabled to you.~~ given by (see attached copy)

4. You will inquire as to the present position of the Government's proposed invitation to firms of consultants to submit proposals for carrying out the detailed engineering. The Government has agreed with the Bank on a list of six suitable firms and the Bank, at the request of the Government, provided draft outline terms of reference. You should stress to the Government the importance of this matter proceeding at a reasonable pace to ensure the availability of cost figures based on a firm proposal by the time an appraisal report is ready for presentation to the Loan Committee.

5. You should inquire with USAID as to the progress of their studies in the transport field in Ghana.

6. On your return to the Bank, you will make a Back-to-Office Report to be followed by a draft Appraisal Report.

PRMorris/MSParthasarathi/isc
Bank/IDA

Cleared with and cc: Messrs. Povey, Clyde, Petretti, Young, Hogg
cc: Mr. Chadenet, Mr. Baum, Miss Van Gasse

FORM NO. 59
(2-55)

Gh Rds Eng.

CROSS REFERENCE SHEET

COMMUNICATION: Memorandum

DATED: November 12, 1968

TO: Files

FROM: F. Povey

FILED UNDER: Ghana (General Negotiations)

SUMMARY: Annual Meeting, 1968

Extract....

Trunk Roads - Engineering Credit

It was agreed that mid-November would be a convenient time for the appraisal mission to arrive in Ghana.

Gh Rds Eng.

Form No. 27
(6-68)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: SACKEYFIO
PRINCIPAL SECRETARY
MINISTRY WORKS AND HOUSING

ACCRA

DATE: NOVEMBER 8, 1968

CLASS OF SERVICE: LT

COUNTRY: GHANA

NWI

TEXT:
Cable No.:

Nov 8

HAVE TODAY CABLED OMABOE COMMISSIONER ECONOMIC AFFAIRS QUOTE RE PROPOSED FINANCING OF ENGINEERING FOR ACCRA KUMASI AND TAKORADI KUMASI HIGHWAYS STOP COMFIRMING DISCUSSIONS DURING ANNUAL MEETING PROPOSE SENDING APPRAISAL MISSION COMPRISING MORRIS ENGINEER PARTHASARATHI ECONOMIST ARRIVE NOVEMBER NINETEENTH FLIGHT GH 707 STOP CABLE SUGGESTING DETAILED ARRANGEMENTS BEING ADDRESSED MINISTRY WORKS HOUSING RAM UNQUOTE GRATEFUL YOU ARRANGE CONSULTANTS KJESSLER MANNERSTRALE HAVE REPRESENTATIVES AVAILABLE DISCUSS ENGINEERING AND ECONOMIC ASPECTS FEASIBILITY STUDIES AND TO ACCOMPANY MISSION ON FIELD INSPECTION EXISTING ROADS AND PROBABLY AIR RECONNAISSANCE PROPOSED ALIGNMENTS STOP BANK ARRANGING HOTEL RESERVATIONS ACCRA PROVISIONALLY THROUGH NOVEMBER TWENTYEIGTH STOP REGARDS

YOUNG

INTBAFRAD

Re: GHANA-Proposed Highway Engineering Project

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME H.R. Young

DEPT. Transportation Projects

SIGNATURE H.R. Young
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

PRMorris/cp
RK.m.

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

Cleared with and cc: Messrs. Povey, Parthasarathi
cc: Messrs. Clyde, Petretti, Hogg Engelmann

For Use By General Files and Communications Section

Checked for Dispatch:

DISPATCHED

V 8 5 57 PM 1968

GENERAL FILES
COMMUNICATIONS

Gh Rde Gy.

Form No. 27
(7-61)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: OMABOE
COMMISSIONER FOR ECONOMIC AFFAIRS
ACCRA

DATE: November 8, 1968

CLASS OF SERVICE: LT

Wu

COUNTRY: GHANA

TEXT:
Cable No.:

RE PROPOSED FINANCING OF ENGINEERING FOR ACCRA KUMASI AND TAKORADI KUMASI HIGHWAYS STOP CONFIRMING DISCUSSIONS DURING ANNUAL MEETING PROPOSE SENDING APPRAISAL MISSION COMPRISING MORRIS ENGINEER PARTHASARATHI ECONOMIST ARRIVE NOVEMBER NINETEENTH FLIGHT GH 707 STOP CABLE SUGGESTING DETAILED ARRANGEMENTS BEING ADDRESSED MINISTRY WORKS HOUSING REGARDS

RAM
INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME M. S. Ram

DEPT. Western Africa

SIGNATURE M. S. Ram
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

PRMorris:bc

ORIGINAL (File Copy)
(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:
Cleared with & cc: Messrs. Morris
Parthasarathi
cc: Messrs. Clyde
Hogg
Petretti
Young

For Use by Archives Division

Checked for Dispatch: ✓

OUTGOING WIRE

DATE November 3, 1959	CLASS OF SERVICE LT	
TO: GHANA COMMISSIONER FOR ECONOMIC PLANNING ACCRA		

COMPANY GHANA

TEXT:

CALL NO.

RE PROPOSED FINANCING OF ENGINEERING FOR VOLTA KANSAI AND TAKORADI KANSAI

HIGHWAYS STOP CONTINUING DISCUSSIONS DURING ANNUAL MEETING INCLUDE SENDING

PLANNING MISSION COMPRISING MORRIS ENGINEER PARTHASARATHI ECONOMIST VENTAR

MOVEMENT MINISTERIAL ACTION ON TOT SEOS CABLE SUGGESTING DETAILED ARRANGEMENTS

BEING ADDRESSED MINISTERS MORRIS MONITORING RECORDS

MAM

INTERPRETED

NOT TO BE TRANSMITTED

CLEARANCES AND COPY DISTRIBUTION:

Cleared with & cc: Messrs. Mottin
Martinez
Horn
Perkoff
Jones

cc: Messrs. Chase

GENERAL FILES

NOV 3 4 20 PM 1959

MESSAGE AUTHORIZED BY

NAME H. S. Kam

DEPT. Accepted Mitchell

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

TELETYPE

ORIGINAL (Not copy)

(INFORMATION for telephone calls in typewritten form)

Checked for dispatch

For use of typing division

INTERNATIONAL DEVELOPMENT ASSOCIATION	RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL BANK FOR	CORPORATION INTERNATIONAL FINANCE

Form No. 55 (3-59)

Gh. Rds Engine

September 25, 1968

Mr. C. W. O. Sackeyfio
Principal Secretary
Ministry of Works and Housing
P.O. Box M.43
Accra, Ghana

Dear Mr. Sackeyfio:

Re: Accra-Kumasi and Takoradi-Kumasi Roads: Detailed Engineering

Thank you for your letter of August 21, 1968 with the list of consultants to be invited to submit unpriced proposals, together with a draft of a letter of invitation, and a list of supplementary information required, to be sent to the consultants.

