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REPUBLIC OF CAMEROON
Peace-Work-Fatherland

NORTH-WEST REGIONAL ASSEMBLY

REGIONAL EXECUTIVE COUNCIL

PEACE-JUSTICE-UNITY-HARD WORK- SOLIDARITY

REPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie

ASSEMBLEE REGIONALE DU NORD-OUEST

CONSEIL EXECUTIF REGIONAL

PAIX-JUSTICE-UNITE-TRAVAIL-SOLIDARITE

OPEN NATIONAL INVITATION TO TENDER

TENDER FILE

PROJECT OWNER:
THE PRESIDENT OF THE NORTH WEST REGIONAL ASSEMBLY

CONTRACTING AUTHORITY:
THE PRESIDENT OF THE NORTH WEST REGIONAL ASSEMBLY

TENDER BOARD:
NORTH WEST REGIONAL ASSEMBLY INTERNAL TENDERS BOARD (NWRAITB)

TENDER FILE N°: - - 0 0 1 /ONIT/NWRA/ITB/2024 OF 2 5 JAN 2024
FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE

FUNDING: BIP 2024
IMPUTATION:

FINANCIAL YEAR 2024

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Document N°. 1

TENDER NOTICE

REPUBLIC OF CAMEROON
Peace-Work-Fatherland

NORTH-WEST REGIONAL ASSEMBLY

REGIONAL EXECUTIVE ASSEMBLY

PEACE-JUSTICE-UNITY-HARD WORK- SOLIDARITY

REPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie

ASSEMBLEE REGIONALE DU NORD-OUEST

CONSEIL EXECUTIF REGIONAL

PAIX-JUSTICE-UNITE-TRAVAIL-SOLIDARITE

TENDER NOTICE

OPEN NATIONAL INVITATION TO TENDER N°- 001 /ONIT/NWRA/ITB/2024 OF 25 JAN 2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE

Financing: Public Investment Budget - 2024 assigned to the North West Regional Assembly.

1. **Subject of the Invitation to Tender:**

Within the framework of the 2024 Public Investment Budget assigned to the North West Regional Assembly, The President of the North West Regional Assembly, Contracting Authority, hereby launches an Open National Invitation to tender **for the Construction of an Emergency Centre at the Regional Hospital Annex Nkambe.**

2. **Nature of work:**

Work to be done consists of

Lot 1: Preliminary works
Lot 2: Earthworks - Roads and Other Networks (VRD)
Lot 3: Major work
Lot 4: Roof Works
Lot 5: Flooring/Tiling
Lot 6: Wood joinery/ Metal joinery – Locksmith
Lot 7: Aluminum joinery
Lot 8: Painting
Lot 9: Electricity - High currents - Low current - Air conditioning - Ventilation
Lot 10: Sanitary & plumbing

3. **Execution deadline**

The maximum deadline provided by the Contracting Authority for the execution of the works which are the subject of this Invitation to tender is **Six (06) Months** from the date of notification to start work.

4. **Allotment**

The works are in a single lot.

5. **Estimated cost**

The estimated cost after preliminary studies **is Four Hundred and Ninety Two Million Two Hundred and One Thousand Six Hundred and Thirty Seven (492,201,637) FCFA**

6. **Participation and origin**

Participation to this Invitation to tender is opened under the same conditions to all Cameroonian companies and business persons that have proven experience in the field of building construction and provided they are in compliance with the Cameroonian laws.

7. **Financing**

Works which are the subject of this Invitation to Tender shall be financed by the 2024 Public Investment Budget assigned to the North West Regional Assembly.

8. **Bid bond**

Each bidder must include in his administrative documents, a bid bond issued by a first-rate banking establishment or an insurance company approved by the Ministry in charge of finance and

PRESIDENT

whose list is found in document No. 12 of the Tender File, of an amount of **Nine Million Eight Hundred and Forty Five Thousand (9,845,000) Francs CFA** and valid for thirty (30) days beyond the date of validity of bids.

9. Consultation of Tender File:

The file may be consulted during working hours at **The Services of the Director of General Affaires of the North West Regional Assembly (Tel N° 673007649/233360092)**, as soon as this notice is published.

10. Acquisition of Tender File:

The file may be obtained from the **Services of the Director of General Affaires of the North West Regional Assembly (Tel N° 673007649)**, as soon as this notice is published against payment of the sum of **One Hundred and Ninety Eight Thousand Five Hundred (198,500)** CFA Francs, payable at the Treasury of the North West Regional Assembly (Block B), representing the cost of purchasing the Tender File.

11. Submission of bids:

Each offer drafted in English or French in Seven (7) copies including One (1) original and Six (6) copies marked as such, should reach the **Services of the Director of General Affaires of the North West Regional Assembly (Tel N° 673007649/233360092)**, not later than 27 FEV 2024 **at 10:00am noon** local time and should carry the inscription:

<< OPEN NATIONAL INVITATION TO TENDER
N°- 001 / ONIT/NWRA/ITB/2024 OF 5 JAN 2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE>>
"To be open only during the bid-opening session"

12. Admissibility of bids

Upon penalty of being rejected, only originals or certified true copies signed by the issuing service or administrative authorities (Senior Divisional Officer, Divisional Officers....) must imperatively be produced in accordance with the Special Regulations of the Invitation to Tender.
They must obligatorily not be older than three (3) months 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 rejected. This refers especially to the absence of a bid bond issued by a first-rate bank or insurance establishment approved by the Minister in charge of Finance.

13. Opening of bids:

The bids shall be open in a single phase. The opening of the administrative documents, the Technical and Financial offers will take place on the 27 FEV 2024 **at 11.00 am** local time, in the conference hall of the Internal Tenders Board, by its competent members. Only bidders may attend or be represented by duly mandated persons of their choice and having a good knowledge of their files.

14. Evaluation criteria

The bids shall be evaluated according to the main criteria as follows:

A. <u>Eliminatory criteria</u>

1. Absence or non-conformity of an element in the administrative file non regularized within 48 hours after opening of bids
2. Execution deadline higher than prescribed in the Tender File;
3. False declaration or falsified documents;
4. Absence or insufficient bid bond at the opening of the bids;
5. A bid with the external envelope carrying a sign leading to the identification of the bidder;
6. Incomplete financial file;

7. Non respect of **75%** of essential criteria;
8. Change of a quantity or unit in the financial file;
9. Omission of a Sub Unit price in the financial file;
10. Submission of insufficient number of bids or the lake of the original copy of bids;
11. Financial capacity of the bidder less than Two Hundred and Fifty Million (250,000,000) Francs CFA;
12. Average annual turnover of the bidder for the past five years (2019-2023) less than 250,000,000 Francs CFA
13. Suspended by MINMAP for 2024.

B. <u>Essential criteria</u>

1- General presentation of the bids;
2- Financial capacity;
3- References of the company in similar works visaed by the competent authority;
4- Quality of the personnel;
5- Technical organization of the works;
6- Safety measures on the site;
7- Logistics;
8- Attestation of site visit duly signed on honour by the bidder and report of site visit with pictures;
9- Special Technical Clauses initialed on all the pages, signed and dated on the last page;
10- Special Administrative Clauses completed and initialed on all the pages, signed and dated at the last page.

15. Award

The evaluation shall be done in a binary way (**Yes**) or (**No**) with an acceptable minimum score of **75%** of the essential criteria taken in account.

The Contract shall be awarded to the bidder who would have proposed the offer with the lowest amount, in conformity with the regulations of the Tender Documents and having satisfied **100%** of the eliminatory criteria and at least **75%** of the essential criteria.

16. Validity of bids

Bidders shall remain committed to their offers for **Ninety (90) days** from the deadline set for the submission of tenders.

17. Complementary information

Complementary technical information may be obtained during working hours from the **Services of the Director of General Affaires of the North West Regional Assembly (Tel N° 673007649/233360092).**

Done at Bamenda on 25 JAN 2024

THE PRESIDENT OF THE REGIONAL ASSEMBLY
(Contracting Authority)

Copies:
- ARMP BAMENDA
- RD/MINMAP/NW
- President ITB/NWRA
- Notice Board
- File/archive

REPUBLIC OF CAMEROON
Peace-Work-Fatherland

NORTH-WEST REGIONAL ASSEMBLY

REGIONAL EXECUTIVE COUNCIL

PEACE-JUSTICE-UNITY-HARD WORK- SOLIDARITY

REPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie

ASSEMBLEE REGIONALE DU NORD-OUEST

CONSEIL EXECUTIF REGIONAL

PAIX-JUSTICE-UNITE-TRAVAIL-SOLIDARITE

AVIS D'APPEL D'OFFRES

APPEL D'OFFRES NATIONAL OUVERT

N°- 001 /AONO/ARNO/CIPM/2024 DU 25 JAN 2024 POUR LA CONSTRUCTION D'UN CENTRE D'URGENCE À L'ANNEXE DE L'HÔPITAL RÉGIONAL DE NKAMBE

Financement : Budget d'Investissement Public 2024 alloué à l'Assemble Régional de Nord-Ouest.

1. Objet de l'Appel d'Offre

Dans le cadre de l'exercice budgétaire 2024 alloué à l'Assemble Régional de Nord-Ouest, le Président de l'Assemblée Régionale du Nord-Ouest, Autorité Contractante lance un Appel d'Offres National Ouvert **pour la construction d'un Centre d'Urgence à l'Annexe de l'Hôpital Régional de Nkambe**

2. Consistance des travaux

Les travaux comprennent notamment :

Lot 1 : Travaux préliminaires
Lot 2 : Terrassements - Voiries et Autres Réseaux (VRD)
Lot 3 : Travaux majeurs
Lot 4 : Travaux de toiture
Lot 5 : Sol/Carrelage
Lot 6 : Menuiserie Bois/ Menuiserie Métal – Serrurier
Lot 7 : Menuiserie aluminium
Lot 8 : Peinture
Lot 9 : Électricité – Courants forts – Courants faibles – Climatisation – Ventilation
Lot 10 : Sanitaire & plomberie

3. Délais d'exécution

Le délai maximum prévu le Maître d'Ouvrage Délégué pour la réalisation des travaux objet du présent appel d'offres est de **Six (06) mois** à compter de la date de notification pour commencer les travaux.

4. Allotissement

Le travail est ci-après défini à un (01) lot

5. Coût prévisionnel

Le coût prévisionnel de l'opération à l'issue des études préalables est de **Quatre cent quatre-vingt-douze millions deux cent un mille six cent trente-sept (492,201,637) FCFA TTC**

6. Participation et origine

La participation à cette consultation est ouverte aux entreprises de droit camerounais.

7. Financement

Les travaux objet du présent appel d'offres sont financés par le Budget d'Investissement Publics du Cameroun de l'exercice 2024 alloué à l'Assemble Régional de Nord-Ouest.

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 dans la pièce 12 du DAO, d'un montant de **Neuf millions huit cent quarante-cinq mille (9,845,000)FCFA** et valable pendant trente (30) jours au-delà de la date originale de validité des

offres

9. Consultation du Dossier d'Appel d'Offres

Le Dossier d'Appel d'Offres peut être consulté et obtenu aux heures ouvrables aux **services de Directeur d'Affaire General à l'Assemble Régional de Nord-Ouest (Tel N° 673007649/233360092)** dès Publication du présent avis.

10. Acquisition du Dossier d'Appel d'Offres

Le dossier peut être obtenu aux heures ouvrables auprès Publication du présent avis aux **Services de Directeur d'Affaire General à l'Assemble Régional de Nord-Ouest (Tel N° 673007649/233360092),** contre présentation d'une quittance de versement au payable au trésor d'Assemble Régional de Nord-Ouest de la somme non remboursable de **Cent quatre-vingt-dix-huit mille cinq cents (198,500) Francs CFA.**

11. Remise des offres

Chaque offre rédigée en français ou en anglais en sept (07) exemplaires dont un (01) original et six (06) copies marquées comme telles, devra parvenir contre récépissé au **Services de Directeur d'Affaire General à l'Assemble Régional de Nord-Ouest(Tel N° 673007649/233360092),** au plus tard le 27 FEV 2024 **à 10 h 00,** heure locale et devra porter la mention suivante:

«APPEL D'OFFRES NATIONAL OUVERT N°- 001 / AONO/ARNO/CIPM/2024 DU 25 JAN 2024 POUR LA CONSTRUCTION D'UN CENTRE D'URGENCE À L'ANNEXE DE L'HÔPITAL RÉGIONAL DE NKAMBE»
«A 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,...), 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. Notamment l'absence de la caution de soumission délivrée par une banque ou assurance de premier ordre agréée par le Ministère chargé des Finances.

13. Ouverture des plis

L'ouverture des plis se fera en un temps. L'ouverture des pièces administratives et des offres techniques et financières aura lieu **le** 27 FEV 2024 **à 11h 00,** heure locale, dans la salle de conférence de commission Interne de Passation de marche public de l'Assemblée Régionale du Nord-Ouest siégeant en présence des soumissionnaires ou de leurs représentants dûment mandatés et ayant une parfaite connaissance du dossier.

14. Critères d'évaluation

Les offres seront évaluées selon les principaux critères suivants :

A - Critères éliminatoires

Il s'agit notamment:

1. Absence ou non-conformité d'un élément au dossier administratif non régularisé dans les 48 heures suivant l'ouverture des plis
2. Délai d'exécution supérieur à celui prescrit dans le Dossier d'Appel d'Offres ;
3. Fausse déclaration ou documents falsifiés ;
4. Absence ou insuffisance de cautionnement de soumission à l'ouverture des plis ;
5. Une offre dont l'enveloppe extérieure porte une enseigne permettant l'identification de l'enchérisseur ;
6. Dossier financier incomplet ;
7. Non respect de 75% des critères essentiels ;
8. Changement d'une quantité ou d'une unité dans le dossier financier ;

9. Omission d'un prix de sous-unité dans le dossier financier ;
10. Présentation d'un nombre insuffisant d'offres ou manque de la copie originale des offres ;
11. Capacité financière du soumissionnaire inférieure à Deux cent cinquante millions (250.000.000) de Francs CFA ;
12. Chiffre d'affaires annuel moyen du soumissionnaire sur les cinq dernières années (2019-2023) inférieur à 250.000.000 Francs CFA
13. Suspendu par le MINMAP pour 2024.

B - Critères essentiels

Les critères relatifs à la qualification des candidats porteront à titre indicatif sur :

1- Présentation générale de l'offre ;
2- Capacité financière ;
3- Références de l'entreprise dans les réalisations similaires ;
4- Qualité du personnel ;
5- Organisation technique des travaux ;
6- Sécurité au chantier ;
7- Moyens logistiques ;
8- Attestations de visite de site signée sur l'honneur par le soumissionnaire et rapport de visite du site avec photos ;
9- Cahier des Clauses Techniques Particulières paraphé à chaque page, signe et date a la denier page ;
10- Cahier des Clauses Administratives Particulières complété et paraphé à chaque page, signe et date a le denier page.

Les critères essentiels sont soumis à des minima dont le détail est donné dans le Règlement Particulier de l'Appel d'Offres (RPAO).

15. Attribution

Cette évaluation se fera de manière purement positive (oui) ou négative (non) avec un minimum acceptable d'au moins **75%** de l'ensemble des critères essentiels pris en compte.

Le marché sera attribué au soumissionnaire qui aura proposé l'offre la moins disant, conforme pour l'essentiel aux prescriptions du Dossier d'Appel d'Offres, ayant satisfait à **100%** des critères éliminatoires et au moins **75%** des critères essentiels.

16. Durée de validité des offres

Les soumissionnaires restent engagés par leur offre pendant Quatre-vingt-dix (**90**) **jours** à partir de la date limite fixée pour la remise des offres.

17. Renseignements complémentaires

Les renseignements complémentaires d'ordre technique peuvent être obtenus auprès des services **de Directeur d'Affaire General à l'Assemble Régional de Nord-Ouest (Tel N° 673007649/233360092).**

Fait à Bamenda, le 25 JAN 2024

Le Président de l'Assemblée Régionale du Nord-Ouest
(Autorité Contractante)

Pr. Fru Joseph Ngwafo III
President, North West Regional Assembly

Copie :

- ARMP
- DR/MINMAP/NW
- Présidents CIPM
- Affichage
- Chrono/archive

Document N°. 2

GENERAL REGULATIONS OF THE INVITATION TO TENDER

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A. General

Article 1: Scope of the tender

1.1 The Contracting Authority, The President of the North West Regional Assembly hereby launches an Open National Invitation to Tender **N° ___/ONIT/NWRA/ITB/2024 of __/__/2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE.**

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

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

Article 2: Financing

The source of financing of the works forming the subject of this Invitation to Tender shall be specifie in the Special Regulations.

