REPUBLIC OF CAMEROON
Peace - Work – Fatherland

REPUBLIQUE DU CAMEROUN
Paix –Travail – Patrie

MINISTRY OF DECENTRALIZATION AND LOCAL DEVELOPMENT
****

BAMENDA CITY COUNCIL

****

INTERNAL TENDERS BOARD

OPEN NATIONAL INVITATION TO TENDER N°008/ONIT/BCCITB/2023 OF 01/09/2023 FOR THE REHABILITATION OF THE FINANCE-JUNCTION- VETERINARY JUNCTION - CITY CHEMIST- HOSPITAL ROUND-ABOUT – T-JUNCTION ROADS IN BAMENDA CITY "UNDER EMERGENCY PROCEDURE".

TENDER FILE

Funding: Bamenda City Council Budget for 2023 financial year.

(Account: 220 150)

SEPTEMBER, 2023

SUMMARY

Document n° 1: Invitation to Tender (IT)

REPUBLIC OF CAMEROON
Peace - Work – Fatherland

REPUBLIQUE DU CAMEROUN
Paix –Travail – Patrie

MINISTRY OF TERRITORIAL ADMINISTRATION & DECENTRALISATION
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BAMENDA CITY COUNCIL

****
INTERNAL TENDERS BOARD

OPEN NATIONAL INVITATION TO TENDER N°008/ONIT/BCCITB/2023 of 01/09/2023 for the rehabilitation of the Finance-Junction - Veterinary Junction – City Chemist – Hospital Round-about – T-Junction Roads in Bamenda City "Under Emergency Procedure".

1. Subject of the tender
Within the framework of the execution of the 2023Public Investment Budget, the City Mayor of Bamenda City Council hereby launches an Open National Invitation to Tender "under emergency procedure" for the above-mentioned project.

2. Scope of work
The works are made up of: Site installation, Mobilization and demobilization of equipment, Scarification of the exiting road surface and moulding, Cut and throw, Fill from borrow pit, Base course in crushed aggregate 0/31.5 or laterite, Priming and Double layer surface dressing.All other works described in the cost estimates and bill of quantities.

3. Execution timeframe
The maximum deadline provided by the Contracting Authority for the execution of the works forming the subject of this invitation to tender is fifty (50) days.

4. Maximum number of lots
The works as listed above are regrouped in a single lot.

5. Estimated cost
The estimated cost after preliminary studies is one hundred **ninety-nine million four hundred and fifty-four thousand four hundred and ninety-seven (199,454,497) Francs CFA** all taxes inclusive.

6. Participation and origin
Participation in this invitation to tender is opened to all national companies specialized in building construction and public works.

7. Funding
Works referred to in this invitation to tender shall be funded by the Bamenda City Council Budget for 2023 Financial year, (Account: 220 150)

8. Bid bond
Each bidder must include in his administrative documents, a bid bond issued by a first-rate banking establishment approved by the Ministry in charge of finance and whose list is found in document No. 12 of the Tender File, of **three million nine hundred and eighty-nine thousand ninety (3,989,090) Francs CFA** valid for thirty (30) days beyond the validity date of the bids. Bid bonds for unsuccessful bidders shall be withdrawn not later than fifteen (15) days after the award of the contract and those of successful bidders shall be retained until the required performance guarantee for good execution is provided.

9. Consultation of the tender documents
The tender documents may be consulted during working hours at the Bamenda City Council, Department of Technical Services, Tel: 677 14 41 31/ 674 78 21 67, upon publication of the invitation to tender.

10. Acquisition of the tender documents
The file may be obtained from the Bamenda City Council, Department of Technical Services at Mulang Tel: 677 14 41 31/ 674 78 21 67 upon publication of the invitation to tender against payment of the non-refundable sum of **one hundred and fifty thousand (150,000) CFA Francs**, payable at Bamenda City Council Treasury under the budgetary head 712 101.

11. Submission of tenders
Each bid drafted in English or French shall be signed by the bidder or by a duly authorized representative and presented in seven (07) copies including the original and six (06) copies marked as such. These shall be submitted in one sealed pack containing three (3) envelopes; (A: Administrative file, B: Technical file, C: Financial file). The

sealed pack shall bear no information on the enterprise, and should reach Bamenda City Council on or before the **27/09/2023** not later than **10:00am** and should carry the inscription:

«OPEN NATIONAL INVITATION TO TENDER N°008/ONIT/BCCITB/2023 of 01/09/2023for the Rehabilitation of the Finance-Junction - Veterinary Junction – City Chemist – Hospital Round-about – T-Junction Roads in Bamenda City "Under Emergency Procedure"

«TO BE OPENED ONLY DURING THE TENDER OPENING SESSION»

12. Admissibility of offers

For fear of being rejected, only originals or true copies certified by the issuing services or administrative authorities (Senior Divisional Officer, Divisional Officers etc…) must imperatively be produced in accordance with the Special Regulations of the invitation to tender.

They must obligatorily not be older than ninety (90) days preceding the date of submission of bids or may be established after the signature of the tender notice.

Any bid not in compliance with the prescriptions of the Tender File shall be declared inadmissible.

13. Opening of tenders

The opening of the Administrative and technical bids shall be done on the **27/09/2023, at 11.00 am** prompt in the Conference Hall of the Bamenda City Council Internal Tenders Board. Only bidders may attend or be duly represented by a person of their choice, who has full knowledge of the file and mandated in that capacity.

14. Main eliminatory criteria

i) Eliminatory criteria

- Forged, scanned, false or fake document;
- Absence of bid bond;
- Non compliance with the bid model;
- Deadline of execution more than the prescribed;
- Omission of a quantified task on the bill of quantities;
- Technical mark less than 80% ;
- Audited balance sheet for the last 5 years certified by charted accountant from 2018 to 2022;

ii) Essential criteria

The following essential criteria shall be evaluated in a binary manner (satisfactory or not) and will include:

- Financial situation;
- Equipment;
- Personnel;
- Methodology of execution and conformity with technical specifications, environmental protection And hygiene;
- References for similar works;
- Acceptance of the conditions of the contract.

15. Award

The contract shall be awarded to the bidder whose bid is in conformity to the dispositions of the tender file and on the basis of the lowest bid and technical quality, confer article 33 of the public contracts code.

16. Tender validity

Bidders will be bound by their tender for a period of ninety (90) days with effect from the tender-submission deadline.

17. Complementary information

Complementary technical information may be obtained during working hours from the Department of Technical Services, Tel: 677 14 41 31/ 674 78 21 67, upon publication of the invitation to tender.

Bamenda, the 01 SEPT 2023

The City Mayor,
Bamenda City Council,
(Contracting Authority)

ACHOBONG TAMBENG PAUL

Copies:
- PCRB (for publication and archiving),
- Chairman TB (for information),
- Notice Board,
- Contract Service/Archives.

REPUBLIC OF CAMEROON
Peace - Work – Fatherland

REPUBLIQUE DU CAMEROUN
Paix –Travail – Patrie

MINISTRY OF DECENTRAISATION NAND LOCAL DEVELOPMENT
****

BAMENDA CITY COUNCIL

****
INTERNAL TENDERS BOARD

AVIS D'APPEL D'OFFRES NATIONAL OUVERT N°008/AAONO/CIPMCUB/2023du 01/09/2023pour la réhabilitation des routes Finance Junction - Veterinary Junction- City Chemist – Hospital Round-about – T-Junction dans la ville de Bamenda « Sous procédure d'urgence » .

1. Objet de l'Appel d'Offres
Dans le cadre de l'exécution du budget d'investissements 2023, le Maire de la ville auprès de la Communauté Urbaine de Bamenda pour le compte de sa municipalité lance sous la procédure d'urgence un appel d'offres National Ouvert pour le projet susmentionné.

2. Consistance des travaux
Les travaux comprennent notamment : Installation de chantier, Amené et repli du matériels, Scarification de la chaussée existante plus mise en forme, Couche de base en concassé (0/31.5) ou latérite, Imprégnation, Couche de roulement en bicouche. Toutes autres taches décrites dans le détail quantitatif.

3. Délais d'exécution
Le délai maximum prévu par le Maître d'Ouvrage pour la réalisation des travaux objet du présent appel d'offres est de cinquante (50) jours.

4. Allotissement
Les travaux comme indiqué ci-desus sont regroupés dans un unique lot.

5. Coût prévisionnel
Le coût prévisionnel de l'opération à l'issue des études préalables est de **cent quatre-vingt-dix-neuf million quatre cent cinquante-quatre mille quatre cent quatre-vingt-dix-sept (199, 454,497) Francs CFA** TTC.

6. Participation et origine
La participation au présent appel d'offres est ouverte à toute entreprise Camerounaise spécialisée dans les travaux publics et bâtiment.

7. Financement

Les travaux objet du présent appel d'offres seront financés par le Budget d'Investissement de la Communautaire Urbaine de Bamenda au titre de l'exercice 2023 sur la ligne d'imputation 220 150.

8. Cautionnement provisoire
Chaque soumissionnaire doit joindre à ses pièces administratives, une caution de soumission établie par une banque de premier ordre agréée par le Ministère chargé des finances et dont la liste figure danslapièce12duDAO, du montant de trois million neuf cent neuf cent quatre-vingt-neuf mille quatre-vingt-dix **(3,989,090)**Francs CFA valable pendant trente (30) jours après l'expiration de la validité des offres pour les soumissionnaires n'ayant pas été retenus.

Dans le cas où le soumissionnaire est attributaire de la lettre commande, le cautionnement provisoire sera libéré après constitution du cautionnement définitif.

9. Consultation du Dossier d'Appel d'Offres
Le dossier peut être consulté aux heures ouvrables au Secréterait de la Direction des Services Techniques, Communauté Urbaine de Bamenda à Mulang Tel : 677 144 131/ 674 78 21 67 dès publication du présent avis.

10. Acquisition du Dossier d'Appel d'Offres
Le dossier peut être obtenu au Secrétariat de la Direction des Services Techniques, Communauté Urbaine de Bamenda dès publication du présent avis, contre versement d'une somme non remboursable de **cent cinquante mille (150,000)** Francs CFA payable à la trésorerie de Communauté Urbain de Bamenda sous la ligne budgétaire 712 101.

11. Remise des offres
Chaque offre rédigée en français ou en anglais en sept (07) exemplaires dont l'original et six (6) copies marquées comme tels, devra parvenir à la Direction des Services Techniques, Communauté Urbaine de Bamenda, Tel: 33 36 12 67, au plus tard le **27/09/2023 à 10 heures précise** et devra porter la mention:

AVIS D'APPEL D'OFFRES NATIONAL OUVERT N°008/AAONO/CIPMCUB/2023 du01/09/2023 pour la réhabilitation des routes Finance Junction - Veterinary Junction- City Chemist – Hospital Round-about – T-Junction dans la ville de Bamenda « Sous procédure d'urgence ».

« A N'OUVRIR QU'EN SEANCE DE DEPOUILLEMENT »

12. Recevabilité des offres

Sous peine de rejet, les pièces du dossier administratif requises doivent être produites en originaux ou en copies certifiées conformes par le service émetteur ou une autorité administrative (Préfet, Sous-préfet etc…), conformément aux stipulations du Règlement Particulier de l'Appel d'Offres.

Elles doivent dater de moins de trois (03) mois précédant la date originale de dépôt des offres ou avoir été établies postérieurement à la date de signature de l'Avis d'Appel d'Offres. Toute offre incomplète conformément aux prescriptions du Dossier d'Appel d'Offres sera déclarée irrecevable

13. Ouverture des plis

L'ouverture des offres administratives et techniques qui se fera en un temps par la Commission de Passation des Marchés de la Communauté Urbaine de Bamenda, aura lieu le **27/09/2023à 11 heures** dans la salle de conférence de la Commission Interne de Passation des Marchés de Communauté Urbaine de Bamenda.

Seuls le soumissionnaire peut assister à cette séance d'ouverture ou s'y faire représenter par une personne de son choix ayant une bonne connaissance de son offre.

Celle des offres financières aura lieu au terme de l'analyse technique et ne concernera que les soumissionnaires ayant obtenu la note minimale de 80% des points.

14. Critères d'évaluations

i) Les critères éliminatoires sont :

- Absence de caution de soumission;
- Délai d'exécution supérieur à celui prescrit;
- Fausses déclarations ou pièces falsifiées ;
- Non-conformité du modèle de soumission;
- Omission d'un prix quantifié dans le devis ;
- Note technique inférieure à 80%,
- Bilan audité des 5 dernières années certifié par un expert-comptable de 2018 à 2022

ii) Principaux critères de qualification

Les critères relatifs à la qualification des candidates porteront sur :

- Situation financière ;
- Références pour les travaux similaires ;
- Personnels ;
- Matériels ;
- Méthodologie de l'exécution et la conformité aux spécifications techniques, la protection environnementale et l'hygiène ;
- Acceptation des conditions du contrat.

15. Attribution

Le contrat sera attribué au soumissionnaire dont l'offre a été jugée essentiellement en conformité avec le dossier d'appel d'offres et est évalué le moins-disant.

16. Durée de validité des offres

Le soumissionnaire reste engagé par son offre pendant ***90 jours*** à partir de la date limite fixée pour la remise de l'offre.

17. Renseignements complémentaires

Les renseignements complémentaires peuvent être obtenus aux heures ouvrables à la Communauté Urbaine de Bamenda au Secréterait de la Direction des Services Techniques, Communauté Urbaine de Bamenda, Tel : 677 14 41 31/ 674b78 2167.

Bamenda, le 01 SEPT 2023

Le Maire de la ville,
Communauté Urbaine de Bamenda
(AUTORITÉ CONTRACTANTDÉLÉGUÉ)

ACHOBONG TAMBENG PAUL

Ampliations :
(1) ARMP (pour publication et archivage) ;
(2) Présidents CIPM (pour information) ;
(3) Affichage (pour information) ;
(4) Service de Contrats/Archives

Document n° 2: General Regulations of the Invitation to Tender (GRIT)

Table of contents

GENERAL REGULATIONS OF THE INVITATION TO TENDER

A. General Provisions

Article 1: Scope of the tender

1.1 The Contracting Authority as defined in the Special Regulations of the invitation to tender hereby launches an invitation to tender for the maintenance works described in the Tender File and briefly described in the Special Regulations.
The name, identification number and number of lots which form the subject of the invitation to tender feature in the Special Regulations of the invitation to tender.

1.2 The bidder retained or the preferred bidder must complete the works within the time- limit indicated in the Special Regulations and which time-limit runs from the date of notification of the Administrative Order or that indicated in the said Administrative Order.

1.3 In this Tender File, the term "day" means a calendar day.

Article 2: Funding

The source of funding of the works forming the subject of this invitation to tender shall be specified in the Special Regulations.

Article 3: Fraud and corruption

3.1 The Contracting Authority requires of bidders and contractors the strict respect of rules of professional ethics during the award and execution of public contracts. By virtue of this principle:

a) The following definitions shall be admitted:

i) Shall be guilty of "corruption" whoever offers, gives, requests or accepts any advantage in view of influencing the action of a public official during the award or execution of a contract;

ii) Is involved in "fraudulent manoeuvres" whoever deforms or distorts facts in order to influence the award or execution of a contract;

iii) "Collusive practices" shall mean any form of agreement between two or among several bidders (whether the Contracting Authority is aware or not) aimed at artificially maintaining the prices of bids at levels not corresponding to those resulting from competition;

iv) "Coercive practices" shall mean any form of harm against persons or their property or threats against them in order to influence their action during the award or execution of a contract.

b) Any proposed award shall be rejected if it is proved that the proposed preferred bidder is directly or through an intermediary, guilty of corruption or is involved in fraudulent manoeuvres, collusive or coercive practices for the award of this contract.

3.2 TheMinister Delegate at thePresidency in chargeof public contractsmay, as a precaution, take a decision ofexclusion from biddingfor a periodnot exceeding two(2) years against anybidderfoundguiltyofinfluencepeddling,ofconflictsofinterest,insider trading, fraud, corruption orproduction of non-genuine documents in the bid,without prejudice to criminal proceedingsthat may be broughtagainsthim

Article 4: Candidates admitted for the competition

4.1 If the invitation to tender is restricted, consultation is addressed to all candidates retained after a pre-qualification procedure.

4.2 Generally, the invitation to tender is addressed to all entrepreneurs, subject to the following provisions:

(a) A bidder (including all members of a group of enterprises and all sub-contractors to the bidder) must be from an eligible country, in accordance with the funding agreement.

(b) A bidder (including all members of a group of enterprises and all sub-contractors to the bidder) must not be in a situation of conflict of interest, subject to disqualification. A bidder shall be judged to be in a situation of conflict of interest if he:

i) is or was associated in the past with an enterprise (or a subsidiary of this enterprise) which provided consultancy services for the conception, preparation of specifications and other documents used within the scope of contracts awarded for this invitation to tender; or

ii) presents more than one bid within the context of invitation to tender, except authorised variants according to article 17, where need be; meanwhile, this does not prevent the participation of sub-contractors in more than one bid.

iii) The Contracting Authority or Contracting Authority has financial interests in the capital in a way as to compromise the transparency of the procedures of award of public contracts.

(c) The bidder must not have been excluded from bidding for public contracts.

(d) A Cameroonian public enterprise may participate in the consultation if it can demonstrate that it is (i) legally and financially autonomous, (ii) managed according to commercial laws and (iii) not under the direct supervisory authority of the Contracting Authority or Project Owner.

Article 5: Materials, equipment, supplies, equipment and authorised services

5.1 Materials, the contractor's equipment, supplies, equipment and services forming the subject of this contract must originate from countries meeting the criteria of origin defined in the Special Regulations of the invitation to tender and all expenditure done within the context of the contract shall be limited to the said building materials, materials, supplies, equipment and services.

5.2 Within the meaning of this 5.1 above, the term "originate" shall designate the place where the goods are extracted, cultivated, produced, manufactured and from where the services originate.

Article 6: Qualification of the bidder

6.1 As an integral part of their bid, bidders must:

(a) submit a power of attorney making the signatory of the bid bound by the bid; and

(b) provide all information (complete or update information included in their request for pre-qualification which may have changed in the case where the candidates took part in pre-qualification) requested of bidders in the Special Regulations of the invitation to tender, in order to establish their qualification to execute the contract.

Where necessary, bidders should provide information relating to the following points:

(i) the production of certified balance sheets and recent turnovers;
(ii) access to a line of credit or availability of other financial resources;
(iii)orders acquired and contracts awarded;
(iv)pending litigations; and
(v) Availability of indispensable equipment.

6.2 Bids presented by two or more associated undertakings (joint-contracting) must satisfy the following conditions:

(a) The bid must include all the information listed in article 6(1) above. The Special Regulations must indicate the information to be furnished by the group and that to be furnished by each member of the group;

(b) The bid and the contract must be signed in a way that is binding on all members of the group;
(c)The nature of the group (joint or several) must be specified in the Special Regulations and justified with the production of a joint venture agreement in due form;
(d) The member of the group designated as the representative will represent all the undertakings vis à vis the Contracting Authority and Contracting Authority with regard to the execution of the Contract;
(e) In case of joint co-contracting, the co-contractors shall share the sums which are paid by the Contracting Authority into a single account. On the other hand, each undertaking is paid into its own account by the Contracting Authority where it is joint co-contracting.

6.3 Bidders must equally present sufficiently detailed proposals to demonstrate that they comply with the technical specifications and execution time-limits set in the Special Regulations of the invitation to tender.

6.4 Bidders requesting to benefit from the margin of preference must furnish all the necessary information to prove that they satisfy the eligibility criteria set in article 33 of the General Regulations of the invitation to tender.

Article 7: Visit of the works site

7.1 The bidder is advised to visit and inspect the site and its environs and obtain by himself and under his own responsibility, all the information which may be necessary for the preparation of the bid and the execution of the works. The related cost of the visit of the site shall be borne by the bidder.

7.2 The Contracting Authority shall authorise the bidder and his employees or agents to enter the premises and the land for the said visit but only on the express condition that the bidder, his employees and agents free the Project Owner, his employees and agents of any responsibility that may ensue and indemnify them if necessary and that they shall remain responsible for any deadly or corporal accident, loss or material damages, costs and fees incurred from this visit.

7.3 The Contracting Authority may organise a visit of the site of the works during the preparatory meeting to establishing the bids mentioned in article 19 of the General Regulations of the invitation to tender.

B. Tender File

Article 8: Content of Tender File

8.1 The Tender File describes the works forming the subject of the contract, sets the consultation procedure of contractors and specifies the terms of the contract. Besides the addendum (addenda) published in accordance with article 10 of the General Regulations of the invitation to tender, it includes the following documents:

Document No. 1.The letter of invitation to tender (for restricted invitation to tender);
Document No. 2. The tender notice;
Document No. 3. The General Regulations of the invitation to tender;
Document No. 4. The Special Regulations of the invitation to tender;
Document No. 5. The Special Administrative Conditions;
Document No. 6. The Special Technical Conditions;
Document No. 7. The schedule of unit prices;
Document No. 8. The bill of quantities and estimates;
Document No. 9. The sub details of unit prices;
Document No.10. Model of the contract:
Document No. 11. Forms and models to be used by bidders;

a. Model of declaration of intention to bid
b. Tender Model
c. Model of Bid Bond
d. Model of final bond
e. Model of start-up advance bond
f. Model of guarantee retention bond
g. Provisional planning of works

Document No. 12. Justifications of preliminary studies; to be filled by the Contracting Authority or Delegated Project Owner;

Document No. 13. List of first grade banking establishments or financial institutions approved by the Minister in charge of Finance authorised to issue bonds for public contracts to be inserted by the Contracting Authority.

8.2 The bidder must examine all the regulations, forms, conditions and specifications contained in the Tender File. It is up to him to furnish all the information requested and prepare a bid in compliance with all aspects of the said file.

Article 9: Clarifications on the Tender File and recourse

9.1 Any bidder who wants to obtain clarifications on the Tender File may request them from the Contracting Authority in writing or by electronic mail (fax or e-mail) at the Contracting Authority's address indicated in the Special Regulations of the invitation to tender and send a copy to the Project Owner. The Contracting Authority replies in writing to any request for clarification received at least fourteen (14) days prior to the deadline for the submission of bids.

A copy of the Contracting Authority's response, indicating the question posed but not mentioning the author, is addressed to all bidders who bought the Tender File.

9.2 Between the publication of the tender notice including the pre-qualification phase of candidates and the opening of bids, any bidder who feels aggrieved in the public contracts award procedure may lodge a complaint to the Minister in charge of Public Contracts.

9.3 A copy of the complaint should be addressed to the Contracting Authority and to the body in charge of the regulation of public contracts and the chairperson of the Tenders Board.

9.4 The Contracting Authority has five (5) days to react. A copy of the reaction shall be forwarded to MINMAP and the body in charge of the regulation of public contracts.

Article 10: Amendment of the Tender File

10.1The Contracting Authority may at any moment, prior to the deadline for the submission of bids and for any reason, be it at his initiative or in reply to a request for clarification formulated by a bidder, amend the Tender File by publishing an addendum.

10.2 Any published addendum shall be an integral part of the Tender File, in accordance with article 8.1 of the General Regulations of the invitation to tender and must be communicated in writing or made known by a traceable means to all bidders who bought the Tender File.

10.3 In order to give bidders sufficient time to take account of the addendum in the preparation of their bids, the Contracting Authority may postpone as is necessary, the deadline for the submission of bids, in accordance with provisions of article 22 of the General Regulations of the invitation to tender.

C. Preparation of bids

Article 11: Tender costs

The candidate shall bear the costs related to the preparation and presentation of his bid and the Contracting Authority and the Contracting Authority shall in no case be responsible for these costs nor pay for them whatever the evolution or outcome of the invitation to tender procedure.

Article 12: Language of the bid

The bid as well as any correspondence and any document exchanged between the bidder and the Contracting Authority shall be written in English or French. Complementary documents and the forms provided by the bidder may be written in another language on condition that a precise translation into either English or French of the passages concerning the bid is included; in which case for reasons of interpretation, the translation shall be considered to be authentic.

Article 13: Constituent documents of the bid

13.1 The bid presented by the bidder shall include the documents detailed in the Special Regulations of the invitation to tender, duly filled and put together in three volumes:

*a. **Volume 1: Administrative file***

It includes:

i) all documents attesting that the bidder:

- has subscribed to all declarations provided for by the laws and regulations in force;
- paid all taxes, duties, contributions, fees or deductions of whatever nature;
- is not winding up or bankrupt;
- is not the subject of an exclusion order or forfeiture provided for by the law in force;

ii) The bid bond established in accordance with the provisions of article 17 of the General Regulations of the invitation to tender;

iii) the written confirmation empowering the signatory of the bid to commit the bidder, in accordance with the provisions of article 6(1) the General Regulations of invitation to tender.

*b. **Volume 2: Technical bid***

b.1 Information on qualifications

The Special Regulations list the documents to be furnished by bidders to justify the qualification criteria mentioned in article 6(1) of the Special Regulations of the invitation to tender.

b.2 Methodology

The Special Conditions of the invitation to tender specifies the constituent elements of the technical bid of the bidders especially: a methodological statement on an analysis of the works and specifying the organisation and programme which the bidder intends to put in place or use to execute the works (installations, schedule, Quality Assurance Plan (QAP), sub-contracting, attestation of visit of the site, where necessary, etc).

b.3 Proof of acceptance of conditions of the contract

The bidder shall submit duly initialled copies of the administrative and technical documents relating to the contract, namely:

1.The Special Administrative Conditions (SAC);
2.The Special Technical Conditions (STC).

b.4 Commentaries (optional)

A commentary on the technical choices of the project and possible proposals.

*c. **Volume 3: Financial bid***

The Special Regulations specify the elements that will help in justifying the cost of the works, namely:

1. The signed and dated original bid prepared according to the attached model, stamped at the prevailing rate;
2. The duly filled Unit Price Schedule;
3. The duly filled detailed estimates;
4. The sub-details of prices and/or breakdown of all-in prices;
5. The projected schedule of payments, where need be.

In this regard, the bidders will use the documents and models provided in the Tender File, subject to the provisions of article 17(2) of the General Regulations of the invitation to tender concerning the other possible forms of guarantees.

13.2 If in accordance with the provisions of the Special Regulations of the invitation to tender, the bidders present bids for several lots of the same invitation to tender, they could indicate rebates offered in case of award of more than one lot.

Article 14: Bid price

14.1 Except otherwise stated in the Tender File, the amount of the contract shall cover all the works described in article 1.1 of the General Regulations of the invitation to tender, on the basis of the price schedule and the detailed bill of quantities and estimates presented by the bidder .

14.2 The bidder shall fill the unit prices and totals of all items on the schedule and bill of quantities and estimates.

14.3 Subject to contrary provisions provided for in the Special Regulations and in the Special Administrative Conditions, all dues, taxes and fees payable by the bidder on grounds of the contract or on any other ground, thirty (30) days prior to the submission of the bids, shall be included in the prices and in the total amount of the bid presented by the bidder.

14.4 If a price revision/updating clause is provided for in the contract, the date of establishment of the initial price, as well as the price revision/updating conditions for the said price must be specified. This is with the understanding that any contract of duration less than one (1) year shall not be subject to price revision.

14.5 All unit prices must be justified by sub-details established in accordance with the structure proposed in document 8 of the Tender File.

Article 15: Currency of bid and payment

15.1 In case of international invitations to tender, the currencies of the bid shall follow the provisions of either Option A or Option B below, the applicable option being that retained in the Special Regulations of the invitation to tender.

15.2 Option A:The amount of the bid shall be entirely made in the national currency.
The amount of the bid, unit prices of the price schedule and the prices of the bill of quantities and estimates are completely made in CFA francs in the following manner:

a) Prices shall be entirely drawn in the national currency. The bidder who intends to commit expenditures in other currencies for the execution of the works shall indicate in the annex to the bid the percentage(s) of the amount of the bid necessary to cover the needs in foreign currencies, without exceeding the maximum of the three currencies of member countries of the funding institution of the contract.
b) The exchange rates used by the bidder to convert his bid into the national currency shall be specified by the bidder in an annex to the bid in compliance with the specifications of the Special Regulations. These rates shall be applied for any payment within the framework of the contract so that the retained bidder does not bear any change in the exchange rate.

15.3 Option B:The amount of the bid shall be directly made in the national and foreign currency at the rates fixed in the Special Regulations.

The bidder shall draw the unit prices of the price schedule and the prices of the bill of quantities and estimates in the following manner:

(a) The prices of inputs necessary for the works which the bidder intends to procure in the Contracting Authority's country shall be in currency of the Contracting Authority's country specified in the Special Regulations and called "national currency";

(a) The prices of inputs necessary for works which bidder intends to procure out of the Contracting Authority's country shall be in the currency of the country of origin of the bidder or of the currency of an eligible member country widely used in international trade.

15.4 The Contracting Authority may request the bidders to explain the needs in national and foreign currencies and to justify that the amounts included in the unit and total prices and indicated in annex to the bids are reasonable; to this end, a detailed statement of their needs in foreign currencies shall be furnished by the bidder.

15.5 During the execution of the works, most of the foreign currency to be paid as part of contract may be revised by mutual agreement between the Contracting Authority and the entrepreneur in a way as take account of any modification in the foreign currency needs within the context of the contract.