We have no objection to your inviting proposals from the six firms on your list, Kjessler and Mannerstrale, Foundation Engineering of Canada Corporation Limited, Ingeroute, Louis Berger, Inc., N.D. Lea and Associates Limited, and Dr. Ing Walter Ingenieurberatung. We also have no objection to your dividing the work into two parts, each consultant putting in a separate proposal for each of the two roads.

We suggest that in your letter of invitation to the consultants, the roads might be more fully described. For example the first paragraph refers to "(a) a road about 145 miles long (including 10 miles stretch along Kumasi-Dunkwa Road to be upgraded)"; we believe that the name of the road should be given and the terminal points briefly described. We also think it would be useful if you described the feasibility studies and preliminary engineering already carried out by Kjessler and Mannerstrale, and stated that this would be made available to the firms selected to undertake the detailed engineering. Of course, the information need only be summarized, since you would no doubt be providing full details to the representatives of the firms when they visited Ghana.

We note that the firms will be required to draft terms of reference as part of their proposals. You will recall that we enclosed with our letter of April 19, 1968 a draft outline for the terms of reference for detailed engineering and design. We suggest that you use these as a guide for the consultants in preparing their proposals. However, it should of course be made clear to the consultants that they are free to include in their proposals any amplification or modification they may consider necessary for the particular circumstances.

September 25, 1968

Mr. C. W. O. Sackeyfio
Principal Secretary
Ministry of Works and Housing
P.O. Box M.43
Accra, Ghana

Dear Mr. Sackeyfio:

Re: Accra-Kumasi and Takoradi-Kumasi Roads: Detailed Engineering

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We understand that you intend to include a 10 mile stretch of the Kumasi-Dunkwa Road with the Accra-Kumasi Road in one of the detailed engineering contracts. We assume this is the road from Kokobin to Kumasi and that it has been grouped with the Kumasi-Accra Road because of its proximity. However, we think there may be advantages in grouping the Kokobin-Kumasi section with the detailed engineering contract for the Takoradi-Dunkwa section, so as to avoid splitting the engineering work on the Takoradi-Kumasi Road between two firms of consultants; this might be particularly important should the Accra-Kumasi Road and the Takoradi-Kumasi Road be built at different times.

We appreciate your anxiety to call for proposals as soon as possible, to carry out the evaluation and selection process and to negotiate draft contracts with the selected consultants, so as to avoid subsequent delay in having the detailed design work started. This would suit the Bank's procedure in appraising an engineering project, since it is necessary for draft contracts to be negotiated before we can present the project to our Board. Naturally, until the approval of the Board is obtained we are unable to commit the Bank. Before selecting the firms of consultants we would be grateful to have your summarized comments on the proposals received, and your recommendations. We would also like to have an opportunity to comment on the draft contracts, which would of course include the terms of reference, negotiated with the consultants, prior to their signature.

We are hoping to send an appraisal mission to Ghana in November 1968 and, assuming all goes well, we would aim to have negotiations in Washington and to present the proposals to the Board towards the middle of 1969. It would not, however, be possible to complete our appraisal before the coming dry season, which we understand is from December through March, and which is of course the best period for the consultants to undertake the field work.

We have received the draft final report by Kjessler and Mannerstrale on their feasibility study and preliminary engineering of the Accra-Kumasi and Takoradi-Kumasi Roads. This is being studied and we hope to give our comments in the near future.

Sincerely yours,

S. C. Hardy
Chief, Highway Section
Projects Department - Transportation

PRMorris/cp

cc: The Chief of Mission
IBRD
Permanent Mission in Western Africa
B.P. 1850
Abidjan, Ivory Coast (with copy of Bank letter of April 19, 1968)

Cl. with and cc: Messrs. Povey, Karcher, Finne
cc: Messrs. Clyde, Petretti, Sorensen, Young

FORM No. 26
(6-65)

Gh Rds
cc H.S.

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

INCOMING CABLE

DATE AND TIME OF CABLE: SEPTEMBER 16, 1968 1640

LOG NO.: RC 3/17

TO: INTBAFRAD

FROM: ABIDJAN

ROUTING

ACTION COPY: MR. EL EMARY
PROJECTS-TRANSPORTATION

INFORMATION COPY: MR. MCIVOR
PROJECTS-342

DECODED BY:

TEXT:

142 EL EMARY AND SADOVE

SUBJECT GHANA TRUNK ROADS

PRIMO WE CONSIDER PRELIMINARY ENGINEERING REPORT TO BE COMPLETE AND SATISFACTORY AND HAVE NO FURTHER COMMENTS BEYOND THOSE PRESENTED OUR LAST SUPERVISION REPORT AUGUST 23. CONSULTANTS HAVE DONE GOOD JOB. SECUNDO REGARDING GOVERNMENT PLANS FOR DETAILS ENGINEERING WE SUGGEST EARLY BANK APPROVAL GOVERNMENT PROPOSED SHORT LIST CONSULTANTS THEREBY ENSURING AVAILABILITY UNPRICED PROPOSALS PRIOR TO ARRIVAL BANKS APPRAISAL MISSION FOR ENGINEERING CREDIT TENTATIVELY SCHEDULED EARLY NOVEMBER

LUTOLF

AFRICA DEPT.
SEP 17 1968

- [x] ~~El Emary~~
- [x] McIvor
- [x] ~~Calika~~
- [ ] Larsen
- [x] ~~Div.~~
- [ ] Div.
- [ ] Div.
- [ ] Div.
- [ ] Op. Files
- [ ] Res. Files
- [ ]

MT

cc: Mr. Horsley

FOR INFORMATION REGARDING CABLES, PLEASE CALL THE COMMUNICATIONS UNIT EXT. 2021

ORIGINAL

° ° °

Ghana Rds Eng.