Article 3: Fraud and corruption

3.1 The Contracting Authority requires of bidders and Contractors the strict respect of rules o 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 i view of influencing the action of a Public official during the award or execution of Contract;

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

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

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

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

3.2 The Minister Delegate at the Presidency in charge of Public Contracts may, as precaution, take a decision of exclusion from bidding for a period not exceeding two (2) yea against any bidder found guilty of influence peddling, of conflicts of interest, insider tradin fraud, corruption or production of non-genuine documents in the bid, without prejudice criminal proceedings that may be brought against him

Article 4: Candidates allowed to compete

4.1 If the Invitation to Tender is OPEN, consultation is addressed to all candidates retained aft a pre-qualification procedure.

4.2 Generally, the Invitation to Tender is addressed to all entrepreneurs, subject to the followi provisions:

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 th bidder) must not be in a situation of conflict of interest, subject to disqualification. A bidd 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 enterpris which provided consultancy services for the conception, preparation of specifications ar other documents used within the scope of Contracts awarded for this Invitation to Tende or

ii) Presents more than one bid within the context of Invitation to Tender, except authorise variants according to article 17, where need be; meanwhile, this does not prevent th participation of sub-Contractors in more than one bid.

iii) The Contracting Authority or Project Owner has financial interests in the capital in a wa 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 demonstra that it is (i) legally and financially autonomous, (ii) managed according to commerci laws and (iii) not under the direct supervisory authority of the Contracting Authority Project Owner.

Article 5: Building materials, materials, supplies, equipment and authorised services

5.1 Building materials, the Contractor's materials, supplies, equipment and services forming th subject of this Contract must originate from countries meeting the criteria of origin define in the Special Regulations of the Invitation to Tender and all expenditure done within th context of the Contract shall be limited to the said building materials, materials, supplie equipment and services.

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

Article 6: Qualification of 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 pr qualification which may have changed in the case where the candidates took part in pr qualification) requested of bidders in the Special Regulations of the Invitation to Tender, 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;
(v) Availability of indispensable equipment.

following conditions:

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

(b)The bid and the Contract must be signed in a way that is binding on all members of th group;

(c) The nature of the group (joint or several) must be specified in the Special Regulations an 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 th undertakings vis à vis the Project Owner and Contracting Authority with regard to th execution of the Contract;

(e) In case of joint co-Contracting, the co-Contractors shall share the sums which are paid by th Project Owner into a single account. On the other hand, each undertaking is paid into i own account by the Project Owner where it is joint co-Contracting.

6.3 Bidders must equally present sufficiently detailed proposals to demonstrate that they comp with the technical specifications and execution time-limits set in the Special Regulations of th Invitation to Tender.

6.4 Bidders requesting to benefit from the margin of preference must furnish all the necessar information to prove that they satisfy the eligibility criteria set in article 33 of the Gener Regulations of the Invitation to Tender.

Article 7: Visit of works site

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

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

7.3 The Project Owner may organise a visit of the site of the works during the preparato meeting to establishing the bids mentioned in article 19 of the General Regulations of th 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 consultati procedure of Contractors and specifies the terms of the Contract. Besides the addendu (addenda) published in accordance with article 10 of the General Regulations of the Invitati to Tender, it includes the following documents:

Document No. 1. The Tender Notice;
Document No. 2. The General Regulations of the Invitation to Tender;
Document No. 3. The Special Regulations of the Invitation to Tender;
Document No. 4. The Special Administrative Conditions;
Document No. 5. The Special Technical Conditions;
Document No. 6. The schedule of unit prices;

Document No. 8. The sub details of unit prices;
Document No. 9. Model documents of the Contract:

a. The execution schedule;
b. Model of forms presenting the equipment, personnel and references;
c. Model bidding letter;
d. Model bid bond;
e. Model final bond;
f. Model of bond of start-off advance;
g. Model of guarantee in replacement of the retention fund;
h. Model Contract;

Document N°. 10. Models to be used by bidders;

a. Model Contract;

Document N°. 11. Justifications of preliminary studies; to be filled by the Project Owner o Delegated Project Owner;

Document N°. 12. List of first grade banking establishments or financial institutions approve by the Minister in charge of Finance authorised to issue bonds for Public Contracts t be inserted by the Contracting Authority.

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

Article 9: Clarifications on the Tender File and complaints

9.1 Any bidder who wants to obtain clarifications on the Tender File may request them from th Contracting Authority in writing or by electronic mail (fax or e-mail) at the Contracting Authority address indicated in the Special Regulations of the Invitation to Tender and send a copy to th Project Owner. The Contracting Authority replies in writing to any request for clarification receive 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 th 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 candidat and the opening of bids, any bidder who feels aggrieved in the Public Contracts award procedu 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 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 forwarde to MINMAP and the body in charge of the regulation of Public Contracts.

Article 10: Amendment of the Tender File

10.1 The Contracting Authority may at any moment, prior to the deadline for the submission of bi and for any reason, be it at his initiative or in reply to a request for clarification formulated by 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 w article 8.1 of the General Regulations of the Invitation to Tender and must be communicated 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 preparati of their bids, the Contracting Authority may postpone as is necessary, the deadline for the submissi

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 t
Contracting Authority and the Project Owner shall in no case be responsible for these costs nor pa
for them whatever the evolution or outcome of the Invitation to Tender procedure.

Article 12: Language of bid

The bid as well as any correspondence and any document exchanged between the bidder and t
Contracting Authority shall be written in English or French. Complementary documents and the for
provided by the bidder may be written in another language on condition that a precise translati
into either English or French of the passages concerning the bid is included; in which case for reaso
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 Speci
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 Gener
Regulations of the Invitation to Tender;

iii) the written confirmation empowering the signatory of the bid to commit the bidder,
accordance with the provisions of article 6(1) the General Regulations of Invitation
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 qualificati
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 t
technical bid of the bidders especially: a methodological statement on an analysis of the wo
and specifying the organisation and programme which the bidder intends to put in place
use to execute the works (installations, schedule, Quality Assurance Plan (QAP), su
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 docume
relating to the Contract, namely:

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

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, stampe 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 t the provisions of article 17(2) of the General Regulations of the Invitation to Tender concerning th other possible forms of guarantees.

13.2 If in accordance with the provisions of the Special Regulations of the Invitation to Tende the bidders present bids for several lots of the same Invitation to Tender, they coul 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 th works described in article 1.1 of the General Regulations of the Invitation to Tender, on th basis of the price schedule and the detailed bill of quantities and estimates presented b the bidder .

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

14.3 Subject to contrary provisions provided for in the Special Regulations and in the Speci Administrative Conditions, all dues, taxes and fees payable by the bidder on grounds the Contract or on any other ground, thirty (30) days prior to the submission of the bid 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 establishme of the initial price, as well as the price revision/updating conditions for the said price mu be specified. This is with the understanding that any Contract of duration less than one (year shall not be subject to price revision.

14.5 All unit prices must be justified by sub-details established in accordance with the structu 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 t provisions of either Option A or Option B below, the applicable option being that retained 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 a 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 comm expenditures in other currencies for the execution of the works shall indicate in the ann to the bid the percentage(s) of the amount of the bid necessary to cover the needs foreign currencies, without exceeding the maximum of the three currencies of memb countries of the funding institution of the Contract.

be specified by the bidder in an annex to the bid in compliance with the specifications the Special Regulations. These rates shall be applied for any payment within t framework of the Contract so that the retained bidder does not bear any change in t exchange rate.

15.3 Option B: The amount of the bid shall be directly made in the national and foreign curren 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 quantiti and estimates in the following manner:

(a) The prices of inputs necessary for the works which the bidder intends to procure in t Contracting Authority's country shall be in currency of the Contracting Authority's count specified in the Special Regulations and called "national currency";

(a) The prices of inputs necessary for works which bidder intends to procure out of t Contracting Authority's country shall be in the currency of the country of origin of t bidder or of the currency of an eligible member country widely used in internation trade.

15.4 The Contracting Authority may request the bidders to explain the needs in national a foreign currencies and to justify that the amounts included in the unit and total prices a indicated in annex to the bids are reasonable; to this end, a detailed statement of their nee 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 Contract may be revised by mutual agreement between the Contracting Authority and t entrepreneur in a way as take account of any modification in the foreign currency needs with 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 submission of the bids fixed by the Contracting Authority, in application of article 22 of t Special Regulations. A bid valid for a shorter period shall be rejected by the Contracti Authority or Contracting Authority as not being in compliance.

16.2 Under exceptional circumstances, the Contracting Authority may seek the approval of bidders extend the validity time-limit. The request and the responses that will be given shall be in writi (or by fax). The validity of the bid bond provided for in article 17 of the General Regulatio shall equally be extended for a corresponding duration. A bidder may refuse to extend t validity of his bid without losing his bid bond. A bidder who consents to an extension shall not 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 bids is extended by more than sixty (60) days, the amounts payable to the bidder retained sh be updated by application of the related formula featuring in the request for extension that t Contracting Authority addressed to bidders.

The updating period shall run from the date of overrun of sixty (60) days to the date of notificati of the Contract or the Administrative Order for start of execution of works by the retained bidd as specified in the Special Administrative Conditions. The effect of updating shall not be taken in 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 the amount specified in the Special Regulations and which bid bond shall be a full part of bid.

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.

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 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.

Contracting Authority at least one week before the meeting. The Contracting Authority may re reply to questions received too late. In this case, the questions and answers shall be transmitte 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 give including questions prepared after the meeting, shall be forwarded immediately to everyon who bought the Tender File. Any modification of documents of the Tender File listed in article of the General Regulations which may prove to be necessary at the end of the preparator meeting shall be done by the Contracting Authority by publishing an addendum in accordanc with the provisions of article 10 of the General Regulations and not through the minutes of th preparatory meeting.

19.5 The fact that a bidder does not attend a preparatory meeting for the establishment of bids sho 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 th General Regulations in a volume clearly indicated "**ORIGINAL**". In addition, the bidder sho submit the number required in the General Regulations, bearing "**COPY**". In case of discrepanc 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 b accepted in the case of copies) and shall be signed by the person(s) duly empowered to sign o behalf of the bidder, in accordance with article 6(1a) or 6(2c) of the General Regulations, as th case may be. All the pages of the bid containing alterations or changes must be initialled by th signatory (ies) of the bid.

20.3 The bid shall be bear no modification, suppression or alteration unless such corrections a 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 (intern envelopes) by marking on these envelopes "**ORIGINAL**" and "**COPY**", as the case may be. Th envelopes shall then be placed in another envelope which will equally be sealed but which w 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 Speci Regulations;

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

21.3 The internal envelopes should equally carry the name and address of the bidder in a way as enable the Contracting Authority return the sealed bid if it is late in accordance with article 2 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(above, the Contracting Authority shall not be responsible if the bid is misplaced or OPE 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(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 the bids by publishing an addendum in accordance with the provisions of article 10 of t General Regulations. In this case, all the rights and obligations of the Contracting Authority a 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 accordance with article 22 of the General Regulations shall be declared late and consequentl 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 writte notification of the modification or withdrawal is received by the Contracting Authority prior the end of the time-limit prescribed for the submission of the bids. The said notification must b signed by an authorised representative in application of article 20(2) of the Gener Regulations. The modification or the corresponding replacement bid must be attached to th written notification. As the case may be, the envelopes must bear the inscriptio **"WITHDRAWAL"**, and **"REPLACEMENT BID"** or **"MODIFICATION"**.

24.2 Notification of modification, replacement or withdrawal of the bid by the bidder should b prepared, sealed, marked and forwarded in accordance with the provisions of article 21 of th General Regulations. Withdrawal may equally be notified by telex but should in this case b confirmed by a duly signed written notification whose date, post mark being authentic, shall n 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 b returned to them un-open.

24.4 No bid may be withdrawn during the interval between the submission of bids and the expiry the validity of bids specified by the model tender. The withdrawal of a bid by a bidder durin this interval may lead to the confiscation of the bid bond in accordance with the provisions 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 regional Tenders Board shall OPEN the envelopes in single or double phases and in th presence of the representatives of bidders who wish to attend at the date, time and addre specified in the Special Regulations. Representatives of bidders shall sign a register attesting their presence.

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

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

are complete, if the required guarantees are furnished, if the documents were correctly signe 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 th conditions fixed in the Tender File based on the content without recourse to external elements o proof.

28.3 A bid that complies with the Tender File shall essentially be a bid that respects all the term conditions and specifications of the Tender File, without substantial divergence or reservation. 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 Contractin Authority or his obligations in relation to the Contract;
iii) Whose correction would unjustly affect the competitiveness of the other bidders wh 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 an shall not subsequently be rendered in compliance.

28.5 The Contracting Authority reserves the right to accept or reject any modification, divergence o reservation. Modifications, divergences, variants and other factors which are beyond th 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 havin submitted a bid substantially in compliance with the provisions of the Tender File, fulfils th qualification criteria stipulated in article 6 of the Special Regulations. It is essential to avo any arbitrariness in determining qualification.

Article 30: Correction of errors

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

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

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

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

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

bot, 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 conve the prices of bids expressed in various currencies into those in which the bid is payable in CF francs.

31.2 The conversion shall be done using the selling rate fixed by the Bank of Central African State (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 th 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 th 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 th General Regulations;

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

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

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

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

f) If need be, in accordance with the provisions of article 13(2) of the General Regulations ar the Special Regulations by applying the rebates offered by the bidder for the award 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 Regulatio and the Technical Specifications, the proposed technical variants, if they are permitte shall be evaluated on their own merit and independently of the fact that the bidd offered or not a price for the technical solution specified by the Contracting Authority in th Special Regulations.

32.3 The estimated effect of price revision formulae featuring in the GAC and SAC applied durir 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 relation to the estimates of the Project Owner for the works to be executed in this Contract, th Tenders Board may, from the sub-details of prices furnished by the bidder for any element or all th elements of the bill of quantities and estimates, verify if these prices are compatible with th construction methods and proposed calendar. In the case where the justifications presented by th bidder are not satisfactory, the Contracting Authority may reject the bid after the technical opini 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 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 judg essentially in compliance with the Tender File and who has the required technical and financ

including, where necessary, proposed rebates

34.2 If, according to article 13(2) of the General Regulations, the Invitation to Tender comprise several lots, the lowest bid shall be determined by evaluating this Contract with other lots to b awarded concurrently, by taking into account the rebates offered by the bidders in the case of mor than one lot.

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

Article 35: The right by the Contracting Authority to declare an Invitation to Tender unsuccessfu or cancel a procedure

The Contracting Authority reserves the right to cancel a procedure of Invitation to Tender after th authorisation of the Minister Delegate at the Presidency in charge of Public Contracts where the bid have been OPEN or to declare an Invitation to Tender unsuccessful after the advice of the competen 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 Authorit shall notify the preferred bidder by telecopy confirmed by registered mail or by any other mean that his bid was retained. This letter will indicate the amount the Project Owner will pay the Contracto 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, upo request addressed to it within a maximum deadline of five (5) days after Publication of the awar results, the Independent Observer's report as well as the minutes of the award session of the relate 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 sho be destroyed, without any claims for compensation being entertained. Only the copy destined for th 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 th body in charge of the regulation of Public Contracts, the Contracting Authority and the chairperson the Tenders Board concerned.
It must take place within a maximum deadline of five (5) working days after the Publication of th results.

Article 38: Signing of the Contract

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

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

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

Article 39: Final Bond

39.1 Within twenty (20) days of the notification by the Contracting Authority, the Contractor sha furnish the Project Owner 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 o all taxes, may be replaced by a guarantee from a banking establishment approved according to th instruments in force with the Project Owner as beneficiary or by a joint or several guarantee.

39.3 Small and medium-sized enterprises (SME) constituted of national capital and managed b nationals may, in lieu of the guarantee, provide a statutory lien or a bond issued by a bankin 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 th termination of the Contract under the terms laid down in the General Administrativ Conditions.

Document N°. 3

SPECIAL REGULATIONS OF THE INVITATION TO TENDER

References of the General regulations	General
1	**Definition of works:** Construction of an Emergency Centre at the Regional Hospital Annex Nkambe. **Name and address of the Contracting Authority:** The President of the North West Regional Assembly **Reference of Invitation to Tender:** N° ___/ONIT/NWRA/ITB /2024 of ___/___/2024
2	**Execution deadline: Six (06) Months** from the date of notification to start
3	**Source of financing** Works which are the subject of this Invitation to Tender shall be financed by the 2024 Public Investment Budget assigned to the North West Regional Assembly.
4	**List of pre-qualified candidates:** Not applicable
5	**Origin of building materials, equipment, and supplies:** The materials will generally be from local materials in Cameroon or imported.