Article 16: Validity of bids

16.1 Bids must remain valid during the period stated in the Special Regulations from the date of submission of the bids fixed by the Contracting Authority, in application of article 22 of the Special Regulations. A bid valid for a shorter period shall be rejected by the Contracting Authority or Delegated Contracting Authority as not being in compliance.

16.2 Under exceptional circumstances, the Contracting Authority may seek the approval of bidders to extend the validity time-limit. The request and the responses that will be given shall be in writing (or by fax). The validity of the bid bond provided for in article 17 of the General Regulations shall equally be extended for a corresponding duration. A bidder may refuse to extend the validity of his bid without losing his bid bond. A bidder who consents to an extension shall not be asked to modify his bid nor shall he be authorised to do so.

16.3 Where the contract does not include a price revision clause and that the period of validity of bids is extended by more than sixty (60) days, the amounts payable to the bidder retained shall be updated by application of the related formula featuring in the request for extension that the Contracting Authority addressed to bidders.

The updating period shall run from the date of overrun of sixty (60) days to the date of notification of the contract or the Administrative Order for start of execution of works by the retained bidder, as specified in the Special Administrative Conditions. The effect of updating shall not be taken into account for purposes of evaluation of bids.

Article 17: Bid bond

17.1 In application of article 13 of the General Regulations, the bidder shall furnish a bid bond of the amount specified in the Special Regulations and which bid bond shall be a full part of his bid.

17.2 The bid bond must conform to the model presented in the Tender File; other models may be authorised subject to the prior approval of the Contracting Authority. The bid bond will remain valid for thirty (30) days beyond the original date set for the validity of bids or any other validity time-limit requested by the Contracting Authority and accepted by the bidder, in accordance with the provisions of article 16 (2) of the General Regulations.

17.3 Any bid without an acceptable bid bond shall be rejected by the Tenders Board as not in conformity. The bid bond of associated enterprises must be established in the name of the group submitting the bid and mention each member of the associated grouping.

17.4 The bid bonds of bidders who are not retained shall be returned within fifteen (15) days after publication of the award result.

17.5 The bid bond of the successful bidder shall be released as soon as the latter would have signed the contract and furnished the required final bond.

17.6 The bid bond may be seized:

(a) if the bidder withdraws his bid during the period of validity;

(b) if the retained bidder:

i) fails in his obligation to register the contract in application of article 38 of the General Regulations;

ii) fails in his obligation to furnish the required final bond in application of article 38 of the General Regulations;

iii) refuses to receive notification of the Administrative Order to commence execution

iv) .

Article 18: Varying proposals of bidders

18.1 Where the works can be executed within variable deadlines, the Special Regulations shall specify these deadlines and shall indicate the method retained for the evaluation of the completion deadline proposed by the bidder within the specified deadlines. Bids that propose deadlines beyond those specified shall be considered as not being in conformity.

18.2 Except in the case mentioned in article 18(3) below, bidders wishing to offer technical variants must first assess the basic solution of the Contracting Authority as described in the Tender File and furnish in addition all the information which the Contracting Authority needs for a complete evaluation of the proposed variant, including the plans, calculations, technical specifications, sub-details of prices and proposed construction methods and all other useful information. If necessary, the Contracting Authority will examine only the technical variants of the bidder whose bid is in compliance with the basic solution has been evaluated as the lowest bid.

18.3 When according to the Special Regulations the bidders are authorised to directly submit the technical variants for certain parts of the works, these parts of the works must be described in the technical specifications. Such variants shall be evaluated on their own merit in accordance with the provisions of article 31(2) (g) of the General Regulations.

Article 19: Preparatory meeting to the establishment of bids

19.1 Except otherwise stipulated in the Special Regulations, a bidder may be invited to take part in a preparatory meeting which will hold at the date and place indicated in the Special Regulations.

19.2 The subject of the preparatory meeting shall be to furnish clarifications and answer any questions which may be raised at this stage.

19.3 As much as possible, the bidder is requested to submit any question in a way as to reach the Contracting Authority at least one week before the meeting The Contracting Authority may not reply to questions received too late. In this case, the questions and answers shall be transmitted according to the methods set in article 19(4) below.

19.4 The minutes of the meeting, including the text of the questions asked and the replies given, including questions prepared after the meeting, shall be forwarded immediately to everyone who bought the Tender File. Any modification of documents of the Tender File listed in article 8 of the General Regulations which may prove to be necessary at the end of the preparatory meeting shall be done by the Contracting Authority by publishing an addendum in accordance with the provisions of article 10 of the General Regulations and not through the minutes of the preparatory meeting.

19.5 The fact that a bidder does not attend a preparatory meeting for the establishment of bids shall not be a reason for disqualification.

Article 20: Form and signature of bid

20.1 The bidder shall prepare an original of the constituent documents described in article 13 of the General Regulations in a volume clearly indicated "**ORIGINAL**". In addition, the bidder shall submit the number required in the General Regulations, bearing **"COPY"**. In case of discrepancy, the original shall be considered as authentic.

20.2 The original and copies of the bid must be typed or written in indelible ink (photocopies shall be accepted in the case of copies) and shall be signed by the person(s) duly empowered to sign on behalf of the bidder, in accordance with article 6(1a) or 6(2c) of the General Regulations, as the case may be. All the pages of the bid containing alterations or changes must be initialled by the signatory (ies) of the bid.

20.3 The bid shall be bear no modification, suppression or alteration unless such corrections are initialled by the signatory(ies) of the bid.

D. Submission of bids

Article 21: Sealing and marking of bids

21.1 The bidder shall seal the original and each copy of the bid in separate envelopes (internal envelopes) by marking on these envelopes "**ORIGINAL**" and "**COPY**", as the case may be. The envelopes shall then be placed in another envelope which will equally be sealed but which will not give any indication regarding the identity of the bidder.

21.2 The external and internal envelopes:

a) should be addressed to the Contracting Authority at the address indicated in the Special Regulations;

b) should bear the name and identification number of the project as indicated in the Special Regulations and bear the inscription "***TO BE OPENED ONLY DURING THE BID-OPENING SESSION***" as specified in the Special Regulations.

21.3 The internal envelopes should equally carry the name and address of the bidder in a way as to enable the Contracting Authority return the sealed bid if it is late in accordance with article 23 and 24 of the General Regulations.

21.4 If the external envelope is not sealed and marked as indicated in paragraphs 21(1) and 21(2) above, the Contracting Authority shall not be responsible if the bid is misplaced or opened prematurely.

Article 22: Date and time-limit for submission of bids

22.1 The bids must be received by the Contracting Authority at the address specified in article 21(2) of the Special Regulations not later than the date and time stated in the Special Regulations.

22.2 The Contracting Authority may, at his discretion, postpone the deadline set for the submission of the bids by publishing an addendum in accordance with the provisions of article 10 of the General Regulations. In this case, all the rights and obligations of the Contracting Authority and bidders previously governed by the initial date will henceforth be governed by the new date.

Article 23: Late bids

Any bid received by the Contracting Authority beyond the deadline for the submission of bids in accordance with article 22 of the General Regulations shall be declared late and consequently rejected.

Article 24: Modification, substitution and withdrawal of bids

24.1 A bidder may modify or withdraw his bid after submitting it, on condition that the written notification of the modification or withdrawal is received by the Contracting Authority prior to the end of the time-limit prescribed for the submission of the bids. The said notification must be signed by an authorised representative in application of article 20(2) of the General Regulations. The modification or the corresponding replacement bid must be attached to the written notification. As the case may be, the envelopes must bear the inscription **"WITHDRAWAL"**, and **"REPLACEMENT BID"** or **"MODIFICATION".**

24.2 Notification of modification, replacement or withdrawal of the bid by the bidder should be prepared, sealed, marked and forwarded in accordance with the provisions of article 21 of the General Regulations. Withdrawal may equally be notified by telex but should in this case be confirmed by a duly signed written notification whose date, post mark being authentic, shall not be posterior to the time-limit set for the submission of bids.

24.3 In application of article 24(1), bids being requested to be withdrawn by bidders shall be returned to them unopened.

24.4 No bid may be withdrawn during the interval between the submission of bids and the expiry of the validity of bids specified by the model tender. The withdrawal of a bid by a bidder during this interval may lead to the confiscation of the bid bond in accordance with the provisions of article 17(6) of the General Regulations.

E. Opening of envelopes and evaluation of bids

Article 25: Opening of envelopes and petitions

25.1 The competent Tenders Board shall open the envelopes in single or double phases and in the presence of the representatives of bidders who wish to attend at the date, time and address specified in the Special Regulations. Representatives of bidders shall sign a register attesting to their presence.

25.2 Firstly, envelopes marked "**withdrawal**" shall be opened and the contents announced to the hearing of everyone, while the envelope containing the corresponding bid shall be returned to the bidder unopened. Withdrawal shall be allowed only if the corresponding notification contains a valid empowerment of the signatory to request this withdrawal and if this notification is read to the hearing of everyone. Then the envelopes marked "**Replacement** bid" are opened and announced to the hearing of everyone and the new corresponding bid substituted for the preceding one which will be sent to the bidder concerned unopened. The replacement of the bid shall only be allowed if the corresponding notification contains a valid empowerment of the signatory requesting the replacement and read to the hearing of everyone. Lastly, the envelopes marked "**modification**" shall be opened and their contents read to the hearing of everyone with the corresponding bid. The modification of the bid shall only be allowed if the corresponding notification contains a valid empowerment of the signatory requesting the modification and read to the hearing of everyone. Only bids which were opened and announced to the hearing of everyone during the opening of bids shall then be evaluated.

25.3 All envelopes shall be opened successively and the name of the bidder announced aloud as well as the possible modification mentioned, the price offered, including any rebates [*in case of opening of financial bids*] and any variant, where necessary, the existence of a guarantee of the bid if it is required and any other details which the Contracting Authority deems useful to be mentioned. Only rebates and variants of bids announced to the hearing of everyone during the opening of bids shall be submitted for evaluation.

25.4 Bids (and modifications received in accordance with the provisions of article 24 of the General Regulations) which were not opened and read to the hearing of everyone during the bid-opening session for whatever reason, shall not be submitted for evaluation.

25.5 Bid-opening minutes are recorded on the spot mentioning the admissibility of bids, their administrative regularity, prices, rebates and time-limits as well as the composition of the Evaluation sub-committee. A copy of the said minutes to which is attached the attendance sheet is handed over to all the participants at the end of the session.

25.6 At the end of each bid-opening session, the chairperson of the Tenders Board immediately hands over to the focal point designated by the body in charge of regulation of public contract an initialled copy of the bids presented by bidders.

25.7 In case of petition as provided for by the Public Contracts Code, it should be addressed to the Minister Delegate in charge of Public Contracts with a copies to the body in charge of the regulation of public contracts, the head of structure to which is attached the Tenders Board concerned.

It must reach within a maximum deadline of three (3) working days after the opening of bids in the form of a letter to which is obligatorily attached a sheet of the petition form duly signed by the petitioner and possibly by the chairperson of the Tenders Board.

The Independent Observer attaches to his report the sheet that was handed to him, including any related commentaries or observations.

Article 26: Confidential nature of the procedure

26.1 No information relating to the examination, clarification, evaluation and comparison of bids and verification of the qualification of the bidders and the recommendation for the award shall be given to bidders or to any person not concerned with the said procedure as long as the preferred bidder has not been made public, subject to the disqualification of the bid of the bidder and suspension of the authors from all activities in the domain of public contracts.

26.2 Any attempt by a bidder to influence the Tenders Board or the Evaluation sub-committee of bids or the Contracting Authority in its award decision may lead to the rejection of his bid.

26.3 Notwithstanding the provisions of paragraph 26.2 above, between the opening of bids and the award of the contract, if a bidder wishes to enter into contact with the Contracting Authority for reasons having to with his bid may do so in writing.

Article 27: Clarifications on the bids and contact with the Contracting Authority

27.1 To ease the examination, evaluation and comparison of bids, the Tenders Board may, if it so desires, request any bidder to give clarifications on his bid. This request for clarification and the response thereto are formulated in writing but no change on the amount or content of the bid is sought, offered or authorised, except it is necessary to confirm the correction of calculation errors discovered by the Evaluation Sub-committee during the evaluation in accordance with the provisions of article 30 of the General Regulations.

27.2 Subject to the provisions of paragraph 1 above, bidders shall not contact members of the Tenders Board and the Evaluation Sub-committee for questions related to their bids, between the opening of envelopes and the award of the contract.

Article 28: Determination of compliance of bids

28.1 The Evaluation sub-committee shall carry out a detailed examination of bids to determine if they are complete, if the required guarantees are furnished, if the documents were correctly signed and if generally the bids are in proper order.

28.2 The Evaluation sub-committee shall determine if the bid is essentially in compliance with the conditions fixed in the Tender File based on the content without recourse to external elements of proof.

28.3 A bid that complies with the Tender File shall essentially be a bid that respects all the terms, conditions and specifications of the Tender File, without substantial divergence or reservation. A substantial divergence or reservation is that:

i) which substantially limits the scope, quality or realisation of the works;

ii) which substantially limits, contrary to the Tender File, the rights of the Contracting Authority or his obligations in relation to the contract;

iii) whose correction would unjustly affect the competitiveness of the other bidders who presented bids that essentially complied with the Tender File.

28.4 If a bid is essentially not in compliance, it shall be rejected by the competent Tenders Board and shall not subsequently be rendered in compliance.

28.5 The Contracting Authority reserves the right to accept or reject any modification, divergence or reservation. Modifications, divergences, variants and other factors which are beyond the requirements of the Tender File shall not be considered during the evaluation of bids.

Article 29: Qualification of the bidder

The Evaluation sub-committee shall ensure that the successful bidder retained for having submitted a bid substantially in compliance with the provisions of the Tender File, fulfils the qualification criteria stipulated in article 6 of the Special Regulations. It is essential to avoid any arbitrariness in determining qualification.

Article 30: Correction of errors

30.1 The Evaluation sub-committee shall verify bids considered essentially in compliance with the Tender File to correct the possible calculation errors. The Evaluation sub-committee shall correct the errors in the following manner:

(a) where there is an incoherence between the unit price and the total obtained by multiplying the unit price by the quantity, the unit price being authentic, the total price shall be corrected, unless the Evaluation sub-committee judges that it is a gross error of decimal point in the unit price in which case the total price as presented shall be authentic and the unit price corrected.

(b) if the total obtained by addition or subtraction of the totals is not exact, the sub totals shall be considered authentic and the total corrected.

(c) where there is a difference between the price indicated in letters and in figures, the amount in letters shall be considered authentic, unless the amount is linked to an arithmetical error confirmed by the sub-detail of the said price, in which case the amount in figures shall prevail subject to paragraphs (a) and (b) above.

30.2 The amount featuring in the bid shall be corrected by the Evaluation sub-committee, in accordance with the error correction procedure above and with confirmation by the bidder, the said amount shall be deemed to commit him.

30.3 If the bidder who presented the bid evaluated as the lowest refuses the correction thus carried out, his bid shall be rejected and the bid bond may be seized.

Article 31: Conversion into a single currency

31.1 To facilitate the evaluation and comparison of bids, the Evaluation sub-committee shall convert the prices of bids expressed in various currencies into those in which the bid is payable in CFA francs.

31.2 The conversion shall be done using the selling rate fixed by the Bank of Central African States (BEAC) under the conditions defined by the Special Regulations.

Article 32: Evaluation and comparison of financial bids

32.1 Only bids considered as being in compliance, as per the provisions of article 28 of the General Regulations, shall be evaluated and compared by the Evaluation sub-committee.

32.2 By evaluating the bids, the Evaluation Sub-committee shall determine for each bid the evaluated amount of the bid by rectifying the amount as follows:

a) By correcting any possible error in accordance with the provisions of article 30.2 of the General Regulations;

b) By excluding projected sums and where necessary provisions for unforeseen occurrences featuring in the bill of quantities and estimates but by adding the amount of works done under State supervision where they are costed in a competitive manner as specified in the Special Regulations.

c) By converting into a single currency, the amount resulting from the rectifications (a) and (b) above, in accordance with the provisions of article 31(2) of the General Regulations;

d) By appropriately adjusting any other modification, divergence or quantifiable reservation on technical or financial basis.

e)By taking into consideration the various execution time-limits proposed by the bidders, if they are authorised by the Special Regulations;

f) If need be, in accordance with the provisions of article 13(2) of the General Regulations and the Special Regulations by applying the rebates offered by the bidder for the award of more than one lot, if this invitation to tender is launched simultaneously for several lots.

g) If need be, in accordance with the provisions of article 18(3) of the Special Regulations and the Technical Specifications, the proposed technical variants, if they are permitted, shall be evaluated on their own merit and independently of the fact that the bidder offered or not a price for the technical solution specified by the Contracting Authority in the Special Regulations.

32.3 The estimated effect of price revision formulae featuring in the GAC and SAC applied during the period of execution of the contract shall not be considered during the evaluation of bids.

32.4 If the bid judged the lowest bid is considered abnormally low or strongly unbalanced in relation to the estimates of the Contracting Authority for the works to be executed in this contract, the Tenders Board may, from the sub-details of prices furnished by the bidder for any element or all the elements of the bill of quantities and estimates, verify if these prices are compatible with the construction methods and proposed calendar. In the case where the justifications presented by the bidder are not satisfactory, the Contracting Authority may reject the bid after the technical opinion of the Public Contracts Regulatory Agency.

Article 33: Preference granted national bidders

National contractors shall benefit from a margin of national preference during the evaluation of bids as provided for in the Public Contracts Code.

Article 34: Award

34.1 The Contracting Authority shall award the contract to the bidder whose bid was judged essentially in compliance with the Tender File and who has the required technical and financial capacities to execute the contract satisfactorily and whose bid was evaluated as the lowest by including, where necessary, proposed rebates

34.2 If, according to article 13(2) of the General Regulations, the invitation to tender comprises several lots, the lowest bid shall be determined by evaluating this contract with other lots to be awarded

concurrently, by taking into account the rebates offered by the bidders in the case of more than one lot.

34.3 Any award of contract shall be made to the bidder fulfilling the technical and financial capacities required resulting from the evaluation criteria and presenting the bid evaluated as the lowest.

Article 35: The right by the Contracting Authority to declare an invitation to tender unsuccessful or cancel a procedure

The Contracting Authority reserves the right to cancel a procedure of invitation to tender after the authorisation of the Minister Delegate at the Presidency in charge of Public Contracts where the bids have been opened or to declare an invitation to tender unsuccessful after the advice of the competent Tenders Board, without any claims being entertained.

Article 36: Notification of award of the contract

Before the expiry of the validity of the bids set in the Special Regulations, the Contracting Authority shall notify the preferred bidder by telecopy confirmed by registered mail or by any other means that his bid was retained. This letter will indicate the amount the Contracting Authority will pay the contractor to execute the works and the execution time-limit.

Article 37: Publication of results of award and petitions

37.1 The Contracting Authority shall communicate to any bidder or administration concerned, upon request addressed to it within a maximum deadline of five (5) days after publication of the award results, the Independent Observer's report as well as the minutes of the award session of the related contract to which shall be attached the evaluation report of the bids.

37.2 The Contracting Authority is bound to communicate the reasons for the rejection of bids of the bidders concerned who so request.

37.3 After publication of the award results, bids that are not withdrawn within fifteen (15) days shall be destroyed, without any claims for compensation being entertained. Only the copy destined for the body in charge of regulation shall be kept.

37.4 In case of petition, it should be addressed to the Public Contracts Authority, with copies to the body in charge of the regulation of public contracts, the Contracting Authority and the chairperson of the Tenders Board concerned.

It must take place within a maximum deadline of five (5) working days after the publication of the results.

Article 38: Signing of the contract

38.1 After publication of the results, the draft contract subscribed by the successful bidder is submitted to the Tenders Board for examination and where applicable, to the Minister in charge of Public Contracts for prior endorsement.

38.2 The Contracting Authority has a deadline of seven (7) days to sign the contract from the date of reception of the draft contract examined by the competent Tenders Board and subscribed by the successful bidder and where applicable, the endorsement of the Minister in charge of Public Contracts.

38.3 The contract must be notified to the successful bidder within five (5) days of its date of signature.

Article 39: Final Bond

39.1 Within twenty (20) days of the notification by the Contracting Authority, the contractor shall furnish the Contracting Authority with a final bond, to guarantee the complete execution of the works.

39.2 The bond whose rate varies between 2 and 5 percent of the amount of the contract inclusive of all taxes, may be replaced by a guarantee from a banking establishment approved according to the instruments in force with the Contracting Authority as beneficiary or by a joint or several guarantee.

39.3 Small and medium-sized enterprises (SME) constituted of national capital and managed by nationals may, in lieu of the guarantee, provide a statutory lien or a bond issued by a banking establishment or first rate financial institution approved in accordance with the instruments in force.

39.4 Failure to produce the final bond within the prescribed time limit shall likely cause the termination of the contract under the terms laid down in the General Administrative Conditions.

Document n° 3: Special Regulations of the Invitation to Tender (SRIT)

Special Regulations of the Invitation to Tender

	Introduction
1.1	***Definition of Work:*** The works consist of the rehabilitation of the Finance-Junction - Veterinary Junction – City Chemist – Hospital Round-about – T-Junction Roads in Bamenda City following the characteristics defined in the technical specifications and the quantities given in the estimate. The works are regrouped in single lot. This project has as aim the rehabilitation of theroads mentioned above. The Contractors shall acquire the materials, mobilize the human resources and equipment and all other subjections necessary for the realization of the works. The works shall be carried out within the framework of the development of regional and local authorities and shall be executed on behalf of the Bamenda City Council. *Name and address of Contracting Authority*: The City Mayor of Bamenda City Council. *Reference of the Invitation to tender:* OPEN NATIONAL INVITATION TO TENDER N°008/ONIT/BCCITB/2023of 01/09/2023for the Rehabilitation of the Finance-Junction - Veterinary Junction –City Chemist – Hospital Round-about – T-Junction Roads in Bamenda City "Under Emergency Procedure"
1.2	*Execution timeframe:* The maximum execution timeframe shall be fifty (50) days
2.1	*Source of Funding:*Works referred to in this invitation to tender shall be funded by the investment Budget of the Bamenda City Council Budget for 2023 Financial year, (Account: 220 150) . *Name of the project:*the Rehabilitation of the Finance-Junction - Veterinary Junction –City Chemist – Hospital Round-about – T-Junction Roads in Bamenda City.
4.1	*List of pre-qualified candidates: Not applicable*
5.1	*Sources of Materials, Equipment and supply of equipment and services:* Locally
6	Principal qualification criteria of the bidder: **Eliminatory criteria** - Forged, scanned, false or fake document; - Absence of bid bond; - Non compliance with the bid model; - Deadline of execution more than the prescribed; - Omission of a quantified task on the bill of quantities; - Technical mark less than 80%. - Audited balance sheet for the last 5 years certified by charted accountant from 2018 to 2022; **Essential criteria** The following essential criteria shall be evaluated in a binary manner (satisfactory or not) and will include: - Financial situation ; - Equipment ; - Personnel ; - Conformity with technical specifications,environmental protection and hygiene; - References for similar works; - Acceptance of the conditions of the contract
6.1	The number of points that shall be awarded to each criterion and sub-criterion shall be as follows: **A. Financial situation** a. Financial capacity >140 million — Yes/No **Total A** — **/1** **B. References for similar works or experience**

a. Certified first and last pages of 3 similar contracts in the required domain ≥ 150 mill. realized within the past 3 years	Yes/No
b. Certified copies of the reception minutes of the contracts	Yes/No
Total B	**/2**

C. Equipment

a. 1 bitumen tank	Yes/No
b. 1 bulldozer	Yes/No
c. 1 grader	Yes/No
d. 1 front head loader	Yes/No
e. 4 trucks of capacities ≥ $10m^3$	Yes/No
f. 1 pick-up	Yes/No
g. 1 compactors (cylinder)	Yes/No
h. 1 water tanker	Yes/No
i. 1 manual compactor	Yes/No
j. 1 tar boiler	Yes/No
k. 1 chip sprayer	Yes/No
l. Sufficient small tools: Shovels, wheelbarrows, Pickaxes, etc....	
m. Justify with certified copies of carte grise or receipt of purchase or lease agreement in case of hire + carte grise or receipt of purchase	Yes/No
Total C	**/13**

D. Personnel

Site Supervisor (Bac+3 minimum) in civil engineering registered with NOCE	
a. Attestation of presentation of original of diploma	Yes/No
b. Certified copy of diploma	Yes/No
c. Attestation from the NOCE	Yes/No
d. Experience in building construction and public works (≥10yrs)	Yes/No
e. CV signed and certified I.D card	Yes/No
f. Attestation of engagement with the enterprise	Yes/No
Foreman for exploitation of laterite pit pits and stone quarry (HND) in civil engineering*	
a. attestation of presentation of original of diploma	Yes/No
b. certified copy of diploma	Yes/No
c. experience in building construction and public works (≥5yrs)	Yes/No
d. CV signed and certified I.D card	Yes/No
Foremen for main works (HND) in civil engineering*	
a. attestation of presentation of original of diploma	Yes/No
b. certified copy of diploma	Yes/No
c. experience in building construction and public works (≥5yrs)	Yes/No
d. SignedCV and certified I.D card	Yes/No
Foremen for secondary works (HND) in civil engineering*	
a. attestation of presentation of original of diploma	Yes/No
b. certified copy of diploma	Yes/No
c. experience in building construction and public works (≥5yrs)	Yes/No
d. SignedCV and certified I.D card	Yes/No
Surveyor (holder of an HND in surveys)	
a. attestation of presentation of original of diploma	Yes/No
b. certified copy of diploma	Yes/No
c. experience in the domain (≥5yrs)	Yes/No
d. SignedCV andcertified I.D card	Yes/No
Topographer (at least a holder of an HND)	
a. attestation of presentation of original of diploma	Yes/No
b. certified copy of diploma	Yes/No
c. experience in the domain (≥5yrs)	Yes/No
d. SignedCV and certified I.D card	Yes/No
Geotechnician (at least a holder of an HND)	
a. attestation of presentation of original of diploma	Yes/No

b. certified copy of diploma	Yes/No
c. experience in the domain (≥5yrs)	Yes/No
d. SignedCV and certified I.D card	Yes/No
Total D	**/30**

E. Methodology and conformity with technical specifications, environmental protection and hygiene

a. Consistence site installation	Yes/No
b. Consistence Description of post of work	Yes/No
c. Consistence Organizational chart of the enterprise	Yes/No
d. Consistence Organizational chart for the execution of the works	Yes/No
e. Consistence Planning of execution of works	Yes/No
f. Consistence Attestation of site visit	Yes/No
g. Consistence Site visit report	Yes/No
h. Consistence Internal control	Yes/No
i. Consistence Means of communication	Yes/No
j. Consistence Use of human intensive labour	Yes/No
k. Consistence Environmental protection report	Yes/No
l. Consistence hygiene and sanitation of the personnel	Yes/No
m. Consistence security of the personnel	Yes/No
n. Consistence protection against HIV/SIDA	Yes/No
o. Consistence maintaining of circulation during work and signalisation	Yes/No
Total E	**/15**

F. Acceptance of the conditions of the contract

a. The Special Administrative Clauses (SAC) initialled on all pages and signed on the last page	Yes/No
b. The Special Technical Clauses (STC) initialled on all pages and signed on the last page	Yes/No
c. Quality of tender (orderliness, binding and neatness)	Yes/No
Total F	**/3**

TOTAL A+B+C+D+E+F = 64 points

The minimum acceptable total score to obtained for the technical offer shall be 80% = 52yes/70.

7.3 *Visit of the site of work:*

1. It is important for the Bidder to visit and inspect the work site and its surroundings and obtain for himself and under his own responsibility all information that may be necessary for the preparation of the bid and the execution of work. The cost of the site visit shall be supported by the Bidder.

2. The Contracting Authority will allow the Bidder and its employees or agents to enter its premises and on its land for purposes of that visit, but only on the express condition that the Bidder, its employees and agents free the Contracting Authority, its employees and agents from any liability that may arise and compensation necessary, and they remain responsible for fatal accidents or corporal, loss or damage, costs and expenses incurred as a result of this visit.

3. The Contracting Authority may arrange a tour of the work site at the preparatory meeting for the preparation of tenders referred to in Article 19 of GRIT.

12 *Language of the bid*

The offer and all correspondences and documents exchanged between the Bidder and the Contracting Authority will be written in English or French.

13.1 The list of documents sighted in article 13 of the SRIT must be completed, regrouped in three volumes inserted respectively in internal envelopes and detailed as follows.