FORM No. 26
(6.65)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

INCOMING CABLE

DATE AND TIME OF CABLE: AUGUST 28, 1968 1132

LOG NO.: RC 24/28

TO: HORSLEY INTBAFRAD

FROM: ABIDJAN

ROUTING	
ACTION COPY:	MR. HORSLEY
INFORMATION COPY:	MESSRS. EL EMARY/MCIVOR
DECODED BY:	

TEXT:

135 H'way S.

URCAB 172 GHANA TRUNK ROAD STUDY. DRAFT FINAL REPORT TO BE SUBMITTED AUGUST 31. GOVERNMENT KEENLY DESIRES COMPLETION DETAILED ENGINEERING BOTH ROADS BY END 1969 AND EXPECTS APPRAISAL MISSION NOVEMBER IN ACCORDANCE URLET JULY 18. SHORT LIST OF CONSULTANTS NOW BEING PREPARED FOR IDA APPROVAL AND GOVERNMENT HOPES TO HAVE FIELD WORK UNDERWAY JANUARY PAYING ONLY LOCAL CURRENCY TO CONSULTANTS WHO IT IS HOPED WILL BE WILLING TO DEFER FOREIGN CURRENCY CLAIMS UNTIL IDA CREDIT AVAILABLE APRIL MAY. SINCE FIVE CLEAR MONTHS REQUIRED FOR FIELD WORK JANUARY START ESSENTIAL TO COMPLETION OF ENGINEERING BY END OF 1969. DUNCAN BRANDRETH MEMO AIRMAILED TO YOU AUGUST 26. WE DO NOT HAVE COPY JULY 24 LETTER TO YOU FROM GOVERNMENT FOR ADDITIONAL REFERENCE

LUTOLF

NA

FOR INFORMATION REGARDING CABLES, PLEASE CALL THE COMMUNICATIONS UNIT EXT. 2021

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GENERAL FILES
COMMUNICATIONS

Gha Rds Eng

Form No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Abidjan Office

TO: Messrs. El Emary/ McIvor

DATE: August 23, 1968

FROM: Franz Lutolf FL

Letter No. 308

SUBJECT: GHANA - Trunk Road

Please find attached Messrs. Duncan's and Brandreth's report on their recent supervision mission to Ghana. The report is self-explanatory. I agree in substance with its conclusions, but I would like to draw your attention to para. 7. The procedure suggested by the Ghanaians is, as the mission report recognizes, somewhat unorthodox, and I am not altogether convinced that we should approve it. May I have your comments, please?

Attachment

cc: Mr. Geolot

cc. Messrs. Lithgow/Mining
Clyde
Petretti
Miss Powell

AFRICA DEPT.

AUG 30 1968

- El Emary
- McIvor
- Calika
- Larsen
- Div. B
- Div.
- Div.
- Div.
- 3 Op. Files
- Cos. Files

Form No. 57

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

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cc: Mr. Geolot

AFRICA DEPT.

AUG 30 1968

- [x] El Emary
- [x] McIvor
- [x] Gallia
- [x] Larsen
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1968 AUG 30 AM 8:59

RECEIVED
REPRODUCTION FILES
COMMUNICATIONS

AUG 30 1968

Abidjan Office

Mr. F. Lutolf

August 23, 1968

A.A. Duncan/H.G. Brandreth

GHANA - Supervision of UNDP-financed Study of Two Trunk Roads

1. In accordance with our Terms of Reference dated August 8, we visited Accra from August 9 to 13, to supervise the work done on the above study by consultants Kjessler & Mannerstrale.

Status of Study

2. The consultants have almost completed their draft final report on Phase 11 of the Study, which includes preliminary engineering of the two trunk roads; they plan to submit it on August 31, as scheduled.

3. We reviewed the various parts of the report with the consultants, offering comments and suggestions on certain details.

4. The preliminary engineering appears to have received careful and competent professional attention; the drawings are clear and complete.

5. The economic analyses have been revised in the light of additional traffic data secured over the past months and of more precise construction cost estimates. The latter were not yet complete, so that revised rates of return for the proposed roads were not available.

Detailed Engineering

6. Government's plan is to have detailed engineering for both roads carried out and completed in 1969. It is hoped that an appraisal for an Engineering Credit can take place in November 1968 as mentioned in a letter dated July 18 from Headquarters to Mr. Sackeyfio, Principal Secretary, Ministry of Works and Housing.

7. A short list of five consultants will shortly be submitted to IDA for approval; Government would ask each consultant to submit two separate unpriced proposals (one for each road) and would then designate one leading candidate for each road. Thus, two consultants would be retained from the panel of five. Although this procedure is slightly different from the customary one, it is suggested that it be approved, as being fair and practical under the circumstances. The alternative would be to set up two panels of, say, 4 consultants each, and request only one proposal from each consultant. This alternative does not appeal to PWD, as they would prefer to have more flexibility in assigning either road to a candidate, yet reasonably limit the total number of candidates to allow thorough consideration of each consultant's proposed staff, work program, and experience background.

8. Unpriced proposals might be received by November 1, and it is hoped to have a negotiated contract ready for IDA approval by late December; assuming that the consultants were willing to start field work in early January, with local currency payments only, pending effectiveness of an IDA Credit in April or May, then all detailed engineering could be completed by late 1969 or early 1970. We understand, from PWD, that most of the consultants on the panel have expressed their willingness to defer submission of their first statement for foreign exchange until the IDA Credit is declared effective. This understanding, however, would not be a factor in the selection of the consultants. Provided assurances on this last point were received, it seems that the Government's proposed plan is a good one, as it might allow advantage to be taken of most of the coming dry season, to carry out field surveys.

9. We provided PWD with samples of the following texts, for their guidance in soliciting unpriced proposals:

(a) circular letter requesting proposals,
and (b) instructions to consultants submitting proposals

We suggested that the drafts, to be sent out, be submitted by PWD to Headquarters for approval/ comments.

US Aid Studies

10. From the local US AID Mission, we learned that the Stanford Research Institute, who are to carry out the multi-sector studies in Ghana (including transport) are expected to begin field work next month on the first phase of their assignment, which will lead to a definition of the terms of reference for the main body of the studies, to be submitted to US AID and Government late this year.

11. As AID/Washington plans to solicit Bank Headquarters' comments or suggestions on these terms of reference, there will be an opportunity for the Bank to remind AID of its earlier agreement regarding inclusion of several subjects (particularly road maintenance) which were dropped from the current Trunk Road Study in early 1967, when the terms of reference thereof were being established. One of the reasons for excluding a road maintenance study, at that time, was the assurance given by US AID/Washington that it would be properly covered by their full study of the transport sector.

12. The choice of consultants for the projected AID study of a coastal road link between Ghana and the Ivory Coast will probably be made in about a month. It is expected that a fixed-price contract will be negotiated.