6.1 Evaluation criteria

The bids shall be evaluated according to the main criteria as follows:

C. **Eliminatory criteria**

1. Absence or non-conformity of an element in the administrative file non regularize within 48 hours after opening of bids
2. Execution deadline higher than prescribed in the Tender File;
3. False declaration or falsified documents;
4. Absence or insufficient bid bond at the opening of the bids;
5. A bid with the external envelope carrying a sign leading to the identification of the bidder;
6. Incomplete financial file;
7. Non respect of **75%** of essential criteria;
8. Change of a quantity or unit in the financial file;
9. Omission of a Sub Unit price in the financial file;
10. Submission of insufficient number of bids or the lake of the original copy of bids;
11. Financial capacity of the bidder less than Two Hundred and Fifty Million (250,000,000) Francs CFA;
12. Average annual turnover of the bidder for the past five years (from 2018-2022) less than 250,000,000 Francs CFA
13. Suspended by MINMAP for 2024.

D. **Essential criteria**

1- General presentation of the bids;
2- Financial capacity;
3- References of the company in similar achievements visa by the competent administrati authority;
4- Quality of the personnel;
5- Technical organization of the works;
6- Safety measures on the site;
7- Logistics;
8- Attestation of site visit duly signed on honour by the bidder and report of site visit with pictures;

10-Special Administrative Clauses completed and initialed in all the pages, signed and dated at the last page.

The criteria relating to the qualification of candidates could be indicative on the following: The essential criteria are subjected to minima whose detail is given in the Special Tender Regulation (RPAO).

This evaluation will be done in a purely positive way (yes) or negative (no) with a acceptable minimum score of at least 75% of the essential criteria taken in account.

The Contract will be awarded to the bidder who would have proposed the offer with the lowest amount, in conformity with the regulations of the Tender Documents and having satisfied **100%** of the eliminatory criteria and at least **75%** of the essential criteria.

ARTICLE 6: Language of the bids:

The offer like any correspondence and all documents concerning the tender, exchanged between the bidder and the Project Owner will be written in French or English. The complementary documents and the printed forms provided by the Bidder can be written in another language in condition of being accompanied by a precise translation in French or English; in which case and for purposes of interpretation of the offer, the translation will be taken.

PRESENTATION OF THE TENDER

The bids prepared in English or French and in seven (07) copies with one (01) original and six (06) copies marked thus, shall be presented in three (03) volumes as follows:

A) Administrative Documents
B) Technical Documents
C) Financial Documents

5.1 External envelope.

Each bidder shall seal these three (03) envelopes (A, B and C) in one common envelope on which shall be written.

<<OPEN NATIONAL INVITATION TO TENDER
N° ___/ONIT/NWRA/ITB/2024 OF __/__/2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE>>
"TO BE OPEN ONLY DURING THE BID-OPENING SESSION"

N.B: The external envelope should not carry any mark or sign that can lead to the identification of the bidder.

8.2 Internal envelopes

Three (03) internal envelopes must be sealed in an external envelope.

The first internal envelope shall be labeled;

<<ENVELOPE A: ADMINISTRATIVE DOCUMENTS>> and shall contain the administrative documents of the enterprise. These documents shall be original or copies certified by competent authorities not more than three months old.

ADMINISTTRATIVE DOCUMENTS

DOCUMENT N°	DESCRIPTION
A.1	Declaration of intention to tender stamped with the tariff in force (written by the bidder with a fiscal stamp.
A.2	Certified Copy of the Business Registration, not more than three months old.
A.3	Certificate of non-bankruptcy established by the Court of 1st instance or the Chamber of Commerce, Industry and Trade of the place of residence of the bidder, not more than three (03) months.
A.4	Attestation of bank account of the bidder, issued by a first rate-bank approved by the Ministry in charge of Finance. (See list of approved banks on document no 12 of this

A.5	Purchase receipt of Tender File issued by the Treasury of the North West Regional Assembly.
A.6	A bid bond issued by a first rate-financial institution or insurance establishment approve by the Ministry in charge of Finance in conformity with COBAC conditions.
A.7	An attestation of non-exclusion from Public Contracts issued by the Public Contracts Regulatory Board (ARMP)
A.8	An Attestation of the National Social Insurance Fund stating that the bidder has met all h obligations vis a vis the Fund; the attestation valid within the given time.
A.9	A Clearance Certificate (Attestation de conformite fiscal) signed by the chief of Centre o Taxes that the bidder has met all the statutory declarations in issues of taxes in the curre financial year; this certificate should be less than three months old.
A.10	A valid taxpayer's card stamped with the tariff in force.
A.11	Plan of location of the Company signed by the bidder on honour
A.12	Power of attorney if necessary
A.13	Group agreement where applicable
A.14	Special Administrative Clauses completed and initialed on all the pages, signed, dated and stamped on the last page.

The absence or insufficient bid bond will result to the elimination of the offer

The second Internal Envelope shall be labeled **<<ENVELOPE B: TECHNICAL DOCUMENTS>>** an shall contain the following:

N°	DOCUMENTS	OPERATION	AUTHENTIFICATION
B1	List of equipment	The enterprise must list all the equipment to be used including site machines, equipment and small tools to be used. • Dump truck "owned or hired" • Backhoe or loader excavator "owned or hired" • Concrete mixer (350liters) "owned" • Concrete vibrator "owned" • Small compacting cylinder "owned or hired" • Pickups "owned" • Survey equipment (Total station, GPS, rolling wheel etc,) "owned or hired"	Enclose certified copies of registration document for site equipment and vehic (hired or owned) and certif copies of receipt of purch for small tools and le agreements for hi equipment including certif carte grise of the le vehicles or equipment, vehi and tools.
B2	List of personnel	The main personnel shall comprise the following: - **Works Director:** A civil engineer holder of at least a Masters Decree (A Level +5) in civil engineering with at least 10 years of experience in building construction works and must be enrolled in the National Order of Civil Engineers - **Site foreman No 1:** A site foremen being holder of at least BAC+3 in civil engineering and at least 5 years of experience in building construction and public works.	For each personnel, enclos signed & dated CV project titles of p experiences and cost projects executed, attesta of presentation of orig diploma, a certified copy diploma, a certified copy national identity card bea 03 signatures of concerned and an attesta of availability signed by worker showing that he/ shall be available in execution of the project.

		being holder of at least BAC+3 in electrical engineering and at least 5 years of experience in building construction and public works. - **Site foreman No 3**: A site foremen being holder of at least BAC+3 in carpentry or related domain and at least 5 years of experience in building construction and public works. - **Site foreman No 4**: A site foremen being holder of at least BAC+3 in environmental studies or related domain and at least 5 years of experience in building construction and public works. **Other personnel's** Senior Technician or similar of at least 3 years experience in building construction. • 1Geotechnician Be holder of at least Bachelor's Degree in Civil Engineering and a member of a recognised regulatory body of the profession in Cameroon with at least three years of working experience • 1Surveyor • 4 builders • 4 electricians, • 2 carpenters • 2 plumbers with at least A level or equivalent in Plumbing • 2 aluminum/glass workers with at least A Level +2 in Sheet Metal	association of National Orde of a profession should attach an original attestation of belonging to the association. **A "No" for any of this poin above for a personnel will result in the disqualification of that personnel and loose of all the makes for the saic personnel**
B3	Technical Proposal and methodology	This includes: - Organisational chat of the Enterprise and for the execution of the project. - Methodology of execution proposed. - Synchronized Planning of execution of works. - Individual Protection Plan (IPP). - General Plan of Health and Security Plan (PGSSS). - Socio environmental protection plan, - The graphics and details plan of execution, -The plan of supply of materials and mobilization of equipment; - Internal quality control.	Signed and dated by bidder at the end of e document

B4	Sub-contracting and list of sub-contractors	sub-contractors if applicable (material, human and financial means of the sub-contractor).	bidder at the end of eac document
B5	Attestation and report of site visit	Attestation and report of site visit	Dated and signed by th contractor on honour with sit photos.
B6	References of the enterprise	References of the bidder in the domain of building construction and public works within the past ten years. Three (03) public contracts of at least 250,000,000 FCFA all taxes inclusive. Experience in the construction of at least 02 administrative buildings or public buildings of at least 150,000,000 FCFA all taxes inclusive. Experience in the execution of public contracts in the South West and North West Regions within the past five years of at least 01 project with a minimum amount of 50,000,000 FCFA.	Amount of the works, certifie copies of the contracts (1s 2nd and last pages) and fin reception minutes for wor executed before 2023 ar provisional reception minut for projects executed fro 2023.
B7	CCTP visa on each page, signed and dated on the last page	Special Technical Clauses (STC)	Visa on all pages and at t end of the document, t date, signature and stamp the bidder.
B8	Financial capacity	Pre-financing capacity of the bidder of an amount greater than or equal to Two Hundred and Fifty Million (250,000,000) FCFA	The Bidder shall demonstra that it has access to, or h available liquid assets, lir of credit and other financ means (attestation of p financing from a ba recognized by the Ministry Finance where the account the contractor is opene sufficient to meet the p financing capacity of billion.
B9	Declaration of references	Contracts in building constructions and public works received or ongoing within the past ten years irrespective of their amount recapitulated in a table.	Signed by the bidder honour.
B10	Security notice	This document should express the mastery of the security context and measures to be put in place to ensure the management of any insecurity that may result during the works period	Signed by the bidder honour.
B11	Average annual turnover	Minimum Average annual turnover of Two Hundred and Fifty Million (250,000,000) FCFA	a) Average annual turno of Two Hundred and F Million FCFA calculated total certified paym received for contracts progress or comple within the last five years (from 2019)

			copies of past contrac (completed or ongoinç Reception minutes for c completed contracts should b presented.

ENVELOPE C- FINANCIAL FILE

No.	DESIGNATION.
C1	A submission letter, signed, dated and stamped.(see ANNEX 3)
C2	Completed and signed frame work of unit prices.
C3	Signed Bills of quantities and cost estimates indicating the total amount without taxes (HT) and with taxes (TTC)
C4	Sub details of unit prices

- The bidders will use for this purpose the documents and models envisaged in the Tende Documents, subject to the provisions of Article 19.2 of the GAC concerning the other possible forms of bid bond.
- The various parts of the same file must be separated with colour guides in the original as i the copies, so 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 otherwise, thirty (30) days before the deadline for submission of bids will be include the price and the total amount of its bid.
14.4.	The prices of the contract are not revisable.
15.1.	Not relevant
15.2. and 15.3	*Currency reserved for the conversion to a single currency:* The franc CFA. *Source of exchange rate:* The Bank of Central African States (BEAC). *Date of exchange rate:* Not Applicable
	Preparation and submission of bids
16.1.	**Period of validity of bids:** The period of validity of bids shall be Ninety (90) days from the date of submission of
17.1.	**Amount of the bid bond: Nine Million Eight Hundred and Forty Five Thousand (9,845,000) F CFA** and valid for thirty (30) days beyond the original date of the vali of the offer.
19.1.	Venue, date and time of preparatory meeting to the establishment of bids: applicable
20.1.	**Number of copies of the bid which must be filled and sent:** *Seven (7) including one original and six (6) copies.*

21.2.	the Director of General Affaires of the North West Regional Assembly (N°673007649/233360092) not later than .... /.... /2024 at 10:00am and shou carry the following inscription: Number of the invitation to tender: **OPEN NATIONAL INVITATION TO TENDER** **N°..... ONIT/NWRA/ITB/2024 OF THE .....** **FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPIT/ ANNEX NKAMBE** **"TO BE OPEN ONLY DURING THE BID OPENING SESSION"**
22.1.	**Date and time-limit for submission of bids:** **On the _____ 2024 at 10:00 am** local time precisely.
25.1	**Venue, date and time of opening of bids:** The conference hall of the Internal Tender Board situated at North West Regional Assembly Block B; **On the _____ 2024 at 11:00 am,** local time.
	Evaluation and comparison of bids
31.2.	**Currency retained for the conversion into a single currency:** The CFA franc **Source of exchange rate:** Bank of Central African States **Date of exchange rate:** Not applicable
32.2. (e)	**The execution time-limit will be evaluated as follows:** The execution timeframe is no criterion for evaluation.
32.2 (g).	**The method of evaluation of technical variants shall be the following:** Not applicable
33.1.	National bidders shall not benefit from a margin of preference during evaluation.
	Award of the contract
34.1 and 34.2	The contract shall be awarded the bidder whose bid has been judged essentially compliance with the tender file and is evaluated the lowest.
	Final bond
39.1 39.2	The final bond is **5%** of the Contract and will be established according to the mo provided in this Invitation to Tender.

SITE INSTALLATION

Before the commencement of works, the Contractor must be installed on the site by th following:

- The President of the North West Regional Assembly or his representative (Chairman);
- The Contract Engineer, The Regional Delegate MINTP North West or his representative
- The control mission; Secretary;
- The Contract Manager or his representative, The Director of General Affairs of Nort West Regional Assembly;
- The Representative of MINMAP/NW;
- The Commissioner of Health at the North West Regional Assembly;
- The Director of the Regional Hospital Annex Nkambe (Observer).

Document N°. 4

SPECIAL ADMINISTRATIVE CONDITIONS (SAC)

Chapter I: General
Article 1 - Subject of the Contract
Article 2 - Award procedure
Article 3 - Definitions and duties (article 2 of GAC supplemented)
Article 4 - Language, applicable law and regulations
Article 5 - Constituent documents of the Contract (article 4 of GAC)
Article 6 - General applicable instruments
Article 7 - Communication (GAC articles 6 and 10 supplemented)
Article 8 - Administrative Orders (article 8 of GAC supplemented)
Article 9 - Contracts with conditional phases (article 15 of GAC)
Article 10 - Contractor's personnel (article 15 of GAC supplemented)
Chapter II: Financial conditions
Article 11 - Guarantees and bonds (articles 29 and 41 of GAC supplemented)
Article 12 - Amount of Contract (articles 18 and 19 supplemented)
Article 13 - Place and method of payment
Article 14 - Price variation (article 20 of GAC)
Article 15 - Price revision formulas
Article 16 - Price updating formulas (article 21 of GAC)
Article 17 - Work under State supervision (article 22 of GAC supplemented)
Article 18 - Evaluation of works (article 23 supplemented)
Article 19 - Evaluation of supplies (article 24 of GAC) supplemented)
Article 20 - Advances (article 28 of GAC)
Article 21 - Payments for the works (articles 26, 27 and 30 of GAC supplemented)
Article 22 - Interests on overdue payments (article 31 of GAC supplemented)
Article 23 - Penalties for delay (article 32 of GAC supplemented)
Article 24 - Payment in case of a group of enterprises (article 33 of GAC)
Article 25 - Final detailed account (article 35 of GAC)
Article 26 - General detailed account (article 35 of GAC)
Article 27 - Tax and customs schedule (article 36 of GAC)
Article 28 - Stamp duty and registration (article 37 of GAC)
Chapter III: Execution of the works
Article 29 - Nature of works
Article 30 - Obligations of the Project Owner (GAC supplemented)
Article 31 - Execution deadline of Contract (article 38 of GAC)
Article 32 - Roles and responsibilities of the Contractor (article 40 of GAC)
Article 33 - Making available documents and site (article 42 of GAC)
Article 34 - Insurance of structures and civil responsibility (article 45 of GAC)
Article 35 - Documents to be furnished by the Contractor (article 49 supplemented)
Article 36 - Organisation and security of sites (article 50 of GAC)
Article 37 - Implantation of structures (article 52 of GAC)
Article 38 - Sub-Contracting (article 54 of GAC)
Article 39 - Site laboratory and trials (article 55 of GAC)
Article 40 - Site logbook (article 56 of GAC supplemented)
Article 41 - Use of explosives (article 60 of GAC)
Chapter IV: Acceptance
Article 42 - Provisional acceptance (article 67 of GAC)
Article 43 - Documents to be furnished after execution (article 68 of GAC)
Article 44 - Guarantee time-limit (article 70 of GAC)
Article 45 - Final acceptance (article 72 of GAC)
Chapter V: Miscellaneous provisions
Article 46 - Termination of the Contract (article 74 of GAC)
Article 47 - Force majeure (article 75 of GAC)
Article 48 - Differences and disputes (article 79 of GAC)
Article 49 - Drafting and dissemination of this Contract
Article 50 and last: Entry into force of the Contract

Article 1: Subject of Contract

The subject of this Contract shall be the **Construction of an Emergency Centre at th Regional Hospital Annex Nkambe.**

Article 2: Contract award procedure

This Contract is awarded through Open National Invitation to Tender N ___/ONIT/NWRA/ITB/2024 of __/__/2024.

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

3.1 *General definitions (cf. Code)*

- ✓ The Contracting Authority shall be **The President of the North West Regional Assembly;** this respect he preserves the original documents relating to the contract and transmits copi to the Public Contract Regulatory Agency.
- ✓ The Contract Manager shall be **The Director of General Affairs at the North West Region Assembly.** In this capacity, he shall respect the administrative, technical and financial claus of this contract.
- ✓ The Contract Engineer shall be **The Regional Delegate of MINTP for the North-West.** H shall validate the different crucial phases of work done, from the installation of th Contractor to the Provisional Technical Reception.
- ✓ The Project Manager shall be the (to be specified) consultant recruited for the control an supervision of the works hereinafter referred to as **«The Project Manager »**
- ✓ **The Regional Delegation of MINMAP North-West** shall carry out unannounced control f the execution of this project.
- ✓ **The Divisional/Sub-Divisional Peace and Development Committees (P.D.C)** shall carryo Social Control and report to the President of the Regional Executive Council, North West
- ✓ The Contractor shall be [to be specified*]*.