Envelope A- Volume 1: Administrative documents

a. Declaration of intention to tender, signed and fix with a fiscal stamp (according to the attached model);

b. *The group agreement, where need be;*

c. *The power of attorney where need be;*

d. *A certificate of non-bankruptcy established by the Court of First Instance not more than three (3) months preceding the date of submission of bids;*

e. *An attestation of the bidder's domiciliary bank issued by a bank approved by the Ministry in charge of finance of Cameroon;*

f. *Receipt of purchase of the Tender File;*

g. *The bid bond (according to the attached model) of* **three million nine hundred and eighty-nine thousand ninety (3,989,090) Francs CFA***and a validity of* ***30 days*** *established by a first-rate bank approved by the Ministry in charge of Finance of Cameroon;*

h. *An Attestation of Non-exclusion from public contracts delivered by the authority competent for the regulation of public contracts;*

i. *Certified copy of tax payer's card;*

j. *Attestation of localization;*

k. *Certified plan of localization;*

l. *Certified copy of 2023 business licence or non-indebtedness;*

m. *Certified copy of business registration.*

n. *A certificate of visit of the site;*

o. *Audited balance sheet for the last five (05) years (2018-2023) certified by a ChateredAccoutant*

p. *An attestation less than three months old signed by the Director of Taxes certifying that the bidder has effected all statutory declarations in issues of taxes for the current financial year;*

q. *In case of a group of companies each member of the group must present a complete administrative file, documents e, f, g, I shall be presented only by the representative of the group.*

Envelope B- Volume II: Technical bid

b.1 Information on qualifications

1. The list of references for two similar works within the last 3 years ≥ 150million, attaching justifying documents (certified contract's first and last pages including their reception minutes).
2. An attestation of financial capacity delivered by a banking institution recognised by COBAC of not less than one hundred and forty million **(140,000,000)** Francs CFA.

(See essential criteria A and B)

b.2 Technical proposals

1. Methodological note with a report of site visit, the description of works, the planning, list of equipment to be used to carry out the work (attach proof of ownership) as well as environmental protection measures and hygiene;
2. The organization of the team in charge of execution with the qualifications and CVs of key personnel (site supervisor, foreman etc.), attaching justifying documents;

(See essential criteria C, D and E)

b.3 Proofs of acceptance of the contract conditions

The Bidder will also include copies of documents duly initialled and sign on the last page of administrative and technical character regulating the contract, namely:

1. The Special Administrative Clauses (SAC);
2. The Special Technical Clauses (STC).

	(See essential criteria F) **Envelope C- Volume III: Financial bid** c.1 The bid proper, generally prepared according to the attached model, stamped at the prevailing rate and dated; c.2 The duly filled Unit price schedule; c.3 The duly filled detailed estimates; c.4 The sub-details of prices and/or the breakdown of all-in a prices N.B The various parts of the same file must obligatorily be separated by color dividers both in the original and in the copies in a way as to facilitate its examination.
	Amount and currency of the offer
14.3	All duties, taxes and charges payable by the Bidder under the future contract or otherwise, thirty (30) days before the deadline for submission of bids will be included in the price and the total amount of its bid.
14.4	Prices are not revisable
15.1	Not relevant
15.2 and 15.3	*Currency of the Contracting Authority*: Franc CFA
	Preparation and submission of offers
16.1.	*Period of validity of offers:* Bidders shall be bound by their tenders for a period of ninety (90) days with effect from the tender-submission deadline.
17.1.	*Amount of the bid bond:* The amount of the bid bond shall stand at:three million nine hundred and eighty-nine thousand ninety (3,989,090)Franc CFA.
19.1.	*Place, date and hour of the preparatory meeting:* The will be no preparatory meeting.
20.1.	*Number of copies the offers to be filled and submitted:* Each offer written in English or French shall be in seven (07) copies; one original and six copies labelled as such.
21.2.	*Address of the Contracting Authority to be used to send the offers:* Bamenda City Council; Department of Technical Services, Tel: 677 14 41 31 / 674 78 21 67. *Number of the invitation to tender:* OPEN NATIONAL INVITATION TO TENDER N°008/ONIT/BCCITB/2023
22.1.	*Date and time for submission of bids:***27/09/2023** not later than **10:00am**local time precisely.
25.1.	*Place and date of opening of the bids:* Bamenda City Council library;**27/09/2023 at 11.00 am** local time.
	Evaluation and comparison of the bids
31.2	*Currency reserved for the conversion to a single currency:* _____ *Source of exchange rate:* _____ *Date of exchange rate:* _____
32.2.(e)	*The execution timeframe will be evaluated as follows:* The execution timeframe is not a criterion for evaluation.
32.2.(g)	*The method of evaluation of the technical variable is the following:* Not relevant.
33.1.	Not relevant
	Award of the contract
39.1. 39.2	The final bond is 3% of the amount inclusive of all taxes of the contract and will be established according to the model provided in this Invitation to Tender.

Document n°4: Special Administrative Conditions (SAC)

Table of Contents

Chapter I: Generalities

Article 1: Subject of the contract

The subject of this contract is the realization of the works of rehabilitation of some roads in Bamenda City.

Article 2: Procedure of award of the contract

This contract is awarded through Open National Invitation to Tender N°008/ONIT/BCCITB/2023 of 01/09/2023.

Article 3: Definitions and attributions (article 2 of GAC supplemented)

3.1 ***General definitions***

- The **Contracting Authority** and **Project Owner** will be the **City Mayor** of the Bamenda City Council;
  He awards the contract, ensures the preservation of originals of the said contract documents and the transmission of copies to the Ministry in charge of Public Contracts and to the body in charge of regulation.

- **The attributions of the** Contract Manager **are carried out by the Director of Technical Services in the Bamenda City hereby denominated** «The Contract Manager»;

- The **Contract Engineer** will be the Divisional Delegate of Urban Development and Housing hereinafter referred to as **«The Control Engineer»;**.

- The attributions of the **Project Manager** are carried out by the consulting firm recruited for the control and supervision of works, hereby denominated **"The Project Manager"**;

  He ensures respect of the administrative, technical and financial conditions and contractual deadlines.

- The **Contractor** is the holder of the contract for the execution works of maintenance of earth roads;

- The competent Tenders Boardisthe **Bamenda City Council Internal Tenders Board**.

- Official in charge of unannounced controls: **Regional Control Brigade MINMAP/NWR**.

3.2 ***Security***

This contract may be used as collateral security subject to any form of transfer of the debt.

In this case:

- Authority in charge of the order to pay: The City Mayor of Bamenda City Council;
- Authority in charge of liquidation: The Director of Technical Services in the Bamenda City Council;
- Accountant in charge of payment: The Municipal Revenue Collector;
- Competent Authority for enquiries: The Project Owner (or his competent services).

Article 4: Language, applicable law and regulation

1.4 The language to be used shall be English and/or French.

1.5 The contractor shall be bound to observe the law, regulations and ordinances in force in Cameroon both within his own organization and in the execution of the contract.

If the laws and regulations in force at the date of signature of this contract are amended after the signature of the contract, the possible direct resulting costs shall be taken into account without gain or loss for either party.

Article 5:Constitutive documents of the contract (Article 4 of GAC)

The constituent contractual documents of this contract are in order of priority:

1. The letter of submission or the act of engagement.

2. The offer of the Contractor and its annexes in all dispositions none contrary to the Special Administrative Clauses and the Special Technical Clauses mentioned herein;

3. The Special Administrative Clauses (SAC);

4. The Special Technical Clauses (STC);

5. The elements peculiar to the determination of the amount of the contract, such as, by order of priority: the prices list; the state of standard prices; the detail estimate; the decomposition of standard prices and/or the sub-detail of unit prices;

6. Plans, calculation details, survey and geotechnical documents;

7. The General Administrative Conditions applicable to the public contracts of works and enforced by decree N° 033 du 13 February 2007;

8. The Special Technical Clauses (STC) applicable to works subject of this contract.

Article 6: Applicable general texts

This contract shall be governed by the following general texts:

1. *Law No. 96/12 of 5 August 1996 on the management of the environment;*
2. *The Mining Code;*
3. *Texts governing the various professional bodies;*
4. *Decree No. 2001/048 of 23 February 2001 relating to the setting up, organization and functioning of the Public Contracts Regulatory Agency*
5. *Decree No. 2003/651/PM of 16 April 2003 to lay down the modalities of application of fiscal and custom regulations in Cameroon;*
6. *Decree No. 2004/275 of 24 September 2004 to institute the Public Contracts Code;*
7. *Decree No. 2012/074 of 8 March 2012 relating to the creation, organisation and functioning of Tenders Boards amended and supplemented by Decree No. 2013/271 of 5 August 2013;*
8. *Decree No. 2012/075 of 8 March 2012 to organise the Ministry in charge of Public Contracts;*
9. *Circular No. 001/CAB/PR of 19 June 2012 relating to the award and control of execution of Public Contracts;*
10. *Letter No; 00908/MINTP/DR of 1997 to publish guidelines for the consideration of environmental impact of road maintenance;*
11. *Circular relating to the execution, and control of execution of the budget of the State, Public Administrative Establishments and Regional and Local Authorities and other bodies receiving government subsidies*
12. *Unified Technical Documents (DTU) for building works;*
13. *Applicable standards;*
14. *Other instruments specific to the domain concerned with the contract.*

Article 7:Communication (Articles 6 and 10 supplemented)

1.1 **All communications within the framework of this contract shall be written and notifications sent to the following address:**

a) In the case where the contractor is the addressee: Sir/Madam.....

b) Beyond the time-limit of 15 days fixed in article 6(1) of the GAC to make his domicile known to the Contracting Authority and Contract Manager, correspondences shall be validly addressed to the Bamenda II&IIICouncils, jurisdiction within which the work was done;

c) In the case where the Contracting Authority is the addressee:

d) Sir/Madam City Mayor of Bamenda City Council with a copy addressed to the Contract Manager, Contract Engineer, Project Manager and where need be, within the same deadline.

e) In the case where the Contracting Authority is:

The City Mayor of the Bamenda City Council with a copy addressed within the same deadline to the, Contract Manager, Contract Engineer and Project Manager, where applicable

1.2 The contractor shall address all written notifications or correspondences to the Delegated Project Manager with a copy to the Contract Manager.

Article 8:Service Orders (Article 8 of GAC)

The various Service Orders shall be established and notified as follows:

8.1 The Service Order to start execution of works shall be signed by the Contracting Authority and notified to the contractor by the Contract Manager with a copy to the Contract Owner, the Contract Engineer and the Organ in charge of payment.

8.2 Upon proposal by the Delegated Project Manager, Service Orders with an incidence on the objective, the amount and execution deadline shall be signed by the Contracting Authority and notified by the Contract Manager to the Contractor with a copy to the Contracting Authority, the Contract Engineer, the Project Manager and the Delegated Project Manager and the Organ in charge of payment.

8.3 Service Orders of a technical nature relating to the normal progress of the work and without financial incidence shall be signed directly by Contract Manager and notified to the contractor by the Delegated Project Manager with a copy to the Contracting Authority, Contract Manager and the Contract Engineer.

8.4 Service Orders formal notices shall be signed by the Contracting Authority and notified to the contractor by the Contract Manager with a copy to the Contracting Authority, the Contract Engineer and the Project Manager.

8.5 Service Orders for suspension or resumption of work as a result of the weather or any other case of un-foreseen circumstance shall be signed by the Contracting Authority and notified by his services to the contractor with a copy to the Contract Manager, Contract Engineer, Project Manager and the Delegated Project Manager.

8.6 Service Orders prescribing works necessary to remedy disorders which could appear on structures during the guarantee period and not related to normal usage shall be signed by the Contract Manager upon the proposal of the Contract Engineer and notified to the contractor by the Contract Engineer.

8.7 The contractor has a time-limit of fifteen (15) days to issue reservations on any Service Order received. Having reservations shall not exonerate the enterprise of executing the Service Orders received.

8.8 Concerning Service Order signed by the Contracting Authority and notified by the Contract Manager, the notification must be done within a maximum of 30 days from the date of transmission by the Contracting Authority to the Contract Manager. Beyond this deadline, the Contracting Authority shall establish the default of the Contract Manager, take over from him and carry out the said notification.

Article 9: Contracts of conditional phases (Article 9 of GAC)

9.1 The present contract is of a single phase.

Article 10: Contractor's equipment and personnel (Article 15 of GAC supplemented)

10.1 All modifications even partial to the propositions of the technical offer will be done only after certification by the Engineer. In case of modification, the Contractor will have to replace with some personnel of competence (qualification and experience) at least equal or with equipment of similar performance and in a good operating state.

10.2 In any case, the lists of supervisory staff and equipment to be used shall be subject to the approval of the Contract Engineer in a time-limit of fifteen (15) days following the notification of the Service Order to start execution. The Contract Engineer has at his disposition seven (7) days to notify his opinion in writing with a copy sent to the Contract Manager. Beyond this time-limit, the staff list shall be considered as approved.

10.3 Any unilateral modification on the list of supervisory staff and equipment given in the technical bid prior to and during the works shall constitute a motif for termination of the contract as mentioned in article 45 below or the application of penalties up to ten (10) percent.

Chapter II: Financial conditions

Article 11 Guarantees and bonds (Articles 29 and 41 of GAC)

11.1. Final bond

The final bond shall be set at three (3) % of the amount of the contract, inclusive of all taxes.

It is constituted and transmitted to the Contract Manager within a maximum deadline of twenty (20) days of the notification of the contract.

The bond shall be returned or the guarantee released within one month following the date of provisional reception of the works, following a release issued by the Contracting Authority upon request by the contractor.

11.2. Security (guarantee) bond

The retention fund shall be set at 10% of the amount of the contract, inclusive of all taxes.

The return or release of the retention fund or security bond shall be done within one month after the final reception upon a release issued by the Contracting Authority upon request by the contractor.

11.3. Start-up advance bond

This Start-upadvance must be guaranteed by a reimbursement guarantee bond or caution at one hundred per cent (100%) by a local Banking Institution certified by the Minister in charge of finance under the conditions of the COBAC.

The refunding of the start-upadvance bond or the caution will be done when this advance must have been totally reimbursed on a release order delivered by the Contracting Authority at the request of the Contractor.

Article 12: Amount of the contract (Articles 18 and 19 of GAC supplemented)

The amount of this contract as indicated by the attached [*detail or estimates*] is_____ (in figures) _____(in letters) CFA francs Inclusive of All Taxes; that is:

- Amount exclusive of VAT: _____(_____) CFA F
- Amount of VAT: _____ (_____) CFA F.
- Amount of IR _____ (_____) CFA F.
- Amount inclusive of VAT _____CFA F
- Net to be paid=Amount exclusive of VAT - IR

Article 13: Place and method of payment

The Contracting Authority shall release the sums due in the following manner:

a. For payments in CFA francs (*amount in figures and letters exclusive of taxes*) by credit to account No._____ opened in the name of the contractor in the _____bank.

b. For payments in foreign currencies (*amount in figures and letters exclusive of taxes*) by credit to account No._____ opened in the name of the contractor in _____bank.

Article 14: Variation of Prices

Prices are fixed and not subject to revision.

Article 15: Formula for the revision of Prices

Not necessary.

Article 16: Formula for actualization of Prices

Not necessary.

Article 17: Works pre-financed by the Delegated Contracting Authority "Travaux en régie"

Not necessary.

Article 18: Valorisation of the works

This contract is of unit and all-in prices.

Article 19: Valorisation of supply

Not necessary.

Article 20: Start-up advance (article 28 of the GAC)

20.1 The Contracting Authority may grant a start-up advance of twenty (20 %) of the amount of the contract.

20.2 This advance whose value cannot exceed twenty (20) percent of the initial amount inclusive of all taxes shall be guaranteed at one hundred (100) percent by a banking establishment governed by Cameroon law or a first-rate financial institution in accordance with the regulations in force and reimbursed by deduction of the payments on accounts to be paid to the contractor during the execution of the contract according to the modalities laid down in the Special Administrative Conditions.

20.3 The total amount of the advance must be reimbursed not later than when the value in basic price of the works reaches eighty (80) percent of the amount of the contract.

20.4 As the reimbursement advances, the Contracting Authority shall issue the release of the corresponding part of the guarantee upon the express request by the contractor.

20.5 The possibility of granting start-up advance or advance for supplies must be expressly stipulated in the Tender File.

Article 21: Payment of works (articles 26, 27 and 30 of the GAC supplemented)

21.1 Verification of works executed

Before the 30th of each month, the Contractor and the Engineer of the contract will establish a contradictory attachment which recapitulates and fixes the quantities of works realised for each list of work that gives right to payment.

21.2 Monthly detailed account

No later than the fifth (5^{th}) of the month following the month of the services, the contractor shall hand over to the Project Manager two draft provisional monthly detailed accounts in seven copies (one detailed account exclusive of VAT and the other inclusive of taxes), according to the agreed model and establishing the total amount of the sums to which he may lay claim as a result of the execution of the contract since the start of the contract.

Only the detailed account exclusive of VAT shall be paid to the contractor. The detailed account of the amount of the taxes shall be the subject of an entry into the budgets of the Ministry in charge of Finance

Only the amount exclusive of VAT shall be paid to the contractor as follows:

- [100-2.2 paid directly into the account of the contractor;
- 2.2 % paid to the public treasury as AIR due by the contractor.

The Project Manager has a time-limit of seven (7) days to forward to the Contract Manager the detailed accounts he has approved.

The Contract Engineer has a maximum time-limit of twenty-one (21) days to forward the detailed accounts he approved such that they are in his possession not later than the twelfth of the month.

The Contract Manager has a deadline of fourteen (14) days maximum to sign the detailed accounts.

Payments shall be done by the Municipal Treasurer within a maximum deadline of 21 calendar days maximum from the date of submission of the approved detailed accounts.

Article 22: Interest on overduepayments (Article 31 of the GAC)

Possible interests on overdue payments are paid by statement of sums due in accordance with article 88 of Decree No. 2004/275 of 24 September 2004 to institute the Public Contracts Code.

Article 23: Penalties (Article 32 of the GAC supplemented)

A. Penalties for delay

23.1 The amount set for penalties for delays shall be set as follows:

a) One two thousandth ($1/2000^{th}$) of the initial contract amount all taxes inclusive per calendar day of delay from the first to the 30^{th} day beyond the contractual time-limit;

b) One one thousandth ($1/1000^{th}$) of the initial amount of the contract inclusive of all taxes per calendar day beyond the 30^{th} day.

23.2 The cumulated amounts of penalties for delay shall be limited to ten percent (10 %) of the initial contract inclusive of all taxes.

B. Specific penalties [amount to be indicated]

23.3 Independently of penalties for overrun of contractual time-limit, the contractor shall be liable for the following special penalties for the non-observation of the provisions of the contract, especially:

- Late submission of final bond;
- Late submission of insurances;
- Late submission of the draft execution schedule if the lateness is caused by the contractor.

Article 24: Payment in case of a group of enterprises (article 33 of the GAC)

Co-contractors will distribute the funds which are paid by the Contracting Authority in a single account.

Article 25: Final detailedaccount (article 34 of the GAC)

25.1 After completion of the works and within a maximum time-limit of fourteen (14) days after the date of provisional reception, the contractor shall establish, based on joint reports, the draft final detailed account of works executed and which detailed account summarises the total sums to which the contractor may be entitled as a result of the execution of the whole contract.

25.2 The Contract Manager has at their disposal a deadline of seven (7) days to notify the corrected project and accepted by the Engineer.

25.3 The Contractor has at his disposal a deadline of fourteen (14) days to resubmit the final detail account bearing his signature.

Article 26: General and final detailedaccount (article 35 of the GAC)

26.1 At the end of the guarantee period which results in the final reception of the works, the Contract Manager draws up the general and final detailed accounts of the contract which he has had signed jointly by the contractor and the Contracting Authority. This detailed account includes:

- the final detailed account,
- the balance
- the summary of monthly payments on account.

The signing of the general and final detailed account without reservation by the contractor definitely binds the two parties, puts an end to the contract, except with regard to interest on overdue payments

26.2 The Contractor has at his disposal a deadline of fourteen (14) days to resubmit the final detail account bearing his signature

Article 27: Tax and customs regulations (article 36 of the GAC)

Decree No. 2003/651/PM of 16 April 2003 lays down the terms and conditions for implementing the tax regulations and customs procedures applicable to public contracts. The taxes applicable to this contract include notably:

- Taxes and dues relating to industrial and commercial profits, including the IR which is a deduction on company taxes;
- Registration dues in accordance with the Tax Code;
- Dues and taxes attached to the execution of services provided for in the contract;
    - Duties and taxes of entry into Cameroonian territory (customs duties, VAT, computer tax);
    - Council dues and taxes;
    - Dues and taxes relating to the extraction of building materials and water.

These elements must be included in the costs which the undertaking imputes on its running costs and constitute one of the elements of the sub-details of prices exclusive of taxes.

All taxes inclusive prices means VAT included.

Article 28: Stamp duty and registration of contracts (article 37 of GAC)

Seven (7) original copies of the contract shall be stamped by and at the charges of the contractor, in accordance with the applicable regulations.

Chapter III: Execution of works

Article 29: Nature of the works (article 46 of GAC)

The works shall include especially:

- Site installation;
- Preparation works;
- Roadway;
- All other subjection necessary for good execution of the works.

Article 30: Role and responsibilities of the ContractingAuthority (GAC supplemented)

30.1 The Contracting Authority shall be bound to furnish the contractor with information necessary for the execution of his mission and to guarantee, at the cost of the contractor, access to sites of projects.

30.2 The Contracting Authority shall ensure the contractor of protection against threats, insults, violence, assault and battery, slander or defamation of which he could be victim by reason of or during the exercise of his mission.

Article 31: Execution time-limit of the contract (article 38 of the GAC)

31.1 The time-limit for the execution of the works forming the subject of this contract shall be: three (03) calendar months.

31.2 This time-limit shall run from the date of notification of the Service Order to commence execution of the works.

Article 32: Role and responsibilities of the contractor (article 40 of the CAG)

The detailed and general plan of progress of the works shall be communicated to the Project Manager in in five (5) copies at the beginning of the execution of the works.

Article 33: Provision of documents and site (article 42 of the GAC)

A reproducible copy of the plans featuring in the Tender File shall be submitted by the Contract Manager.

The Contracting Authority shall make available the site and access ways to the contractor at the appropriate time as the works progress.

Article 34: Insurance of structures and civil liabilities (article 45 of GAC)

The following insurance policies are required within the scope of this contract in the minimum amounts indicated hereafter within fifteen (15) days of the notification of the contract:

- *Liability insurance,business manager;*
- *Comprehensive insurance of the site;*
- *Insurance covering its ten-year obligation, where applicable.*

Article 35: Documentstobefurnished by the contractor (Article 49 of the GAC supplemented)

35.1 Programme of works, Quality Assurance Plan and others (*to be specified).*

a. Within a maximum deadline of thirty (30) days, as from the notification of the service order to start work, the Contractor shall submit, in six (06) copies, for the approval of the Contract Manager after the endorsement of the Project Manager (or the Contract Engineer) the program of execution of the works, the calendar of supply and his plan of environmental management.

This program shall be presented following the models furnished.

Two (2) copies of the documents shall be returned in a deadline of ten days as from their reception with:

- Either with the approval mention "good for execution";
- Or the mention of their reject accompanied by the motives of the said reject.

The contractor has at his disposal eight (8) days to present a new one. The Contract Manager disposes then a deadline of five (5) days to give his approval or make eventual remarks. In this case, the procedure is restarted without that this modifies the contractual duration.

The approval by the Contract Manager or Project Manager does relief the Contractor of his responsibility. Meanwhile the works executed prior to the program will not be verified or paid. The actualized approved planning becomes the contractual planning.

The contractor shall constantly update on site, the planning that will take account the real progress of the site. Significant modifications may only be made on the contractual program only after the approval of the Project Manager.

After approval of the execution planning by the Contract Manager, the latter shall transmit it within five (5) days to the Contracting Authority without suspense effect of its execution. However, if important modifications alter the objective of the contract or the nature of the works, the Contracting Authority shall return the execution planning accompanied by reservations to be lifted within fifteen (15) days of the date of reception.

a) The Environment Management Plan should bring out notably the technical conditions choice of the site and basic life, conditions of the backfill of the extraction sites and conditions for reinstating the works and installation sites.

b) The contractor shall indicate in this schedule the equipment and methods which he intends to use as well as the personnel he intends to employ.

c) The approval granted by the Contract Manager or Project Manager shall in no way diminish the responsibility of the contractor with regard to the harmful consequences which their implementation may cause both towards third parties and the respect of clauses of the contract.

35.2 Execution Plans

a) The execution plans and documents (calculations and drawings) necessary for the realisation of all the parts of the structure must be submitted for the endorsement of the Delegated Project Manager at most one month (specify the duration which must not exceed one month) prior to the date provided for the commencement of execution of the corresponding part of the structure.

b) The Delegated Project Manager has a deadline of fifteen (15) days to examine and make known his observations. The contractor then has a deadline of eight (8) days to present a new file including the said observations.

35.3 In case of the non-observance of the approval deadlines of the above documents by the Administration, these documents shall be deemed to have been approved.

Article 36: Organisation and safety of sites (article 50 of the GAC)

36.1 Signboards at the beginning and end of each section must be placed within a maximum deadline of one month after the notification of the Service Order to commence work.

36.2 The services to inform in case of interruption of traffic or along the deviated itinerary: The Senior Divisional Officer for Mezam in accordance with article 50(2) of the GAC].

36.3 Indicate the special measures demanded of the contractor, other than those provided for in the GAC, for rules of hygiene and safety and for circulation around or in the site.

Article 37: Implantation of structures

The Project Manager shall notify within seven (7) days following the date of notification of the Service Order to commence work, the basic points and levels of the project.

Article 38: Sub-contracting (article 54 of the GAC)

The part of the works to be sub-contracted shall be 25% of the initial amount of the contract and its additional clause.

Article 39: Site laboratory and tests (article 55 of GAC)

39.1 Indicate if necessary the modalities for carrying out the tests and geotechnical studies provided for in the Special Technical Conditions.

39.2 The Contract Manager has a deadline of fourteen (14) days to approve the contractor's personnel and laboratory as soon as the request is made.

Article 40: Site logbook (article 56 of the GAC supplemented)

40.1 The Site logbook must be systematically jointly signed by the Delegated Project Manager or Engineer, where need be and the contractor's representative each day.

40.2 It is a joint document in a single copy. Its pages must be numbered and initialled. No page should be removed. The erased or cancelled parts must be mentioned on the margin for validation.

Article 41: Use of explosives (article 60 of the GAC)

The use of explosives is forbidden.

Chapter IV: Acceptance

Article 42: Provisionalreception (article 67 of the GAC)

Before the provisional reception, the contractor shall request in writing to the Contracting Authority with a copy to the Contract Manager, the Engineer and the organ in charge of payment the organisation of a technical visit prior to the provisional reception.

42.1 Tests included in the operations prior to reception (*not applicable*).

42.2 Possible ascertainment of the folding up of the site installations and the restitution of the site as was [*insert and modify if applicable*];

42.3 The Reception Commission shall comprise the following members indicatively:

i. The Project Owner or his representative as chairperson;
ii. The Contract Manager as member;
iii. Project Manager as secretary;
iv. The Stores Accountant;
v. The Contractor as observer.
vi. MINMAP (observer)

The contractor shall be invited to the reception by mail at least 10 days prior to the acceptance. He is bound to attend (or be represented).

He takes part in the reception as an observer. His absence is equivalent to acceptance without reservation of the conclusion of the Reception Commission.

After the visit of the site, the Commission shall examine the minutes of the preliminary operations to the reception and shall proceed to provisional reception of the works if that be the case.

The visit for provisional reception shall be the subject of minutes of provisional reception signed on the spot by all the members of the Commission.

The minutes of the provisional reception report shall specify or set the date of completion of the works.

42.4 Partial receptions are not previewed in the framework of this contract.

42.5 The guarantee period begins from the date of provisional reception.

Article 43: Documents to befurnishedafterexecution (article 68 of the GAC)

43.1 Within 30 days after the provisional reception of all the works, the Contractor will submit a dossier of verification with a plan to 1/100e and a report describing the work done.

43.2 The bond of the good execution of work will be released only after the submission of the dossier of verification.

Article 44: Guaranteeperiod (article 70 of the GAC)

The guarantee period shall be *one (01) year* to run from the date of the provisional reception of the works.

Article 45: Final reception (article 72 of the GAC)

45.1 Final reception shall take place within a maximum deadline of *twenty one (21) days* from the date of expiry of the guarantee.

45.2 The Project Manager shall [not] be a member of the commission.

45.3 The procedure for final acceptance shall be the same as for provisional acceptance.

Chapter V: miscellaneous provisions

Article 46: Termination of the contract (article 74 of the GAC)

The contract may be terminated as provided for in Part III Paragraph IV of Decree No. 2004/275 of 24 September 2004 and equally under the conditions laid down in articles 74, 75 and 76 of the GAC especially in one of the following cases:

- Delay of more than fifteen (15) calendar days in the execution of an Service Order or unjustified stoppage of work for more than seven (7) calendar days;
- Delay in work resulting in penalties of more than 10% of the amount of the works;
- Refusal to repeat poorly executed works;
- Default by the contractor;
- Persistent non-payment for services.

Article 47: Case of unforeseencircumstances (article 75 of the GAC)

If the contractor were to raise the issue of unforeseen circumstances, the thresholds below which claims shall not be admitted are:

- *Rainfall: 200 millimetres in 24 hours;*
- *Wind: 40 metres per second;*
- *Flood: decennial flood frequency.*

Article 48: Disagreements and disputes (article 79 of the GAC)

Disagreements and disputes resulting from the execution of this contract may be settled amicably.