UNDP Resident Representative

13. We called on Mr. Latour, the UNDP Resident Representative in Ghana, and informed him of the progress being made on the project.

14. We briefly discussed the possibility that Government may approach the UNDP's World Food Program in connection with a possible labor-intensive project, consisting of clearing bush on the probable alignments of the two trunk roads (Kumasi-Accra and Dunkwa-Takoradi).

15. At a meeting held in PWD offices on August 10th, the possible approaches to such a labor-intensive project were discussed with Mr. Muttukumaru, Project Officer, World Food Program, who is stationed in Ghana, and Mr. S.B. Kirk, Consultant, Civil Engineering, Labor-Intensive Projects, Office of the Special Commissioner for Redeployment of Labour.

16. Manual workers, on direct hire by PWD, would receive half of their wage in food (such as tinned sardines, corned beef, and powdered milk) and half in cash. However, as there may be some objections to the scheme, from the trade unions, PWD will refer the matter to higher authority for decision.

17. Such brush cutting and tree felling as might be done by these labour gangs would clear a swath perhaps one hundred to two hundred feet wide through the forest, to facilitate field surveys required in detailed engineering. No foreign currency payments would be involved, since the food would be donated by the United Nations World Food Program.

18. At this stage, no action need be taken by the Bank in respect of this scheme. Its successful execution will simply reduce the local currency cost component of the detailed engineering for the two trunk roads.

Volta Lake Development Plans

19. Informal discussions between the mission and the Volta River Authority, represented by Mr. E.A.K. Kalitsi, Director of Finance, were initiated by Dr. J. Koopman of the Harvard Advisory Group in Ghana, on the subject of the development of transport services on the Volta Lake.

20. According to Mr. Kalitsi, the Dutch and Danish governments have committed the equivalent of US $ 1,300,000 for studies and technical assistance relating to the gradual development of regular barge services on the Volta Lake. It is anticipated that the Dutch share (US $ 1 million) will provide consulting services (and/or technical assistance) by NEDECO with possibly some provision for the purchase of navigation equipment on the lake. The Danish grant (US $ 300,000) will provide consulting services by Ostenfeld and Jo/ston.

21. The mission was asked whether a loan request to provide for the construction of modest lake terminal facilities and the purchase of transport equipment (tugs, barges, etc.) in accordance with the anticipated recommendations of the consultants would likely be viewed favourably by the Bank Group. We replied that, in principle, the Bank Group was interested in projects of this kind provided it could be demonstrated that they could be operated effectively and economically and the project was of sufficiently high overall priority. We added that if the Government seriously intended to request a loan or credit for this purpose, it would be advisable, as a first step, to request the Bank to comment on the Terms of Reference for the Dutch/Danish studies to ensure that the type of information which the Bank would ultimately require for appraisal purposes would be forthcoming.

22. Mr. Kalitsi indicated that the formal arrangements and the Terms of Reference would be negotiated in the last quarter of the year and Bank comments on the Terms of Reference, or assistance in their preparation, would be solicited.

Findings and Recommendations

23. Consultants Kjessler & Mannerstrale expect to submit their draft final report on the Study of Two Trunk Roads on schedule, at the end of August. The work appears to be well done.

24. The Government wishes to retain two consultants for detailed engineering, one for each trunk road. An IDA Credit will be sought, for which a November appraisal would be appropriate. We would, however, recommend that the appraisal mission be scheduled for the earliest possible date, such as late October-early November.

25. The date of the next PMWA mission to Ghana cannot be specified at this time; it depends on a number of factors, including assignment of responsibility for supervision of detailed engineering which should be discussed with Headquarters.

26. A request for participation in the preparation of Terms of Reference for studies relating to the development of water transport services on the Volta Lake may be expected from the Government of Ghana towards the end of the year. It is anticipated that these studies will ultimately lead to a request for a Bank Group loan or Credit for vessels and terminal facilities.

AIRMAIL

In case of reply the number and date of this letter should be quoted.

My Ref. No. CMB.3/2/SF.1/V.2

Your Ref. No.

Telephone: No. 65421

Cha
Rds Eng.

Ministry of Works and Housing
P.O. Box M.43
Accra

21st August, 1968

Dear Sir,

ACCRA-KUMASI AND TAKORADI-KUMASI ROADS
DETAILED ENGINEERING

As the Final Report (draft) on the feasibility Studies for the proposed Accra-Kumasi and Takoradi-Kumasi roads would be submitted on 31st August, 1968, we take the opportunity to submit for your approval the names of six Consultants we intend inviting to submit unpriced proposals for carrying out detailed engineering work for the roads.

2. It is our intention to divide the project into two separate contracts, namely, Accra-Kumasi Road and Takoradi-Kumasi Road, and offer the design work to two different Consultants. Each of the six Consultants would be requested to submit two proposals one for each road. A Consultant would be offered work for only one of the roads.

3. The procedure outlined above differs slightly from that usually adopted by your office. However, it should be considered on the merit that although there would be twelve (12) proposals to be read, there would be only six (6) curriculum vitae (the main item for which points are awarded) to be examined.

Also enclosed for your comments are:

(a) A list of Consultants to be invited to submit unpriced proposals.

(b) A draft of our letter to be sent to the Consultants.

(c) A draft of the supplimentary information for the Consultants.

Yours faithfully,

PRINCIPAL SECRETARY
(C.W.O. SACKEYFIO)

THE INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT,
1818 H STREET, N.W.,
WASHINGTON, D.C.,
U.S.A. 20433.

Ack Sept 25

cc: The Chief of Mission,
I.B.R.D. Permanent Mission
in W.A. B.P. 1850, Abidjan
Ivory Coast.

Copy to Clyde
Morris
Sorensen
Miss Powell
B/File

1968 AUG 26 PM 2:40

Consultant X

D R A F T

Subject: ACCRA-KUMASI AND
TAKORADI-DUNKWA ROADS
DETAILED ENGINEERING

Gentlemen:

The Government of Ghana wishes to retain consultants to carry out the complete, final detailed engineering for (a) a road about 145 miles long (including 10 miles stretch along Kumasi-Dunkwa road to be upgraded), (b) a road about 100 miles long (including spurs) from the Takoradi area to Dunkwa. Your firm is one of several from which the Government is soliciting unpriced proposals for preparation of full construction contract documents for these projects; ready to call for bids. Consultant selection will be based on the usual practice recommended by the World Bank, as the Government expects to appraoch the Bank for financial assistance in executing this high-priority project.