3.2 *Security*

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

In this case:

- The authority in charge of ordering payment shall be **The President of the North We Regional Assembly.**
- The body or official in charge of payment shall be **The Regional Treasurer North We Regional Assembly.**
- The official competent to furnish information within the context of execution of this Contra shall be ***The Director of General Affairs at the North West Regional Assembly.***
- The authority in charge of clearance shall be **The Specialized Finance Controller of t North West Regional Assembly.**

3.2.1 Duties of the Control Mission, Project Manager: The duties of the control mission shall b defined in the contract of the control mission for the control and supervision of the constructi of the Administrative building of the North West Regional Assembly.

3.2.2 Control Missions **[to be specified*]*.**

Article 4: Language, law and regulation applicable

1.2 The language to be used shall be *[English and/or French]*.

1.3 The Contractor shall be bound to observe the law, regulations and ordinances in force Cameroon both within his own organization and in the execution of the Contract.

signature of the Contract, the possible direct resulting costs shall be taken into account without gai
or loss for either party.

Article 5: Constituent documents of the Contract (Article 4 of GAC)

The constituent Contractual documents of this Contract are in order of priority:

1) The tender or commitment letter;
2) The bidder's tender and its annexes in all provisions not contrary to the Special Administrative Conditions (GAC) and the Special Technical Conditions (STC) hereunder;
3) The Special Administrative Conditions (SAC);
4) The Special Technical Conditions (STC);
5) The particular elements necessary for the determination of the Contract price, such as, in order o priority: the unit price schedule, the statement of all-in prices, detailed estimates, the breakdow of all-in prices and the sub-details of unit prices;
6) Plans, calculation notes, trial documents, geotechnical documents;
7) The General Administrative Conditions applicable on Public works Contracts that went into effec by Order No. 033/CAB/PM of 13 February 2007;
8) The General Technical Condition(s) applicable on the services forming the subject of the Contract

Article 6: General instruments in force

This Contract shall be governed by the following general instruments *[to be adapted according to th case]*:

1. Law No 2018/012 of July 11, 2018 on the financial regime of the state and other public entities;
2. Law No 2019/024 of December 24, 2019 on the General code of Regional and Local Authorities;
3. Law No. 96/12 of 5th August 1996 on the management of the environment;
4. Law No 2016/017 of 14 December 2016 instituting the Mining Code;
5. Decree No. 2018/366 of 20th June 2018 to institute the Public Contracts Code and its texts application;
6. Instruments governing the various professional bodies;
7. Decree No. 2001/048 of 23rd February 2001 relating to the Setting up, Organization an Functioning of the Public Contracts Regulatory Agency
8. Decree No. 2003/651/PM of 16th April 2003 to lay down the Procedure for Implementing the To and Customs System applicable to Public Contracts;
9. Decree No. 2012/075 of 8th March 2012 to organise the Ministry in charge of Public Contracts;
10. Order No 212/A/MINMAP of September 28,2021 organizing the operation of internal structures f the administrative management of Public contracts;
11. Circular No. 001/CAB/PR of 19th June 2012 relating to the Award and Control of Execution of Pub Contracts;
12. Letter No; 00006/LC/PR/MINMAP/CAB of August 17,2021 clarifying the control of the award public contracts and specifying the modalities of its exercise with the Project Owner;
13. Circular No 00000026/C/MINFI of 29/12/2023 on instructions relating to the execution of finan laws, the monitoring and control of the execution of the budget of the state and other public entitie for the 2024 financial year;
14. Unified Technical Documents (DTU) for building works;
15. Applicable standards;
16. Other instruments specific to the domain concerned with the Contract.

Article 7: Communication (Articles 6 and 10 supplemented)

7.1 All notifications and written communication within the framework of this Contract shall be se to the following address:

a) In the case where the contractor is the addressed : Beyond the time-limit of 15 days fixed Article 6 (1) of the GAC to make his domicile known to the Contract Manager a immediately after completion of the works, correspondences shall be validly address council where the Contractor resides.

addressed to: the President of the North West Regional Assembly with copies addressed to the Contract Manager, Project Manager, the Contract Engineer and the Regional Delegation of Public Contracts for the North West.

7.2 The contractor shall address all written notifications or correspondences to the Engineer with a copy to the Contract Manager.

Article 8: Administrative Orders (Article 8 of GAC)

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

8.1 The Administrative 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 Project Manager, the Contract Engineer, the Regional Delegation of Public Contracts for the North West, and the Paying Body, where applicable.

8.2 Upon proposal by the Contract Manager, Administrative Orders with an incidence on the objective, the amount and execution deadline shall be signed by Contracting Authority and notified by the Contract Manager to the Contractor with a copy to the Project Manager, the Contract Engineer, the Regional Delegation of Public Contract North West and the Paying Body. The prior endorsement of the Paying Body shall possibly be required before the signature of those that have an incidence on the amount.

8.3 Administrative Orders of a technical nature linked 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 Project Manager with a copy to the Contracting Authority, Contract Engineer and the Regional Delegation of Public Contract North West.

8.4 Administrative Orders serving as warnings shall be signed by the Contracting Authority and notified to the Contractor by the Contract Manager with a copy to the Project Manager, the Contract Engineer and the Regional Delegation of Public Contract North West.

8.5 Administrative Orders for suspension or resumption of work as a result of the weather or any other case of force majeure shall be signed by the Contracting Authority and notified by the Contract Manager to the Contractor with a copy to the Project Manager, the Contract Engineer and the Regional Delegation of Public Contract North West.

8.6 Administrative 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 Project Manager and notified to the Contractor by the Project Manager with a copy to the Contract Engineer and the Regional Delegation of Public Contract for the North West.

8.7 The Contractor has a time-limit of fifteen (15) days to issue reservations on an Administrative Order received. Having reservations shall not free the enterprise of executing the Administrative Orders received.

8.8 Concerning Administrative 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 the 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 with conditional phases (Article 9 of GAC) (Not applicable)

9.1 This Contract has one fix phase in 2024.

issue an attestation of proper execution to the Contractor. This attestation shall condition th start of the following conditional phase (Not applicable).

9.2 The time-limit granted for notification of the Administrative Order to start execution of conditional phase shall be Fifteen (15) days. (Not applicable)

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

10.1 Any modification, even partial, made on the technical bid shall only occur after the writte approval of the Contract Manager. In case of modification, the personnel replaced shall be member of staff of equal competence (qualifications and experiences).

10.2 In any case, the lists of supervisory staff to be used shall be subject to the approval of th Project Owner in the days following notification of the Administrative Order to sta execution. The contract Manager has **5 (five) days** to notify his opinion in writing with a cop sent to the Contract Engineer. Beyond this time-limit, the staff list shall be considered a approved.

10.3 Any unilateral modification on the supervisory staff made in the technical bid prior to an during the works shall be a reason for termination of the Contract as mentioned in article 4 below or the application of penalties.

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 2 % 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 provisional acceptance of the works, following a release issued by the Contracting Authority upo request by the Contractor.

11.2 Performance 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 shall be done within one month after fin acceptance by release issued by the **Contracting Authority** upon request by the Contractor.

11.3 Guarantee of start-off advance

The contractor may be granted a start off amount of 20% of the contract amount (inclusive of taxe upon request.
The start-off payment shall be guaranteed at 100% by a Cameroonian bank recognized by th Ministry in charge of Finance.

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_____ figures)_____(in letters) CFA francs Inclusive of All Taxes; that is:

- Amount exclusive of VAT: _____(_____) CFA F
- Amount of VAT: _____(_____) CFA F.
- Amount of TSR and/or _____CFA F
- Net to be paid= EVAT-TSR and/or AIR

Article 13: Place and method of payment

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

b. For payments in foreign currencies (*amount in figures and letters exclusive of taxes*) b credit to account N°._____ open in the name of the Contractor in _____bank.

Article 14: Price variation (Article 20 of GAC)

16.1 Prices shall be firm.

a. Payments on account made to the Contractor as advances shall not be revisable.
b. Revision shall be "frozen" upon expiry of the Contractual time-limit, except in the case o price reductions.

16.2 Price updating modalities (Not applicable)

Article 15: Price revision formulae (article 21 of GAC)

(Not applicable)

Article 16: Price updating formulae (article 21 of the GAC)

(Not applicable)

Article 17: Works under State supervision (Article 22 of GAC supplemented)

17.1 The percentage of works under State supervision shall *not exceed* 2% of the amount of th Contract and its additional clauses, where applicable.

17.2 In the case where the Contractor were invited to execute works under State supervision, th submitted and duly justified expenditures shall be reimbursed to him under the followin conditions:

- The quantities considered shall be the hours used or the quantities of building materials ar materials used that was the subject of joint job cost sheets;
- The remunerations and salaries effectively paid to local labour shall be increased by for percent (40 %) to take account of social benefits;
- The hours put in by the heavy equipment shall be counted at the rate featuring in the sul detail of prices;
- building materials and materials shall be reimbursed at cost price duly justified at the pla of use, marked up by ten percent for loss, stocking and handling;
- The amount for services thus calculated, including the hours put by heavy equipment shall b marked up by 25 % to take into account the overheads, profits and the Contracto unforeseen.

Article 18: Evaluation of works (article 23 of the GAC)

The work done shall be evaluated using the unit price.

Article 19: Evaluation of supplies (article 24 of the GAC supplemented) (Not applicable)

19.1 *[indicate, where applicable, the modalities for payment of supplies].*

19.2 No security shall be requested for payments on account on supplies.

Article 20: Advances (article 28 of the GAC)

20.1 The Contracting Authority *may* grant a start-off advance *equal to 20 % of the amount of t* Contract.

all taxes shall be guaranteed at one hundred (100) percent by a financial establishmen governed by Cameroon law or a first-rate financial institution in accordance with the instrument in force and reimbursed by deduction of the payments on accounts to be paid to the Contracto during the execution of the Contract according to the modalities laid down in the Specia Administrative Conditions.

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

20.4 As the reimbursement advances, the Project Owner shall issue the release of the correspondin part of the guarantee upon the express request by the Contractor.

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

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

21.1 Establishment of works executed

Before the 30th of each month, the Contractor and the Project Manager shall jointly establish a job cos sheet which summarises and fixes the quantities executed and established for each item on the schedul during the month and capable of giving entitlement to payment.

21.2 Monthly detailed account

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

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

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 amount of payment on account shall not exceed the value of the technical execution phases carrie out.

Payment on account may be spread over the duration of the execution of the Contract according technical execution phases as defined in the Contract.

Payment on account shall take place within thirty (30) days from the date of transmission to th competent accounting officer, of the documents giving entitlement to payment.

The contractor shall transmit seven (7) copies of the partial invoices to the Engineer for approval befo the 5th of the month following the works executed.

The Engineer shall within a time-limit of seven (7) days forward the approved partial invoices to t Chief of Service.

The Chief of Service has a maximum time-limit of twenty-one (21) days to sign the partial invoice a to produce the documents giving entitlement to payment on account and transmit same to the compete accounting officer.

21.3 **Detailed account of start-off account** (*specify*).

Article 22: Interest on overdue payments (Article 31 of the GAC)

Possible interests on overdue payments are paid by statement of sums due in accordance wi Decree No. 2018/366 of 20 June 2018 to institute the Public Contracts Code.

A. Penalties for delay

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

a) One two thousandth (1/2000th) of the initial Contract amount all taxes inclusive pe calendar day of delay from the first to the 30th day beyond the Contractual time-limit;

b) One thousandth (1/1000th) of the initial amount of the Contract inclusive of all taxes pe calendar day beyond the 30th 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

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: Five Hundred Thousand (500,000) Francs CFA
- Late submission of insurances, shall be one five thousandth (1/5000th) of the initial Contract amount all taxes inclusive per calendar day of delay from the first to th 30th day beyond the Contractual time-limit;
- Late submission of the draft execution schedule if the lateness is caused by th Contractor shall be one five thousandth (1/5000th) of the initial Contract amount a taxes inclusive per calendar day of delay from the first to the 30th day beyond th Contractual time-limit;

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

1. In the case of a group of enterprises, indicate the method of payment of co- and sub Contractors, where need be.
2. Indicate the method of payment of sub-Contractors, where need be.

Article 25: Final detailed account (article 34 of the GAC)

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

25.2 *The Contract Engineer has up to thirty (30) days to notify the corrected and approved draft the Project owner.*

25.3 *The Contractor has up to thirty (30) days to return the corrected and approved final detail account to the competent accounting officer.*

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

26.1 The Contract Manager or the Project Manager has up to thirty (30) days to *establish the gener detailed account and forward to the Contractor after final acceptance.*

At the end of the guarantee period which results in the final acceptance of the works, the Authorisi Officer draws up the general and final detailed accounts of the Contract which he had signed joint by the Contractor and the Contracting Authority. This detailed account includes:

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

definitely binds the two parties, puts an end to the Contract, except with regard to interest on overdue payments.

26.2 The Contractor has up to thirty (30) days to return the signed final detailed account.

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 IAR 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 cost 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: (position or volume of works)
cf. Special Technical Conditions

Lot 1: Preliminary works
Lot 2: Earthworks - Roads and Other Networks (VRD)
Lot 3: Major work
Lot 4: Roof Works
Lot 5: Flooring/Tiling
Lot 6: Wood joinery/ Metal joinery – Locksmith
Lot 7: Aluminum joinery
Lot 8: Painting
Lot 9: Electricity - High currents - Low current - Air conditioning - Ventilation
Lot 10: Sanitary & plumbing

Article 30: Roles and responsibilities of the Project Owner (GAC supplemented)
30.1 The Project Owner 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 Project Owner 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 **Six (0 Months.**

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

Article 32: Roles 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 Projec Manager in *five (05)* copies at the beginning of each.

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 Contrac Manager.*

The Project Owner shall make available the site and access ways to the Contractor at th appropriate time as the works progress.

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

The Contractor shall take out a third party risk insurance concerning persons, property or liabilitie from an insurance company governed by the "CIMA" insurance code.

Article 35: Documents to be furnished by the Contractor (Article 49 of the GAC supplemented)

35.1 **Program of works, Quality Assurance Plan and pegging map.**

a) Within a maximum deadline of *fifteen (15) days* from the date of notification of th Administrative Order to commence execution, the Contractor shall submit in *six (6)* copies for th approval of *project owner after the endorsement of the Contact Engineer* the execution program of th works, his supply calendar, his draft Quality Assurance Plan and the Environment Management Pla where applicable and the electricity network pegging map at scale 1/2500.
This program shall be exclusively presented according to the furnished models.
Two (2) copies of these documents will be returned to him within a deadline of fifteen (15) days fro the date of reception with:

- Either the indication "GOOD FOR EXECUTION";
- Or the indication of their rejection including the reasons for the said rejection.

The Contractor has eight (8) days to present a new draft. The Contract Manager or the Proje Manager then has a deadline of five (5) days to give his approval or possibly make comment Delay in approving the draft execution schedule shall stay the execution deadline.

The approval given by the Project Owner does not in any way release the Contractor of h responsibilities. Meanwhile, works executed before the approval of the program shall neither b ascertained nor paid for. The updated and approved schedule will become the Contractu schedule.
The Contractor shall constantly update on site, a schedule that will take account of real progress the site. Significant modifications may only be made on the Contractual program upon receiving th approval of the Project engineer. After approval of the execution schedule by the Contra Manager, the latter shall transmit it within five (5) days to the Contracting Authority without stayi its execution. However, if important modifications alter the objective of the Contract or the nature the works, the Contracting Authority shall return the execution schedule accompanied by reservatio to be lifted within fifteen (15) days of the date of reception.

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

use as well as the personnel he intends to employ.

d) The approval granted by the Contract Engineer 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 draft

a) The execution plan documents (calculations and drawings) necessary for the realisation of all the parts of the structure must be submitted for the endorsement of the Contract Engineer at most fifteen (15) days prior to the date provided for the commencement of execution of the corresponding part of the structure.

b) The Contract Engineer has a deadline of *five (05) days* to examine and make known his observations. The Contractor then has a deadline of (04) four *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 fifteen days after the notification of the Administrative Order to commence work. must have the following characteristics: Height = 2.80m, width=1.20m, board thickness=2.5cm at 1.20m above the ground level. The Contract Engineer shall put at the Contractors' disposa the text to be used.

36.2 The services to inform in case of interruption of traffic or along the deviated itinerary: *[To b specified 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 th GAC, for rules of hygiene and safety and for circulation around or in the site.

Article 37: Implantation of structures

The Project Owner shall notify within [five] days following the date of notification of th Administrative 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 not exceed 30 % of the initial amount of th Contract and its additional clauses.