Where no amicable solution can be found for a disagreement, it is brought before the competent Cameroonian jurisdiction.

Article 49: Formatting and reproduction of thiscontract

Seven (7) copies of this contract shall be produced at the charges of the contractor and submitted to the Contract Manager.

Article 50 and last: Entry into force of the contract

This contract shall be final only upon its signature by the Contracting Authority. It shall enter into force as soon as it is notified to the contractor by the Contracting Authority.

Document n° 5 : Special Technical Clauses (STC)

TECHNICAL SPECIFICATIONS

ARTICLE B 100 – GENERALITIES

Article B 101 - Purpose of this technical specifications
Article B 102 - Abbreviations
Article B 103 - Standards and regulations
Article B 104 - Study descriptions
Article B 105 - Description of work

ARTICLE B 200 - QUALITIES AND PREPARATIONS OF THE MATERIALS TO BE USED

Article B 201 - Aggregates for mortar and concrete
Article B 202 - Hydraulic binders
Article B 203 - Admixtures
Article B 204 - Curing products
Article B 205 - Composition of concretes and mortars
Article B 207 - Compaction and mixing water
Article B 207 - Steels for reinforced concrete reinforcement
Article B 208 - Various sections and steels
Article B 209 - Formwork
Article B 210 - Concrete blocks
Article B 211 - Shaping of reinforcements for reinforced concrete
Article B 212 - Materials for backfill
Article B 213 - Materials for subbase and base
Article B 214 - Materials for impregnation of base layer, tack coat and pavement coatings
Article B 215 - Materials for backfill under foundation
Article B 216 - Materials for filtering devices
Article B 217 – Sealingdevices
Article B 218 – Concretepipes
Article B 219 - Pvc pipes
Article B 220 - Fonts
Article B 221 - Rock fill
Article B 222 - Road paint
Article B 223 - Water repellents

ARTICLE B300 - METHOD WORK EXCUTION

PRELIMINARY WORKS - EARTHWORKS - ROADS

Article B301 - General provisions
Article B302 - General layout

ARTICLE B310 - PRELIMINARY WORK

Article B311 - Brush clearing
Article B312 - Voids
Article B313 - Scarification of existing pavements
Article B314 - Demolition
Article B315 – Discharges

ARTICLE B 320 - EARTHWORKS

Article B321 - Topsoil stripping
Article B322 - Land movements
Article B323 - Purging of bad land
Article B324 - Requirements applicable to excavated earthworks
Article B325 - Careers and loans
Article B326 - Requirements applicable to earthworks in embankments
Article B327 - Tolerance on earthworks
Article B328 - Compaction
Article B329 - Adjustment of platforms
Article B330 - Roads
Article B331 - Finishing of platform

Article B708 - Pavement markings
Article B709 - Cleaning work
Article B710 - Method of carrying out the work
Article B711 - Conditions of execution

ARTICLE B800 - EXECUTION OF NETWORK DISPLACEMENT
Article B802 - Reconnaissance trenches
Article B803 - Execution of works

ARTICLE B900 - MODES OF PLANTATION EXECUTION

Article B901 - Origin and quality of trees and shrubs
Article B902 - Method of carrying out the work
Article B903 - Grassing
Item B904 - Cleaning
Article B905 - Warranty and maintenance
Article B907 - Paving
Article B907 - Development of the existing box culvert
Article B908 - Signalling
Article B909 - Concrete blocks.
Article B1000 - Environmental directives.

ARTICLE B 100 - GENERALITIES

ARTICLE B 101 - SUBJECT OF THE PRESENT SPECIFIC TECHNICAL CLAUSES

The purpose of this Book of Special Technical Clauses is to specify the standards applicable to equipment and materials incorporated in the rehabilitation of some roads in Bamenda city

ARTICLE B 102 - ABBREVIATIONS

The abbreviations used in this Technical Prescription Book have the following meanings:

- C.C.A. P. Book of Special Administrative Clauses
- C.C.T.P. Book of Particular Technical Clauses
- or C.C.T.G. General Technical Clauses Book
- A.S.T.M. American Society for Testing and Materials
- A.A.S.H.T.O. American Association of States Highway and Transportation Officials
- I.S.O. International Organization for Standardization
- A.W.W.A. American Water Work Association
- O.P.M. Optimum Proctor Modified
- LABOGENIE National Laboratory of Civil Engineering of CAMEROON
- C.A.M.WATER : Cameroon Water Utilities Corporation
- E.N.E.O The Cameroon Electricity Supplier
- CAMTEL CAMEROON Telephone Network

ARTICLEB103 - STANDARDS AND REGULATIONS

The applicable standards are those in force in the Republic of Cameroon or failing that, the French standards in force in the construction industry.

Other standards will be accepted if their quality is equal to or better than the specified standard after submission for approval by the Inspection Engineer.

The sources, qualities, types, dimensions, weight, and characteristics, as well as the methods of testing, marking, checking and acceptance of materials and supplies, must meet the standards in force at the time of signing the Contract.

The Co-contractor is deemed to be familiar with these standards and in particular the following documents:

B103.1 Technical Clauses Book (C.C.T. ex-C.P.C)

- Booklet N ° 1: General provisions common to the various types of work
- Fascicle N ° 2: General earthworks
- Fascicle N ° 3: Supply of hydraulic binders
- Fascicle N ° 4 (Title 1): Steel for reinforced concrete
- Booklet N ° 7: Soil recognition
- Fascicle N ° 23: Road aggregates
- Fascicule N ° 24: Supply of hydrocarbon binders used in the construction and maintenance of pavements
- Fascicle N ° 26: Execution of surface plasters
- Fascicule N ° 31: Borders and gutters in natural stone or concrete and concrete retaining devices
- Fascicle N ° 32: Construction of sidewalks.
- Fascicule N ° 35: Works of green spaces, sports and leisure areas
- Fascicle N ° 50: Topographic works, large-scale plans
- Booklet N ° 61:
Title 4:
Title 5:
Climatic actions
Design and calculations of bridges and metal constructions
- Booklet N ° 62
(Title 1 - Section 2): Technical rules for the design and calculations of reinforced concrete structures and structures according to the limit states method
- Fascicle N ° 63: Execution and implementation of unreinforced concrete, preparation of mortars
- Fascicle N ° 64: Masonry work for civil engineering structures
- Fascicle N ° 65: Execution of civil engineering works in reinforced or prestressed concrete
- Fascicle N ° 66: Execution of bridges and other metal frames of similar techniques
- Booklet N ° 67: Waterproofing of engineering structures
- Fascicle N ° 68:
Title 1:
Execution of foundation works

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- Booklet N ° 67: Waterproofing of engineering structures
- Fascicle N ° 68:
Title 1:
Execution of foundation works
- Fascicle N ° 70: Sewerage pipes and ancillary works
- Fascicule N ° 71: Supply and installation of water pipes, accessories and connection

The Common Prescriptions applicable to the construction of a public lighting ıetwork from March 1974.
All the technical rules published by the UTE in their up-to-date edition for electrical nstallations.

ARTICLE B104 - STUDY DESCRIPTIONS

Within thirty days from the date of the start of the works, the Co-contractor will delimit the right-of-way of the works and undertake the delimitation of the constructions within these rights-of-way after agreement or according to the instructions of the Project Manager. Then, he will establish from the plans and tender documents the complete execution project defining the adaptation of the works to the actual execution conditions.

The execution plan will include all the modifications or variants proposed by the Co-contractor as well as the calculation notes and drawings referred to in article A 327.3 of the Special Prescriptions Specifications.

The execution plan must be submitted to the Market Engineer within thirty days before the start date of the corresponding part of the work.

The Project Manager will have a period of fifteen days to approve the execution plan or to make known his observations under the conditions defined in the Special Prescriptions Book. The execution project will include:
- Situation plans at 1 / 500th
- Layout of the rights-of-way at 1 / 500th
- Layout plans at 1 / 500th of tracks and structures with storm water purification,
- Projects and plans for network movements (CAMWATER, ENEO, CAMTEL) at 1 / 500th,
- Notebook of cross sections at 1 / 100th (one profile every 10 m),
- Typical cross sections at 1 / 50th,
- Plans of crossroads at 1 / 200th with sanitation,
- Formwork and reinforcement plans for sanitation structures at 1 / 20th (scuppers, manholes, heads of structures, etc.),
- Detail plans at 1: 50th (curbs of sidewalks, etc.),
- All calculation notes for sanitation works,
- Calculation notes for sanitation and outlet of structures,
- Program, plan and results of geotechnical tests (foundation soils, cuttings reusable as backfill, purges, groundwater level, deflection tests, etc.),
- Detailed pre-survey by section and structures.

ARTICLE B105 - DESCRIPTION OF THE WORK

- Site installation
- Mobilisation and demobilisation of equipment
- Scarification of the exiting road surface and moulding
- Cut and throw
- Fillfromborrowpit
- Foundation course in laterite
- Base course in crushed aggregate 0/31.5
- Priming
- Bituminousconcrete
- Reinforcedconcretegutters
- Supply and placement of reinforced concrete ring culverts

- Construction of reinforced concrete box culvert 3x3
- Horizontal signalisation
- Vertical signalisation
- All other works described in the cost estimates and bill of quantities.

GENERAL

The control tests and execution studies prescribed in this CCTP will be the responsibility of the Co-contractor who is required to submit the results for the approval of the Project Manager. Samples of the materials and equipment that will have been retained by the Project Manager will be kept in the premises of the Project Manager on the site.

ARTICLE B201 - AGGREGATES FOR MORTARS AND CONCRETE

Aggregates for mortars and concretes must meet the requirements of the French standards cited in fascicules 65 of the C.C.T.G. (see B103.1). The aggregates will be of uniform quality and without excess of flat or elongated lumps, dust or impurities.

In addition, it is specified that the dimension of the gravel for concrete will be at most equal to 25 mm. This maximum size will be reduced to 15 mm in the rubbed areas.

However, in massive structures and with the express agreement of the Project Manager, the maximum size may be increased to 40 mm.

Concrete 0/25 will be made up of at least three classes of aggregates, the grain size curves being taken from the following series of sieve dimensions, expressed in millimetres: 2 - 4 - 6.3 - 10 - 20 or 3 - 5 - 8 - 12.5 - 15 - 25.

The sands will be of good quality, stable, clean and free of dust, shale, clay or organic debris. They should not contain more than 5% of fine elements passing through an 80 micron sieve.
No grain should be larger than 6.3 mm. The sand equivalent will necessarily be greater than 70.

The aggregates will be stored in such a way that the different classes cannot mix. Contamination by mud and dust should be avoided. A good drainage of stocks must be ensured.

The quality and size of the aggregates must be subject to the approval of the Project Manager. This approval will only be acquired after the resistance tests on concrete specimens carried out with the proposed aggregates have been found to be satisfactory.

ARTICLE B202-HYDRAULIC BINDERS

The cement used in the composition of ordinary or reinforced concrete and mortars will be of the class
CPA 325 or CPJ 35. The use of aluminium cement will not be authorized as well as the cement mixture.

Cement must be stored in dry, well ventilated rooms that are effectively protected against bad weather. The raft of wooden or concrete rooms should be at least 20 cm above the ground to prevent any rising damp. Each supply should be stored separately so that it can be easily identified and controlled.

The cement must be used in the order of delivery or as directed by the Project Manager. The cement in bags will be piled up to a maximum height of 2 meters.

The tonnage of cement stored must be sufficient to ensure consumption of at least one month during site activity. Any cement showing traces of humidity or setting must be removed from the site.

ARTICLE B203 - ADDITIVES

The possible use of admixtures for making concrete will be subject to the approval of the inspection engineer. The adjuvants must be used in accordance with the prescriptions of booklet 65 of the C.C.T.G, in particular with regard to the maximum dosage, the precautions to be taken and the contraindications. Chlorine additives are prohibited.

The use of the adjuvant must be such that it is guaranteed against any abnormal concentration, for this purpose, the mixing of the adjuvant and the mixing water will take place in the tank or in an auxiliary tank which will be equipped with a sufficiently powerful autonomous stirring device in permanent motion.

Any additives used by the Co-contractor and supplied by him on the site must give rise to the presentation of a certificate of origin, indicating the deadline beyond which these products must be scrapped.

ARTICLE B204 - CURING PRODUCTS

The curing products that may be used for concrete will be subject to the prior agreement of the Project Manager and will comply with the requirements of booklet 65 of the C.C.T.G.

ARTICLE B205 - COMPOSITION OF CONCRETE AND MORTARS

B205.1 Concrete

The concretes used for the construction of the structures will meet the following specifications:

Description	Minimum Dosage ofcement	Usage	Minimum resistance at 28 days Mini compression Mini traction	Ratio W/C maximal
Plain concrete BC	200 Kg	Lean concrete		0,70
Concrete 1(BQ1) 20	250 Kg	Béton de forme	18 MPa 1,8 Mpa	0,60
Concrete 2(BQ2)	300 Kg	Non reinforced or lightly reinforced element	23 MPa 2,05 MPa	0,55
Concretequality 3(BQ3)	350 Kg	Footings foundation etc…	27 MPa 2,32 MPa	0,55
Concretequality 4(BQ4)	400 kg	Highlysolicited structures	33 Mpa 2,6Mpa	0,55

The W / C (water / cement) ratio indicated in the table is the maximum admissible for the implementation of the corresponding type of concrete.
The dose of cement indicated in the table cannot be reduced even if the resistance of the tests exceeds the prescribed values.

a) Consistency
The consistency of quality concretes BQ2, BQ3 and BQ4 will be measured with the AGTM cone, the subsidence will be less than 5cm. The Co-contractor must in all cases have the necessary equipment so as to ensure satisfactory vibration of the concrete.

b) Composition

The study of the composition of concrete is the responsibility of the Co-contractor.

The Co-contractor must present his proposals to the Project Manager and submit for his approval the particle size composition and the volumes of water to be incorporated per cubic meter and this in good time to meet the contractual execution period.

The Co-contractor has a period of fifteen (15) working days from the notification of the market to present the composition of the concrete.

The Project Manager will make its observations or give its approval within seven (07) working days from the date of receipt of the Co-contractor 's proposals.

Following the approval by the Project Manager of the concrete compositions proposed, the Co-contractor will carry out mix tests for each concrete quality indicated. The tests must correspond to the manufacturing conditions on the site.

The Co-contractor will only apply the mixtures approved by the Project Manager.

B205.2. Mortars

Depending on their destination, the mortars will have the following compositions:

M400:
Mortar at 400 kg of cement per cubic meter of sand. It will be used to produce the coatings seen from the structures (manhole cover slabs, superstructure structure).
M500:
Mortar at 500 kg of cement per cubic meter of sand with the addition of Sika N1 product following the dosage prescribed by the manufacturer and subject to the approval of the Project Manager. This mortar will be used for the waterproof interior plasters of the structures.
The W / C (water / cement) ratio indicated in the table is the maximum admissible for the implementation of the corresponding type of concrete.
The dose of cement indicated in the table cannot be reduced even if the resistance of the tests exceeds the prescribed values.

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The consistency of quality concretes BQ2, BQ3 and BQ4 will be measured with the AGTM cone, the subsidence will be less than 5cm. The Co-contractor must in all cases have the necessary equipment so as to ensure satisfactory vibration of the concrete.

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M600:
Mortar dosed at 600 kg of cement per cubic meter of sand. It will be used for all seals (metal profile descent rungs, etc.) and for repointing masonry rafters

Mortars will be manufactured mechanically or exceptionally, manually for very small quantities. Manufacturing equipment must provide the same dosage guarantees as for concrete.
Any mortar which has started to set or which has dried out will be rejected and must not be mixed with fresh mortar.

B205.3 Control of concrete

The Co-contractor is responsible for carrying out the study tests and suitability tests in good time to meet its contractual obligations relating to the time limits for execution, whatever the results of said tests.

The test pieces will be made in approved molds. The transport to the control laboratory of the convenience and information control test pieces will be carried out by the Co-contractor.

Concrete control will be carried out according to the services in the table below:

Concrete class	Number of samples	Compression	Traction frequency	Consistency
BQ3 350 kg	Daily concreting - cylinders	2 tests At 7 days	2 tests At 7 days	1 per ½ day
	6 samples	4 tests à 28 days	4 tests at 28 days	
BQ4 400 kg	10 samples	3 tests at 3 days 2 tests at 7 days	3 tests at 3 days 2 tests at 7 days	1 per ½ day
	10 samples	5 tests à 7 days	5 tests à 28 days	

Structures or parts of structures, for which the tests thus carried out show resistances 15% lower than the required resistances, will be refused.

ARTICLE B207 - COMPACTION AND MIXING WATER

The supply of water is the responsibility of the Co-contractor. The proportion of materials dissolved or suspended in the compaction water must be low enough so that it does not cause a reduction in the qualities of the earthworks of the roadway.

The water used both for mixing and for compaction must have the physical and chemical properties set by the standard defined in the prescriptions of booklet 65 of the C.C.T.G. It should not exceed a temperature of 30 ° C and should not contain more than 2 g of dissolved salt per liter.

Questionable water will be subjected to chemical analysis by the care and at the expense of the Co-contractor.

ARTICLE B207 - STEELS FOR REINFORCED CONCRETE
The steels used for the reinforced concrete will be as follows:

Steels with high adhesion Fe400 in accordance with the standards cited in booklet 4 in title 1 of the C.C.T.G.

Minimum yieldstrength: 400 MPa

For each supply of steels intended for the works, the Co-contractor will provide certificates indicating the results of tests undergone by the materials. If test results are not available, the Employer may refuse its use. The steels will be securely tied in bundles. The bundles must be clearly marked with the supplier, the quality, the delivery date and the length, diameter and number of bars.

Steels for reinforced concrete will be stored on supports above the ground and will be protected against rust, oil and other harmful influences.
ARTICLE B208 - PROFILES AND MISCELLANEOUS STEELS

The various profiles, sheets, plates, bars, tubes shall be in laminated mild steel, of weldable quality, non-brittle, malleable, free from flaws, streaks, cracks, cracks. Parts to receive a protective zinc coating will be hot dip galvanized. The weight of zinc will not be less than 200 grams per square meter (single sided). They will comply with the prescriptions of booklet 4, title 3 of the C.C.T.G.
ARTICLE B209 - FORMWORK

The formwork will be made up of metal elements, wood or any other equivalent material. They will be subject to the approval of the Project Manager.

The slab, raft and wall forms that will remain in view will be smooth, ensuring smooth and even surfaces. They will comply with the prescriptions of fascicle 65 of the C.C.T.G.

ARTICLE B211 - SHAPING OF REINFORCEMENT FOR REINFORCED CONCRETE

The conditions of use of the reinforcements must comply with the prescriptions of booklet 4, title 1 of the C.C.T.G.

Article 21 of fascicle 65 of the C.C.T. is completed as follows:

When it is necessary to constitute reinforcement with several bars, the joints are distributed over a certain length so that, in a section, there are at least 2/3 of the continuous bars, it being accepted that the overlap of the reinforcements to improved adhesion will comply with the requirements of the reinforced concrete rules in force.

Immediately before placement, the steels will be clean and rust-free. The reinforcements will be well fixed so that there is no risk of displacement during the pouring of the concrete. Are forbidden:
- the deliberate folding and unfolding of the reinforcements,
- the assembly of reinforcements by welding.

ARTICLE B212 - FILL MATERIALS

B212.1 - General indications

The materials used in backfill must have the following characteristics:

- Plant element content less than 1%;
- Granulometry: no elements greater than 100 mm;
- Plasticity index: less than or equal to 40;
- Lift: the immediate CBR bearing index (natural W) must be greater than or equal to 10 for compaction at 95% O.P.M. The index bearing CBR is measured after 04 days of imbibition;
- Linear swelling: less than 3%.

It is the responsibility of the Co-contractor to carry out all the geotechnical studies on the soils in place and on the borrow sites for which they have researched the sites, at their own expense. The studies
Geotechnical techniques that may be made available to the Co-contractor by the project manager are given for information only.

With regard to soils whose water content, at the time of installation is too high to allow obtaining the minimum acceptable compactness indicated in article B328 of this CCTP, the Co-contractor will take all the necessary measures to aerate and reduce the water content to a value close to the optimum.

In addition, in flood-prone areas, the base of the embankments will be made up to the height of the highest water levels with sand or any other equivalent material in order to accelerate the consolidation of the soils in place and to constitute a draining layer allowing the water circulation. The draining material should not contain more than 10% fine elements. This provision is not valid for embankments serving as dykes for whom the materials must be submitted to the approval of the Inspection Engineer.

B212.2 - Materials for backfill bodies

The backfill bodies will be made with materials from the cuttings (topsoil and micaceous earth excluded). In the event of poor quality or insufficiency, materials from the best borrowings approved by the Project Manager will be used, in accordance with articles B212.1, B325 and B326 of this document.

B212.3 – Sub grade course

The subgrade is defined as the part of the structure on which the roadway is placed. This is either the shape resulting from the compacted cuttings or the existing road surface.

The thickness of the form base is considered to be equal to 30 cm. The materials constituting this backing must meet the following characteristics, unless an exemption is granted by the Project Manager:

Organic content :	< 2 %
Granulometry :	150 mm maximum
Percentages of fines :	< 40 %
Limitesd'Atterberg :	limite de liquidity< 60 plasticity index < 40
Indice CBR (measured after 4 days of immersion) :	CBR > 15 for dry density at 95 % de l'O.P.M.
Gonflementlinéaire :	tolerance 2 % maximum

In the event that the natural terrain does not have these characteristics, the Co-contractor would be required to provide a top layer meeting these standards.

The remuneration for the presentation of the fund is not specified separately in the price schedule, but is considered to be included in the other unit prices.

ARTICLE B213 - MATERIALS FOR FOUNDATION AND BASE LAYER

The definition of the pavement body structures will be finalized in agreement with the Project Manager before the start of works.

The foundation layer will be executed:
- lateriticgravel with an I.P. less than 35 and a CBR greater than 40
- in natural gravel reconstituted according to proposals allowing to obtain an I.P. less than 30 and a CBR greater than 35.

The base layer will be executed:
- gravelly lateritic or lateritic T.V. reconstituted according to the characteristics defined above, improved to 4% cement,
- in crushed gravel 0 / 31.5.

The pavement layers in gravel bitumen will be carried out in accordance with the Directives of the SETRA-LCPC "for the realization of the pavement foundations in gravel bitumen and sand-bitumen of September 1972".
The quarries from which the materials will come must be approved by the Project Manager.

The materials for the foundation and base layer must meet the specifications indicated in the table below with the exception of asphalt gravel which will be considered as dense asphalt (see article B214 below).

	FONDATIONS	**BASE**	**BASE**				**TESTS**
Parametersdensity	Laterite	Crushedaggregates 0/31,5	Stabiliselateriteciment 4%				Quantity
CBR after 4 days of immersion at 95 % OPM	≥ 30	≥ 150	≥ 160				1/1000 m²
Percentage of fines (elements at 0,08 mm)	≤ 35	≤ 35	≤ 30				1/1000 m²
Plasticity index	≤ 30	≤ 6	≤ 25				1/500 m²
Gonflement	≤ 2 %	≤ 1 %	≤ 2 %				1/1000 m²
Proctor density	≥ 1,9	> 2,20 T/m3	≥ 1,9				1/500 m²
Organic content	≤ 2 %	≤ 1 %	≤ 1 %				1/2000 m²
Simple compression resistance - Rc (3 days curing with air, 4days immersion) - Rc (7j air curing)			T1	T2	T3	T4	1/2000 m² 1/2000 m²
			5	5	7	7	
			5	15	20	20	
Traction Resistance (days air curing)	/		1	1	15	15	1/1000 m²

Granulometry Tamis – % passant	0,08 mm 35 % maxi	0,08 mm 0,2 mm 0,5 mm 2 mm 6,3 mm 10 mm 20 mm 31,5mm 40 mm	2 – 10 8 – 20 17 – 32 30 – 50 45 – 70 55 – 82 75 –100 95 – 100 100	(voir LADN 1987) 0,08 mm 35 % maxi	1/1000 m²
Forme – Angularity % éléments tels que G/E < 1,58	/	≤ 30		/	1/2000 m²
Sand equivalent		30 T1 & T2 40 T3 & T2			1/1000 m² 1/1000 m²

ARTICLE B214 - MATERIALS FOR IMPREGNATION OF BASE LAYER, TACK COATING AND WEARING COURSE

- Base coat impregnation, tack coat

The binders used will comply with the requirements of fascicle N-24 of the C.C.T.G. "Supply of hydrocarbon binders used in the construction and maintenance of pavements. The aggregates used will comply with the prescriptions of the N-23 of the C.C.T.G." Road aggregates ".

- Impregnation of the Base Layer = Cut-back Fluid of class 0/1 for the Stabilized Grave or 10/15 for the 0 / 31.5.

- Tack coat = Cut-back 400/600

- Pavement coating
They will be made up of surface plasters or dense mixes.

A) **Surface dressing**

The characteristics to which surface plasters must meet are defined below:

Aggregates

Granularity	**Single layer**	**Double layer**	**Triple layer**
1st coat	6/10 ou 8/12	10/14 ou 8/15	10/14ou 12/18
2nd coat	-	6/10 ou 4/8	6/10 ou 8/12
3rd coat	-	-	4/6 ou 4/8

- **Hardness:** Los Angeles << 40 (preferential << 35%) or wet Micro-Deval<< 25 (preferential << 20)
- Shape:% of element such that G / E <1.56 will be less than or equal 25
- Angularity:% crushed elements >> 50
- Cleanliness:% elements <1 mm: <4: T1 and T2
2: T3 and T4
- Adhesiveness:% fixed aggregates >> 90 vialit 20 ° C and >> 75 vialit 60 ° C
- Granulometry: class 4/8 - 8/12 - 12/18
- Accelerated polishing coefficient >> 40%

Binders:
We will use either:
- a cutback bitumen 150/250
- a 400/600 fluidized bitumen or cationic emulsion containing 65 - 70% bitumen 80/100 or 60/70 class T2, T3, T4.

A) Dense mixes

1) Aggregates:
The granulation of the construction material will fall within the following reference range: (given as an indication)

Sieve	0,08	0,20	0,315	1	2	4	6	10

(mm)								
% Sieved	5 – 9	8 – 14	10 – 18	20 – 32	30 – 45	50 – 60	65 – 75	90 – 100

The aggregates must have excellent granularity and a crushing index equal to 90.
The equivalent of sand measured on the 0 / 6.3 fraction of the reconstituted mixture will be at least equal to 60, on the 0/4 fraction of the sand; the equivalent of sand will be greater than 40.
The hardness by the Los Angeles test on class 6/10 will be less than 35.
The binder content should be in the range 5.5 to 6.5 for bituminous concrete and 3.5 to 4.5 for serious bitumen.
Filler: The filler water content will be between 5 and 9%. The filler / bitumen ratio will be between 1.1 and 1.4.

1) Bitumen:

The binder will be pure bitumen with a 60/70 or 80/100 penetration.
Bitumen with hardness greater than 150 or less than 50 are not recommended.

2) Typical formulas for dense bituminous concrete:

The Contractor will formulate the composition of the dense asphalt that he plans to use. This composition must correspond to the requirements of the table below: (given as an indication)

1. GRANNULATS	**COMPOSITIONS RANGE**	**FORME – TYPE RANGE**
Proportion of 6/10 or 8/12 %	30 – 35	30
Proportion of 4/6 ou de 4/8 %	15 – 20	20
Proportion d'apport %	48 – 55	48
Filler %	1 – 3	2
Granulometry % passant		
Sieve10 mm	95 – 100	97
6 mm	62 – 74	70
4 mm	48 – 58	49
2 mm	30 – 45	33
1 mm	20 – 28	23
0,315	10 – 19	14
0,2	6 – 15	10
0,08	5 – 9	7
Specific surface m^2/Kg	8,7 – 14,7	11,8
Sand equibalent of fraction 0/6	> 60	> 6
Los Angeles	<< 35	<< 35
Flakiness index	Satisfactory	
Adhésivity VIALIT	Satisfactory	< 25
2. BITUMEN		
Hardness	60/70	60/70
3. Mixture		
% B.B.	2,3 – 3,0	2,6
Module de richesse % G.B.	3,0 – 3,9	3,75
Bitumen content % B.B.	5,5 – 6,5	6,2
Ratio filler/bitumen %	1,1 – 1,4	1,2
Bitumen content G.B.	3,2 – 4,2	3,7
4. PERFORMANCE ANTICIPABLES		
4.1 – DURIEZ ou (LCPC)		
Rc DURIEZ at 18 °C 1+7 days air (bars) G.B.	50 – 100	65
B.B.	60 – 110	80
Ration Rc/Rc% G.B. – B.B.	0,65 – 0,85	0,70
Apparent density T/m^3 G.B. – B.B.	2,25 – 2,45	2,30
Compacity % G.B.	88 – 94	> 90
BB	90 – 96	>> 92
4.2. MARSHALL		
Stability at 60° Kg/cm^2 G.B.	700 – 1000	>> 850
B.B	800 – 1200	1000

Fluage en 1/10 mmG.B.	2,20 – 2,35	< 2,30
B.B.	2,25 – 2,45	< 2,35
Apparent density T/m3 G.B. – B.B.	2,20 – 2,50	>> 2,35
Compacity % G.B.	91 – 95	> 93
B.B.	92 – 96	> 94
Residual voids % G.B. – B.B.	12 – 4	8

ARTICLE B215 - MATERIALS FOR BACKFILLS

The materials for backfill under the foundation of structures or canals must come from a loan approved by the Control Engineer.