Attached hereto you will find"supplementary information for consultants" which will guide you in preparing your offers of services. You are expected to submit a draft contract including Terms of Reference, for each of these assignments and it is therefore necessary that a representative of your firm visit Ghana to obtain information of the kind you will need to draft your proposals. You may also wish to visit the offices of the IBRD in Washington or Abidjan.

Please acknowledge this letter on receipt,to:

Engineer-In-Chief
Public Works Department
P. O. Box 136,
Accra (Tel. 64641)

indicating whether you are interested in these projects. We expect you proposals, here in Accra, not later than November, 1, 1968. Copies should also be submitted to IBRD Washington and Abidjan, by the same date.

The firms selected after negotiation will be expected to start field work within one month from the effective date of their contract, and to complete all work under the contract within twelve (12) calendar month thereafter.

Two separate unpriced proposals are expected, one for each road.

Sincerely yours,

GHANA

SUPPLEMENTARY INFORMATION FOR CONSULTANTS

Submitting Unpriced Proposals for
Detailed Engineering of Roads

Proposal

Proposals shall be submitted in septuplicate and shall include the following information:

a. A brief description of the Consulting Firm and an outline of recent experience on projects of similar nature.

b. A draft prepared by the Consultants of the Terms of Reference, and of the engineering contract. All work shall be completed in twelve (12) calendar months from start of field work.

c. The manner in which the Consultants would organize and execute the assignment.

d. The composition of the team of technical personnel which the Consultants propose to provide in Ghana and in the home office, and the tasks which would be assigned to each member of the team.

e. Past experience, in detail, of each staff member to be assigned to the team, including partners and senior officers in the home office who would be responsible for supervision of the team, giving length of time spent on important past assignments and specific responsibilities held by the staff member.

f. Estimates of the total man-months of work required for completion of the consulting services, supported by bar-chart diagrams showing man-months for each expert in Ghana in the home office.

In preparing the proposal, the Consultants should give particular attention to the following:

a. Members of the team should have the requisite experience outside their own country, preferably under conditions similar to those prevailing in Ghana. Knowledge of English is essential for key personnel to work on this assignment.

b. A majority of the personnel comprising the Consultants' team should be drawn from the permanent staff of the firm.

c. Periodic inspection visits to Ghana should be made by partners or senior officials of the consulting firm during the course of the assignment.

thus:	Public Works Department, Accra	4 copies)	to arrive by November 1, 1968
	IBRD, Washington, Att: Mr. Warren C. Baum	2 ")	
	IBRD, B.P. 1850, Abidjan.....	1 copy)	

1. Kjessler & Mannerstrale
   Vartavagen 73,
   Stockholm
   Sweden.

2. Foundation Engineering of
   Canada Corporation Limited,
   2200 Yonge Street,
   Toronto 12,
   Canada.

3. Ingeroute,
   Siege Social,
   14, Rue Cambaceres,
   Paris Ville,
   France.

4. Louis Berger Inc.,
   100 Halsted Street,
   East Orange N.J. 07018
   U.S.A.

5. N.D. Lea & Associates Ltd.,
   100 Adelaide Street West,
   Toronto 1,
   Ontario,
   Canada.

6. Dr. Ing Walter Ingenieurberatung,
   43 Essen,
   Consultinghaus,
   Wittenbergstrasse 10.

LIST OF CONSULTANTS TO BE INVITED TO SUBMIT UNPRICED PROPOSALS

1. KJESSLER AND MANNERSTRALE A.B.
2. FOUNDATION OF CANADA ENGINEERING
3. INGEROUTE.
4. N.D. LEA & ASSOCIATES LTD
5. LOUIS BERGER INC.
6. DR. ING WALTER INGENIEURBERATUNG

BY AIR MAIL

AÉROGRAMME

AIR LETTER

THE DIRECTOR,
AFRICA DEPARTMENT,
THE INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT,
1818 H. STREET, N.W.,
WASHINGTON D.C.,
U.S.A. 20433.

This space also for correspondence

Sender's name and address PRINCIPAL SECRETARY,
MINISTRY OF WORKS AND HOUSING,
P. O. BOX M.43,
ACCRA, GHANA.

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL

Ghg H'way
1
S

MINISTRY OF WORKS & HOUSING
MINISTRY P. O. BOX M. 43
ACCRA, GHANA

My Ref. C.MB.3/2/SF.1/V.4/425 17th August,1968

Dear Sir,

ACCRA-KUMASI AND TAKORADI-KUMASI HIGHWAY

AFRICA DEPT.
AUG 22 1968
☐ El Emary
☐ McIvor
☐ Calika
☐ Larsen
☒ Div. B
☐ Div.
☐ Div.
☐ Div.
☒ Op. Files
☐ Res. Files
☐

I have to inform you that the Government of Ghana has approved the alignments recommended by Messrs. Kjessler and Mannerstrale AB of Sweden in respect of the proposed Accra/Kumasi and Takoradi/Kumasi Highway as follows:-

(i) Accra/Kumasi Road:-

The alignment which runs from Accra-near Mempom-near Oda-near Ofoase-near Lake Bosomtwe-Kumasi.

(ii) Takoradi/Kumasi Road:-

The alignment which runs from Kumasi-Dunkwa-Subri-Asikuma-Botawjina-Sekondi-Takoradi.

2. Your letter dated 18th July is under consideration and a reply will be sent to you shortly.

Yours faithfully,

PRINCIPAL SECRETARY.
(C.W.O. SACKEYFIO)

THE DIRECTOR,
AFRICA DEPARTMENT,
THE INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT,
1818 H. STREET, N.W.,
WASHINGTON D.C.,
U.S.A.
(ATTENTION: MR. NORMAN HORSLEY).

Copy Mr Morris
Sorelson
Miss Powell
Clyde
B File

BY AIR MAIL

AÉROGRAMME

AIR LETTER

Mr Norman Horsley, African Department
International Bank for Reconstruction
and Development, 1818 H. Street N.W.
Washington D.C. 20433.

Sender's name and address Mr E. N. Omaboe
Commissioner for Economic Affairs,
Accra, Ghana. W.A.

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED OR SENT BY ORDINARY MAIL

1968 JUL 29 PM 9:37

This space also for correspondence

AIRMAIL

Please quote number and date of this letter

No. NEC/

Gha Rds Project

ECONOMIC COMMITTEE
(NATIONAL LIBERATION COUNCIL)
c/o P.O. BOX M.76
ACCRA

24 July, 1968.

B MSR

Dear Mr. Horsley,

I thank you for your letter of July 18, 1968, concerning the financing of the Accra/Kumasi and Takoradi/Kumasi Trunk Ways.