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

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

39.2 The Contract Manager has a deadline of three days to approve the Contractor's personnel an 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 Project Manager or Enginee 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 pag should be removed. The erased or cancelled parts must be mentioned on the margin f validation.

Article 41: Use of explosives (article 60 of the GAC) (Not applicable)

CHAPTER IV: ACCEPTANCE

42.1 PRE- ACCEPTANCE OPERATIONS

Before the acceptance of the works the Contractor shall ask in writing to the Contract Engineer to organize a technical visit for pre-acceptance. This visit shall include the following operations.

- Qualitative and quantitative evaluations of the different works that have been executed.
- Findings and statement of the unexecuted task envisaged in the present contract.
- Findings relative to the completion of the work
- Findings on the quantity of works that have been effectively realized

These operations shall be subject to a site report drawn up on the field, signed by the following.

-Contract Engineer;
- RD/MINMAP/NW (Observer);
- Project Manager;
- The Director of the Regional Hospital Annex Nkambe (Observer)
-Contractor.

During this pre-reception, the Engineer shall eventually specify the reserves to be lifted an the corresponding works to be effected before the reception. The Engineer shall fix the receptio date in collaboration with the chief of service for the Contract.

42.2 Acceptance

The acceptance commission shall comprise:

1- The President of the North West Regional Assembly or his representative. (Chairman)
2- The Contract Engineer..... (Member)
3- The Contract Manager or his representative..... (Member)
4- The Project Manager.....(Secretary)
5- The Stores Accountant of North West Regional Assembly..... (Member)
6- The RD MINMAP/NW or his representative..... (Observer)
7- The Commissioner of Health at the North West Regional Assembly ..... (Observer)
8- The Director of the Regional Hospital Annex Nkambe ..... (Observer)
9- The Contractor or his Representative..... ..... (Observer)

The commission shall examine the report of the pre-acceptance and shall proceed to the acceptanc An acceptance report (process - verbal) of the works shall be prepared by the Contract Engine and sign by all the commission members.

ARTICLE 43: DOCUMENTS TO BE FURNISHED AFTER EXECUTION

43.1 The contractor shall furnish within one (1) month after completion of the works five (5) copi of all working documents and drawings as executed, especially those relevant to the exploitati and maintenance of the works.(for lots 2,3,4)

43.2 A penalty of 30% of the guarantee retention shall be retained in the event where t contractor fails to comply with Article 43.1 above.

Article 44: GUARANTEE PERIOD.

The guarantee period is one (01) year from the date of the provisional acceptance.

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

Final acceptance shall take place within a maximum deadline of fifteen (15) days from the date expiry of the guarantee.

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

Chapter V: Sundry provisions

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

The Contract may be terminated as provided for in Decree No. 2018/366 of 20 June 2018 a equally under the conditions laid down in articles 74, 75 and 76 of the GAC especially in one of t following cases:

- Delay of more than fifteen (15) calendar days in the execution of an Administrative Order unjustified stoppage of more than seven (7) calendar days;

- Refusal to repeat poorly executed works;
- Default by the Contractor;
- Persistent non-payment for services.

Article 47: Case of force majeure (article 75 of the GAC)

If the Contractor were to raise the issue of force majeure, 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 court in the North-West Region of the Republic of Cameroon.*

Article 49: Production and dissemination of this Contract

Twenty (20)] copies of this Contract shall be produced at the cost of the Contractor and furnished 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 CONDITIONS (STC)

CHAPTER I: GENERAL PROVISIONS

Article 0. SECURITY CONTEXT

Since October 2016, protests around sectorial demands have degenerated into a political crisis in Cameroon's Anglophone regions. This crisis has led to the re-emergence of the Anglophone question and highlighted the limits of the Cameroonian governance model, based on centralization and co-optation of elites.

The Anglophone area consists of two of the country's ten regions, the Northwest and the Southwest. It covers 16,364 sq km of the country's total area of 475,442 sq km and has about 5 million of Cameroon's 24 million inhabitants. It is the stronghold of the main opposition party, the Social Democratic Front (SDF) and plays an important role in the economy, especially its dynamic agricultural and commercial sectors. Most of Cameroon's oil, which accounts for one twelfth of the country's gross domestic product (GDP), is located off the coast of the Anglophone region.

The city of Bamenda is today, and this over the past two years, witnessing insecurity and conflicts caused by what is known as the "Anglophone crisis". This crisis deteriorated from simple trade unionist strikes to full flesh political protests in 2017 and has since then taken the region and the country hostage. Bamenda is the main gateway into the entire region and is highly involved and exposed to this crisis due to its administrative, economic and social position in the region. Simmering resentment dating back to the period of independence has resurfaced within the minority English speaking community in Cameroon's North West and Southwest regions in recent years. The period since November 2016 has been marked by the closure of all English-speaking schools, strikes, unrest and sporadic violence. Tensions between English- and French-speaking communities have escalated considerably since October 2017, when secessionists unilaterally proclaimed independence in the region.

The Anglophones of Cameroon, 20 per cent of the population, feel marginalised. Their frustrations surfaced dramatically at the end of 2016 when a series of sectoral grievances morphed into political demands, leading to strikes and riots. The movement grew to the point where the government's repressive approach was no longer enough to calm the situation, forcing it to negotiate with Anglophone trade unions and make some concessions. Popular mobilisation is now weakening but most Anglophones are far from happy. Having lived through three months with no internet, six months of general strikes and one school year lost, many are now demanding federalism or secession. Ahead of presidential elections next year, the resurgence of the Anglophone problem could bring instability. The government, with the support of the international community, should quickly take measures to calm the situation, with the aim of rebuilding trust and getting back to dialogue.

Generally little understood by Francophones, the Anglophone problem dates to the independence period. A poorly conducted re-unification, based on centralisation and assimilation has led the Anglophone minority to feel politically and economically marginalised, and that their cultural difference is ignored.

The current crisis is a particularly worrying resurgence of an old problem. Never has tension around the Anglophone issue been so acute. The mobilization of lawyers, teachers and students starting in October 2016, ignored then put down by the government, has revived identity-based movements which date back to the 1970s. These movements are demanding a return to the federal model that existed from 1961 to 1972. Trust between Anglophone activists and the government has been undermined by the arrest of the movement's leading figures and the cutting of the internet

boycotts and sporadic violence.

Small secessionist groups have emerged since January. They are taking advantage of the situation to radicalize the population with support from part of the Anglophone diaspora. While the risk of partition of the country is low, the risk of a resurgence of the problem in the form of armed violence is high, as some groups are now advocating that approach.

The government has taken several measures since March – creating a National Commission for Bilingualism and Multiculturalism; creating new benches for Common Law at the Supreme Court and new departments at the National School of Administration and Magistracy; recruiting Anglophone magistrates and 1,000 bilingual teachers; and turning the internet back on after a 92-day cut. But the leaders of the Anglophone movement have seen these measures as too little too late.

International reaction has been muted but has nevertheless pushed the government to adopt the measures described above. The regime in Yaoundé seems more sensitive to international than to national pressure. Without firm, persistent and coordinated pressure from its international partners, it is unlikely that the government will seek lasting solutions.

The Anglophone crisis is in part a classic problem of a minority, which has swung between a desire for integration and a desire for autonomy, and in part a more structural governance problem. It shows the limits of centralized national power and the ineffectiveness of the decentralization program started in 1996. The weak legitimacy of most of the Anglophone elites in their region, under-development, tensions between generations, and patrimonialism are ills common to the whole country. But the combination of bad governance and an identity issue could be particularly tough to resolve.

The politicization of the crisis and the radicalization of its protagonists is mainly due to the government's response (denial, disregard, intimidation and repression), the diminishing trust between the Anglophone population and the government and the exploitation of the identity question by political actors who have aggravated the population's resentment to the point that probably most Anglophones now see a return to federalism or even secession as the only feasible ways out of the crisis.

The coordination is however adopting management techniques that will permit it move on with the program despite uncertain times. The program is more concerned with the behavioral pattern of the population which can be summarized as follows:

- Fear and panic by citizens who are easily alarmed because they have no clear knowledge of events pertaining to the crisis.
- Wanton spread of untrue rumour especially through the social media which usually fuels up tension without any justification.
- Active polarization of the crisis which creates tension and panic in the city without the necessary transfer of struggles to the city.
- The high militarization rate of the city and the impositions of curfews prohibiting movement during certain hours by state official.
- The drop in social and commercial activities for a city which could pride itself in leading these two sectors.
- The creation of tension and distrust between the administration and the administered.
- The high rate of emigration of the population towards neighboring towns in search of safety and education
- The existing poor state of urban infrastructures like roads is a continuous reminder of the fact that the city has been abandoned and so any effort by the state via programs like this is perceived as "questionable".

the management of the crisis. The Church and syndicats are good exemples.

- The population of Bamenda is very active and dynamic thereby reliable (once convinced) to work with.
- An environment of distrust has been created amongst the population during the crisis, though to a limited extent.
- The need to actively involve the women and the youths in the project management.

Article 01: WORK DESCRIPTION

The works involved in this project includes:

Lot 1: Preliminary works
Lot 2: Earthworks - Roads and Other Networks (VRD)
Lot 3: Major work
Lot 4: Roof Works
Lot 5: Flooring/Tiling
Lot 6: Wood joinery/ Metal joinery – Locksmith
Lot 7: Aluminum joinery
Lot 8: Painting
Lot 9: Electricity - High currents - Low current - Air conditioning - Ventilation
Lot 10: Sanitary & plumbing

A detail listing of these works are as follows:

- Preparation of the site (clearing and installation of site);
- General tiling works for internal floor and the frontage;
- Replacement of damaged windows;
- Follow-up of toilet maintenance and usage by the Liberian and the committee formed;
- Enlargement of some doors and windows;
- Drainage works;
- Planting of trees and grass around where the buckaroos will be constructed
- Replacement of aluminium shutters and protectors;
- General painting of the wall of the
- Electrification of the entire building;
- Reviewing the air conditioning system;
- Pavement works to be done on the entire front yard.
- Replacement of wooden shelves with metallic shelves
- Casting of window sills below the windows;
- Environmental and social impacts;
- Construction of buckaroos for relaxation.
- Dismantling and putting in place new roofing sheets.
- etc.

Article 02: GENERAL OBLIGATIONS OF THE CONTRACTOR

a) Technical control:

Before works execution

- Examination of the general proposals made by the contractor concerning the structures the construction site, work planning and possible sub-contractors;

- Verification of execution plans for approval, technical conditions and all the documents relating to the modifications that shall be necessary for a proper execution of works;
- Reception of materials and equipment required for a proper execution of works;
- Control of the putting in place of activities aimed at sensitizing the beneficiary populations.

<u>During or after works execution</u>

- Control of the characteristics of the materials used and their compliance with the prescribed norms: rip-rap, irons rods, aggregate (sand and gravel) for concrete, duct mould, etc.
- Control of the execution of works, notably:
  - Clearing and maintenance of the area where the structures will be put up, that is grass clearing and felling of trees, if necessary;
  - Maintaining and cleaning of the entrances to the structure;
  - Earthworks for the structures;
  - Fabrication of reinforced concrete, ordinary concrete blinding concrete and others works;
  - Reinforcement for structures.

b) Environmental and social control

It shall consist in the verification that the contractor executes the works as specified in the Special technical conditions, and in the tender file as a whole, in compliance with the provisions relating to environmental protection or the laws and ministerial instructions referred to in article 22 of the Special administrative conditions.

Article 03: PERSONNEL AND MATERIALS

To ensure the proper execution of works, the contractor shall put in place the personnel made up as follows which list is not exhaustive:

- **Works Director:** a civil engineer holder of at least a BSC in civil engineering with at least 5 years of experience in building construction and public works and must be enrolled in the National Order of Civil Engineers and must present an attestation of presentation of originals of diploma. He shall be the direct representative of the contractor on the site;
- **4 Sites foremen:** 04 site foremen with 01 for civil engineer, 01 for electrical engineering, 0 for carpentry, 01 for Environment and being holders of at least Degree in related fields an at least 5 years of experience in building construction works and other personnel.. Mus present attestations of presentation of originals of diplomas.

Article 04: START AND DURATION OF WORKS

The duration of works is Thirty (30) calendar years with effect from the date of notification b the Project Owner of the service order to start work as detailed below:

	Fixed Phase 1	Conditional Phase 1	Conditional Phase 2	TOTAL
Duration (Months)	6	12	12	30

Article 05: SUBMISSION OF REPORTS

For each structure, the contractor shall produce a report comprising inter alia:

- Designs of the structures;
- The description of conditions for execution of works;
- Possible technical proposals;

The As-Built report shall be submitted within **fifteen (15) days** before the date of provisional acceptance of the works.

Each As-Built report shall be submitted in three (3) hard copies.

The report shall be considered approved if one month after submission of the final report, the Project owner has not notified the contractor of his observations.

SPECIAL TECHNICAL CLAUSES (STC)

OBJECT

The subject of this Special Technical Clauses Book concerns **the Construction of an Emergency Centre at the Regional Hospital Annex Nkambe.**

The services include all the work as defined in this document including all the works described in the plans and attached documents and technical sheets, intended for the complete and perfect finish of the work within the framework of the contractual documents and the Regulations in force.

The company is responsible for carrying out the works described in the Description (Part 3 of the STC), completely including the necessary work resulting from the detailed studies, even if these are not explicitly mentioned on the plans and documents of the Design File. Business consultation (DCE).

Below are the different activities to be carried out by phases

Phase 1:

Earthworks -and other networks Preliminary works

Earthworks -and other networks

Complete ground floor of the following blocks Block A, Block B, Block C and Block D Phase 2:

Complete ground floor toilet Hangars

SPECIAL TECHNICAL CLAUSES (STC)

This document, called STC, consists of three parts and is structured as follows:

Part 1: Preliminary notes describing the general requirements for all trades

Part 2: The Special Technical Prescriptions Booklet relating to DTUs, standards etc. according to the rules of the art (STC)

3rd part: The descriptive estimate relating to the detailed characteristics of the work to be performed. The information given makes it possible to define: the parts of elementary structures concerned, the materials used for the construction of these structures and their implementation, the location of the structures.

COMPANY OBLIGATIONS

The company must strictly comply with the directives given to it by the Client through the Client. Likewise, he must comply with the site requirements defined in general documents such as SAC, CPS or others.

The company is deemed to have taken cognizance of all STC and execution plans, as well as all the documents mentioned in the various contract documents.

Additional note:

Although divided by chapters, this STC constitutes a homogeneous whole. All the chapters form an inseparable whole. The spirit of the documents is to take into account all the materials and labor necessary for the proper execution of the work. Anything which is omitted by some but indicated by others and which is necessary for the completion of the work in accordance with the manifestation of intention of the said contract documents must be carried out by the contractor without added value. Moreover, any omission cannot justify any faulty workmanship or inferior supply.

In the contractual documents, the Client has endeavoured to inform the Contractor on the nature of the work to be carried out, on their quantity and their location, but it should be noted that this description is not restrictive and that the tenderer must perform as included in his price, but without exception or reservation, all the work of his profession necessary and essential for the complete completion of the service. Consequently, the company must carefully study the parts submitted, find out about anything that may appear doubtful to it, visit the site where the work is to be carried out in order to assess the extent of its intervention. In any case, the fact that the contractor examines the performance of the documents submitted by the Project Manager without changing anything cannot in any way reduce his full and entire responsibility.

THE PRIZES

Unit prices also include all site and other costs under the conditions defined in the written documents. In summary, the final amount of the work is deemed to include all the work and other constraints necessary for the complete and perfect completion of the works covered by this contract.

The prices include, without this enumeration being exhaustive:

All execution constraints, whatever they may be, taking into account the specific conditions of the site on the one hand and of the project on the other, which the Company is deemed to be fully aware of.
The maintenance in use of the various networks and sanitation existing on the site or nearby, both in their current routes and in their temporary or final deviations.
The constraints for recovery work between the different lots (see above).
Evacuation of surface water and infiltration.
All the constraints described item by item in parts 2 and 3 of this STC.

VISITING PLACES

As soon as it is submitted, the company consulted is deemed to have full knowledge of the place and the accesses. It must include in its offer the cost of all the works, devices and means necessary to access any point of the site for the performance of the services covered by this contract.

CONSEQUENCES IF DELAY

The company also takes responsibility and under its responsibility for the financial consequences of the delay caused by it.

NATURE AND SCOPE OF THE WORK

The services and works covered by this project will include all the supplies and implementations necessary for the complete completion of the works. The services relate to the following lots and are detailed in the "Scope of work" paragraph for each lot.

Lot 1: Preliminary works
Lot 2: Earthworks - Roads and Other Networks (VRD)
Lot 3: Major work
Lot 4: Roof Works
Lot 5: Flooring/Tiling
Lot 6: Wood joinery/ Metal joinery – Locksmith
Lot 7: Aluminum joinery
Lot 8: Painting
Lot 9: Electricity - High currents - Low current - Air conditioning - Ventilation
Lot 10: Sanitary & plumbing

NOTE:

The above list of the different types of works is given for information only and is in no way limiting or restrictive in nature.