The materials must be clean and sound and will meet the following characteristics:

- Plant element content less than 1%;
- Granulometry: no elements greater than 100 mm;
- Plasticity index: less than or equal to 40;
- Lift: the immediate CBR bearing index (natural W) must be greater than or equal to 10 for compaction at 95% O.P.M. ;
- Linear swelling less than 3%.

ARTICLE B216 - MATERIALS FOR FILTERING DEVICES

The materials of the filtering layers offered under the canals and structures will be made up of all-round materials screened from rivers or approved quarries. The materials will be cleared of elements with a diameter greater than the maximum grain diameter allowed for the constitution of the filter or the foundation layer.

The vertical filters may be made of ENKADRAIN SK 20 type filter materials or similar.

B216.1 - Sand

The sands constituting the filter must be clean, healthy and durable and contain no significant quantities of platelets or needles. Their particle size curve must correspond to the following table:

SIEVE (mm)		**SIEVED**
	Max	**Min**
4,000	8	0
2,000	10	0
1,000	20	3
0,500	50	10
0,250	90	50
0,125	100	85
0,063	100	96

B216.2 - Gravel

The gravel used in the filters should be clean, healthy and durable. The grain size depends on the sand used for the filter and must comply with the following characteristics:

(D 50 gravel / D 50 sand) including 12 and 58

(D 15 gravel / D 85 sand) including 5 and 10

(D 50 gravel D 15 sand) including 12 and 40.

The Contractor will present to the Project Manager a sample of the gravel + that he proposes to use for the filter.

B216.3 - Geotextile

The geotextile must meet the following specifications:

- Weight greater than 200 grams per square meter
- Tensile strength greater than 100N / cm
- D / 90 less than 200 microns.

B216.4 Barbican

The barbicans are in P.V.C. of diameter 25.4 mm. They will be applied for the drainage of filters (rectangular channels and scuppers). The length of the pipes is equal to the wall thickness plus half the thickness of the filter layer.

ARTICLE B217 - WATERPROOFING DEVICES

Sealing gaskets for box culverts and rectangular channels must have the following characteristics:

- Tensile strength greater than 20.4 N / mm²
- Elongation at break greater than 400%
- Minimum width: 260 mm
- Minimum thickness: 9 mm.

ARTICLE B218 - CONCRETE PIPES
Not applicable

ARTICLE B219 - PVC PIPES
Sanitation series PVC pipes will be used for the pipes and sheaths. These pipes must meet the French standards specified in fascicle 71 of the C.C.T.G. in particular AFNOR T54-002, T54-003, T54-016, T54-028, T54-029 and T54-038 standards.

ARTICLE B220 - ROAD MOLDS
The manhole covers, drain screens etc. located in the right-of-way of the roadway will be in unalloyed spheroidal graphical cast iron, class 400.

ARTICLE 221 – dry packing
The riprap will be of N 4 hardness, semi-firm quality, and comply with the standards of booklet 64 of the C.C.T.G.

ARTICLE B222 - ROAD PAINTINGS
The products used for the markings must be retro-reflective, and must be approved in their country of origin. The approval forms will be subject to the prior approval of the Project Manager.

ARTICLE B223 - HYDROFUGES
The buried concrete facings will be covered either with a de-acidified tar, hot bitumen, or a non-acid emulsion of bitumen.

ARTICLE B300 - PERFORMANCE METHOD OF PRELIMINARY WORKS - EARTHWORKS - PAVEMENTS

ARTICLE B301 - GENERAL PROVISIONS

B301.1 General
The Co-contractor will take all the necessary measures to avoid accidents of any kind that could occur as a result of the work.

Access to the site must be strictly prohibited to the public or to any person outside the site. Signs with large print will be placed at the main entrances to the site.

The Co-contractor must also submit to all regulatory safety measures. He will be responsible for all accidents occurring on the site and caused by the work to third parties, to his staff and to civil servants of the administration.

All precautions will be taken by the Co-contractor and at its expense to maintain safe traffic on the routes covered by the works. He will submit for the approval of the Project Manager the arrangements he intends to take for the establishment of detours and the maintenance of all the routes used to ensure traffic during the work.

B301.2 - Water drainage
The Co-contractor must, under its responsibility, organize its site in such a way as to get rid of all kinds of water, to maintain the flows and to take all the necessary measures so that these are not prejudicial to the temporary works necessary for the evacuation. Run off or infiltration water.

The Co-contractor is required to have sufficient number and power of exhaust pumps on site.
The project manager may limit or prohibit exhaustion if it is likely to cause damage to neighbouring installations.
B301.3 - Presence of public interest network
When work must take place, in whole or in part, in the vicinity of existing networks, the Co-contractor will notify the concessionaire companies and services concerned in order to examine with them in good time the conditions for moving or protecting the structures.

The client will provide all the information in his possession but will not be held responsible for errors, omissions, modifications, concerning the presence and installation of existing networks. Execution studies and network travel costs are the responsibility of the Co-contractor.

The route of the existing networks and structures will be recognized by the Co-contractor before the start of the works. During the duration of these, the Co-contractor will take all measures to ensure the protection of these structures, and ensure the connection of local residents.

ARTICLE B302 - GENERAL SETTING OUT
Before any work begins, the Co-contractor will mark the axes of the tracks and delimit the rights-of-way in order to proceed with the demolition of the existing structures after the agreement of the Project Manager.

B303.2 - Basic Pegging
After preparation of the platform and before any start of earthworks, the Co-contractor will set up the base points of the main picket line (layout of axes) from the data from the layout plan of the tender and construction documents. the polygonal, which he will have previously checked.

It will then be contradictory to the verification of this solidly founded implantation in the form of a truncated pyramid at the square base 0.50 m high, carrying at their axis a rod of sealed concrete reinforcement. Each terminal will bear the characteristic number of the point it materializes.

The Co-contractor remains responsible for this installation and will bear all the unnecessary work which would result from a bad installation, before as after verification thereof.

B302.3 – survey of natural ground - Additional pegging
When the main picketing is accepted, the Co-contractor will carry out at its own expense a contradictory survey of the natural terrain (TN) along the axes of the tracks on all the cross sections and wherever the works forming part of its services must be carried out. The survey shall include side points every 5 m at most on the cross sections, spaced no more than thirty (30) meters apart.

In addition, the stake of the axis of the tracks must be moved and marked by solid markers on a line parallel to the axis on one side only at a fixed distance and out of the right-of-way of the earthworks.

After the execution of the general picketing, the Co-contractor will carry out the levelling of these points, attached to the general leveling of Cameroon. He will have to fix along the outline of the solid side marks and as many as will be necessary for the good execution of the work.

The Co-contractor must agree to any verification that the Project Manager decides to have carried out. He will keep the equipment, devices and personnel authorized to carry out these control operations at the disposal of the Project Manager.

B302.3 – conservation of pegging
The Co-contractor is required to ensure the conservation of the picketing and levelling points, to restore or replace them if necessary either in their original location, or by moving them if the progress of the work requires it, but in giving all references to the modifications thus made.

ARTICLE B310 - PRELIMINARY WORK

ARTICLE B311 – BUSH CLEARING

The Co-contractor will carry out the general clearing of the land, the felling of trees and their stump removal, as well as the evacuation of all the corresponding elements outside the site, in a place approved by the Project Manager. On the instructions of the inspection engineer, certain trees may be preserved as long as they do not constitute an obstacle to the execution of the work.

ARTICLE B312 - VOID
All natural or artificial cavities such as wells, sumps, septic tanks, location of stumps located in the right-of-way of the works will be emptied and backfilled with compacted sand after the agreement of the Project Manager.

Only the floor areas of cavities more than 1 meter deep to be treated will be taken into account in the attachments.

ARTICLE B313 - SCARIFICATION OF EXISTING PAVEMENTS
In some areas, scarification of existing pavements may be necessary. These areas as well as the depth of scarification will be fixed by the Project Manager. The possible use of scarified materials can only be done after agreement of the Project Manager.

ARTICLE B314 - DEMOLITION
The contractor must demolish constructions, hedges, fences, etc. existing in the right-of-way of the work to be carried out. The masonry encountered will be levelled 0.50 meters below the level of the excavations to be opened.

The demolition of constructions of all kinds can only be undertaken after delimitation of the rights-of-way and the establishment of an inventory report, specifying the constructions or portions of construction to be demolished before starting the demolition work, quantities will be established by a joint mission of the contractor and the Project Manager. All costs of establishing quantities such as additional excavation etc. will be included in the unit prices for this work.

Demolitions made before this mission will not be remunerated.
Demolitions and restorations not envisaged by the project will be the responsibility of the contractor in accordance with article A 305 of the CPS.

Incineration of materials is prohibited on the site.
The use of explosives to demolish the structures is strictly prohibited.
All water, electricity and telephone connections must be disconnected before demolition, in agreement with the concessionaire services and at the contractor's expense.

ARTICLE B315 – DUMPING SITE
All products and materials to be removed from the site may be deposited at the expense of the Co-contractor:
- At the public landfill in agreement with the Project Manager and the Town Hall,
- In a place specified by the Project Manager on the municipal territory,
- In a place proposed by the Co-contractor with the agreement of the Project Manager

The excavated material placed in permanent storage will be levelled and levelled according to the instructions of the Project Manager.

ARTICLE B320 - EARTHWORKS

ARTICLE B321 – TOP SOIL SCRAPPING

In the event of the expenditure of topsoil, the stripping will be on the right-of-way of the earthworks and on a thickness defined in agreement with the Project Manager. The topsoil thus extracted will be transported to places approved by the Project Manager and placed in geometric mass storage. It will be reused for the development of green spaces.

ARTICLE B322 - MOVEMENTS OF SOIL

The Co-contractor shall submit for the approval of the Project Manager within fifteen (15) days from the date of the start of the works, a land movement project.
This project must indicate in particular the deposit areas, the transport distances, the volumes of soil transported and the quality of the materials, defined by geotechnical tests at the expense of the Co-contractor.

ARTICLE B323 - PURGE OF BAD SOIL
In areas where the need will be recognized by the Project Manager, the contractor will remove poor soil.
The zones and the depth will be established on site contradictorily between the contractor and the Project Manager.
The soil will be removed from the site under the same conditions as the demolition products.

ARTICLE B324 - REQUIREMENTS APPLICABLE TO EXCAVATED EARTHWORKS

B324.1 - General indications
The excavation will be done in accordance with the execution plans, established by the Co-contractor and approved by the Project Manager, for the construction of the platforms and collections.
The final profile will be produced in a single continuous operation up to the level of the level of the earthworks. The embankments will be adjusted to their final profile.

The Co-contractor must maintain a sufficient slope on the surface of the excavated parts and carry out in good time the slits, channels and temporary works.
Rainwater or runoff will be directed away from the site by measures not causing any disturbance to local residents or existing installations.

The Co-contractor must have the Project Manager approve the procedure guaranteeing the preparation of excavation bottoms under backfill according to article B326. The attachment of the cuttings will only be carried out after perfect completion of the fill.

The excavated material not reused as backfill due to its poor quality will be evacuated to the public landfill or to places approved by the Project Manager.

B324.2 - Different categories of cuttings
The excavated material is classified into five categories:

1st catégory : Cut fur purges	This category is made up with materials with Ip> 10 et un CBR > 10
2nd Catégory : Cut use as fill	This category is made up with materials with Ip< 40 et un CBR < 10
3rdcatégory : Cut and throw	This category is made up with materials with Ip> 40 et un CBR < 10
4eme catégorie : Déblais réutilisables en corps de chaussée	This category is made up with materials with Ip< 35 et un CBR < 40 (foundation)
5thcatégory : Cut on rocky soil	This category is made using a tractor of 270CV.

Note:
The Co-contractor may only excavate rocky terrain with the prior consent of the Project Manager. The neighboring unconsolidated land will then be sufficiently cleared to allow a precise assessment of the volumes of rock cuttings to be taken into account. A contradictory attachment must be drawn up before any start of execution.

B324.3 - Execution method of cuttings

Excavation in soft ground
The excavations in soft ground corresponding to the first four categories designated above will be carried out using mechanical devices. They will be sorted and deposited near their place of reuse or evacuated to the landfill if they are not reusable. Compaction of the form must be carried out so as to obtain, over a thickness of 30 cm, a density equal to 95% of the O.P.M.

If purges are necessary, the excavations will be carried out to the depth fixed by the Project Manager. The theoretical dimension of the cuttings will be made up by adding good soil which will be put in place as described in article B326 below for the embankments.

Excavation in rocky terrain
Close to the buildings, the excavation in rocky terrain will be carried out with a pneumatic hammer. The theoretical side slope will be caught up by adding fine rock cuttings.

ARTICLE B325- BORROW PIT
In the only case where the Co-contractor would be obliged to resort to borrowing materials, due to a lack of reusable cuttings as backfill, the exploitation of quarries and borrow pits can only begin after written authorization. of the Master of Work. This authorization may be withdrawn at any time if the Project Manager considers that the exploited deposit no longer yields materials of satisfactory quality.

The Co-contractor may not claim any compensation on this account. It is specified that, if the careers and loans prove to be insufficient or if the quality of the materials is such that the Project Manager has to refuse them, the Co-contractor will do his business to find new careers.
The materials from these new quarries will be subject to the approval of the Project Manager in the event of non-acceptance, the Co-contractor will be required to resume the search for quarries or deposits of materials meeting the requirements set and the necessary quantities.
The Co-contractor will bear all the operating costs of the borrow pits and quarries and in particular:
- the opening and development of access tracks;
- clearing and deforestation, removal of plant soil or unwanted cover materials and their storage outside the limits of the loan;
- restoration of the site after quarry operation.
The drainage of the borrow rooms must be done efficiently.
All measures must be taken so that runoff water can flow normally outside the limits of the borrow areas.

ARTICLE B 326 - REQUIREMENTS APPLICABLE TO FILL

B 326.1 - Different categories of backfill

Embankments are classified into four categories:

- Category 1 :	Compacted fill (IP < 40 et CBR > 10)
- Category 2 :	Fill in swampy areas (IP < 40 et CBR > 10)
- Category 3 :	Fill for platform (IP < 40 et CBR > 15)
- Category 4 :	Remblais mis en dépôt (IP > 40 et CBR < 5).

B 326.2 - Origin of materials

The materials used in the constitution of the backfill will come either from the excavations or from the quarries or from the borrow pits proposed by the Co-contractor and approved by the Project Manager.

B 326.3 - Preparation of the platform under fills

The additional compaction preparation is carried out, if necessary, over the entire width of the embankment right-of-way.

Compaction will be carried out so as to obtain a dry density of the compacted soil at least equal to 90% of the dry density of the Optimum Proctor modified over a thickness of at least 25 cm.

Under the embankments, picking and ploughing over a maximum thickness of 0.10 m will be compulsory as soon as the transverse slope of the land is greater than 10%. If this slope exceeds 20%, it would be practiced rigging steps arranged in accordance with the opinion of the Inspection Engineer.

Preparation of land under backfill will be received before backfilling. In the event of water coming under the influence of the embankments, the Co-contractor will carry out any necessary drains; the method of execution and the type of drains to be used will be subject to the approval of the Inspection Engineer.

B326.4 - Mode of execution of fills

The backfill in ordinary terrain must comply with the specifications of article B212.1. They will be levelled over their entire width for the execution of embankments (or by half if necessary), in layers having a slope of 2%, on which the earthmoving and transport machines having been assigned to their execution will circulate in such a way as to exert on them a compression distributed as uniformly as possible.

The materials will be used in layers of maximum thickness, measured after compaction, of 20 cm over the entire width of the backfill up to the dimensions provided by the plans and profiles.

The profile of the embankments will be obtained by the excess backfill method, the dressing must be careful so that neither shanks nor irregularities appear. The embankments must be compacted to 90% of the O.P.N. (Optimum Proctor Normal).

The work must be carried out in such a way that after settling or compression, the profiles indicated are carried out to the tolerances fixed by article B 327 below.

It is expressly specified that the earthworks will be restarted each time the degree of compaction required in article B328 of this C.P.T. could not be obtained. The materials will be used with a water content greater than 1% than the optimum content and with a tolerance of plus or minus 3%.

The embankments will be protected against erosion until they are received.

B 326.5 - Tests on fill

	Categories 1 and 2	**Category 3**
Granulometry, proctor, plasticity index, in-situ density and water content	1 for 500 m^3	1 for 250 m^3
Identification of CBR	1 for 1 000 m^3	1 for 500 m^3

ARTICLE B 327 – TOLERANCES ON EARTHWORKS

Les tolérances d'exécution des terrassements sont ainsi fixées :

Terrassements	Profils de la forme	Talus	Profil sous couche de forme
Cuts on normal	+ ou – 2 cm	+ ou – 10 cm	+ ou – 5 cm
Cut on rockysoil	+ ou – 4 cm	+ ou – 20 cm	+ ou – 10 cm
Fill	+ ou – 2 cm	+ ou – 5 cm	+ ou – 5 cm

The theoretical slopes of the embankments are as follows:
- in 1/3 cuttings (1 of the base for 3 of height);
- 2/3 embankments (2 from the base for 3 in height).

However, these slopes may be modified at the request of the Project Manager depending on the characteristics of the materials encountered or used, and in view of the results of soil tests.

ARTICLE B 328 - COMPACTION

Unless there is a specific exemption granted or prescribed by the Project Manager, the backfill will be methodically compacted by layers of maximum thickness, measured after compaction, 25 cm thick. Each layer will be received before the execution of the next. The method of performing the compaction will be subject to the approval of the Project Manager.

All the equipment that the Co-contractor proposes to use will appear on the list of equipment that will be attached to the offer. This list will mention the technical characteristics of the machines. Before any execution begins, the Co-contractor will calibrate its compaction equipment, the Project Manager will check the results of this operation.

The water content of the soils before implementation on the site must be able to be recognized on a regular, continuous and safe basis. The compaction will be checked daily and at any request from the Project Manager.

The approved materials which constitute the layers leveled on unloading must be homogenized and scarified. If necessary, with the motor grader and the harrow. The materials will be brought into the range of water content necessary to obtain the prescribed dry density taking into account the compaction energy required (site test diagram), if they are too dry, the materials will be sprayed with water. regularly before and during compaction operations. On the contrary, if the materials turn out to be too wet, the Co-contractor may bring them back to an acceptable level by prior drying activated by mechanical ventilation, harrowing or ploughing.

Otherwise, the site will be stopped if the company fails to accept the subjection to open a new loan deemed satisfactory. In any event, these soils will only be implemented with the agreement of the Project Manager, who may prescribe their assessment outside the site and who remains the sole judge of the duration of the site shutdown. This will be extended until the soils to be used are in the conditions necessary to obtain satisfactory compaction without the Co-contractor being able to consider itself entitled to claim any compensation whatsoever for fixed assets.

It is expressly specified that the earthworks will be interrupted whenever the degree of compaction required in this article cannot be ensured. The materials will be used at a water content close to the optimum water content to within plus or minus 2%. Evaporation must be taken into account, which in the dry season is important.

The different minimum degrees of compaction to be achieved will be for 90% of measurements in all cases greater than the following values:

	Mini	Tolérance (10 % de mesure)
- Soilreceivingfills	90 % OPM	88 % OPM
- Corps de remblais	90 % OPM	88 % OPM
- last coat of fill (	95 % OPM	92 % OPM
- foundation	90 % OPM	95 % OPM
- base course	95 % OPM	96 % OPM

In the event of deterioration due to the settling of the embankments or to the insufficiency of their characteristics, the Co-contractor may in no way be turned against the Client and must take over the damaged areas at its expense.

ARTICLE B 329 – GRADING OF THE PLATFORMS

After earthworks, the platforms and embankments must be adjusted and cleaned in the right-of-way of the works. All measures will be taken to ensure the evacuation of runoff water without gullying and without harming riparian properties.

ARTICLE B 330 - (PLATFORM)

ARTICLE B 331 - FINISHING OF FORM BEDS
After compaction, the profile of the platform, shoulders and approaches will be adjusted so as not to reveal a difference greater than 2 cm below the four-meter rule.
The Contractor will request in writing to the Employer the reception of the platforms. He must provide a register of density checks on the section considered: two checks every 50 m or one check per profile alternating the measurements.

ARTICLE B 332 - EXECUTION OF THE FOUNDATION LAYER

The foundation layers will comply with the requirements of article B213. It is specified that the thicknesses will be given for information only. It is the Co-contracting party's responsibility to have all the necessary tests carried out at its own expense on the materials it proposes to use. In view of the results of these tests, the Project Manager may possibly prescribe other thicknesses.

After approval by the Earthworks Platform Inspection Engineer, the Co-contractor will apply the layer of materials over the entire width of the platform and to the minimum thickness required, in layers of 15 cm of minimum thickness and 25 cm maximum thickness depending on the grain size.

The in situ compaction water content should not exceed by two points the optimum water content given by the modified proctor test.
Compaction will be carried out so as to obtain a dry density in situ at least equal to 97% of the maximum density given by the modified proctor test. It will be performed with a tire roller, tamper or vibrating feet.

The Project Manager will also check the prescribed minimum thicknesses. These checks may be carried out at the locations of the density measurements in place or at different locations designated by the Project Manager.

The minimum layer thicknesses must be respected at all points; the altimetry tolerance is plus or minus 2cm from the project coast. If these minimum thicknesses and the prescribed altimetry tolerance were not respected, the Co-contractor would be required to take over the section concerned at its own expense, either by supplying materials or by removing the material from excavation. In both cases, he will have to scarify the layer and recompact it.

The Co-contractor will take all necessary steps to avoid leafing.

ARTICLE B 333 - EXECUTION OF THE BASE COURSE

B 333.1 - Base layer of selected laterite improved with cement

Not applicable

B 333. 2 - Base layer in crushed gravel 0 / 31.5

After receipt of the foundation layer by the Project Manager, the Co-contractor will apply the base layer in layers of minimum 10cm and maximum 15cm after compaction.

The materials used will be fully crushed 0 / 31.5 crushed gravel, the characteristics of which are defined in clause B334.

The rate of compaction in place must be greater than or equal to 98% of the O.P.M. for 90% of the measurements. The remainder will in any case be greater than 97% of the OPM.

The Project Manager will check the thickness of the base layer. These checks may be carried out at the locations of the density measurements in place or at other locations designated by the latter.

The minimum thickness of the base layer must be respected at all points. The altimetry tolerance is plus or minus 1 cm from the project coast. If the minimum thickness and the prescribed altimetry tolerance were not respected, the

Co-contractor would be required to take back the section concerned at its expense. In both cases he will have to scarify the base layer and recompact it.

The Co-contractor will determine, from test boards, the water content which will allow it to obtain a dry density in situ greater than 98% of the OPM, taking into account the means of compaction that it must use. and the characteristics of the base coat materials.

Whatever the water content obtained, the Co-contractor will take all measures to avoid any segregation of materials during the supply, placement and compaction of the latter. To this end, the Co-contractor must ensure that the height of the storage of aggregates in quarries does not exceed 6 m and that the materials are transported with a certain initial water content.

B333.3 - Base layer in gravel-bitumen

Not applicable

B 333.4 - Base layer in selected lateritic gravel, improved with crushed 0 / 31.5

After receipt of the foundation layer by the Project Manager, the Co-contractor will proceed with the implementation of the base layer in layers of one thickness after
compacting of 10cm minimum and 20cm maximum, in accordance with the prescriptions of article B213.

The Project Manager will check the prescribed minimum thickness of the base coat. These checks may be carried out at the locations of the density measurements in place or at other locations designated by the latter. The minimum thickness of the base layer must be respected at all points.

The altimetry tolerance is plus or minus 2 cm from the project coast. If this minimum thickness and the prescribed altimetry tolerances are not respected, the Co-contractor will be required to take back the section concerned at its own expense. The same applies in the event of non-compliance with the prescriptions in terms of dosage, CBR, compactness, lamination or cracking other than shrinkage. In these cases, he will have to scarify the base layer, add cement, mix and compact it.

The Co-contractor must take all measures to ensure the good bond between the base layer and the foundation layer. In case of in situ mixing, it will ensure to penetrate the underlying layer by 1 to 2 cm.

All protective measures must be taken by the Co-contractor and at its expense, to take into account the curing constraints of the selected natural materials, improved with cement and the maintenance of circulation.

Transport and spreading of material

The material can be transported and spread by means of trucks or scrapers followed by the grader which must give the layer to stabilize the geometric characteristics of the project, taking into account the reduction in thickness deriving from compaction.

Preliminary compaction

The layer of material thus spread will receive a preliminary compaction or pre-compaction intended to allow the circulation of the machines.

Compaction

It is specifically recalled that all compaction operations must be started immediately after mixing and finished before the cement sets, in any case, within three hours of mixing. For this purpose, the Co-contractor must have sufficient number and type of compaction equipment available to obtain, within the aforementioned times, the prescribed dry density of the mixture. If, for whatever reasons, the compaction operations are not completed in time or the prescribed density has not been met, the Co-contractor must, at its expense, remove the stabilized layer over the entire section in question and deposit the material outside. of the right-of-way in places approved by the Control Engineer.

Finishing

Before the binder has started setting, the Co-contractor must carry out the finishing operations to give the stabilized layer the profile of the project, both longitudinal and transverse, as indicated on the plans.

If necessary, after the passage of the grader which gives the final profile, a compaction of the closures of the superficial parts will be carried out, preferably this operation will be done with a tire roller.

Repetition of construction

Whenever the stabilization operation is resumed after the end of the setting time (therefore at least each time the working day is restarted), the mixing operations must be preceded by a picking of the terminal part already carried out, until the elimination of any material which, by the very nature of the work, does not have the characteristics of homogeneity and hardness proper to the soil - cement. All arrangements will be made to avoid lamination.

Tack layer

Immediately after the completion of the compaction of the stabilized material, the tie coat will be spread in accordance with article B 214 of this C.P.T.

Installation schedule and traffic opening

Traffic will be prohibited on the compacted layer for approximately seven (07) days. The precise times for compaction and opening to traffic will be determined in the laboratory.

Dosage distribution:

Grave lateritic: 75%
Crushed 0/315: 25%.

ARTICLE B 334 - TESTS OF IMPLEMENTATION OF THE FOUNDATION COAT AND THE BASE COAT

The pavement body installation control tests are listed in the table below:

Nature des travaux	**Nature de l'essai**	**Résultatsexigés**	**Nombred'essai à réaliser**
Compactage de la couche de fondation	Compacité en place	Supérieure ou égale à 97 % de la densité sèche de l'O.P.M*.	1 tous les 250 m²
Compactage sur emprise de trottoirs	Compacité en place	≥ à 97 % de la densité sèche de l'OPM*	1 tous les 500 m²
Compactage de la couche de base	Compacité en place	Supérieure ou égale à 98 % de la densité sèche de l'OPM*	1 tous les 250 m²
Contrôle de la quantité des matériaux pour couche de base	Epaisseur	Epaisseur mise en place ne doit pas être inférieure de plus de 1 cm par rapport à épaisseur théorique indiquée sur plans ou définie par l'Ingénieur	1 tous les 250 m²
Mise en œuvre de la couche d'imprégnation ou de la couche d'accrochage	Dosage du liant	Ecart autorisé par rapport au dosage théorique ne doit pas excéder plus ou moins 0,05 kg/m²	
Toléranced'exécution	Viagraphe	80 % des valeurs 10mm de pénétration	1 longitudinale par voie

* for at least 90% of the measurements taken.

For the cases of base layers in gravel-bitumen, the tests and controls will be identical to those carried out on dense mixes (see article B342 below).

ARTICLE B 340 - PAVEMENT AND SIDEWALKS
ARTICLE B 341 - METHOD OF EXECUTION OF MULTI-LAYER COATINGS

The characteristics to which surface plasters must meet are defined below:

Aggregates

Class	Single layer	Double layer	Triple layer
1st layer	6/10 ou 8/12	10/14 ou 8/15	10/14 ou 12/18
2nd layer	-	6/10 ou 4/8	6/10 ou 8/12
3rd layer	-	-	4/6 ou 4/8

Hardness: Los Angeles << 40 (preferential << 35%) or wet Micro-Deval<< 25 (preferential << 20)
- Shape:% of element such that G / E <1.56 will be less than or equal 25
- Angularity:% crushed elements >> 50
- Cleanliness:% elements <1 mm: <4: T1 and T2
2: T3 and T4
- Adhesiveness:% fixed aggregates >> 90 vialit 20 ° C and >> 75 vialit 60 ° C
- Granulometry: class 4/8 - 8/12 - 12/18
- Accelerated polishing coefficient >> 40%

Binders:
We will use either:

- a cutback bitumen 150/250
- a 400/600 fluidized bitumen or cationic emulsion containing 65 - 70% bitumen 80/100 or 60/70 class T2, T3, T4.