I confirm that it is the Government's intention to apply for IDA credit for the detailed engineering studies. We also intend to approach the Bank or IDA for assistance in financing the construction of the roads when the studies have been completed and reviewed.

Yours sincerely,

(E.N. OMABOE)
COMMISSIONER FOR ECONOMIC AFFAIRS

Mr. Norman Horsley,
Africa Department,
International Bank For
Reconstruction and Development,
1818 H Street, N.W.,
Washington, D.C. 20433,
U.S.A.

cc: Messrs. Sorensen
Morris
Bickers
Clyde
Reamy/RJones
Miss Powell
Africa B File

copy to P

Gha Rds
Engineering

July 18, 1968

Mr. C.W.O. Sackeyfio
Principal Secretary
Ministry of Works and Housing
P.O. Box M.43
Accra, Ghana

Dear Mr. Sackeyfio:

Thank you for your letter of June 18, reference CMB.3/2/SF.1/Vol.3/358, concerning detailed engineering studies for the Accra-Kumasi and Takoradi-Kumasi trunk roads.

We understand from your letter that, as a first step and because of Ghana's foreign exchange situation, you now seek a credit to cover the foreign exchange costs of these studies. The financing of the construction of the roads would be the subject of a separate application to the Bank or IDA, which would consider the application when the detailed engineering studies had been completed and reviewed.

We would, of course, carry out an appraisal in the usual way before submitting a proposal for the detailed engineering credit to our Executive Directors. If the feasibility studies are received by the end of August, we hope that the field appraisal could take place in November. An engineering credit would normally be amortized over eight years, following a grace period of about one year. It would be refunded out of the proceeds of any Bank loan or IDA credit ultimately made for the construction project.

A credit for detailed engineering does not constitute a commitment by the Bank or IDA to finance the construction project. Moreover, it can be provided only if the Government intends to seek financing for the construction project from the Bank or IDA. A construction project for either or both of the trunk roads would be the subject of a separate appraisal. I hope that the foregoing clarifies the procedures involved.

An alternative that you might wish to consider would be for the Government to finance initially the detailed engineering for the Accra-Kumasi road only. We would be willing to consider including the foreign exchange cost of this, as well as similar costs for the Takoradi-Kumasi road, in a loan or credit that we might make later

ack 8/17

for the construction of the Accra-Kumasi road. The initial Government financing required would thereby be reduced to some $800,000, compared with $1,500,000 for both roads. Moreover, it is probable that only about $500,000 would be needed in 1968/9, the balance of $300,000 falling in the next fiscal year. These amounts may be compared with the local costs of detailed engineering for both roads, which the Government would be expected to meet if we made a credit for detailed engineering, of about $300,000 this year and $200,000 in 1969/70.

I should be grateful for your views on this suggestion.

Yours sincerely,

Norman Horsley
Africa Department

Copy to: Mr. E. N. Omaboe
Commissioner for Economic Affairs
P.O. Box M.76
Accra, Ghana

Cleared with and cc: Messrs. Bergan
Morris
Clyde
Petretti

cc: Messrs. Lutolf (Abidjan)
Ram/Hammel/Africa B file: Ghana - Trunk Roads

NHorsley:di
IBRD/IDA

Gha Rds
Engineering

July 18, 1968

Mr. E. N. Omaboe
Commissioner for Economic Affairs
Ministry of Economic Affairs
P.O. Box M.76
Accra, Ghana

Dear Mr. Omaboe:

I enclose a copy of a letter to the Principal Secretary, Ministry of Works and Housing, concerning detailed engineering studies for the Accra-Kumasi and Takoradi-Kumasi trunk roads.

I should be grateful if you would confirm the Government's wishes with regard to a possible credit from IDA for the detailed engineering studies, and that if such a credit is made you expect to approach the Bank or IDA for assistance in financing the construction of those roads when the studies have been completed and reviewed.

Yours sincerely,

Norman Horsley
Africa Department

Enclosure

Cleared with and cc: Messrs. Bergan
Morris
Clyde
Petretti

cc: Messrs. Lutolf (Abidjan)
Ram/Hammel/Africa B file: Ghana - Trunk Roads

NHorsley:di
IBRD/IDA

BY AIR MAIL

AÉROGRAMME

AIR LETTER

THE DIRECTOR,
AFRICA DEPARTMENT, INTERNATIONAL BANK
FOR RECONSTRUCTION AND DEVELOPMENT,
1818 H STREET, N.W. WASHINGTON D.C.,
20433, U.S.A.

Sender's name and address The Principal Secretary,
Ministry of Works & Housing, P. O. Box M.43,
Accra, Ghana.

AN AIR LETTER SHOULD NOT CONTAIN ANY
ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL

This space also for correspondence

This space also for correspondence

Gha 115

Ministry of Works & Housing,
P. O. Box M.43,
Accra, Ghana.

My Ref.No.CMB.3/2/SF.1/Vol.3/
358

AFRICA DEPT.

18th June, 1968.

JUN 24 1968

El Emary
McIvor
Calika
Larsen
Div.
Norman Horsley
Div.
Div.
Div.
Files
Reviews

A. G. El Emary

Dear Sir,

Further to our telex of 2nd May, 1968, we wish to thank you for your letter of 19th April 1968, concerning the detailed engineering studies of the two trunk roads to Kumasi.

2. We fully appreciate the points made in your letter and wish to state that as the Ghana Government's foreign exchange position is not favourable enough to meet commitments connected with the detailed engineering studies, it has been decided that we should wait until the final report on the feasibility studies has been submitted and the project appraised by you before we apply to you for a loan or credit to finance this phase of the project.

3. We appreciate your continued co-operation in the matter.

Yours faithfully,

PRINCIPAL SECRETARY.
(C.W.O. SACKEYFIO).

THE DIRECTOR,
AFRICA DEPARTMENT,
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT,
1818 H STREET,
N.W. WASHINGTON D.C. 20433,
U.S.A.

ack July 18

(Attention: Mr. Norman Horsley).

Copied to: Mr. Morris
Mr. Clyde
Mr. Petretti
Mr. Ram/Hammel/
Africa B file

Dist. June 26

cc. The Chief of Mission,
I.B.R.D. Permanent Mission
In W.A., B.P. 1850,
Abidjan, Ivory Coast.