The contractor of this contract will have the perfect and complete completion of the work necessary for the realization of the work carried out in the Rules of the Art, regulations, Standards and DTU in force. It is implicitly provided for in its offer all the constraints:
Shoring, scaffolding, platform, handling and lifting means, protection, shielding, water collection and depletion if necessary.
Guarding of its works throughout the duration of the site until the reception of its works.
Support and provisional reinforcement of all kinds
Rubble removal and daily cleaning with selective sorting.

Before any work begins, the company will propose to the Project Manager for validation the detailed schedule and the operating mode of all of its intervention.

The same will apply to the site installation plan and no work will begin until these documents have received its approvals.

EXECUTION STUDY

The plans appearing in the DCE documents are execution plans. The architectural and technical studies were carried out by the Project Manager

The execution plans provided by the Project Manager were the subject of calculation notes explicitly taking into account the assumptions of charges and overloads as well as any provisional charges when necessary.

The Project Manager will provide in the DCE a list of the detailed technical specifications of the works (calculation note, technical sheets, etc.) and execution plans for the works.

WORKS RECOVERY PLANS

For the reception of the various works, the company will have to establish the plans of its works "as carried out". The proofing file for the DOE (File of Executed Works), will be provided within thirty [30] days after the provisional reception in seven (07) physical copies in hard copy and in two digital copies containing:

The drawing files in the following formats: PDF, DWG and equivalent (Autocad 2000 or later) or DXF (Autocad 2000 or later)
The list of all plans and documents issued in Excel format (.XLS type)
The other documents
.XLS format spreadsheets
Word Notes, .DOC format
Various manuscripts or others, PDF format

KNOWLEDGE OF LOCATIONS AND TAKING POSSESSION

The company is supposed to have entered its Contractt with full knowledge of the facts. Its offer took into account all the specific constraints, in particular those arising from:

Existing buildings and their configuration.
Constraints relating to neighboring buildings or the configuration of the ground.
Parking and traffic constraints.
Phasing constraints for delivery of certain parts before others.
Access and service to the site.
Administrative regulations in force (safety, traffic, noise, nuisances)

The company will take possession of the premises in the state where they are and this upon notification of the contract start-up service order.

After checking all the documents in his possession, he must report to the Architect any errors, discrepancies or omissions that he may have noticed.

He will take charge of the site and will not be able to claim any supplement due to his poor appreciation of the various constraints listed above and those that may not be specified in the STC.

SITE INSTALLATION PLAN

The company will submit its site installation plan, studied against the background of soil development.
The facilities listed below must include, in particular:
All fixed and mobile installations,

Water and electricity connections ....
Storage areas (aggregates, reinforcements), various materials, possible prefabrication,
Workshops as needed,
Cranes or other lifting means (as required),
Site traffic,
Hygiene installations for site personnel (changing rooms, dining rooms, toilets)
Worksite water networks with layout and location of pumping and fire stations,
Installation of fire extinguishers,
Safety devices necessary for common traffic (guardrails), etc ...
Diagrams of electrical installations with TCE connection cabinets,
Provisional protection of preserved trees and existing structures within the framework of the project.
Installation and maintenance of the protective fence and its evolutionary movement depending on the site of the work.
Vehicle parking.
Temporary occupation of public space
Etc.

The above list is given for information only and is not exhaustive. All the preparatory work necessary for setting up the organization of the site (cranes, concrete mixers, etc.) will be carried out by the company, it being understood that the company will restore the premises to the state in which it was. found, after removal from its facilities.

Additional note for the closing:

The company must ensure the establishment of regulatory palisades on the perimeter of the right-of-way concerned. These continuous fences will be made of large panels, with a height of at least 2.50m, metal or wood. In addition to these provisions, the company must carry out all the movements and adaptations of the fence useful for the smooth running of the site for all the successive phases.

SITE SAFETY AND HYGIENE

The common security and hygiene facilities will be the responsibility of the company and internal security regulations will be established and displayed:

Wearing Personal Protective Equipment for all personnel working on site and for all visitors,
Safety plan displayed,
At the opening of the site, training of all the people who must be, at one time or another, on the site (worker staff, supervision, Project management, Project management, visitors, etc.),
Creation and maintenance of protections,
Workforce keeping (min / max),
Installation of safety signs,
Sanitary facilities, dining rooms, changing rooms ...
Description of the materials used and their safety devices (electrical protection)
Plan of scaffolding and props,
Special provisions for specific work (welding, use of toxic products).

COMPLIANCE WITH REGULATIONS ON ROADS AND ACCESS ROUTES

Cleaning of dirt on tracks:

The company is required to install a means of cleaning the wheels of the vehicles, to keep it in good working order and to oblige all the vehicles leaving the site or the access roads on the public road, to use this device. . Notwithstanding the provisions, the Contractor shall maintain the roads in a state of cleanliness compatible with normal traffic for users, both cars and pedestrians.

In the event of non-compliance with this requirement, cleaning could be requested directly by the Project Manager from an external company at the expense of the contractor for this contract.

of the deadlines.

Protection and accident prevention:
Although the responsibility of the Project Manager can in no case be called into question in this respect, the company cannot refuse to supplement or improve the protective measures already taken if they are deemed insufficient, and in this regard. In this case, he will not be able to claim any additional compensation for perfect and effective protection.

The company will comply with the various safety regulations, both within the perimeter of the site and outside, in force and in particular the following French regulations:
Law of 6/12/76 and implementing decrees of 9/6/77.
Text "accident prevention measure" of 11/06/80 approved by the CTN for construction industries
Regulatory measures of the decree of 8/01/65 modified by the decree of 6/5/95.

If construction vehicles come to maneuver on the public highway, the company will put up the regulatory signs and will assign the personnel that may be necessary for traffic control. The company will be responsible for damage caused by its vehicles or devices on public roads, sidewalks, curbs.
He will also have to:

Submit to the charges and police regulations in force,
Install at its own expense the panels and lighting required by the said regulations,
Respect the site installation plan,
Repair the premises after any damage caused by vehicles or devices on public roads.
In the event of occupation of the public highway, the rights arising are the responsibility of the company until receipt of the work without reservation.

Protection of existing plantations and various works

The following must be protected: trees, public lighting, the existing dividing fence and remain after the site, the various buildings existing on the site to be preserved and the sewage buffers located on the service roads of the site or nearby.

For the networks in place, the company will not be able to deposit any pipe of any kind whatsoever without making sure of their nature, recipient and neutralization. He must ensure, before intervention, that the connections have been deactivated. In the event of active networks serving neighboring properties, they must be kept in service.

With regard to the networks existing in the field before the intervention, the Client must take the necessary steps with the Concessionaires concerned, by mail or if necessary a plan to locate the location of this network (possibly buried network).

COORDINATION WITH SUBCONTRACTORS
Coordination with subcontractors
The company must ensure perfect coordination between the subcontractors, based on the planning implemented. This coordination must meet the following criteria:

Reflection of the progress of the work.
Highlighting of critical points.
Establishment of communication processes.
Coordination of the action of all stakeholders.

In particular, he must effectively manage the interface of the works executed by him with the works to be executed by the subcontractors. Reservations requested in good time must appear on the

between the various stakeholders.

CLEANING

The company for this contract must:

Ensure the perfect maintenance of the premises in an irreproachable state of cleanliness.

Sufficient number of chutes and rubble bins (installation to be submitted for approval by the Project Manager). With for demolitions and / or specific materials, the mandatory passage in selective sorting.

Cleaning and evacuation of rubble at the public landfill, related to its work following the progress of the site.

Daily and systematic cleaning of the area around the site, in particular roads for cars and pedestrians.

PIPES AND CABLES ENCOUNTERED

During the execution of the work, the company must take all precautions in order not to damage or destroy the pipes and cables encountered.

If this is the case, the company must immediately, and as soon as one of these works is located, notify the Project Manager and the competent services to obtain all useful instructions.

The company must, within the framework of itscontract price, guarantee the maintenance, protection, good conservation and perfect functioning of these pipes and cables identified on a plan submitted with the tender dossier, and this during the entire duration of the work of this contract.

In the same spirit, the protection of the structures in the vicinity of the works will be compulsorily ensured throughout the duration of the site. The company will take all useful protective precautions.

LOCATION AND LEVELS

The altimetric dimensions to be respected appear on the various execution plans attached to this file.

Note that the architectural documents give the dimensions of the finished levels and the same for all the other dimensions (interior bare, length of the facades etc ...), the structural documents provide the raw dimensions except special mentions.

During the execution of the work, the company will be required to check and report any discrepancy between the location to be observed and the discrepancies that may occur on the site.

CORPORATE RESPONSIBILITY

In the event that damage, disorder or degradation, however minimal they may be to the existing ones, were noted, the holder of this contract must take all the necessary measures to restore the degraded elements to their original state.

Under no circumstances can the Client or the Client be held responsible for damage or degradation to existing ones. For this, it is necessary to have a contradictory observation made between the parties, that is to say the Company, the Project Management and the Contracting Authority.

Existing works are understood to mean works located inside and outside the site, known and presumed to be such. In this regard, the company must, before any start of execution and under its sole responsibility , carry out any preliminary investigation.

No disorder will be tolerated. In the event of the appearance of hairline cracks, the company must take all necessary measures to remedy it by changing its execution methodology if necessary. The repair of the disorders will be at his expense (see above).

RECOMMENDATIONS FOR NUISANCES

site.
Particular attention will be paid:
on construction site vibration noises
on construction dust and fumes

TESTS AND INSPECTION

17.1 GENERALITIES AND BASIS OF INSPECTION AND TESTS

In addition to the controls carried out by the Project Manager, the company is reminded that it is his responsibility to exercise internal control over the works that he carries out. This cost of internal control tests is taken into account in the specific unit prices of the works.
Under the responsibility of a named person, this internal control will be carried out at different levels:

In terms of supplies,
In terms of storage,
At the level of the interface between different techniques,
In terms of preliminary tests on samples, on site,
In progress, etc ...

In addition to this internal control, the tests and controls requested under this STC may be completed at the request of the Project Manager in the event of insufficient results.

In the case of additional tests requested on structures whose results would leave a doubt about the quality, the costs of these exceptional tests will be borne by the Client if their result is favorable or at the expense of the company. if their result is unfavorable to him.

The tests without being restrictive will mainly focus on:
water analysis
mixing water analysis
concrete tests
resistance tests
test on cement
test on soil
compactness tests
plasticity tests
tests of steel seals in executed works, etc ...

17.2 ADDITIONAL INFORMATION AND DETAILS FOR THE INSPECTION

Internal control of the company

The company is required to set up, on the site, an "internal control" service whose mission is to ensure the verification of the requirements of this contract and in particular, all the requirements required by the following operations:

- Control of the layout of the structures.
- Control of materials and their implementation.
- Auscultation of works and interpretation of measurements.
- Control relating to environmental protection.
- Control relating to hygiene and safety,
- Compliance with execution procedures and rules of art.

Unless otherwise stipulated, the costs relating to the above operations are deemed to be included in the charges to be distributed and are therefore not subject to specific remuneration.

Organizational chart

internal control. Its general mission is to coordinate all control operations, and to identify interpretations of auscultation measures. He is also responsible for specific measures. The presence of the internal control manager is required at each site meeting.

Plan of control

The internal control mission must be carried out in accordance with a control plan drawn up by the Engineer responsible for internal control and subject to the agreement of the
The project manager and the Contract Engineer before the start of work.

This plan must include:
The organization chart of the internal control department with the powers of each named by name.
The control organization plan. This document is a compendium indicating all the elements to be checked. It defines, for each of them, the following prescriptions:
Consistency of the control (Precise definition of the points to be checked, possible interpretation, etc.).
Results to be obtained.
Operating mode used by the company (equipment, precision, etc.)
Frequency of monitoring.
Responsible for control.
The models of documents to be provided by the company, materializing the controls (sheets, statements, etc.).
The model of "notice" forms, the purpose of which is to notify the Project Manager in time of the date of execution of certain tasks (work or checks).
The schematic plan of the work with the indication of the symbolic designations and conventionally adopted to distinguish, without ambiguity, the parts of the works to be built.
Treatment of non-conformities: non-conformities of product non-conformities of execution plans non-conformities of installation non-conformities of execution quality non-conformities etc ...

Control external to the company

Control carried out by specialized laboratories:

The company is required to facilitate the performance of these checks and will have to assist these laboratories in the performance of their mission.

Other controls external to the company:
The Project Manager will carry out all the checks he deems useful, both on the site and in the factory, warehouses or quarries. He will intervene himself or through an organization of his choice. The company is required to facilitate the performance of these verifications. He is required at his own expense to provide the necessary samples and to make available to the personnel in charge of these operations, the machines and their drivers, as well as the necessary equipment. The inconvenience caused by these verifications is borne without remuneration by the company.

SPECIAL REQUIREMENTS

18.1 APPROVALS

The company is reminded that any intervention or work must have received the approval of the Project Manager supplemented by that of the Client, when there is a financial commitment.

18.2 NOTE CONCERNING QUALITY

The company will have within its establishment the existence of a QAP (Quality Assurance Plan) in accordance with the ISO 9001 standard, and will have to justify at any time the reality of the implementation of the QAP established for the execution of this Contract and approved prior to its entry into force.

period, will contain in particular:

The organization of internal control,
The description of the methods of implementation of the materials and equipment used,
Description of specific controls and general organization,
The detailed and nominative organization chart of the site,
Critical points and stopping points,
Treatment of non-conformities.

18.3 NOTE CONCERNING THE ESMP (ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The Company must submit an Environmental and Social Management Plan and must ensure compliance with it throughout the duration of the worksite by assigning the necessary personnel to this task.

VARIANTS

If the company proposes modifications, these must receive the agreement of the Project Manager. Implicitly, this alternative solution includes the cost of any impact on all trades as well as the costs of subsequent studies.

Management of technical non-conformities

Generalities:

A technical non-conformity is defined as a deviation from the standards in force, the prescriptions of the Quality Assurance Plan, the Technical Specifications or the procedures and methodologies adopted on site and also the responsibility of the contracts in the transmission of documents or recommendations given to them by the project team (project manager, contract engineer, contract manager and project owner) and deviation in the contractor's Internal Control.

Non-conformities of a technical nature are prepared and notified to the contractor's representative by the project manager. Within the given time limit, the contractor must submit a detailed report to the project manager, specifying all the immediate and remote causes of the occurrence of the Non-Conformity, the proposed repairs and the measures envisaged to limit the future occurrence of a Non-Conformity of the same nature or of the same order. Non-Conformities of a technical nature give rise to the opening of a non-conformity form in one of the following 3 categories:

Notification of Observation

The Notification of Observation concerns minor deviations in procedures or methodologies, but which do not affect the structure or aesthetics of the work parts and also activities presented in the generalities.

The absence of a report from the contractor's representative or the repeated occurrence of Non-Conformities of the same nature or order may raise the Observation Notification to the level of a Level 1 Non-Conformity.

Level 1 Non-Conformity

The level 1 Non-Conformity concerns the punctual and non-structural divergences, which only affect the aesthetics of the parts of the work concerned, despite the respect of the Technical Specifications (texture, roughness, alignment, shape, position, etc.).

Within 24 hours of the notification of the level 1 Non-Conformity, or of the raising of the Notification of Observation to the level of level 1 Non-Conformity, the contractor's representative must submit his report to the project manager.

The absence of a detailed report from the contractor's representative suspends the implementation and attachment of the parts of the work concerned, at the contractor's expense, without any possibility of complaint.

Conformity may result in the demolition and rework of the offending parts of the work at the expense and cost of the contractor, without any possibility of complaint.
A Level 1 Non-Conformity that is not corrected within 72 hours may be upgraded to Level 2.

Level 2 Non-Conformity
The level 2 Non-Conformity concerns:
obvious deviations from the Technical Specifications for which the performance of the work must be verified and formally confirmed (strength, compactness, bearing capacity, geometry, dimensions)
the multiplicity or non-resolution of level 1 non-conformities.
Within 24 hours of being notified of a level 2 Non-Conformity, or of a level 1 Non-Conformity being raised to level 2, the contractor's representative must submit his report to the project manager.
The contractor is deemed to consider the parts of the work concerned as provisionally rejected and must provide the calculation notes, or carry out at his own expense the additional expert reports and/or tests and measurements, to prove the good performance of the parts of the work concerned.
The technical acceptance of these parts of the work and of any repairs or comfort measures proposed is conditional on the formal and prior approval of the contractor's report.
Level 2 non-conformity may give rise to price refractions on the attachments for the work concerned, calculated as follows
Compactness: 6 x quantity found x % of compactness outside tolerance;
Resistance: 6 x quantity found x % of resistances outside tolerance;
Bearing capacity: 6 x quantity found x % of bearing capacity outside tolerance;
Geometry: 6 x quantity found x % of volumes out of tolerance.
Failure to approve the contractor's report will result in the re-installation of the parts of the work concerned, at the expense and cost of the contractor, without any possibility of complaint.
Independently of the contractor's reports, each Non-Conformity gives rise to the systematic and individual opening of a follow-up sheet which informs at any time the level of its treatment. This form contains appropriate boxes to validly record the opening, the stage of treatment and the closure of the Non-Conformity.