ARTICLE B342 - DENSE COATINGS

Aggregates:

The granulation of the construction material will fall within the following reference range: (given as an indication)

Sieve (mm)	0,08	0,20	0,315	1	2	4	6	10
% Passing	5 – 9	8 – 14	10 – 18	20 – 32	30 – 45	50 – 60	65 – 75	90 – 100

The aggregates must have excellent granularity and a crushing index equal to 90.
The equivalent of sand measured on the 0 / 6.3 fraction of the reconstituted mixture will be at least equal to 60, on the 0/4 fraction of the sand; the equivalent of sand will be greater than 40.
The hardness by the Los Angeles test on the 6/10 class will be less than 35.
The binder content should be in the range 5.5 to 6.5 for bituminous concrete and 3.5 to 4.5 for serious bitumen.

Filler: The filler water content will be between 5 and 9%. The filler / bitumen ratio will be between 1.1 and 1.4.

Bitumen:

The binder will be pure bitumen with a 60/70 or 80/100 penetration.
Bitumens with a hardness greater than 150 or less than 50 are not recommended.

Typical formulas for dense bituminous concrete:

The Contractor will formulate the composition of the dense asphalt that he plans to use. This composition must correspond to the requirements of the table below: (given as an indication)

GRANNULATS	**COMPOSITIONS ENVELOPPES**	**FORME – TYPE MOYENNE**
Proportion of 6/10 ou 8/12 %	30 – 35	30
Proportion of 4/6 ou de 4/8 %	15 – 20	20
Proportion d'apport %	48 – 55	48
Filler d'apport %	1 – 3	2

Granulométry % passant		
Tamis10 mm	95 – 100	97
6 mm	62 – 74	70
4 mm	48 – 58	49
2 mm	30 – 45	33
1 mm	20 – 28	23
0,315	10 – 19	14
0,2	6 – 15	10
0,08	5 – 9	7
Specific surface m2/Kg	8,7 – 14,7	11,8
Sand equivalent of fraction 0/6	> 60	> 6
Los Angeles	<< 35	<< 35
Flakiness index	Satisfactory	
AdhesivityVIALIT	Satisfactory	< 25
BITUMEN		
Hardness	60/70	60/70
MIXTURE		
% B.B.	2,3 – 3,0	2,6
Module de richesse % G.B.	3,0 – 3,9	3,75
Bitumen content % B.B.	5,5 – 6,5	6,2
Ratio filler/bitume %	1,1 – 1,4	1,2
Bitumen content G.B.	3,2 – 4,2	3,7
PERFORMANCE ANTICIPABLES		
4.1 – DURIEZ ou (LCPC)		
Rc DURIEZ à 18 °C 1+7 jrs air (bars) G.B.	50 – 100	65
B.B.	60 – 110	80
Ration Rc/Rc% G.B. – B.B.	0,65 – 0,85	0,70
Apparent density T/m3G.B. – B.B.	2,25 – 2,45	2,30
Compacity % G.B.	88 – 94	> 90
BB	90 – 96	>> 92
4.2. MARSHALL		
Stability at 60° Kg/cm2 G.B.	700 – 1000	>> 850
B.B	800 – 1200	1000
Fluage en 1/10 mmG.B.	2,20 – 2,35	< 2,30
B.B.	2,25 – 2,45	< 2,35
Apparent density T/m3 G.B. – B.B.	2,20 – 2,50	>> 2,35
Compacity % G.B.	91 – 95	> 93
B.B.	92 – 96	> 94
Residual void % G.B. – B.B.	12 – 4	8

ARTICLE B343 - CHECKING THE PROFILING AND THICKNESSES

These checks will be carried out in the presence of the Co-contractor and the representative of the Project Manager. These points will be materialized by metal spikes leveled at the level of the roadway and indicated by a circular mark of white paint 0.10 m in diameter with the profile number corresponding to the project.

a) Long profile

No point on the axis of the finished roadway shall deviate by more than 1cm more or less compared to the longitudinal profile of the approved project. These checks will be made every 200 m. The frequency can be increased at the request of the Project Manager

b) Cross section

For streets where the width does not exceed 7 m, a circle with the theoretical profile of the roadway, applied in a plane perpendicular to the axis, must not highlight points located more than 2 cm below the edge of the road the circle.

It is specified that this check will be carried out only once over the entire width of the roadway by means of a complete hoop and not by means of a semi-circle applied successively to the right part and the left part.

When the width of the road will no longer allow the use of the template, the check will be carried out using a level. As a general rule, no point on the roadway should be more or less 2 cm from the theoretical side.

c) Thickness

This check will be carried out by three soundings in the different layers on the same cross section, a sounding in the axis of the roadway at 1 m from the edge of the sidewalk.

The profiles will be spaced 100 m from each other unless otherwise prescribed by the Project Manager. In any case, the thickness produced may not be less than the thickness prescribed or defined by the Project Manager.

If the average section thickness is more than 0.25cm lower and less than 1cm, price refraction will be applied.

Beyond that, the Co-contractor must implement an additional at least compensating layer, the thickness of which may not be less than 3 cm.

ARTICLE B344 - **CONTROL PROCEDURES**

The checks referred to in the table of article B341.1 may be prescribed by the Project Manager. The control referred to in article B342.2 will in principle be carried out before the placement of the surface layer.

The Project Manager may however prescribe it, even after the execution of the latter if there is reason to fear an insufficiency of the lower layers and in particular if the pavement shows signs of failure.

ARTICLE B345 - **OBLIGATION OF THE CO-CONTRACTOR WITH RESPECT TO CONTROL**

During the duration of the work, the Co-contractor must permanently have on the site the equipment necessary for the checks (in particular: control room, hoop, mason's level, slope indicator). He must also have the necessary personnel for the handling of these instruments.

ARTICLE B346 - POSSIBLE LESS VALUES FOR NON-COMPLIANCE WITH THE TECHNICAL CLAUSES

When the tolerances on the averages are exceeded, the Project Manager may order the Co-contractor to carry out a new adjustment of the manufacturing plant.

If, after giving the order to carry out a new adjustment, the Project Manager finds, at the end of the fixed period, that the tolerances on the averages are still exceeded, the following losses will be applied to the entire production: made between the time when new adjustments have been prescribed and the time of the previous sample which gave satisfactory results:

- by 0.1% difference in the dosage of the binder, 1% reduction on the price per m2 installed with a maximum of 5%,
- by 0.1% difference in the amount of sand filler, 1% reduction with a maximum of 5% for the total of the two reductions for filler and sand,
- by 0.1% difference in the dosage of aggregates, 1% reduction with a maximum of 5% for the total reductions on the aggregates.

ARTICLE B400 - EXECUTION OF DRAINAGE WORK

ARTICLE B401 - GENERAL INDICATIONS

The water purification network will be carried out before the execution of the pavements, surfacing and sidewalks.

The Co-contractor must check all the dimensions and indications of the plans provided to it and ensure that they agree on the various plans and drawings.

Before the opening of the trenches, the Co-contractor will materialize by all stakes and chairs, the axes of establishment. This installation will be the subject of an acceptance report.
ARTICLE B410 – EARTHWORKS

ARTICLE B411 - EXECUTION OF TRENCHES AND EXCAVATIONS

The trenches are established at each point at the depth indicated on the longitudinal profile, increased by the height of the laying bed for the circular pipes and the thickness of the base for the channels and scuppers; the excavation bottom, made of a material conforming to article B212.3 over 0.30 m thick, will be adjusted to the side of the project after compaction to 90% of the OPM.

When a trench is opened under the road or under existing sidewalks, the Co-contractor begins by carefully cutting out the materials that constitute the coating as well as those of the foundation on the right-of-way of the trench, without disturbing or damaging the neighboring parts.

The materials will be sorted clean and deposited parallel to the trench so that they cannot mix, or be transported to the places of deposits. As it is extracted, the cuttings will be put on hold before being reused as backfill.

When rocky banks are encountered in the trenches, they must be leveled at least 20 cm below the bottom of the excavation and replaced on this thickness by fine earth or sand.

The width of the trench must be sufficient at all points for it to be easy to place the nozzles, or to make the structures and joints there and to carry out the backfilling properly. The width of the trench will be at least equal to that of the structure or the outside diameter of the pipeline increased by 30 cm on both sides.

Unless the ground is sandy, the bottom of the trenches will be leveled at least 15 cm below the slope provided for the lower external generator of the nozzle. This thickness will be replaced by a laying bed consisting of sand containing less than 12% of particles smaller than 1 / 10th of a mm. The bedding will be leveled according to the slope of the project. The surface will be well prepared so that the pipe does not rest on any hard or weak point if the nature of the joints makes them necessary, niches to facilitate the making of the joints will be made in the walls and the bottom of the trenches.

In floodplains, the maximum length of excavations that can remain open before backfilling is set at 100 m; on ordinary terrain this length is 200 m.

Any excess depth of the excavation bottom due to the company will be carefully backfilled and tamped in successive layers with materials in accordance with articles B212 and B326, at the expense of the Co-contractor.

When carrying out the earthworks, the Co-contractor must take all necessary measures and comply with the rules of the art to ensure the proper completion of the work, in particular, he will do his business:
- rock excavation or any other arrangement making it possible to fragment or loosen rocky or very hard terrain,
- exhaustion, shoring, shielding, comfort works of any kind to ensure both the safety of the personnel and the possibility of correctly carrying out the planned works.
- devices allowing the good conservation of works and pipes.
- all constraints are the responsibility of the Co-contractor, even if they are not explicitly mentioned in the documents of the contract.

The means to be implemented and the methods of execution are left to the initiative of the Co-contractor, but the Project Manager reserves the right to refuse his approval to any provision he deems unsuitable or dangerous.

ARTICLE B412-EXECUTION OF THE TRENCHES USING MECHANICAL GEAR
The use of mechanical devices is authorized except on certain sections which would be specified by the Project Manager during the picketing depending on the vicinity of certain buildings, structures, pipes, or existing cables.

ARTICLE B413 - SHORING AND SHIELDS

Not applicable

ARTICLE B414 - DRAINAGE UNDER PIPELINE AND STRUCTURE

Not applicable

ARTICLE B415-FILLING OF THE TRENCHES

When the Project Manager has recognized that the pipe tests (see article B423) are satisfactory and that the slopes provided for in the project have been respected, he will authorize the Co-contractor to proceed with the backfilling of the trenches, with category 1 backfill (see article 326). The backfilling of the trench, up to a uniform height of 15 cm above the external upper generatrix of the pipeline, will be carried out carefully manually, with the soil of the cuttings purged of all elements liable to affect the pipe or with any other suitable material approved by the Project Manager (sand, loam or vegetable soil purged of stones, gravel, plant debris, etc.) that the Co-contractor is required to supply in cases where the excavation from the trenches would not be suitable .

This first layer of backfill, called wedging backfill, will be carefully tamped to ensure effective wedging of the pipe. Beyond this first layer, backfilling can continue using mechanical devices.

The maximum thickness of the successive layers of backfill will not be greater than 30 cm and the compaction obtained must not be less than 90% of the OPM. The degree of compaction of the last layer must be equal to 95% of the OPM for 90% of the measurements and in all cases, greater than 92% of the OPM.

The Co-contractor is required to sort and remove blocks of rock, plant or animal debris, etc. which must not be buried in the trenches, the excess excavated material will be evacuated to the disposal sites following the instructions of the Project Manager.

The Co-contractor remains responsible, until final acceptance, for any deformations or settlements which may occur around the backfilled trenches and which are the consequence of the work. He must carry out maintenance operations and immediately comply with the orders of the Project Manager.

ARTICLE B416 - LOCKING OUT OF THE WORKS OF WATER
The excavation operations for drains and the opening of excavations for structures risk meeting the water table.
The work will be organized from downstream to upstream so as to use the parts of drains and structures already carried out for the evacuation of excess water.

The contractor is required to carry out all earthworks and construction work completely dry.
In addition to maintaining surface runoff outside the site, this will involve lowering the water table.
The contractor must install all the necessary equipment such as horizontal drains, filters, suction pipes, pumps, etc.
The bottom of the excavations must have the same characteristics as the bottom of form defined in article B212.3.
ARTICLE B417 - IMPLEMENTATION OF FILTERING DEVICES
After carrying out the earthworks below the water table, filters will be installed in accordance with the requirements of article B216.

a) Horizontal filters price 508.1
The filters are composed of a 10 cm layer of draining sand topped with a BIDIM U 24 type geotextile or similar and a 25 cm thick layer of gravel.

a) Vertical filters price 508.2
The vertical filters will be made of ENKADRAIN SK 20 type filter materials or similar, implemented in accordance with the manufacturer's instructions.

ARTICLE B420-DRAINAGE NETWORKS

ARTICLE B421 - LAYING OF PIPES AND THEIR ACCESSORIES

B421.1 General

Pipe handling and storage

The handling of pipes of all kinds must be done with the greatest care. The pipes are deposited without brutality on the ground or in the bottom of the trench and it is advisable to avoid rolling them on stones or on the rocky ground without having first formed tracks using planks.

Any pipe that a wrong manoeuvre has dropped from any height whatsoever must be considered suspect and may only be laid after a new check.

The pipes must be temporarily stored on the site on a level surface. Wooden wedges will be placed under the lower bed at least every meter so that the sockets are not in direct contact with the ground. The storage height must not be greater than 1.5 m, stakes or side support sides will be provided.

As far as PVC pipes are concerned, every precaution must be taken to protect them from direct sunlight.

Examination of the pipes before laying

At the time of their installation, the pipes will be examined inside and carefully free of any foreign bodies which could have been introduced there. The Co-contractor bears full responsibility for this verification.

Pipe cutting
Depending on the requirements of the installation, the Co-contractor has the option of cutting the pipes. Every precaution should be taken so that the operation is only performed when absolutely necessary and as infrequently as possible.

The cut should be made with sharp tools or with chainsaws or saws, in order to obtain clean cuts.

The chute will always bear on the male side and the Co-contractor will take great care to ensure that the new male end produced by the cut is smooth and that it provides with the fitting to the neighboring pipe a joint as solid as with a bot ordinary.

Laying of pipes in trenches

After receipt of the excavation funds by the Project Manager, the pipes will be carefully lowered into the trench and well presented in the extension of each other, facilitating their alignment by means of temporary wedges made up of packed earthen clods or wedges. in wood. Temporary setting with stones is prohibited.

The pipes will be laid in a well aligned line and with a regular slope between two consecutive manholes.

The pipes will be laid from downstream, and unless otherwise prescribed by the Project Manager, the socket, when it exists, will always be directed upstream.

At each stoppage of work, the ends of the pipes being laid will be sealed to prevent the introduction of foreign bodies. It is forbidden to take advantage of the play of the assemblies to offset the successive pipe elements by an angular value greater than that permitted by the manufacturer. Unless special provisions approved by the Project Manager, the pipes will be laid in trenches in such a way as to ensure, after backfilling, an earth cover of a minimum height of 70 cm above the upper external generatrix of the pipe. when it is placed under a sidewalk and 1 m below the road.

Method - Assembly - Installation of joints
Before placement, the male and female ends will be cleaned. Before fitting, the gaskets and the male and female ends will be lubricated, if necessary, with a special paste.

After making the joint, there must remain, between the male and female ends, inside the socket, a longitudinal clearance allowing the expansion or withdrawal of the pipes.

Pipe laying tolerance

The collectors must be made in accordance with the "watercourse" sides of the execution project with the tolerance on the sides measured at each consecutive inspection manhole:
For slopes greater than 0.003 m / m, the execution tolerance with respect to the project coast is plus or minus 1 cm.
For slopes less than or equal to 0.003 m / m, the execution tolerance in relation to the project dimensions is ± 0.5 cm.

The regularity of the slope of the collector between two consecutive manholes will be checked with the same tolerances as above.

The buffer slopes will be wedged in relation to the roadway or the natural terrain with a tolerance of
± 0.5 cm.

B421.2 - Special requirements relating to the laying of concrete pipes

In the event that concrete pipes are provided for stormwater drainage, they will be laid according to the following prescriptions.

For collared pipes, the end is placed in the socket of the neighboring pipe so that it is concentric. The joint is made using a cement mortar filling to the bottom of the groove, and must be protected externally during setting by a light layer of sand. All cement burrs appearing inside the pipes will be carefully removed.

ARTICLE B422 – MANHOLES

These works will be carried out in accordance with the approved detailed plan. They must withstand the thrusts of the earth, loads and overloads to which they will be subjected in service. In addition, they must ensure excellent sealing. For this purpose, a waterproof coating or M500 mortar with the addition of SICA or similar product will be applied inside the manholes on the walls and the raft foundation.

The structures will be made of reinforced concrete or very carefully vibrated poured concrete. The thicknesses will not at any point be less than 10cm. The Co-contractor may however offer any other construction technique for which he will justify the guarantees of stability and waterproofing.

The interior faces will be smooth and waterproof. The connection of the pipes to the concrete structures will be carried out so as to allow adhesion to the walls.

The foundation concretes which are poured on riprap must be carefully vibrated so that the penetration is good and ensures a perfect bond. The manholes located under the carriageways will be made entirely of reinforced concrete.

The manholes located under sidewalks or off the road, and with a depth less than or equal to 2.00 m will be made of BQ2 concrete at 300 kg. For depths greater than 2 m, the manholes will be made entirely of reinforced concrete.

The manholes comprising a cunette of height equal to the radius of the pipe on which they will be built, and two slopes inclined at 10 connecting to the walls of the manhole. The PVC collector will pass entirely through the manhole. The shallow gutter (cunette) will be obtained by cutting the upper half-part of the pipe, over the entire width of the manhole. This arrangement ensuring the perfect continuity of the "thread of water".

In the event that manholes are provided for the rainwater network, this shallow gutter (cunette) will be obtained by a carefully smoothed concrete form to which the inlet and outlet pipes are connected.

The manhole closing buffer frames will be sealed with M600 cement mortar, in the manhole crown rabbet, so as to allow careful connection to the roadway or sidewalk.

The cells of the cast iron plugs will receive a concrete filling of the asphaltic or hydraulic binder, sprayed at the level of the ribs. The surfaces of the cells perfectly cleaned with the filling.

The composition and implementation of concretes and mortars will be in accordance with the prescriptions of article B205.

The drains will be fitted with grids with cast iron frame type PAM RE 30H6FD or similar with a breaking strength greater than 30,000 daN / cm².

There are two types of outlets:

- Low type for connection to surface network or underground network, under road crossing, height h = 0.50 m
- High type for connection to an underground network with crossing of the roadway height h = 1.20 m.

ARTICLE B423 - PIPELINE TESTS

The leak tightness tests of the collectors will be the subject of a report, and will be carried out before any start of the backfill, with the exception of the jumpers which can be carried out outside the joints to keep the pipes in place.

The pipes will be cleaned before testing.

The contractor is responsible for informing the Inspection Engineer of the manifold sections in condition to be tested. The Testing Engineer will immediately set the date for testing on one of the working days following the Contractor's request.

The contractor will be responsible for providing: personnel, water, equipment (solid plates, stops, test pump necessary for carrying out the tests; the section to be tested will be filled with water 24 hours in advance .

He will remedy any leakage found during the test by carrying out any repairs immediately and at his expense.

The tests, which will be the subject of reports drawn up between the inspection engineer and the contractor, will be carried out under the following conditions:

The tests will be carried out from side to side. Each section of pipe subjected to the test is closed downstream by a sealed plug. The upstream manhole is filled with water: No leak must occur in the pipe or at its joints. The water loss tolerances will comply with the prescriptions of the CCTG booklet N - 70.
When the pipeline is established in permeable ground, or below the water table, the tightness of the pipeline is also observed after the pipes and manholes have been dried. In all cases, and unless otherwise prescribed by the Control Engineer, the duration of the test after filling in water will not be less than 1 hour, after this period, the pipes and joints will be inspected.

- **The contractor is responsible for repairing any defects found. A new test will then be carried out.**
- **The tests will be the subject of reports drawn up between the inspection engineer and the contractor.**

ARTICLE B424 - GENERAL TEST OF UNDERGROUND SANITATION NETWORKS

Not applicable

ARTICLE B425 - CONSTRUCTION OF GUTTERS AND BOX CUVERTS

The concrete gutters as well as the culverts for crossings of roadways, discharge works and discharge works will be executed in accordance with the detailed plan and the prescriptions of this CCTP relating to the construction of concrete works.
The interior facings of structures, rafts and walls will receive a waterproof coating (addition of water repellent) perfectly prepared and smoothed. No fault will be tolerated that would damage the proper flow of water.

ARTICLE B426 - MAINTENANCE DURING THE WARRANTY PERIOD

The Co-contractor is required to carry out, during the warranty period, all repairs and replacements which may prove necessary on the pipes and structures. The expenses resulting from this work are only borne by the Co-contractor if the defects observed arise from the materials or products supplied or the implementation.
The Co-contractor is required to carry out, at its own expense, the replacements and repairs prescribed by the Client, after formal notice has remained ineffective.

The obligations thus imposed will continue if necessary, until the works have been put in a state of final acceptance.

ARTICLE B 500 - METHOD OF EXECUTION OF HYDRAULIC STRUCTURES

The civil engineering works will be carried out in accordance with the prescriptions of the CCTG booklet N ° 65.

- **EARTHWORKS**

- Excavations:
- Are considered as excavations the deadlines executed under the right of works in accordance witharticle B324.
- The excavations will be carried out either mechanically or manually and may require operations of depletion, pumping, shielding, drainage and evacuation of the excavated material in a place approved by the Inspection Engineer.
- The excavation base must have the same characteristics as the shaped bases defined in article B212.3.
-
- **♣Cofferdam:**
- For the construction of hydraulic structures, the protection of foundation works against water may be achieved by means of a metal sheet pile cofferdam or any other structure whose nature may depend on the characteristics of the soil or on hydrological data. The plans, descriptions, and calculation notes of these works as well as the processes that can be implemented for their realization must be submitted for the approval of the Control Engineer on the same date as the working drawings.
- The contractor remains responsible and will insure in all cases damage and damage that may be caused by current or floods.
-
- **♣Exhaustion:**
- The contractor must submit for the approval of the Project Manager the brands, types, characteristics, age and number of materials he proposes to use and the arrangements he intends to take to ensure the emptying

of the excavations, 'waterproofing of their walls and the complete exhaustion of groundwater, as well as their evacuation to the outlets where they can be received.

- No fixed contractual maximum permanent depletion rates.
-
- **♣Backfilling of excavations:**
- The materials for the backfill of the excavations will conform to article B326. Theseembankmentswillbemethodicallycompacted.
- The maximum thickness of each elementary layer of backfill must not exceed, after settlement, 20 cm. The dry density of the backfill in place must reach 90% of the dry density of the Optimum Protor Normal.
- CONCRETE PRODUCTION AND TRANSPORT
- **♣Production:**
- The concrete will be manufactured mechanically by simultaneous mixing of all its constituents which must be introduced into the mechanical device in the following order:
- - Medium and large aggregates;
- - Cement;
- - Sand;
- - Water.
- The contractor will only be able to proceed differently if it is demonstrated that this results in better homogeneity of the concrete components. In all cases, the manufacture of dry mixes for the subsequent addition of water is prohibited.
- The proportion of water introduced into the mixture will be measured either by means of special devices included in concrete mixers or mixers, or by means of receptacles of defined capacity. Unless otherwise prescribed by the inspection engineer, the manufacturing equipment must allow the aggregates, binder and water to be dosed at 5% respectively.
- Volumetric feeders will be prohibited for solid elements whose proportion is fixed by weight. The proportions must be modifiable during execution by adjusting the devices. The methods and materials used for the manufacture of concrete will be subject to the approval of the Inspection Engineer. Manual manufacture of concrete can only be authorized for small quantities and after approval by the Control Engineer.

- **♣Transport:**
- The concrete must be transported under conditions which do not give rise to the segregation of the elements, nor to the beginning of setting before implementation.
- All precautions must be observed to avoid excessive evaporation during transport and the intrusion of foreign bodies. When the descent of the concrete is greater than 1.50 m, metal chutes will be used.

PLACEMT AND CURING OF CONCRETE

♣ Implementation of concrete

For the implementation of concrete, the Contractor will need the agreement of the Control Engineer who will give his approval or his instructions as soon as possible given the nature of this work.

The concretes will be implemented as soon as possible after manufacture after agreement of the Inspection Engineer. Concrete which is not in place within 60 minutes after the introduction of water into the mixer, which has dried out or has started to set, will be rejected.

The concretes will be placed in exhausted enclosures from which any danger of washing will have been eliminated. The placement of the clean concrete will be completed by ramming. Quality concretes will be vibrated in the mass.

♣Concrete vibration:

It will only be approved for vibrations at high frequency, from 9000 to 20000 cycles per minute. The finishing of the slabs and slabs will be carried out by surface vibration.

♣Reprise of concreting:

Reinforcements will only be tolerated on condition that they comply strictly with the formwork joints. Before resumption, the facings must be transplanted, cleaned and pressure washed. A concrete pour can only be poured over the previous one if the latter has not started to set; in this case, the resumption must be postponed for 48 hours.

♣Concrete curing:

The concrete will be protected from the sun from the moment it begins to set. Its cure by humidification must begin as soon as having completely taken, it is no longer likely to be altered by the water flowing on its surface.

Current concrete curing will be carried out in such a way as to maintain the concrete facings in a state of permanent humidity.

The free surfaces and their formwork will be watered to saturation as frequently as required by the hygrometric state of the atmosphere and sunlight.

If necessary, the contractor will have doormats, mats and canvases to protect free surfaces. The free surfaces of quality concrete will be protected by bench tops, mats or canvas. The protections and formwork will be kept running day and night by permanent mechanical watering. The curing of the concrete will consist in maintaining them under running water and without gaps or under a permanent atmosphere of fog.
The cure will be maintained for 7 days or until a compressive strength of 16 MPA is obtained.
The use of chemicals will be subject to the approval of the Testing Engineer.

FACING
Exterior facings not seen will be kept unworked. They should be uniform in color, no stone nest should be visible.
Visible exterior facings must be perfectly smooth, which will be achieved by using good quality formwork.

REINFORCED CONCRETE WORKS
General description
The contractor is required to carry out the work completely dry. Where the concrete is placed directly on the earthen excavation bottom, it will first be levelled, compacted, cleaned and protected against water or deterioration and will be accepted by the inspection engineer.
Until the concrete has set sufficiently, the surfaces will be protected against standing or running water. In rainy weather, pouring concrete is strictly prohibited except under shelter.
Lean concrete

Before placing the concrete on the ground, or on the draining layer, a layer of cleanliness will be implemented with a minimum thickness of 50 mm levelled with a shovel and levelled in order to obtain a clean and flat work surface.
The cleanliness layer must have sufficiently set before pouring the reinforced concrete. The contractor must take care that the concrete mix for the cleanliness layer does not contain too much water to avoid clogging the layer of possible drainage gravel.
Formwork
The formwork must be strong enough to resist any deformation after placing the concrete, waterproof, and must comply with the specifications of booklet N ° 65 of the CCTG.
The use of wire through concrete will be prohibited. Only specially designed bolts with easily removable cones will be admitted.
All the parts to be introduced into the concrete must be firmly fixed. Spaces may be reserved for the subsequent sealing of bolts at the approval of the Inspection Engineer. Immediately before placing the concrete, the forms will be thoroughly cleaned and completely wetted inside.
The formworks will be constructed in such a way that they can be partially removed without touching the supports, which must remain in place for a longer time. Removal of formwork will only be permitted when the characteristic resistance reaches the value of 10MPA and when the concrete is able to support its own weight.
Formwork stripping requires the prior approval of the Control Engineer and will be the sole responsibility of the contractor.
The edges of exposed concrete surfaces will be provided with chamfers. Chamfers will be 20 mm or as specified by the Inspection Engineer.
Protection of concrete against high temperatures
The contractor shall take all necessary measures to keep the concrete as cool as possible. The temperature of the mixture at the time of pouring will not exceed 32 ° C.
The free surfaces of quality concrete will be protected by mats, mats or canvas. The protections and formwork will be kept running, day and night by permanent mechanical watering. The curing of the concrete will consist in keeping them under a running water and without gaps or under a permanent atmosphere of fog.
The cure of the concrete will be maintained for 7 consecutive days or until a compressive strength of 13MPA.
Chemicals will only be applied for curing after approval by the Testing Engineer.
The passage of means of transport over fresh concrete will only be authorized after sufficient setting of the concrete.
Finishing concrete surfaces
The concrete surfaces that will not be visible will be regular. Any stone nests will be transplanted and prepared with mortar or epoxy resins to a depth of 3 cm before backfilling the structures.
The concrete surfaces which will remain exposed must be perfectly smooth, which will be achieved by the use of good quality metal or wooden formwork that does not leave traces on the concrete.
Tolerances
The tolerances for concrete construction will be as follows:
- Deviation of the implantation 10 mm
- Deviation from the prescribed dimension 10 mm
- Deviation in unseen surfaces 20mm / 3m
- Deviation in the seen surfaces 10mm / 3

- Deviation of the dimensions of cross sections + 10 mm and - 5 mm

Structures that do not meet the accepted tolerances will be refused, demolished and the debris removed to landfills.
Opening to be reserved in the walls
The connections of the tertiary and quaternary sanitation canals will be made by the contractor following the instructions of the control engineer and the standard execution plans. The corresponding openings to be reserved in the concrete walls of works and drainage canals do not give rise to any special remuneration.
Sealing devices
Sealing devices conforming to the prescriptions of article B217 of the CCTP will be applied for expansion joints every 10 m.
The contractor will provide the necessary data for approval to the Inspection Engineer. The devices will be fixed and maintained in the correct position during the pouring of the concrete.