Edna Hways

Norman Horsley

IN CASE OF REPLY THE
NUMBER AND DATE OF THIS
LETTER SHOULD BE QUOTED

OUR REF. No. E-2/Vol 2
YOUR REF. No. _____

EMBASSY OF GHANA
2460 16TH STREET, N.W.
WASHINGTON 9, D. C.

May 2, 1968

Dear Mr. Horsley,

----- I have the honour to transmit herewith the original of a cablegram received today from the Ministry of Works, Accra.

Yours sincerely,

C.O.C. Amate
Counsellor

Cable copied to: Messrs. Sorensen
Morris
Bickers
Clyde
Reamy/R. Jones
Miss Powell
Africa B file: Ghana-Road Study

May 2

Mr. Norman Horsley,
Room 547, I.B.R.D.,
1818 H Street N.W.,
Washington D.C.

RCANY 214 1402✠
GHANA 24394

GHANACOM LONDON

FM FOREIGNNACCRA 2ND MAY 1968

TO GHANAEMB WASHINGTON D C

GW-163

FOR AMATE FROM AMPOFO MINWORKS

KINDLY CONFIRM TO HORSELY THAT INTBAFRAD LETTER DATED APRIL 19 NOW RECEIVED STOP PRELIMINARY DISCUSSIONS ALREADY HELD WITH MR DUNCAN PERMANENT MISSION ABIDJAN STOP POLICY ISSUES INVOLVED BEING CLEARED WITH MINISTRY OF ECONOMIC AFFAIRS STOP GOVERNMENT DECISION INVOLVING THE PHASING OF THE DETAILED ENGINEERING WORK WOULD BE COMMUNICATED IN DUE COURSE=

FOREIGN EBS

M

NMNN

✠
GHANA 24394

GHANACOM LONDON

✠
GHANA 24394

Ghe Ways

April 19, 1968

Mr. C.B.A. Mate-Kole
Senior Assistant Secretary
Ministry of Works and Housing
P.O. Box M.43
Accra, Ghana

Dear Mr. Mate-Kole:

Thank you for your letter, reference C.MB.3/2/SF.1/V.2/220, of February 28 concerning the detailed engineering of the two trunk roads to Kumasi which are at present the subject of a UNDP-financed feasibility study.

We fully appreciate the Government's desire to ensure continuity in the engineering work, and to avoid the delays that would arise if detailed engineering could not start early in the next dry season. However, the proposals in your letter include a time-schedule that is, I am afraid, quite impossible for us to follow. If we were to consider a loan or credit for the detailed engineering of the two trunk roads, we could not appraise this project until we had received at least the draft final report on the present feasibility study. We assume that we might have this by about September 1968, and that because of the other steps that have to be followed we would not therefore be in a position to sign an agreement until February or March 1969. The 1968/9 dry season would thus be well advanced before a start could be made to final engineering work. I should add that even if we could appraise a project for the detailed engineering immediately, it is unlikely that we could sign an agreement before October or November next.

It appears to us that the best way to achieve continuity and avoid substantial delays would be for the Government itself to finance initially the cost of detailed engineering and to follow your proposed time-schedule. Our appraisal would then be related primarily to a road construction project, but would, of course, embrace both the feasibility study and the detailed engineering. Such an appraisal could be undertaken when the detailed engineering was sufficiently advanced to provide reasonably firm cost estimates. Loan negotiations would be possible when the detailed engineering was completed. We would be prepared to consider including in a possible loan or credit for road construction the foreign exchange costs of detailed engineering incurred not more than one year before approval of the loan. We

ack June 18

cannot, of course, make any commitment to reimburse the Government for expenditures on detailed engineering until the loan proposal has been approved by our Executive Directors. Such expenditures would therefore be made at the Government's risk, but provided that the results of our appraisal are satisfactory, we do not now see any reason why we should not lend to Ghana for this purpose.

We note your suggestion that you call for unpriced proposals from a short list of consultants (this list to be agreed with the Bank) for carrying out the detailed engineering. I should like to confirm our cable of April 3, which stated that we would have no objection either to this procedure or, if you prefer, to your negotiating directly with Messrs. Kjessler and Mannerstrale who are now engaged on the feasibility studies and preliminary engineering.

We are enclosing an outline draft of the terms of reference for carrying out detailed engineering. These are necessarily written in general terms and would probably need some modification and amplification to suit the particular circumstances. For example, the sections on the "Scope of Work" and "Location and Survey" should be expanded to describe the studies and preliminary engineering already carried out and which should be made available to the consultants (referred to as the Engineer). Also the scales shown are tentative and may require to be varied as appropriate for the particular requirements or for standardization. With regard to your request for sample engineering contracts, we believe that as the terms of these vary so much from case to case, it is best that the contract should be prepared by you to suit your specific circumstances, and we suggest that the consultants themselves prepare a first draft for your consideration and negotiation. We should, however, like to have an opportunity to comment on it before it is finally agreed and signed.

It was a great pleasure to see you in Washington for the negotiation of the proposed power credit, and I look forward to our next meeting.

With kind regards,

Yours sincerely,

Norman Horsley
Africa Department

Enclosure

Cleared in principle with Mr. Knapp
Cleared with Mr. McIvor
Cleared with and cc: Messrs. Morris/Bickers
Clyde
Petretti
Ram/Hammel/B file

cc: Mr. Lutolf, Chief, PMWA
NH:di
IBRD/IDA

Proposed Terms of Reference for Detailed Engineering and Design

Proposals are invited from Consulting Engineers for carrying out detailed engineering and design of roads shown on the attached Schedule A and according to the following:-

1. General Scope of Work

The Engineer shall carry out detailed ground surveys in order to locate the roads precisely and subsequently prepare all the necessary plans, specifications and documents required for international competitive bidding and construction by contract in accordance with procedures acceptable to international financing agencies such as the World Bank. Separate drawings and documents shall be prepared for each of the (five ?) sections of road, for which separate contracts would be let.

2. Location and Survey

The routes to be followed by the roads have generally been established and the Engineer will be advised of these by the Department, which will make available full details of the preliminary engineering already carried out.

The Engineer shall, however, be responsible for the detailed location and shall bring to the notice of the Department any improvements or amendments which he considers desirable to the routes.

3. Design Standards

The geometric and loading design standards to be used will be agreed with the Department. The Engineer shall be responsible for the design details within this framework, including that for the pavement and surfacing.

The alignments and right of way shall be staked on the ground and adequately referenced with permanent markers and bench marks placed clear of the construction area.