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GENERAL

The purpose of this Special Technical Specifications (STS) is to recall the reference texts and the Regulations, the quality and presentation of the equipment and materials used in the construction of works and their implementation.
The works include the implementation of commercial services and structures shaped to obtain "complete" works.
The applicable standards are those recognized internationally, for example DIN, ISO or equivalent.
All materials harmful to the environment are prohibited (asbestos, CFC gas, etc.)

REFERENCE TEXTS - REMINDER OF THE REGULATIONS

The completion of the works is subject to compliance with the legislative, administrative, regulatory, technical and technological texts in force in the Republic of Cameroon, as well as those published in France and in the European Union, made applicable in Cameroon.
For those published in France, they are mainly collected in the Official Journal and the REEF, published by the CSTB - 4 avenue du Recteur Poincaré - 75782 Paris - France and by Eyrolles editions - 61 boulevard Saint-Germain - 75005 Paris.
All of these documents are not attached to the contract, but deemed to be known and monitored by the Contractor for the execution of the works. The reference date of these documents will be that of the offer.

SOURCE, QUALITY AND PREPARATION OF MATERIALS, MATERIALS AND SUPPLIES

Compliance with standards

The origin, the quality, the characteristics, the manufacturing processes as well as the control and acceptance tests of the materials and products manufactured must meet the standards set by this Book of Special Technical Specifications and in any case the approved French standards. or legally in force at the time of signing the contract, which the Entrepreneur is deemed to know.
However, subject to the approval of the Project Manager, corresponding materials and equipment of equivalent quality or higher than that of the standards set by this STS may also be used. The Contractor shall attach to his proposal a complete collection of the standards proposed and translated into French if necessary.
The Contractor will produce the approval certificate for each supply and he will indicate for each product offered the technical specifications, instructions for use as well as any contraindications. The Contractor remains solely responsible vis-à-vis the Project Manager for the quality of the materials and equipment delivered.

Origin

The supplies and materials being imported into Cameroon must include the documents justifying their production in the country concerned.
All supplies and materials used in the composition of the works must be approved by the Project Manager.
To obtain this approval, the Contractor shall present to the Project Manager for acceptance a technical approval file for the materials, equipment and supplies used in the composition of the works.
This file must include all documents making it possible to justify the origin and quality of the materials or products manufactured as well as a detailed description of the equipment including, among other things, the schematic installation plans and the characteristic operating curves.
Non-standard materials or equipment may be admitted under the following conditions: The Contractor must provide the Project Manager with a memorandum of tests of any kind, to which

commonly used methods for known materials. In view of the test results and supporting calculations, the Project Manager will accept or refuse the use of the new material considered.
Important remarks: the references of products indicated in the documents of this file, in the form of trade name, is made only for descriptive title without any requirement of supply in the types or the mark mentioned.

Quality, control and testing

The Project Manager reserves the right to carry out or have carried out, at the expense of the contractor, at any point and at any time that he deems useful, the quality control of the materials used, their location and storage method, their origin and transport conditions. The Contractor must make it easy for the representatives of the Project Manager and the control office to carry out these checks.
All materials supplied recognized as defective after testing must be transported outside the site by the Contractor and at his expense within a time limit set by the Project Manager.
The Contractor shall be responsible for all additional tests carried out in order to verify whether he has made the corrections to the non-conforming supplies.

RECEPTIONS OF WORKS

Provisional acceptance

Immediately after completion of the work, the Contractor will notify the Project Manager in writing. The latter will proceed with the provisional acceptance, in the presence of the Client and the Contractor.
This reception will give rise to a report signed by all the parties.
The Contractor shall be required to replace immediately, at his expense, any part or work not in conformity with the prescriptions or regulations in force and to take responsibility for all repairs resulting from these replacements.
Final acceptance

Final acceptance will be declared without reservation one year from the date of provisional acceptance in the presence of the Client and the Contractor, provided that the latter has fulfilled all the obligations of the contract.

PRELIMINARY WORKS

1.0 GENERAL SPECIFICATIONS

The purpose of this Special Technical Specifications (STS) is to recall for this batch, the reference tex and the regulations, the quality and the presentation of the equipment and materials used in th construction of the works and their implementation.

The works of Lot 1 will be broken down as follows:

CONSTRUCTION FACILITIES

BRUSHING - FELLING - GROUND PREPARATION

DEMOLITION WORKS

1.1 SITE INSTALLATION

The Contractor will be responsible for carrying out the preparatory work for the site as well as th services of common interest to all the trades, necessary for the smooth running of the site.

The Contractor will provide in his offer:

- sufficient facilities to guarantee the safety of personnel, visitors and materials and equipment store on the site in accordance with the requirements of the CCAG and GAC.
- the installation and maintenance throughout the duration of the work of all collective protectic devices in accordance with the "Health and Safety" law and its appendices.
- the day-to-day maintenance and throughout the duration of the work of a daily site log in which wi be mentioned the current date, the name of all the people working on the site with their respectiv functions, the arrival times, as well as the relevant observations noted.

The Contractor will be responsible for the site during the Construction Site until the provisione acceptance of the Works. As such, he will have to:

- present the site installation plan for the approval of the Project Manager and before the start c work
- provide security day and night
- proceed with the withdrawal of all machines and materials at the end of the work
- ensure regular cleaning of the site as well as a general cleaning of the site at the end of the work
- set up a temporary fence to close off the site enclosure as well as regulatory signs for ri: prevention and access restriction
- set up a site sign at the entrance to the site, subject to the approval of the project manager.
- install site offices as well as sanitary facilities in accordance with the hygiene standards of premise for collective use.
- the water and electricity supply as well as all the administrative procedures so that these connectior are made in compliance with the regulations and legislation the continuity of the operation of th hospital during the works
- all insurance due under the contract in accordance with the CCAG
- the realization of an execution program because of all the calculation notes and execution plar necessary for the good realization of the works, in particular those in reinforced concrete, will b provided by the Project Manager.
- the supply, within 30 days of the provisional acceptance, of the plans for re-bonding the structures.

The contractor will be required to complete the project evaluation sheets, in particular the job shee and the sheets for determining various ratios according to the model and within the time limi prescribed by the Project Manager.

DETAILS OF THE AS BUILT FILE

"As-Built" file for updating documents at the end of the business - Costs linked to the constitution of th IUD (Subsequent Intervention File)

After the provisional acceptance of the works, the successful tenderer must provide the Proje Management with the so-called "as-builtt" file written exclusively in English and accompanied by th file of technical files signed by the Project Management. Each file will necessarily include all the usef and relevant information intended to safely allow the execution of future work such as in particulc upkeep, maintenance and foreseeable subsequent work such as repairs, replacement or dismantling c certain elements or equipment. .

Each file must include all the updated plans so as to faithfully reflect the situation of the work actuall carried out at the end of the site.

All information relating to the route as well as the burial depth of buried pipes of any kind discovere during the work (water, gas, electricity, telephone, fire detection, anti-intrusion detection, cabl distribution, computer link, compressed air, heating and ventilation duct, discharge pipes and drainag network, etc.) must be transcribed in the "Recollement" file. This obligation applies to all types c pipes, both exposed and recessed, or made invisible at the end of the work. Said pipes must b clearly and understandably marked on an appropriate scale and possibly accompanied by photc allowing the location of the embedded pipes.

For updating the plots on plans, use will be made of modern representation techniques (computer c other) aimed at providing the Client with documents reflecting colored plots with appropriate legen and the use of signs and symbols. conventional. They should be reproduced on laminated plans or an other equivalent method aimed at guaranteeing perfect long-term data conservation. The origin final document updated at the end of the company by the successful tenderer must imperatively b presented to the author of the project and to the coordinator before final reproduction.

The Contractor must provide, in addition to what is provided for above, in his file of the worl executed all the explanatory notes, technical notices, maintenance notices, warranty certificates, etc.

The company will be responsible for carrying out general earthworks, preparatory work for the sit as well as the services necessary for the smooth running of the site.

The deviation of any networks in connection with the concessionaires, according to a site study carrie out beforehand (included in the site installation costs) and in consultation with the MO and the MC will be the responsibility of the Client. However, if during the work, the company damages c unidentified network as described above, it will make the repairs at its expense.

In addition, to allow proper coordination of the work, the company and any subcontractors ar required to read these specifications in their entirety.

All stakeholders, namely the Company and its possible subcontractors will be united and obliged t provide all the supplies and constraints necessary for the complete completion of the works as soon c these supplies and constraints are recognized as essential to the whole of the work.

1.2 BRUSHING - FELLING - GROUND PREPARATION

a - Bush cutting in areas of reshaped land
Brush clearing, felling and stumping of trees will be carried out in the right-of-way of areas c reshaped land as defined on the soil treatment identification plan.
The Project Manager reserves the right to increase or reduce, if only partially and at its convenienc this influence. No tree located outside the right-of-way of the road network and future constructior will be felled without the prior agreement of the Project Manager.
b - Brush clearing in an area of non-reshaped land

Brush clearing will be carried out in an area of non-remodeled land as defined on the soil treatmer identification plan. The Project Manager reserves the right to increase or reduce, if only partially an at its convenience, this influence. All trees must be kept unless the Project Manager decides in advanc

c - Felling and stumping of trees

On the advice of the Project Manager, the Contractor will cut and stump some existing trees. Fellin trees also includes stumping, removing all roots and plant products of all kinds, backfilling hol formed by removing stumps and large roots.

The products of slaughtering and stumping will be evacuated outside the right-of-way and deposite in places approved by the Project Manager and will in all cases be arranged so as not to obstruct th flow of water and the operation of the site.

1.3 DEMOLITION WORKS

Existing structures including buried structures affected by the development of the area will b demolished by order of the Project Manager: superstructures and their foundations in masonry an reinforced or unreinforced concrete, joinery, tiling, false ceilings, frames and roofing.

All recovery materials will be placed in the areas designated by the Project Manager. They wi remain the property of the Client. All non-recoverable demolition materials will be brought to location designated by the Project Manager.

*** END OF LOT ***

EARTHWORKS - VARIOUS ROADS AND NETWORKS (VRD)

2.1 GENERAL EARTHWORKS

2.1.1 GENERAL

General earthworks include the shaping of the land by cuttings and fillings on the intervention zone defined on the execution plans. They concern the earthworks to be carried out for:
staking out the layout of underground networks and roads,
stripping of topsoil,
trenches for various networks,
excavations for pavement encasement,
platforms for pedestrian traffic,
platforms for green spaces,
backfilling of excavations after completion of the works,
leveling of the surrounding area after execution.
The Contractor will remain fully responsible for any disturbance or movement of the land. N compensation will be granted for ancillary work required in particular due to:
the nature of the land (excavations, handling, removal),
excavations carried out in water or liquid sludge,
handling and removal of wet or infected cuttings,
the excavations and handling carried out in the embarrassment of the props, in underpinning, in smc parts.
No supplement will be allowed due to the possible presence of water from aquifers, seepage or an other cause.

2.1.1.1 REFERENCE DOCUMENTS

The works in this chapter must meet the conditions and requirements of the legislative, regulator technical and technological texts in force in the Republic of Cameroon, as well as those publishe elsewhere and made applicable in Cameroon, including the following:

2.1.1.2 STANDARDS AND DTU

DTU N ° 12: Earthworks for the building
DTU N ° 13.1: Shallow foundations
Standard NF P 98-331: Techniques and constraints related to earthworks.

2.1.1.3 CALCULATION RULES

DTU 13.12: Rules for the calculation of shallow foundations.

2.1.2 Layout of vrd works and buildings

The company holding this lot has an obligation to ensure the installation of all road works and variou networks as well as the civil engineering works that accompany them, in accordance with the plans c the Project Manager and those of the offices of studies. He will have the basic staking established c his own expense by a certified surveyor.
The stakes are attached in plan and in altitude to fixed marks. The Contractor is required to ensur their conservation, as well as their removal if the needs of the work so require. He will be responsibl for checking the level ratings shown on the plans.
When a route is possibly carried out for another trades by the Contractor of the VRD lot, the holde of this lot requests "assistance" and "control" of this trades.
All installation and staking work will be subject to a reception.

2.1.3 MATERIALS FOR GENERAL EARTHWORKS

2.1.3.1 Materials for embankments

a - Definition of materials

The materials for backfill will come from excavated material, if necessary, or possibly borrowed fro sites recognized by the Project Manager.

b - Materials from excavated material

As a general rule, all materials from cuttings will be reused as backfill, with the exception, however, c materials containing more than 0.5% organic matter, silts and very clayey fine materials whos liquidity limit LL would be greater than 60 .

c - Materials from borrowings

When the volume of backfill exceeds that of the cut, the Contractor shall submit for the approval c the Project Manager, at the latest 60 days before starting the work, the borrow sites that he intenc to operate. The Project Manager will authorize or refuse the operation of a loan in view of th identification results of the materials contained in the geotechnical file which must be presented.

d - Base layer in selected materials

The Contractor shall submit for the approval of the Project Manager, no later than 60 days after th order to start work, the borrow sites that he intends to use, with identification of the materia encountered (Atterberg limits, grain size, CBR, etc ...). The Project Manager will specify to th Contractor the authorized limits and thicknesses of materials likely to be used without modifying th contractual requirements - Base layer in selected sand:

The materials for the base layer will be selected natural materials. The percentage by weight c organic matter must in no case exceed 0.5%. The plasticity index must be less than or equal to 20. Th percentage of elements passing through the 0.08 mm sieve must be less than or equal to 20. The CB after 96 hours of imbibition and at 95% of the dry density maximum given by the modified Procto test must be greater than or equal to 80.

- Top layer of backfill:

The upper thirty (30) centimeters of the backfill carried out directly under the leveling of th earthworks must be made with materials presenting a CBR at 96 hours of imbibition and 95% of th maximum dry density given by the modified proctor test, higher or equal to 50.

2.1.4 LAND MOVEMENTS

2.1.4.1 Topsoil stripping

The stripping of the ground will be carried out on 20 to 30cm of depth according to the nature of th ground, after the brush clearing and the extraction of the stumps.

The topsoil will be stripped where it exists in the base of the earthworks, that is to say, between th crests of the cuttings slopes and the feet of the embankment slopes. In the embankment areas, th topsoil stripping products will be, after having been purged in particular of roots and plant debris c foreign matter of all kinds, spread on the slopes previously adjusted and received. Thes embankments will, if necessary, be the subject of steps to fix the appropriate land.

The places of deposit of the topsoil obtained as indicated above by stripping, will be subject to th approval of the Project Manager. The stripping products will in all cases be arranged so as not t hinder the flow of water and circulation.

2.1.4.2 Excavation and deposit

After stripping the topsoil, the excavated material will be reused as backfill. When carrying out th excavation, the Contractor must keep the Project Manager informed of the various materia encountered, in particular those whose quality does not comply with the specifications of this CPTP. H

must obtain the agreement of the Project Manager before discarding materials. All materials thc cannot be reused in backfill will be deposited in a place approved by the Project Manager.
The Contractor must ensure the rapid and efficient evacuation of rainwater at all times as th excavation works are carried out, so as to avoid any humidification affecting the compaction.

The work must be carried out in such a way that after adjustment, the excavation slopes are carrie out to tolerances of 5 cm in distance from the implantation axis. The altimetric dimensions of th excavated bottoms must not differ by more than 2 cm from those of the project.
All the cuttings will be carefully compacted so as to obtain in situ a dry density at least equal to 95% of the maximum dry density given by the modified Proctor test.
It is the responsibility of the Contractor to ensure, at its running costs, the sanitation of the platform order to avoid any imbibition of the materials. For this purpose, he will have to open drains, ditches c temporary structures of any kind suitable to ensure the permanent flow of water in all circumstances.