ARTICLE B502-PRODUCTION AND TRANSPORTION OF CONCRETE

Production

The concrete will be manufactured mechanically by simultaneous mixing of all its constituents which must be introduced into the mechanical device in the following order:

- Medium and large aggregates,
- Cement,
- Sand,
- Water.

The Co-contractor may only proceed differently if it is demonstrated that this results in better homogeneity of the concrete components. In all cases, the manufacture of dry mixes for the subsequent addition of water is prohibited.

The proportion of water introduced into the mixture will be measured either by means of special devices included in concrete mixers or mixers, or by means of receptacles of defined capacity. Unless otherwise prescribed by the Project Manager, the manufacturing equipment must allow the aggregate, binder and water to be dosed respectively at 5%.

Volumetric feeders will be prohibited for solid elements whose proportion is fixed by weight. The proportions must be modifiable during execution by adjusting the devices. The methods and materials used for the manufacture of concrete will be subject to the approval of the Project Manager. Manual manufacture of concrete can only be authorized for small quantities and after approval by the Project Manager.

Transport

The concrete must be transported under conditions which do not give rise to the segregation of the elements, nor to the beginning of setting before implementation.

All precautions must be observed to avoid excessive evaporation during transport and the intrusion of foreign bodies. When the descent of the concrete is greater than 1.50 m, metal chutes will be used.

ARTICLE B503-APPLICATION AND CURING OF CONCRETE

Placement of concrete

For the implementation of concrete, the Co-contractor will need the agreement of the Project Manager who will give his approval or his instructions as soon as possible given the nature of this work.
The concretes will be installed as soon as possible after manufacture after agreement of the Project Manager. Concrete which is not in place within 60 minutes after the introduction of water into the concrete mixer, which has dried out or has started to set, will be rejected.

The concretes will be placed in exhausted enclosures; from where any danger of washing will have been eliminated. The placement of the clean concrete will be completed by ramming. Quality concretes will be vibrated in the mass.

Concrete vibration

It will only be approved for vibrations at high frequency, from 9000 to 20000 cycles per minute. The finishing of the slabs and slabs will be carried out by surface vibration.

Reprise of concreting

Reinforcements will only be tolerated on condition that they comply strictly with the formwork joints. Before resumption, the facings must be transplanted, cleaned and pressure washed. A concrete pour can only be poured over the previous one if the latter has not started to set; in this case, the resumption must be postponed for 48 hours.

Concrete curing

The concrete will be protected from the sun from the moment it begins to set. Its cure by humidification must begin as soon as having completely taken, it is no longer likely to be altered by the water flowing on its surface.

Current concrete curing will be carried out in such a way as to maintain the concrete facings in a state of permanent humidity.

The free surfaces and their formwork will be watered to saturation as frequently as required by the hygrometric state of the atmosphere and sunlight.

If necessary, the other party will have doormats, mats and canvases to protect free surfaces. The free surfaces of quality concrete will be protected by bench tops, mats or canvas. The protections and formwork will be kept running, day and night by permanent mechanical watering. The curing of the concrete will consist in maintaining them under running water and without gaps or under a permanent atmosphere of fog.

The cure will be maintained for seven (07) days or until a compressive strength of 16 MPA is obtained.

The use of chemicals will be subject to the approval of the Project Manager.

ARTICLE B504-FACING

Exterior facings not seen will be kept unworked. They should be uniform in color, no stone nest should be visible.

Visible exterior facings must be perfectly smooth, which will be achieved by using good quality formwork.

ARTICLE B 505 - REINFORCED CONCRETE WORKS

B 505.1 - General Description

The other party is obliged to carry out the work completely dry. Where the concrete is placed directly on the earthen excavation bottom, it will first be leveled, compacted, cleaned and protected against water or deterioration and will be accepted by the inspection engineer.
Until the concrete has set sufficiently, the surfaces will be protected against standing or running water. In rainy weather, pouring concrete is strictly prohibited except under shelter.

B 505.2 - Layer of lean concrete

Before placing the concrete on the ground, or on the draining layer, a layer of cleanliness will be implemented with a minimum thickness of 50 mm levelled with a shovel and levelled in order to obtain a clean and flat work surface.

The cleanliness layer must have sufficiently set before pouring the reinforced concrete. The Co-contractor must take care that the concrete mix for the cleanliness layer does not contain too much water to avoid clogging the layer of possible draining gravel.

B505.3 - Formwork

The formwork must be strong enough to resist any deformation after placing the concrete, waterproof, and must comply with the specifications of booklet N ° 65 of the CCTG.

The use of wire through concrete will be prohibited. Only specially designed bolts with easily removable cones will be admitted.

All the parts to be introduced into the concrete must be firmly fixed. Spaces may be reserved for the subsequent sealing of bolts at the approval of the Project Manager. Immediately before placing the concrete, the forms will be thoroughly cleaned and completely wetted inside.

The formworks will be constructed in such a way that they can be partially removed without touching the supports, which must remain in place for a longer time. Removal of formwork will only be permitted when the characteristic resistance reaches the value of 10 MPA and when the concrete is able to support its own weight.

Formwork stripping requires the prior approval of the Project Manager and will be the sole responsibility of the Co-contractor.

The edges of exposed concrete surfaces will be provided with chamfers. The chamfers will be 20 mm or as indicated by the Project Manager.

B 505.4 - Protection of concrete against high temperatures

The other party must take all necessary measures to keep the concrete as cool as possible. The temperature of the mixture at the time of pouring will not exceed 32 ° C.

The free surfaces of quality concrete will be protected by mats, mats or canvas. The protections and formwork will be kept running, day and night by permanent mechanical watering. The curing of the concrete will consist in keeping them under running water and without gaps or under a permanent atmosphere of fog.

The curing of the concrete will be maintained for seven (07) consecutive days or until a compressive strength of 13 MPA. Chemicals will only be applied for curing after approval by the Testing Engineer.

The passage of means of transport over fresh concrete will only be permitted after sufficient setting of the concrete.
B 505 .5 - Finishing of concrete surfaces
The concrete surfaces that will not be visible will be regular. Any stone nests will be transplanted and prepared with mortar or epoxy resins to a depth of 3 cm before backfilling the structures.

The concrete surfaces which will remain exposed must be perfectly smooth, which will be achieved by the use of good quality metal or wooden formwork that does not leave traces on the concrete.

B 505.6 - Tolerances
The tolerances for concrete construction will be as follows:

- Deviation of the implantation 10 mm
- Deviation from the prescribed dimension 10 mm
- Deviation in areas not seen 20 mm / 3 m
- Deviation in the seen surfaces 10mm / 3 m
- Deviation of the dimensions of the cross sections + 10 mm and - 5 mm.

Structures that do not meet the accepted tolerances will be refused, demolished and the debris removed to landfills.

B 505.7 - Opening to be reserved in the walls
The connections of the tertiary and quaternary sanitation canals will be made by the Co-contractor following the instructions of the Project Manager and the standard execution plans. The corresponding openings to be reserved in the concrete walls of works and drainage canals do not give rise to any special remuneration.

B 505.8 - Sealing devices
Sealing devices complying with the requirements of article B217 of the CCTP will be applied for expansion joints every 10m.

The Co-contractor will provide the necessary data for approval to the Project Manager. The devices will be fixed and maintained in the correct position during the pouring of the concrete.

ARTICLE B 600 - EXECUTION METHOD OF SPECIAL FITTINGS

ARTICLE B 601 - PEDESTRIAN SAFETY DEVICE

Near intersections and on each side of pedestrian crossings, the flow of traffic from metal barriers made of ∅60 mm galvanized steel tube; fixed in concrete studs spaced 2.00 m apart in a straight line and 1.50 m in a curve. The height of the barriers will be 0.90 m. The barriers are fixed to the studs by means of a plate anchored to the stud and must be removable.

ARTICLE B602-ANTI-PARKING DEVICE
They will be identical to the devices described in article B601 with a barrier fixed at 0.50 m from the ground.

ARTICLE B 603 - SAFETY SLIDES

They will be standard types GS2 and GS4 in galvanized steel.
The installation tolerance in plan of the front face "execution side" of the sliding elements is more or less 3 cm compared to the position provided on the plans.

The height of the upper edge of the sliding elements in relation to the level of the ground or of the final coating directly above the slide will be 70 cm with a tolerance of more than 5 cm and less than 10 cm. After assembly, a fine adjustment will ensure the parallelism of the sliding elements with respect to the roadway.
The supports will be in galvanized cast steel (type UAP100, UPM100 or C100x 50 x 25 x 5) 1.50 m in length and will be beaten after checking their vertical as well as that of the bell guide device.
In case of refusal of threshing before the head of the support has reached the imposed dimension, if the plug is at least equal to 50 cm and after agreement of the Client, the contractor may cut the support at the imposed dimension and the drill.
If the plug is less than 50 cm, the contractor must tear off the support, drill through the obstacle then start driving again or carry out an excavation and drive the support into a foundation block with fine sand blocking previously implemented in this excavation.

The torn supports can only be reused after agreement of the Client or his representative.
The Client may require, at the expense of the contractor, the replacement of the supports which, after driving, show defects such as bending, tearing, buckling or warping. The sliding elements must be assembled in such a way that taken in the direction of the traffic, their end covers the origin of the following element. The bolt heads should be placed on the front "traffic side" face of the sliding elements.

ARTICLE B 604 – HAND RAILS

The guardrails will be composed of metal tube and galvanized steel in accordance with the detail and the execution plan established by the contractor.

ARTICLE B610 - KERBS
The types of borders are defined on the detailed plans in the tender dossier.
They will be prefabricated or cast in place in concrete dosed at 350 kg of cement per m3 and will be placed on a concrete footing at 200 kg at least 10cm thick and having a vertical return intended to wedge the curb on the sidewalk side.

The altitude tolerance will be 1cm compared to the prescribed level: the alignment will be strictly respected at plus or minus 1 cm for 10 m.

The Co-contractor will take all measures to avoid any displacement of the curbs during the construction of the pavements and in particular during the compaction of the foundation and base layers.

ARTICLE B 700 - HORIZONTAL SIGNALIZATION

ARTICLE B 701 - QUALITY AND TESTS OF THE MATERIALS
Materials and supplies must be of proven quality. They will be subjected, before their employment, to the examination of the control engineer or his representative and the operator of the road network.
Materials that do not meet the conditions required in this book will be refused.
If the company's control resources are deemed insufficient with regard to the verifications of the materials, the Project Manager may have a competent body carry out control tests. In such a case, the costs inherent in these conditions will be borne by the entrepreneur.

ARTICLE B702 - GENERAL PROVISIONS ON SUPPLIES
The supplies must withstand without damage the external conditions and the stresses which they will be called upon to withstand in service and during the tests.
The company is required to present to all requisitions the paid invoices and other documents which are used to justify the origin of the materials.

ARTICLE B703 - MANUFACTURING PROCESSES AND CONTROLS

Independently of the test conditions of the constituent materials and of the tests to which the supplies will be subjected, by virtue of the requirements set out in this specification, the Inspection Engineer reserves the right to have all verifications of the manufacturing conditions carried out in the factory.
For this purpose, the contractor obtains, if necessary, the agreement of his manufacturer who will authorize the agent appointed by the Project Manager to carry out all the checks at the various stages of manufacture.

ARTICLE B704-CONSISTENCY OF THE WORK
The tests are the responsibility of the contractor.
Before commissioning, the contractor must carry out the tests imposed by the inspection engineer or his representative.

ARTICLE B705-CONSISTENCY OF THE WORK
A) For pavement marking work:
The consistency of the work to be carried out is:
- The supply of white and yellow marking products,
- The supply of glass beads for retro-reflections.

If it does not comply with these requirements, it is automatically provided for replacements and repairs at the expense of the contractor, after formal notice by registered letter without effect.
The obligations thus imposed continue, if necessary, beyond the fixed term until the works have been put in a state of final acceptance. He is also responsible for any damage that the installations could cause under the same conditions.

ARTICLE B708-MARKS ON PAVEMENTS
All the markings on the roadway are white except:
- Lines indicating the prohibition of stopping or parking and zigzag lines indicating bus stopping locations which are yellow;
- Temporary marks (construction sites) which are yellow.

They comply with the requirements of the "Mark on the road" booklet. The linear taken into account in the quantitative is the total linear including the voids.

B708.1 - Longitudinal lines
The continuous lines are announced to those of the conductors to whom it is forbidden to cross them by a broken line possibly differentiating according to their meaning by their modulus.
T1: Axial line or track delimitation.
The length of the line is equal to about a third of their intervals (3 m line; 10 m interval: width 0.15 m),
T2: Edge lines, delimiting deceleration, acceleration or intersection lanes, guidance in intersection, lane entry and exit for slow vehicles.
The length of the lines is approximately equal to that of their intervals (3 m line, 3.5 m interval: 0.15 m width).
T3: Warning lines for continuous lines, lines delimiting lanes for slow vehicles, lines delimiting emergency lanes.
The length of the lines is approximately equal to three times that of their intervals (line 3 m; interval 1.33; width 0.15 m).
The dashed lines next to the solid lines have a ratio of lines at intervals of one-third (T1) in the general case and three (T3) when the section or the overshoot is possible immediately followed by a section where it is not. not.

B708.2 - Transverse lines
The continuous transverse lines, drawn at the limit where drivers must stop at intersections, are 0.50 m wide.
The dashed transverse lines, drawn at the limit where the conductors must give way at intersections, have a width of 0.50 m and the length of the lines is equal to that of their intervals (0.50 m).
The transverse lines of effect of the signals, drawn at intersections, if there is no passage reserved for pedestrians, to indicate the place where vehicles must stop, have a width of 0.15 m. They are discontinuous and the length of the lines is equal to those of the intervals (0.50 m).

B708.3 - Pedestrian crossings
Crossings reserved for pedestrians are indicated by longitudinal strips 0.50 m wide with an interval of 0.50 m

ARTICLE B709 - CLEANING WORK
During the work, the contractor will be required to clean the parts of the roadway to receive the marking products. To this end, the latter will wash with water by high pressure pump (between 50 and 100 bars) in order to remove all traces of old sealants and laitance.

ARTICLE B710 - METHOD OF EXECUTION OF THE WORK
The marking of the axis (real or off-set) of the motorway, the interchange lanes and crossroads necessary for the installation of horizontal signs will be carried out by the contractor.

B710.1 Pre-marking
The contractor will pre-mark the strips and must have, during the duration of this operation, a qualified surveyor, capable of re-implanting the axes of the strips to be traced from the staking, of which he will be responsible for the conservation. .
The verification of the pre-marking will be carried out by the project manager, any modifications which will be requested from the Contractor must be made within forty-eight (48) hours. The application of products can only take place after this verification.

B710.2- Application of products
The material used for the execution of the bands will be subject to the approval of the project manager and must have the following characteristics:
• be a mounted self-propelled machine,
• Have a minimum spreading speed of 4 km per hour,
• Be equipped with a mechanical mixing system,
• Be equipped with a system for sprinkling glass beads ensuring the homogeneity of the retro-reflection over the entire width of the painted strip,
• Have a working autonomy allowing, without reloading, the application of the products over the greatest possible length,
• Arrangement of paint spray limitation allowing quick and easy adjustment of band widths,
• Equipment of an efficient device allowing the change of
Immediately before applying the product, the contractor will remove dust from the parts of the roadway to receive strips.
The devices embedded in the roadway and located in the surfaces to be painted will be protected beforehand by adhesive paper or other cover which will be removed after the passage of the sprayer.

ARTICLE B711 - CONDITIONS OF EXECUTION
Most of the work will be carried out under public traffic.

ARTICLE 800 - MODE OF EXECUTION OF NETWORKS DISPLACEMENT

ARTICLE B 801 - GENERALITIES
The networks located in the right-of-way of the roadways must be moved within the right-of-way of the sidewalks or protected in accordance with the standards of the concessionary services (CAMWATER - ENEO - CAMTEL - etc.)
The network movement plans provided in the ODA files are given for information only and must be verified and possibly completed by the Co-contractor who must also provide the projects and execution plans for the network movement.
It is up to the company to make the necessary arrangements so that the approval details of these plans are incorporated into the schedule of its work.
The attention of the Co-contractor is drawn to the fact that all measures must be taken to avoid damaging the networks supplying neighboring buildings and ensuring the connection of local residents during the work period.
ARTICLE B 802 – SITE RECONNAISSANCE
The search for existing networks will be carried out using reconnaissance trenches carried out manually at the expense of the company.
All precautions should be taken to avoid damaging the networks.

ARTICLE B 803 - EXECUTION OF THE WORK
The work will be carried out in accordance with the technical requirements imposed by the concessionary services and controlled by the applicants of the latter assigned to the Project Manager.

The cables and water pipes located under the existing roadway retained will not be moved or protected.
Cables and pipes with a diameter less than or equal to 200 mm under new pavement (widening or new tracks) will be left in place and protected by a concrete load distribution slab.

A distribution pipe will be placed under each sidewalk (PVC ∅ 110 to 160 mm) to ensure the connection of local residents.
The network relocation projects will be carried out, at the expense of the Co-contractor, by a design office approved by the concessionaires, which will ensure the control and acceptance of the works.
The works must be carried out by companies approved by the concessionaires or by the concessionaires themselves (the tenderers must check with the concessionaires to take into account the conditions of execution of the works in the prices).

The backfilling of the excavations, the trenches, the repair of the roadways, the leveling and the cleaning of the surroundings are the responsibility of the Co-contractor, in accordance with the prescriptions of this CCTP.
The operational and commissioning tests are the responsibility of the Co-contractor, and will be carried out in accordance with the instructions of the concessionary services.
NB: The amount of network travel cannot exceed that set aside in the market. The co-contracting party's sales coefficient may not exceed 15% of the amount of the services of the subcontractors, including the costs of studies and control of the concessionaire.
As for other contract provisions, the amount to be considered is that of the subcontractor validated by the Project Manager, the Engineer and the Head of the Market Department, increased by the fixed sales coefficient of the company capped at 1.15 . In the case of compensation, it is the amount of the affected goods defined by the commission for the observation and evaluation of the implicated goods which is increased by 1.15.

ARTICLE B 900 - METHOD OF EXECUTION OF PLANTING

The plantings will be carried out in accordance with the prescriptions of the **CCTO booklet N ° 35.**

ARTICLE B 901 - ORIGIN AND QUALITY OF TREES AND SHRUBS

The trees and shrubs will come from nurseries chosen by the contractor and subject to the approval of the control engineer. The latter may refuse suppliers who do not provide all the guarantees.
In any case, the plants must be acquired from nurserymen and not from resellers unless there is a firm agreement on a specific supply.
The plants must be of first choice and have undergone transplantation in a nursery. The plants must be healthy, of fair and marketable quality, well constituted, free from all blemishes and diseases, without moss or chapping and present all the characteristics of vigorous vegetation, the roots will be without abrasions, well cut, provided with a hairy enough abundant and preserved as much as possible in their integrity, those which we will be obliged to conceal must maintain 0.30 m in length at least.
The chosen species is Callistemon cinnamon. Planting will be done at 6 meter intervals.
All the plants will be delivered freshly pulled up and gauged if necessary.
The trees supplied must have a minimum height of between 2.00 m and 2.50 m. they will be placed in holes 1 m deep and 0.80 m in diameter minimum. Protective devices as well as guardians may be required.
The relocations will be carried out with all the necessary precautions not to damage the roots.
Depending on the species, the trees will be pulled up, either with bare roots or in a container.
The contractor must, under his responsibility, observe the usual rules of the art in this matter. The prior checking which may be carried out in the nurseries will not prevent a new examination from being carried out on the site of the plantation.

ARTICLE B 902 - METHOD OF EXECUTION OF THE WORK

a) Setting out

Before any start of execution, the contractor must proceed with the establishment of various trees and shrubs.
He will have to carry out the preliminary picketing of the collections as well as the axes serving as picket boxes. The project manager reserves the right to make any detailed modifications to the routes deemed necessary. The works will only start after agreement on the route.
The contractor acknowledges having fully realized on plans and on site the inventory of fixtures, the possibilities of access and manoeuvring of mechanical devices, the deposits of materials and having made the relevant forecasts on this subject. Which concerns the nature and extent of the work. Under no circumstances can he claim additional value for encountering unforeseen obstacles such as old masonry, stony ground, etc.
The contractor must take all measures to ensure that no damage is caused to pipes of all kinds or existing structures, as well as to the roadways, curbs and curbs encountered during the execution of the work.
For newly created structures, it will be up to him to find out about the companies working on the site, in order to define the nature and location.
The contractor will bear full responsibility for any damage he may cause during the duration of the work and the warranty clearance; he will bear in case of deterioration, the costs of repair.
The contractor will not be allowed to present claims whatever their nature, because the layout or the implantation of existing or newly created structures obliges him to take protective measures.
The contractor will not be able to claim any compensation or capital gain due to the realization in several stages due to the opposites imposed by the work of the other lots, nor because of errors or omissions, in the plans or parts annexed to the present CCTP.
The contractor has full responsibility for any errors made by him and would possibly have to suffer all the consequences.

a) Precautions prior to planting

Plantations carried out in principle during the period of slowdown in vegetation, excluding periods when the land is soaked by rains.
The contractor must take into account the weather forecast when planting.
The time between uprooting and planting should be kept to a minimum. It should not exceed 3 days.

If a case of force majeure leads to a longer delay, the entrepreneur should at his expense, put the plants in gauge.
The roots of plants uprooted with bare roots will be protected by straw, grasses or moss. These roots will be dressed and palinated before planting or gauging.
Plants with evergreen leaves or with delicate recovery and those whose development makes it necessary should be removed in clods.

b) Opening the holes

In order to allow the perfect furnishing of the ground and the careful evacuation of all foreign bodies, the company will carry out the breaking of the ground at the location of each tree or shrub. The work will include the opening of the holes, the addition of topsoil from the deposit to the work. The land coming from the holes and trenches will be deposited in the vicinity, if they are recognized of good quality, otherwise, they will be evacuated to the public dumps at the expense of the contractor.
The hole excavations will have the following volumes:
- Trees 1,500 m3
- Shrubs 0.400 m3
- Heads per ml 0.400 m3

Surplus or unfit land will be evacuated by the contractor to the landfill.

a) Tree plantations

Before planting, any water that could have entered the excavation will be removed.
Prior to the establishment of the plants, a fertilizer will be incorporated into the soil at the bottom of the excavation, the composition of which will be subject to the approval of the inspection engineer.
The bottom of the excavation will be filled with earth of suitable quality to receive the foot of the tree and shaped into a dome to facilitate the establishment of the roots, in the event that the plant will be bare rooted.

The roots will be spread out suitably and filled with the looser and finer soil, this soil will be placed carefully by hand, compacting moderately so that there is no void and so as not to injure the hairy individuals.
The fertilizer application will be well mixed with the backfill.
At the surface, the backfill will be determined in a basin. Planting will be followed by watering.
The contractor will provide the stakes that may be necessary as well as the temporary protection devices made up of a mesharmor or vertical wooden stakes.

ARTICLE B903 - SEEDING

B903.1 - Placement of topsoil

The topsoil used will first be broken up very finely, carefully purged of stones, roots and wet grass before spreading.
As it is spread, it will be beaten flat or rolled with a light cylinder.
The thickness of the topsoil is at least 10 cm. The execution tolerance is plus or minus 5 cm from the theoretical profile.
The establishment of topsoil will be carried out outside of rainy periods.

B903.2 - Grassing

Embankment embankments and terraced but unpaved road platforms must be grassed.
The sowing period and the choice of grains will be subject to the approval of the Control Engineer.
The sowing will be done on soil previously loosened to a thickness of 10 cm and the spreading of the grains must be regular and in sufficient quantity to obtain suitable vegetation. After spreading, the earth will be leveled and firmed with the bat.
The contractor will be required to reseed the parts where the grass has not been lifted as soon as possible.

ARTICLE B 904 - CLEANING

As the work is completed, the contractor must clean the tracks, squares, aisles, in all cases where the work has soiled the surfaces.

ARTICLE B905- WARRANTY AND MAINTENANCE

a) Guarantee

The Contractor undertakes to guarantee the taking of all the trees. During a guarantor period set at one year, the Contractor shall replace at his expense any plantations which perish or whose recovery is defective, excluding those destroyed as a result of shocks or accidents caused by persons outside the company.

b) Maintenance

The Contractor will ensure the maintenance of trees and shrubs for one year. The maintenance operations will include:
- The size necessary to give the trees the natural shape and scope;
- Disbudding, possible weeding and the fight against fungal diseases and parasites.
- Maintenance around trees by hoeing or plowing as frequently as possible;
- Watering, application of fertilizers and manures;
- Surface cleaning and waste disposal.

As far as watering is concerned, the Contractor will be responsible for the supply and transport of water.

ARTICLE B906 - PAVING

a) Laying sand layer

This is a 5 cm thick layer of clean fine sand.

b) Paving pavement

The paving stones in question are of the self-locking type. They must be vibrated and compacted during manufacture and respect the following mechanical characteristics:

• Compressive strength: 29 Mpa for those used on the section suitable for vehicles and at least 25 Mpa for the section by bending;
• Bending tensile strength: 5 Mpa for the section suitable for vehicles and 3 Mpa for the pedestrian section.

These characteristics must be previously proven by the contractor through tests carried out by a specialized laboratory and approved by the Project Manager. The Project Manager may require a visit to the ..... manufacturing unit.

The interlocking paving stones will have a thickness of at least 8 cm for the vehicle section and 6 cm for the pedestrian section, in parallel with the aforementioned mechanical characteristics.

The shapes, colours and patterns to be produced will be approved beforehand by the Project Manager.

The blocking of the pavers is done with clean fine sand while the bedding is made of coarse sand.

c) Connection mortar

The materials required for the connection must meet the requirements of article 3.3 of this CCTP.

ARTICLE B907 – REPARING OF EXISTING BOX CULVERT

Not applicable

ARTICLE B909 - CONCRETE PLOTS

The concrete will be dosed at 300 kg / m3. Each block will have the following dimensions: Total height: 1.18 m - width: 0.36 m - thickness 0.24 m - sealing depth: 0.40 m - installation distance: 1.50 m.
The design will be stopped by the Project Manager.

ARTICLE B1000 - ENVIRONMENTAL DIRECTIVES

Context

Road maintenance works and those for the construction of new roads have been carried out in the past without taking into account considerations relating to environmental protection or those inherent in mitigating impacts on the environment, due to the fact that the markets did not include clauses relating to environmental protection.

In response to the commitments made with the international community for the protection of the environment, the Cameroonian Government in 1996 drafted Law No. 96/12 of August 5, 1996 on the framework law on environmental management. This law establishes the general legal framework for environmental management in Cameroon and specifies in its 2nd chapter, the measures to be taken to avoid, mitigate and / or eliminate negative impacts on the environment, during the execution of certain projects and works.

In order to preserve the natural environment in relation to the major modifications that construction work and maintenance of urban roads are likely to produce, the Ministry of Housing and Urban Development has drawn up specific environmental clauses to be implemented. implemented during project execution respond to calls for tenders falling within its competence.

In this perspective, companies which, through the maintenance of urban roads launched by MINHDU, must now comply with the clauses published below if they are retained.

1) SITE INSTALLATION

The provisions mentioned below must be observed, as the case may be.
The Co-contractor must, for the protection of the environment, develop a site protection plan and submit to the project manager for approval.

Choose the installation site outside sensitive areas (lowlands, coastal areas, watersheds) at a distance of at least:
- 30 m from the road;
- 100 m from a watercourse;
- 100 m from the houses.

The internal site regulations must specifically mention:
- Safety rules;
- The ban on the consumption of alcohol during working hours;
- Staff awareness of the danger of STD / AIDS;
- Respect for the habits and customs of neighbouring populations;

Information and awareness sessions must be held regularly and the rules must be displayed visibly in the various facilities.
Choose the location of its deposits (quarries, borrowings) and material deposits so as not to cause disturbances damaging to the environment,
Take all the necessary measures to avoid accidental pollution of water or soil during the work.
Receptacles for receiving waste are to be installed near the various facilities. These receptacles are to be emptied periodically and the waste deposited in a dump. Toxic waste must be recovered separately and treated separately according to established standards.

The equipment washing areas must be concreted in the same way, a sump for recovering oils and greases. This maintenance area must have a slope towards the sump and towards the interior of the platform in order to prevent the flow of pollutants towards unpaved floors.

The storage areas for hydrocarbons for refuelling, the storage area for binders and hydrocarbons for the coating must be concreted and include protective devices in order to prevent accidental spillage of these products and soil contamination. Absorbent products should be stored nearby and all safety equipment and measures in place.

Used oils should be stored in drums to be stored in a secure place pending their recovery for recycling; batteries and oil filters must be stored in sealed containers ultimately intended for a recycling center,

The site should provide adequate water drainage over its entire area.

At the end of the work, the Co-contractor will carry out all the work necessary for the repair of the premises.