4. Soils and Materials Investigations

The Engineer shall carry out such investigations of ground conditions as are necessary for the design of the roads and structures.

In addition he shall carry out such investigations as are required to locate, identify and check the availability of suitable materials for the design which he proposes. The investigations shall include but are not restricted to materials for:-

a. Embankment and subgrade
b. Subbase
c. Base
d. Shoulders
e. Surfacing
f. Concrete aggregates

The location of these materials shall be shown on suitable plans and maps together with the test data relevant to them.

5. Drainage

The Engineer shall study the hydrology and general drainage of the areas affecting the roads and design the waterways and elevation accordingly.

6. Plans and Documents Required

The Engineer shall provide the following detailed engineering drawings, specifications and documents for each road or section of road:-

a. Right of Way Plans - Showing the existing and proposed R.O.W. The Department will provide the necessary information for the former and the latter will be according to the standards shown on the schedule - number required. ...

b. Roadway - Plans 1 : 1250 horizontal
Profile 1 : 1250 horizontal
1 : 125 vertical
Cross Sections 1 : 125 at appropriate intervals as required but in any case not more than 100 ft.
Typical Cross Sections and Details) As required, to appropriate scales.

c. Structures - Scales as appropriate.

d. Drainage - Scales as appropriate.

For (b), (c) and (d) the numbers required are:-

Original tracings
6 sets full size contact prints
30 sets of half size prints (except for cross sections)
suitably bound and indexed.

e. General and Special Conditions.

f. Specifications - 30 copies.

g. Bidding Document - including Schedules of Quantities - 30 copies.

h. Materials Report - 30 copies.

This does not form part of the bidding documents but will be made available to contractors to assist them during bidding and subsequent development of materials sources during construction. It must therefore be a comprehensive report, including location plans, of what a contractor may reasonably expect to be available for construction of the road.

7. Cost Estimate

The Engineer shall prepare detailed estimates of cost for each section of road based on the Schedule of Quantities.

8. Construction and Expenditure Schedule

In order to assist in evaluating the required construction period and forward budget heads the Engineer shall prepare a construction schedule for each road showing the anticipated annual expenditures. Due account should be taken of the climatic conditions in the areas concerned.

9. Consultation with the Department

During the course of the work the Engineer shall liase closely with the Department and before finalizing shall reach agreement with the Department on all of the major aspects of the design such as:-

a. Alignment
b. Grade and elevation
c. Location, type and size of structures
d. Typical cross sections
e. Pavement design
f. Intersections
g. The General and Special Conditions

All necessary calculations and data used in the design shall be supplied to the Department.

10. Time for Completion

(A program for carrying out the detailed engineering, to be agreed with the Engineers.)

11. Reports

a. Interim report (after 6 months?) - outlining proposed designs and specifications.
b. Progress reports - to be submitted monthly.
c. Draft final report (after ? months) - Draft drawings, specifications, estimates and bid documents.
d. Final report.

Gha Works

In case of reply the number and date of this letter should be quoted.

My Ref. No. C.MB.3/2/SF.1/V.2/220

Your Ref. No.

Telephone No. 65421

BY AIR MAIL

Ministry of Works and Housing
P.O. Box M43
Accra

28th February, 1968

Gentlemen,

STUDY OF TWO TRUNK ROADS

The Government is particularly anxious to ensure continuity in the engineering work for the two trunk roads to Kumasi, which are currently being studied by Consultants Kjessler & Mannerstrale under UNDP auspices.

2. Preliminary engineering is now in hand, and is scheduled for completion within six months from 30th January, as concerns the Takoradi route (Consultants' alternative B) and somewhat later - depending on Bank's decision regarding alignments - as concerns the Accra route.

3. In order to allow sufficient time to select Consultants for detailed engineering, strictly in accordance with the Bank's recommended procedures, Government would suggest that the time has come to approach the Bank with a view to obtaining its advice in this matter.

4. It is therefore requested that the Bank outline the various steps which Government should now initiate, with a view to securing a loan or credit for a substantial proportion of the total costs of executing the detailed engineering (including final designs, plans, specifications, and all tender documents ready for advertisement). In particular, Government would appreciate it if the Bank were to furnish complete Terms of Reference for the detailed engineering, as well as samples of recent engineering contracts which might serve as models (mutatis mutandis) for our particular needs. —?

5. After discussions of these questions with Mr. Duncan of the Bank's Permanent Mission to West Africa, I would recommend that a suitable target date for effectiveness of the detailed engineering contract(s) would be 1st September, 1968. Allowing about one month for mobilization, this would allow field surveys to start in early October, 1968, i.e., at the beginning of the dry season.

6. Allowing about two weeks for clearance of the engineering contract with local financial authorities, it would be necessary to have it signed by 15th August, 1968. Since prior Bank approval of the contract (as finally negotiated by both parties) would be required, it would be well to allow two weeks after negotiations for this step; thus, negotiations should take place in late July, 1968.

7. Allowing about six or seven weeks for evaluation of Consultants' proposals (unpriced) and exchange of views with the Bank, as well as Bank approval of the leading candidate, it would be well to set a deadline of, say, 1st June, 1968, for the Consultants' submission of unpriced proposals.

8. As the Consultants normally are given about six weeks to prepare such proposals, the request for same should go out to the Bank-approved short list by mid-April, 1968, at the latest.

9. The Government is prepared, therefore, to submit a short list of Consultants to the Bank by mid-March, 1968, if the Bank indicates

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THE INTERNATIONAL BANK FOR
RECONSTRUCTION & DEVELOPMENT,
1818 H STREET, N.W.,
WASHINGTON, D.C.,
U.S.A. 20433.

to Government that it is ready to consider such a list.

10. The Government wishes to take this opportunity to thank the Bank for its assistance in this matter, up to date, and trusts that it will continue to take an active interest in these important road projects.

Yours truly,

AG. PRINCIPAL SECRETARY
(C.B.A. MATE-KOLE)

copied to: The Chief of Mission,
I.B.R.D. Permanent Mission
In W.A., B.P. 1850,
Abidjan, Ivory Coast.

The Principal Secretary,
Ministry of Economic Affairs.

The Ag. Engineer-in-Chief,
P.W.D.,
Accra.

The Senior Roads Engineer,
Ghana Highway Study,
Accra.

Copied to Working Party March 13: Messrs. Sorensen
Morris
Bickers
Clyde
Reamy
Miss Powell
Horsley/B file
Ram
Hammel