After the equipment has been withdrawn, a report recording the restoration of the site must be drawn up and attached to the Work acceptance report.

INSTALLATIONS CARRIED OUT BY THE CONTRACTOR

Installations carried out by the Contractor and made available to the Client:

- Meeting room equipped with:
- table and chairs to accommodate 20 people
- billboard
- an office each equipped with a desk + 1 armchair + 2 chairs
- A sanitary unit connected to the external network (WC and showers).

These facilities will also be equipped with:

- anelectricalenergyconnection,
- a running water supply,
- a drinking water dispenser

The Contractor will ensure that the Client or his assistant can access the site anywhere and at all times.

During the entire duration of the contract, the Contractor will bear the building maintenance costs and in particular the costs of security, cleaning, electricity, water, telephone, internet, office supplies, ink cartridges for printers and office supplies.

Fire extinguishers are part of the equipment supplied by the Contractor.

2. CLEARING OF RIGHT OF WAY

Brush clearing consists of cutting, without uprooting, any vegetation (grasses, trees, shrubs) growing on the immediate surroundings of the walk able surface: shoulders, ditches and ridges of embankments;

All trees and branches overhanging the surroundings and threatening to fall on the road will be cut down.

All vegetation at the entrance and exit of the structures will be cut, unless it serves to stabilize an embankment slope and does not constitute a threat to the foundation of the structure. Trees and shrubs are uprooted to facilitate water flow and allow regular inspections of the structure.

All plant waste will be carefully removed from shoulders, ditches or structures and evacuated to designated areas where it can be burned safely. Burning on site is strictly prohibited.

The Co-contractor must take all necessary precautions to avoid causing any damage to residents, water pipes, telephone lines, electricity etc.

3. BORROWS PITS AND DUMPING SITES

The following criteria must be met for opening a career:
- Distance from the site at least 30 m from the road;
- Distance from the site to at least 100 m from a body of water;
- Distance from the site to at least 100 m from the dwellings;
- Preference to be given to uncultivated and non-forested areas;
- Preference to be given to areas with low slopes.

The Co-contractor must submit to the project manager the list of sites it intends to operate as well as a redevelopment plan for each site, indicating the work to be carried out for the rehabilitation of the sites operated.

He can only start working on the borrowings and quarries after having received the written authorization of the project manager.

During the execution of the work, the Co-contractor will ensure:
- That the areas for depositing roofing materials that cannot be used for the work are chosen so as not to interfere with the normal flow of water;
- The conservation of the plantations delimiting the quarry;
- Maintenance of access roads;
- Sound attenuation, protection vis-à-vis neigh boring dwellings;
- The installation of all signs necessary for the smooth running of the work;
- Regular cleaning of the pavement of paved roads in the absence of a cleaning device for the wheels of trucks and machinery;
- That all measures are taken so that runoff can flow normally outside the right-of-way of the proposed road without causing damage to riparian properties;
- That the access and service roads are regularly watered and compacted in order to avoid the raising of dust during transport, loading and unloading of materials;
- That when operating quarries for maintenance work on paved roads, a device for cleaning the wheels of trucks and machinery is installed in order to prevent soiling of the pavement.

The works to be carried out for the rehabilitation of the above-mentioned sites will include, among others:

- The leveling of the roofing materials and then the levelling of the topsoil to facilitate the percolation of water and prevent erosion;
- The restoration of previous natural flows;
- Removal of the dilapidated appearance of the site by distributing and concealing large blocks;
- The development of guard ditches to prevent erosion of the regaled land;

- The withdrawal of all equipment, machinery and materials, the demolition of any installation and the removal of all waste and rubble and their deposit at an approved location.

After the sites have been repaired in accordance with the requirements, a report will be drawn up and attached to the reception report.

As soon as a loan or a deposit is abandoned, the area will be redeveloped in accordance with the proposed plans. Once the redevelopment is completed, the Co-contractor will inform the project manager so that an inventory can be drawn up.

4. LOADING AND TRANSPORTATION OF MATERIALS AND EQUIPMENT

For all transport of materials and equipment, whatever they are, the Co-contractor must comply with the regulations in force, concerning the restrictions imposed on the weights and sizes of vehicles and convoys using the public network and in particular:

Environmental protection measures (loss of materials during transport, dust, etc.) Take all the necessary measures to limit the speed of vehicles on the site;
Installation of signs and flag carriers.
Regularly water the traffic routes in inhabited areas;
Plan deviations from existing tracks and roads.

5. DEPOSITS AND MAINTENANCE OF THE WEARING COURSE

The Co-contractor must deposit the materials to be used at regular intervals in areas that do not prevent the normal flow of water.

In order to ensure safe movement, the company must deposit only the quantities that can be used the same day (all the piles should be levelled at the end of the day).
The Co-contractor must, after scarifying the pavement, supplying materials and reshaping the materials to the grader:

- Water and compact the road;
- Organize the distribution of piles on one side of the road at a time over restricted distances;
- Carry out the adjustment as you go;
- Set up adequate mobile signage;
- Regulate transit traffic by flag bearers;
- Avoid the accumulation of lateral bulges on the aisles and ditches;
- Restore the drainage system and access to waterfront homes;
- Remove excess soil from ditches, deposit and level the land outside the right-of-way in places that do not obstruct the normal flow of water.

6. MISCELLANEOUS REPROFILING

The Co-contractor must, after scarifying the pavement and reshaping the materials with a grader, watering and compacting the pavement. He must :

- Avoid the accumulation of side bulges on the aisles and in ditches;
- Restore the drainage system and access to waterfront homes;
- Make passes with a grader until the corrugated sheet disappears;
- Make passes with a grader avoiding the creation of cords;
- Remove loose stones and place them outside the road right-of-way in places that do not obstruct the normal flow of water;
- Install signage on machinery, flag, flashing light;
- Install adequate mobile signage before the site;
- Regulate traffic by flag bearers.

7 MAINTENANCE OF PEDESTRAN TRACK OFVTARRED ROADS

The Co-contractor must:

- Plan an installation in relation to the volume of work (see site installation);
- Work on unpaved shoulders as soon as the degradation reaches more than 3 cm;
- Bring the materials needed for recharging, spread them out and compact them after watering;
- Organize the distribution of piles on one side of the road over restricted distances;
- Carry out the adjustment as you go;
- Restore the platform water drainage system by adjusting the shoulders;

- Remove excess material in ditches, deposit and level the land outside the right-of-way in places that do not obstruct the normal flow of water;
- Put in place adequate signage;
- Regulate transit traffic by flag bearers;
- Avoid the accumulation of side cushions on the aisles and ditches.

8. PARTIAL JOBS USING VARIOUS MATERIALS

The Co-contractor must make the same arrangements as in the site installation chapter. He must :

- Determine the locations of material deposits taking into account a minimum of brush clearing;
- Take drainage measures to prevent the aggregate from being washed away;
- Regularly remove loose chippings;
- Put in place adequate signage;
- Take safety measures for asphalting installations. (bitumen heating, bitumen storage);
- Have absorbent products on site in the event of toxic product spills;
- Avoid carrying out work on days of popular demonstration;
- At the end of the work, the Co-contractor will do what is necessary for the restoration of the premises (withdrawal of all its equipment, machinery and materials), in order to restore the site as it was to its initial state;
- After the equipment has been withdrawn, a report noting the restoration of the site must be drawn up and attached to the work acceptance report.

9. VEGETATION CONTROL AT THE LEVEL OF SLOPES, ACCESSIBILITIES, PIT WALLS.

Brush clearing consists of cutting without uprooting any vegetation (grasses, trees, shrubs) growing on the immediate surroundings of the walkable surface: shoulders, ditches, embankments and crests of embankments; the cut will be made at ground level, between 5 and 10 cm.
All waste will be carefully removed from shoulders, ditches or structures and evacuated to designated areas in a suitable location away from any dwelling. It is strictly forbidden to burn cut waste on site.
If the burning of waste is authorized at this location, the Co-contractor must have a tank of at least 10,000 liters and a sprinkler pump to prevent any possible spread of fire in the vicinity of the site.

It is forbidden to use the grader to clear the shoulders. The execution of brush cutting must be done manually. This task is labour intensive.

10. MANUAL OR MECHANICAL MAINTENANCE OF GUTTERS.

The Co-contractor must:

- Clear the ditch manually or mechanically to restore the initial template;
- Leave the roots of the vegetation intact unless they present a threat to the structure;
- Carry out divergent ditches according to the instructions of the project manager if the section of the ditch is insufficient. Cleaning products should be set to a low thickness and in areas that do not require brush clearing and outside residential areas.

11. FIGHT AGAINST PIT EROSION

The Co-contractor must:

- Carry out work to re-stabilize ditches and shoulders as well as the water speed limitation device according to the instructions of the project manager;
- Ensure site safety and report the work properly;
- Ensure that the materials deposited do not hinder the normal circulation of water;
- Clear the roadway of ditches repairs materials to avoid congestion;
- Restore the shoulders;
- Improve soil resistance by masonry or coated ditches following the instructions of the project manager;
- Ensure that all surplus materials are evacuated and leveled in a suitable place without hindering the normal flow of water.

12. MAINTENANCE OF DRAINAGE WORKS
(Fight against silting up and erosion)

Storage of materials and equipment required for the work should be done in areas outside of homes. The Co-contractor must:
- Clear all solid products obstructing the structures;
- Install gabions in areas with strong current;
- Reinforce the banks with riprap, gabions, masonry rip-rap;

- Reinforce the embankment soil of the banks;
- Adequately mark the work near the edge of the road;
- Carry out the work preferably before the rainy season.
- At the end of the work, remove all rubble and waste outside the right-of-way and to a place authorized by the project manager.

13. **MAINTAINING TRAFFIC**

a) During the work, the Co-contractor is required to ensure traffic in sufficient safety conditions, and to take into account environmental protection measures (dust, noise, etc.).

b) The routes of deviations from public traffic must be submitted to the project manager for approval before any work is carried out. If there is destruction of any property, the company must compensate the persons concerned.

c) After the work, the company must restore the route of the deviations to its original state as much as possible, and in particular scarify the route in order tocompact the soil and restore the vegetation.

14. SITE VISIT AND START OF WORK

All parties involved must be present. The authorities and the local population must be informed of the work to be carried out and whether any observations need to be made from them. The project manager will be able with the help of a local NGO to sensitize the populations on environmental aspects, and human relations between them and the site staff.

15. SANCTIONS AND PENALTIES

Law No. 96/12 of August 5, 1969 provides respectively in its articles 79, 82, 84 and 88 as follows:

i) Is punished by a fine of two million (2,000,000) to five million (5,000,000) CFA francs and a prison sentence of six (06) months to (01) year or one only, anyone with:

- carried out, without an impact study, a project requiring an impact study;
- carried out a project that did not comply with the criteria, standards and measures set out for the impact study;
- prevented the completion of the checks and analyzes provided for by said law and / or by its implementing texts;

ii) Is punished by a fine of one million (1,000,000) to five million (5,000,000) CFA francs and a prison sentence of (06) months to (01) year or one of these two penalties only, any person who pollutes, degrades soils and subsoil, alters the quality of the air or water, in violation of the provisions of the said law. In the event of a repeat offense, the maximum amount of penalties is doubled;

iii) Is punished by a fine of five hundred thousand (500,000) to two million (2,000,000) CFA francs and a prison sentence of six (06) months to one (01) year or one of the only two, any person who operates an installation or uses a movable object in violation of the provisions of the said law. In the event of a repeat offense, the maximum amount of penalties is doubled;

iv) Without prejudice to the prerogatives recognized to the public prosecutor, to judicial police officers with general competence, the sworn officers of the administration in charge of the environment or of other administrations concerned are responsible for the search, the observation and the prosecution in repression of infringements of the provisions of this law and its implementing texts.

v) A company violating or having violated the law raised during road works will be excluded for a period of one year from the right to tender.

vi) Any breach of the requirements duly notified to the company by the project manager must be rectified. The resumption of work or additional work resulting from non-compliance with the clauses is the responsibility of the Co-contractor.

Document n° 6: Schedules of unit prices

Price	UNIT PRICE SLIP (UPS) FOR THE FINANCE JUNCTION - VETERINARY JUNCTION - CITY CHEMIST – HOSPITAL ROUND-ABOUT - T- JUNCTION ROAD IN BAMENDA CITY	Unit Price in figures
100	**INSTALLATION**	
101	**Site Installation:** This price remunerates under the general conditions previewed in the contract site installation. **The LUMP SUM at : ..... FCFA**	
102	**Mobilization and demobilization of equipment:** This price remunerates under the general conditions previewed in the contract in LUMP SUM the deployment and redeployment of tools and equipment. **The LUMP SUM at:**..... FCFA	
103	**Performance program:** This price remunerates under the general conditions previewed in the contract in LUMP SUM. **The LUMP SUM at:**..... FCFA	
200	**PREPARATORY WORKS**	
201	**Scarification, grading and compacting of existing road surface:** This price remunerates under the general conditions previewedin the contract in SQUARE METERS **The SQUARE METER at:**..... FCFA	
202	**Cleaning of gutters:** This price remunerates under the general conditions previewed in the contract in LINEAR METERS. **The LINEAR METER at:**..... FCFA	
300	**BASE AND FINISHING LAYERS**	
301a	**Construction of base course with good laterite:** This price remunerates under the general conditionspreviewed in the contract in CUBIC METERS the realization of base course with good laterite. **The CUBIC METER at** ..... FCFA	
302	**Impregnation of base course with 0/1 bitumen:** This price remunerates under the general conditions previewedin the contract in SQUARE METERS **The SQUARE METER at:** ..... FCFA	
303b	**Two coats surface dressing for the run-way:** This price remunerates under the general conditions previewedin the contract in SQUARE METERS **The SQUARE METER at:** ..... FCFA	

Document n° 7: DETAIL ESTIMATE

BILL OF QUANTITIES AND COST ESTIMATE FOR THE FINANCE JUNCTION - VETERINARY JUNCTION - CITY CHEMIST – HOSPITAL ROUND-ABOUT - T- JUNCTION ROADS IN BAMENDA CITY					
S/N	**DESCRIPTION**	**UNIT**	**QTY**	**UNIT PRICE**	**AMOUNT**
100	**INSTALLATION**				
101	Site installation	LS	1.00		
102	Mobilization and demobilization of equipment	LS	1.00		
103	Performance program	LS	1.00		
	Sub Total 100				
200	**PREPARATORY WORKS**				
201	Scarification, grading and compacting of existing road surface	m^2	20400		
202	Cleaning of gutters	ml	1400		
	Sub Total 200				
300	**BASE AND FINISHING LAYERS**				
301	Construction of base course with good laterite	m^3	3060		
302	Impregnation of base course with 0/1 bitumen	m^2	20400		
303	Two coats surface dressing for the run-way	m^2	20400		
	Sub Total 300				
	TOTAL WITHOUT TAXES				
	VAT 19.25%				
	AIR 2.2%				
	Total including TTC				
	Net payable amount				
	This present estimate is closed at:				

Document n° 8: Sub-detail of unit prices

	SUB-DETAIL OF UNIT PRICE				
Designation of the Price:					
N° Price	**Daily output**	**Total quantity**		**unit**	**Duration (days)**

	CATEGORY	Number	Daily salary	Dayspaid	Amount
LABOUR					
	Total A				

	TYPE	Quantity	Daily rate	Dayspaid	Amount
MACHINES OR EQUIPMENT					
	Total B				

	TYPE	unit	Unit Price	Consumpt.	Amount
MATERIALS and miscellaneous					
	Total C				

D	TOTAL DRY PRICE A+B+C			A+B+C	
E	Site expenses		%	D*X%	
F	Running expenses		%	D*Y%	
G	COST PRICE			D+E+F	
H	Risks + benefits		%	G*Z%	
P	SELLING PRICE WITHOUT TAXES			G+H	
V	UNIT SELLING PRICE WITHOUT TAXES			P/QTE	

Document n° 9: Model of Contract

REPUBLIC OF CAMEROON
Peace - Work – Fatherland

REPUBLIQUE DU CAMEROUN
Paix –Travail – Patrie

MINISTRY OF DECENTRAISATION AND LOCAL DEVELOPMENT
****

BAMENDA CITY COUNCIL

****
SECRETARIAT GENERAL
****
DEPARTMENT OF TECHNICAL SERVICES
****
SERVICE OF PUBLIC CONTRACTS AND PROCUREMENT

CONTRACT N°_____/C/BCC/SG/DTS/SPCP/2023 of _____

Awarded through Open National Invitation to Tender N°008/ONIT/BCCITB/2023of 01/09/2023for the rehabilitation of Finance Junction -Veterinary Junction - City Chemist – Hospital Round-About - T-Junction roads in Bamenda City"Under Emergency Procedure".

AWARDED TO: _____
P.O Box:
Tel:
RC N°
Registration N°

SUBJECT: the rehabilitation of Finance Junction -Veterinary Junction - City Chemist – Hospital Round-About - T-Junction roads in Bamenda City.

AMOUNT OF CONTRACT IN FCFA:

Total exclusive of all taxes	
VAT (19.25%)	
I.R (2.2%)	
TOTAL inclusive of all taxes	
Net Payment (Total – IR)	

DURATION OF EXECUTION: Two (02) calendar months

FUNDING: Bamenda City Council Budget for 2023 financial year. (Account: 22 150)

SUBSCRIBED, on .....
SIGNED, on .....
NOTIFIED, on .....
REGISTERED, on .....

BETWEEN:

THE BAMENDA CITY COUNCIL,
represented by the City Mayor of Bamenda City Council, herein referred to as

"**Contracting Authority**"

ON ONE HAND,

AND

THE ENTERPRISE:
P.O Box:
Tel:
RC N°
Registration N°

Represented by its General Director, _____, herein referred to as

"**The Contractor**"

ON THE OTHER HAND,

IT HAS BEEN AGREED AND CONCLUDED AS FOLLOWS:

Summary

Titre I : Special Administrative Clauses (SAC)

Titre II : Special Technical Clauses (STC)

Titre III : Schedules of unit prices (SUP)

Titre IV : Detail Estimate (DE)

CONTRACT N°_____/C/BCC/SG/DTS/SPCP/2023 of _____

Awarded through Open National Invitation to Tender N°008/ONIT/BCCITB/01/09/2023 for the rehabilitation of Finance Junction -Veterinary Junction - City Chemist – Hospital Round-About - T-Junction roads in Bamenda City"Under Emergency Procedure"

DURATION OF EXECUTION: Two (02) calendar months

AMOUNT OF CONTRACT IN FCFA:

Total exclusive of all taxes	
VAT (19.25%)	
I.R (2.2%)	
TOTAL inclusive of all taxes	
Net Payment (Total – IR)	

VISA AND SIGNATURES

Read and accepted by the Contractor **Bamenda, the……**
Signed by the City Mayor of Bamenda City Council (ContractingAuthority) **Bamenda, the……**
REGISTRATION

Document n° 10: Forms and Models to be used

SUMMARY

Annex 1: MODEL OF DECLARATION OF INTENTION TO BID

I the undersigned.....

Nationality.....

Resident at.....

In title of.....

By virtue of the power of General Director, after having had a sound knowledge of the documents of the Open National Invitation to Tender N°.....

Relating to the realization of the works of the rehabilitation of some roads in Bamenda City;

Declare hereby the intention of my Enterprise _____to submit for the said Invitation to tender.

Drawn up at _____on the_____

Annex 2: Tender Model

I, the undersigned..... [*insert name and title of signatory*]

representing the Company, Enterprise or Group (8) ... ... whose head office is in .....registered in the registrar's office of ..... under No. .....

After having read all the documents contained or referred to in the Consultation file including additives No. .....

- Submit and pledge to realize the works in accordance with the documents of the Tender file, with the price I have stated on the basis of schedule prices and quantities, which prices brings out the amount of offer at .... [*in figures and in words*] Excluding VAT CFA francs, and .... CFA All taxes included. [*in figures and in words*]

- Promise to render the services within a time limit of.....months

- Also promise to maintain my offer in the time limit of..... days [*insert duration*], after the deadline for submission of tenders.

The discounts offered and the provisions of applications of those discounts are as follows: ....

The Council will liberate payment owed by her under this contract by crediting Account No. .....opened in the name of.....with the bank .....Branch.....

Before signing the contract, the present offer accepted by you will be worth a commitment between us.

Done at.....on the.....

Signature.....

as.....
duly authorized to sign the offer for and

on behalf of.....

Annex 3: Model of Bid Bond

Addressed to the City Mayor of Bamenda City Council, "the Contracting Authority"

Considering that the Contractor....., Herein referred to as "the Bidder" has submitted

its bid dated..... for the rehabilitation of the Finance-Junction- Veterinary Junction- City Chemist- Hospital Round-about – T-Junction roads in Bamenda City, herein designated "the offer" and for which he will join a provisional bond equivalent to [*amount*] CFA,

We..... [*name and address of bank*], represented by..... [*names of signatories*], herein designated "the bank" declare to guarantee the payment to the Contracting Authority of the maximum sum of [*amount*] CFA francs, that the bank undertakes to pay in full to the Contracting Authority, obliging itself, its successors and assignees.

The conditions of this obligation are:

If the Bidder withdraws the offer during the validity period specified by him in the act of submission; or
If the Bidder having been notified of the award of the contract by the Contracting Authority during the period of validity:

- Fails to sign or refuses to sign the contract, when he is required to do so;

- Fails to submit or refuses to provide the definitive bond of the Contract (final bond) as provided therein.

We undertake to pay to the Contracting Authority an amount up to the maximum sum specified above, upon reception of his first written request, without the Contracting Authority having to substantiate his request, provided that in his request the Contracting Authority mentioned that the amount he claims is due him because one of the above conditions, or both, are true, and he shall specify which condition(s) is (are) concerned.

This guarantee shall enter into force upon signature and as from the deadline set by the Contracting Authority for the submission of tenders. It will remain valid until the thirtieth day included following the end of the period of validity of tenders. Any request from the Contracting Authority should reach the bank by registered letter with acknowledgment of receipt before the end of the period of validity.

This bond is subject to its interpretation and execution under the Cameroonian law. Cameroonian courts will be the exclusive jurisdictions to adjudicate on all matters relating to this engagement and its aftermath.

Signed and authenticated by the bank

at.....on.....

[Signature of the bank]

Annex 4: Model of final bond

Bank:

Reference of bond: No.....

Addressed to the City Mayor of Bamenda City Council in Cameroon, hereinafter referred to as "the Contracting Authority"

Considering that..... [*name and address of Contractor*], herein designated "the Contractor " has undertaken, in execution of the Contract designated "the Contract" to realize therehabilitation of the Finance-Junction- Veterinary Junction- City Chemist- Hospital Round-about – T-Junction roads in Bamenda City".

Considering that it is stipulated in the contract that the Contractor will submit to the Contracting Authority a final bond, of an amount equal to 3% of the amount inclusive of all taxes to the corresponding Contract, as guarantee of good finish of the execution of his obligations under the conditions of the Contract;

Considering that we have agreed to give the Contractor such guarantee bond;

We..... [*name and address of bank*]

represented by..... [name of signatory]

herein designated "bank", we promise to pay to the Contracting Authority, within a maximum of eight (08) weeks, upon written request of the latter declaring that the Contractor has not met its contractual commitments under the contract, without being able to delay payment or raise objection for any reason whatsoever, all the amount up to the sum of..... [*in figures and words*].

We agree that no change or addendum or modification to the contract will liberate us of any obligation incumbent upon us in virtue of the present final bond and we derogate hereby to any notification of any modifications, additions or changes.

This final bond shall enter into force upon signature and upon notification to the Contractor by the Contracting Authority, the approval of the contract. It will be released within a time limit of one month after the date of provisional reception.

After that date, the bond will be of no effect and will be returned to us without explicit request from us.

Any claim made by the Contracting Authority under this warranty must be made by registered letter with acknowledgment of receipt, and should reach the bank during the period of validity of this commitment.

This final bond is subject to its interpretation and execution under the Cameroonian law. Cameroonian courts will be the exclusive jurisdictions to adjudicate on all matters relating to this engagement and its aftermath.

Signed and authenticated by the bank

at..... on the,.....

Annex 5: Model start-up advance bond

Bank: reference, address.....

We, the undersigned (bank address) hereby declare by the present bond, on behalf of: ..... [*holder*], to the benefit of Contracting Authority

The City Mayor of Bamenda City Council ("The beneficiary")

The payment, without any contestation, on receipt of the first beneficiary's written request, stating that..... [*the holder*] has not fulfilled its obligations relating to reimbursement of the start-up advance following the conditions of the Contract N°..... of the..... relating to the works for the **rehabilitationof the Finance-Junction- Veterinary Junction- City Chemist- Hospital Round-about – T-Junction roads in Bamenda City**the maximum total amount corresponding to the advance of twenty (20)% of the amount inclusive of all taxes of the Contract N°..... payable upon notification of the corresponding service order, that is: ..... CFA

The present bond will enter into force and take effect upon reception of respective shares of this advance in the accounts of ..... [owner] open in the bank .....under the N°.....

It will remain in force until the advance is repaid in accordance with the procedure laid down by the GAC. However, the amount of the bond will be reduced proportionately to the reimbursement of the advance in proportion as the reimbursement.

The law and jurisdiction applicable to the guarantee are those of the Republic of Cameroon.

Signed and authenticated by the bank

at..... on the.....

[Signature of the bank]

Annex 6: Model of guarantee retention bond

Bank:
Reference of bond: No.....
Addressed to the City Mayor of Bamenda City Council, hereinafter referred to as "the Contracting Authority"

Considering that..... [*name and address of Contractor*], herein designated "the Contractor " has undertaken, in the execution of the Contract designated "the Contract" to realize the **rehabilitationof the Finance-Junction- Veterinary Junction- City Chemist- Hospital Round-about – T-Junction roads in Bamenda City.**Considering that it is stipulated in the contract that the guarantee retention fixed at [*percentage less than 10% to be specified*] of the amount to the Contract can be replaced by a solidary bond,

Considering that we have agreed to give the Contractor such bond;

We..... [*name and address of bank*]

represented by..... [*name of signatories*], and herein referred to as "the bank",

Consequently, we affirm by the present that we stand surety for and responsible toward the Contracting Authority, in the name of the contractor, for a maximum amount of ..... [*in figures and letters*], corresponding to [percentage less than 10% to be specified] of the amount of the contract.

And we guarantee the payment to the Contracting Authority, in a maximum time limit of eight (8) weeks, on his simple written request declaring that the contractor has not honoured his contractual obligations or he is found debtor of the Contracting Authority in the framework of the contract modified where there is by its addendum, without deferring the payment nor bringing up contestation for whatever motive, all sum(s) in the limit of the amount equal to [*percentage less than 10% to be specified*] of the accrued amount of the works figuring in the final bill, without that the Contracting Authority has to prove or to give reasons no motif of his request for the amount of the sum indicated above.

We agree that no change or additive or any other modification to the contract shall relieve us of any obligation regarding us in virtue of the present guarantee and we derogate by the present to the notification of any modification, additive or change.

The present bond comes into effect as from its signature. It will be liberated in a time limit of thirty (30) days as from the date of the final reception of works, and on release delivered by the Contracting Authority.

Any request for payment formulated by the Contracting Authority in the framework of the present bond must be made by registered letter with acknowledgement of receipt, reaching the bank during the period of validity of the present engagement.

The present bond is subject for its interpretation and its execution under Cameroonian law. The Cameroonian courts shall be the only competent to statue on all that which concern the following engagement and its aftermath.

Signed and authenticated by the bank

at..... on the.....

[Signature of the bank]

Annex 7: Provisional planning of works

SN	DESIGNATION	UNIT	QTY	OUYPUT	MONTH 1				MONTH 2				MONTH 3				MONTH 4			
					W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4
100	**PRELIMINARY WORKS**																			
101	Site Installation	LS	1																	
102	Mobilization and demobilization of equipment	LS	1																	
103	Performance program	LS	1																	
200	**PREPARATORY WORKS**																			
201	Scarification, grading and compacting of existing road surface	m^2	20400																	
202	Cleaning of gutters	ml	1400																	
300	**ROADWAY**																			
301	Construction of base course with good laterite	m^3	3060																	
302	Impregnation of base course with 0/1 bitumen	m^2	20400																	
303	Two coats surface dressing for the run-way	m^2	20400																	

Document n° 11: Banking institutions and financial organizations authorized to issue bonds in the framework of public contracts

List of Banking institutions and financial organizations

I. BANKS

1. Afriland First Bank
2. BanqueAtlantique
3. Banque Gabonaise pour le Financement International (BGFI BANK)
4. Banque International du Cameroun pour l'Epargne et le Crédit (BICEC)
5. CITI Bank
6. Commercial Bank of Cameroon (CBC)
7. Ecobank
8. National Financial Credit Bank
9. Société Camerounaise de Banque au Cameroun
10. Société Générale de Banque au Cameroun
11. Standard Chartered Bank Cameroon
12. Union Bank of Cameroon
13. United Bank for Africa.

II. Insurancecompanies

14. ChanasInsurance;
15. Activa Insurance
16. ZenitheInsurance

Document n° 12: Marking Scheme

See the Special Regulations of the Invitation to Tender (SRIT)

Annex/Graphical documents