2.1.4.3Execution of embankments

All the backfill beds will, at the request of the Project Manager, be compacted beforehand so as t obtain in-situ a dry density at least equal to 90% of the maximum dry density given by the modifie Proctor test. The Project Manager will advise the Contractor as to the arrangements to be made in th event of encounters with waterlogged foundations.
The backfill operations may not begin before the Contractor has had the preparatory wor approved.
With regard to embankments, the Contractor must ensure the nature and load-bearing qualities of th base materials. In the event that the presence of materials with poor performance is detected, th Contractor must immediately notify the Project Manager who will give him all instructions to this effec The Project Manager may order the Contractor to purge these materials of insufficient quality.
The purged materials will be evacuated and deposited in an area designated by the Proje Manager. The corresponding borrowings required for the backfill will be cleared and stripped accordance with the provisions defined in this CPTP.
The embankments will be erected in successive layers of a maximum of 0.30m after compaction. Th Contractor shall take particular care to ensure that the edges of the embankments are of the sam compactness as the bodies of the embankments and to take all necessary measures and precautior for this purpose.
The work must be carried out in such a way that after compaction and adjustment, the slope profil indicated in the plans are carried out to tolerances close to plus or minus 5 cm. The Contractor attention is drawn to the fact that the profile of the embankments must be obtained by adjustmer carried out in "cut" and not by resurfacing, so as to eliminate any uncompressed over width.
The dry in-situ densities to be obtained will be at least equal to:
- 90% of the maximum dry density given by the modified Proctor test for the body of the backfill;
- 95% of the maximum dry density given by the modified Proctor test for the last thirty centimeters c the crest of the body of the backfill below the level of the latter.

2.1.4.4EXECUTION OF PLATFORMS

The platforms, the geometric characteristics of which are defined on the plans incorporated in th contract, will be subject, after completion of all the drainage works and earthworks, to carefi adjustment and compaction to obtain:
- a level height adjusted to plus or minus 2 cm
- compactness over the last thirty (30) centimeters, at least equal to 95% of the maximum densit given by the modified Proctor test.
The CBR at 96 H of imbibition and at 95% compactness of the modified Optimum Proctor must not b less than 50.

Before the compaction and adjustment of the platform, the drainage works and all other works belo the level of the platform must be completed, including the placement and compaction of the backf that covers them, the The Contractor must obtain the approval of these works in writing from th Project Manager, this in no way releasing the Contractor from his liability.
The Contractor must ensure at all times, even during execution, the rapid and efficient evacuation c rainwater from the platform, so as to avoid its imbibition or humidification of the materials. To th end, ditches, drains, drains and culverts must be in permanent working order.
In addition, the Contractor must open drains, ditches or temporary structures of any kind, suitable fc ensuring the permanent flow of water in all circumstances.

2.1.4.5Acceptance of earthworks and platforms

The Contractor must seek the written approval of the Project Manager for the leveling of th earthworks before undertaking any other services. It is only after written authorization from th Project Manager that the Contractor can put in place the foundation layer or the base layer c undertake the superstructures.
This acceptance will relate in particular to the adjustment of the platforms and will take into accou the checks carried out by the Project Manager. The reception control may include deflectograp measurements. In the event of faulty workmanship or non-compliance, the earthworks will be resume at the expense of the Contractor. Acceptance during the work in no way releases the Contractor fro its obligations and responsibilities relating to provisional and final acceptance.

2.2 MISCELLANEOUS ROADS AND NETWORKS

2.2.1 VARIOUS ROADS AND PATHS

2.2.1.1 GENERAL

Roadways are generally grouped according to their destination, in two categories:
- Carriageways intended for the circulation of vehicles,
- Paved or unpaved pavements, intended for pedestrian traffic.

The works include the reconnaissance of the ground and necessary preliminary surveys, the provisionc installations for the lot, bringing and withdrawal of the equipment and supplies as well as the possibl administrative procedures, the establishment of the excavation zones and of all the zones where th Contractor will have to intervene regardless of the topography of the land encountered.
Before proceeding with the execution of the work, the Contractor must obtain the agreement of th Project Manager on the layout and on the leveling mark.
It will also involve carrying out work such as:
paving of roadways, footpaths and car parks,
outdoor and indoor green spaces,
standard concrete borders.

2.2.1.2FORM FUND FOR PEDESTRIAN ROADS AND PATHWAYS

The works include the installation of the axes of the roadways and various paths. The picketing will b carried out by the contracting company which will be responsible for the benchmarks. To do this, th Contractor must comply with the plans and drawings which may be given to him. He will b responsible for any siting errors that may occur and will have to demolish and rebuild at his expens the poorly laid out portions of the work.
The form bases will be delivered erected, leveled and compacted at the level of the first lowc constituent layer.
In the case of the bottom forms formed by the ground in place, this will be drawn up at the level 0.05 m of the theoretical dimension of the underside of the body of the paving.

Regarding the forms in filler materials, this layer will be made up of all-terrain sand and gravel. Th backfilling will be carried out in successive layers not exceeding 20cm. Compaction will be done wit a mechanical roller.

2.2.1.3COATING OF PEDESTRIAN AND PEDESTRIAN PATHS

The roadways, as well as the pedestrian paths provided for in this file, are made of self-lockin paving stones with tight joints.

After preparation of the base, the implementation will be done in this order:

- Installation/laying of a polyethene paper on the prepared soil surface

the installation of a smooth sand bed, respecting a slight slope for the evacuation of runoff wate Average thickness of the sand bed between 5-7cm.

- laying the pavers, to fit into each other and hit them with a mallet to pack them in the sand
- the packing of the joints using sand.

2.2.1.4 STANDARD CONCRETE EDGES

They are made of prefabricated elements of vibrated concrete, placed on concrete footings of grav dosed at 300 kg of cement and 10cm thick. The installation will be done with medium mortar wit setting flashing on both sides, repointing with greasy mortar, carefully leveled.

STANDARD BORDER TABLE

No.	DESIGNATION	DIMENSIONS		NOMINAL BENDING RESISTANCE OF CONSTITUTIVE CONCRETE		
				CLASS 1 (55 bars)	CLASS 2 (70 bars)	CLASS 3 (100 bars)
		High.	Width			
1	Borders passable			Borders for zones by - villonnaires	Borders and gutters currents	Urban roads and traffic intense
	A1	25 cm	20 cm			
	A2	20 cm	15 cm			
	T4	3 0 cm	20 cm			
2	Channels					
	C1	12 cm	20 cm			
	C2	15 cm	30 cm			
	AC1	18 cm	35 cm			
	AC2	18 cm	27 cm			
	T5	30 cm	24 cm			
3	Water thread					
	CC1	12 cm	40 cm			
	CC2	14 cm	50 cm			
4	Borders car park					
	T1	20 cm	12 cm			
	T2	28 cm	15 cm			
	T3	28 cm	17 cm			

2.2.2 SANITATION - WATER SUPPLY

2.2.2.1 GENERAL

The specifications concerning the origin, quality and preparation of materials, equipment and supplie were recalled in paragraph 0.4 of this STC.

2.2.2.2 SUPPLY OF PVC PIPES AND FITTING PARTS

a - For sanitation

The pipes and fittings will conform to standard NFP 16 352 of December 1978, entitled nor plasticized polyvinyl chloride pipe elements for sanitation ".

b - For water supply

- Definition:

The pipes, fittings and special parts in rigid polyvinyl chloride (PVCR) must meet at least the standarc and recommendations in their most recent version concerning the material, metric series. The Contracto shall specify the articles of these standards to which his equipment meets.

All gaskets, strippers, lubricants and adhesives will be delivered in sufficient quantity.

- Pressure and diameters:

The minimum operating pressure of the pipes and fittings will be 10 bars. The pipes will be supplied i sections of at least 6 m.

The pipes will have glued joints with hot-formed socket for outside diameters less than or equal to 11 mm, and flexible joints for outside diameters greater than 110 mm

Sockets cast by injection and glued to the pipes are prohibited. Flange adapter gaskets of c diameters shall be cast iron. Large radius curves will meet the same assembly characteristics as pipes.

- Connection parts and special parts:

These parts will be in molded PVC with adhesive mounting on pipes with an outside diameter less thc or equal to 90 mm

2.2.2.3 P-PIPESPR

a - Definition and standards

The main characteristic of Polypropylene Random (PP-R) networks is their high resistance. They mu have at least the following general characteristics:

Unit value of PP-R properties		Unit	PP-R value	Test method
Density		g / cm³	0.90	ISO 1183
Metric flow (230 ° C / 2.16 kg)		g / 10 min	0.30	ISO 1133 Requirement 12
Coefficient of linear thermal expansion		1 / K	1.5x10-4	DIN 53752
Thermal conductivity		W / m K	0.24	DIN 52612
Tensile modulus of elasticity (1 mm / min)		MPa	900	ISO 527
Resilience Charpy, notched	+ 23 ° C	kJ / m²	20	ISO 179
	0 ° C	kJ / m²	4	
	-23 ° C	kJ / m²	2	

PP-R pipes, fittings and special parts must also meet at least the standards and recommendations i their most recent version concerning material, metric series. The Contractor will specify the articles c these standards to which his equipment meets.

b - Pressure and diameters

The minimum operating pressure of the pipes and fittings will be 10 bars. The pipes will be supplied i the form of rolls. The buried parts will have as few connections as possible.

c - Connection parts and special parts

The joints are made by mechanical connection using special plastic fittings approved by the pip supplier.

2.2.2.4 CAST IRON TAPS AND FITTINGS

a- Definition and standards

The connecting pieces and special pieces will be made of ductile iron, maximum working pressur defined in the Specifications. They must meet the standards NFE 29324, and NFE 29306, 2930: 29310, and 29311.

b - Valves - round valves

The coupling body and special parts in ductile iron, the seat and the maneuvering screw in coppe alloy or stainless steel.

The gate valves will be with GN 10 or GN 16 flanges, length between flanges according to N 29324, anti-clockwise closing with prescription cap. They will be supplied with two flat gaskets an the corresponding galvanized bolts in sufficient number, prescription cap with maneuvering square 3 x 30.

c - Lockable mouths

Keyed mouths will include the following:

a) a bell intended to cover the upper part of the gate valve;

b) an elongated polyvinyl chloride tube with flange and socket, of appropriate length for the dept of the valve;

c) a keyed mouth head with buffer and hexagonal cast iron chain, roadway and / or sidewalk serie marked "Waters".

d - Suction cups

They are ductile iron and flanged, and double-acting,

They will be fitted with a shut-off valve which may or may not be incorporated, allowing the suctic cup part to be dismantled without interrupting the water service. They will be equipped with flc gaskets and galvanized bolts in sufficient number for the connection.

e - Flange adapter gaskets (JAB)

the connection of the equipment provided with flanges to the PVC pipes is provided by means of cast iron gasket of the flanged adapter type, PN 10 drilling. These connecting pieces must b supplied complete with gasket, flat gasket and galvanized bolts.

2.2.3 SANITATION AND WATER SUPPLY WORK

2.2.3.1 EXCAVATIONS FOR WORKS AND PIPING LAYING

a - Trenches

- Opening of the trenches:

The trenches will be carried out in accordance with the plans and indications of the Project Manage The depth of the trenches above the upper generatrix of the pipes must be at least that indicated c the network plan. The minimum widths of trenches at the base will be given by the formula L = 2 D However for diameters <300 mm, the width will not be less than 600 mm, with

L = trench width in meters and D = internal diameter of the pipeline in m.

The bottom will be perfectly drawn up and purged of the stones encountered.

- Shoring:

The necessary shoring will be established according to the rules of the art and formed of wood c appropriate dimensions for the use of which they will be intended. They will be carried out contiguou if the nature of the land or the duration of the excavation work requires it, and all precautions will b taken if necessary to prevent the sinking of the land. They are included in the opening price of th trenches in the price schedule and will not be subject to specific invoicing.

- Clean-up of pipeline laying sites:

The water encountered in the excavations, whether it comes from aquifers or infiltration of all origi and of all kinds, will be conducted by the Contractor in sumps, where they will be removed by him.

The Contractor will be required to dig, clean out and maintain these sumps as well as the drains an any special installations leading the water to the sumps. These drains and installations must ensure minimum of excavation sanitation.

- Preparation of the bottom of the excavation:

A bed of sand or sifted earth with a thickness of at least ten (10) centimeters will be placed on th bottom of the excavation. In the presence of rocks or stones, the bedding will be twenty (2(centimeters thick. Before any pipe laying, the trench thus prepared will be checked by the Proje Manager who will be notified in time.

The Contractor will keep, on the site, all the equipment and personnel necessary for verifying th depth and alignment of the trench.

- Backfilling of the trenches:

From the bottom and up to at least twenty (20) centimeters above the pipes, the backfilling will b carried out by hand, either with filler sand, or if the conditions are favorable, with the unconsolidate cuttings carefully purged. of stones or hard materials and rammed in layers of ten (10) centimeters o the sides and around the pipes.

The Contractor may proceed with the backfilling only after authorization from the Project Manage who will have checked in particular the external coatings of the pipes, the wedges, etc ...

The rest of the backfill will be made with the cuttings expurgated from the blocks of the rock, plar and animal debris, except unfavorable conditions (clay soil for the crossings of pavements etc ...) b layer of twenty (20) cm maximum, suitably pounded and watered if necessary to obtain a density i place at least equal to 95% of the maximum density obtained in the modified Proctor test.

b - Laying of pipes

Before its implementation, each pipe, special part and device must be on site, carefully cleaned an purged of all foreign elements.

The Contractor must present the pipes well in the extension of each other, facilitating their alignmer by means of temporary shims. It is forbidden to take advantage of the play of the assemblies t offset the successive pipe elements by an angular value greater than that permitted by th manufacturer.

The spacing between the ends of two (2) consecutive pipes per flexible joint varies according to th diameters. It is at least five (5) mm.

The pipes will be assembled according to the manufacturer's instructions. For PVC pipes, this assembl will be done using products (stripper, glue) specified by the manufacturer. It will always be checke that the lubricant used to facilitate assembly, and in particular the elastomer ring, is suitable for th purpose.

During installation, every precaution will be taken to avoid the introduction, inside the pipes, of debr or foreign bodies so as not to damage the interior of the pipe. The ends of the laid pipe must b carefully plugged with wooden plugs during work interruptions.

Pipes, special parts and devices must be lowered with care in the trenches and in the galleries wher they must be laid, avoiding shocks, falls, etc.

The installation and assembly of the pipes and the valves must be carried out by qualified workers.

The Contractor will have the right to cut the pipes when this operation is justified by the requiremen of the installation. The work site must imperatively be reestablished on the male end in the event c assembly by gluing or by flexible joint. However, making hot-formed joints on site will be prohibited. In the event of abusive use of falls, the Contractor shall, at his expense, resume work. Counter-slope at the level of the drain and suction cups, will not be tolerated. The Contractor shall be responsible fc all work necessary to remedy it, including the removal of the pipes already laid and the reinstallation.

No section of piping should be laid horizontally.

All pipe connections will be made using special parts (tees, etc.)

c - Installation of equipment

- Installation of gate valves:

The gate valves will be based on a concrete block, and will be installed under lockable cover.

The parts of the mouths with key, bell, elongated tube, head and buffer will be placed verticall When the keyhole is in green spaces, the head will be placed and sealed with a concrete crown 1 cm above the current ground level.

All gate valves must be able to be easily dismantled so that their replacement does not cause an displacement of the pipe or demolition of the masonry block. The pipes must not exert on the flange any abnormal tensile force likely to cause their tearing or deformation of the body of the device.

Flanged gate valves will therefore be mounted between flexible gaskets (dismantling gasket, flang adapters, etc.). The assembly will be carried out beforehand outside the trench, then the assembly wi be lowered and put in place.

- Installation of purges and suction cups:

The gate valves intended to purge the pipes will be of the diameter of the pipe on which th emptying is carried out. The purge valves will be placed, whenever the ground allows it, unde lockable mouth with evacuation towards a natural outlet or towards the rainwater evacuation networl

The suction cups will in cases be placed under a manhole and connected to the pipes by means of a isolation valve and a clamp on the PVC (diam. Of 63.90 and 110 mm) or a tee reduced on cast irc and PCV for larger diameters.

The location of the purges and suction cups on the installation plans and diagrams is only given as c indication. In all cases, the exact position of these structures must be defined on the ground agreement with the Project Manager.

- External drinking water supply:

The sprinklers, fire hydrants etc ... are connected to the pipes by means of a socket made by tappin or by tee or special socket, a pipe of suitable diameter and a valve under the hydrant with key c under watch.

d - Special precautions

All metal parts (buttons, nuts, brackets, clamps, etc ...) and in particular, those which will be in conta with water, will be protected against corrosion by a bituminous coating applied hot, or any othe material suitable for effectively protecting the metal. Metal parts placed in dry places will b covered with 3 coats of anti-rust paint.

2.2.4 VISITORS AND CONNECTIONS

Depending on the position in the network, the depth and the number of pipes entering or leaving th structure, one of the following types of manholes will be used:

Type A:	40 x 40cm or 50 x 50cm. Depth 0.4 to 0.5m
Type B:	50 x 50cm or 60 x 60cm. Depth 0.6 to 0.8m.
Type C:	60 x 60cm or 80 x 80cm. Depth 0.8 to 1.5m.

The works include the execution of earthworks of all kinds, evacuation of excess earth, shielding etc . All the necessary adjustments to the buffer or slab, possibly, the supply and installation of galvanize steel brackets rungs.

The raft will be 10 cm thick at the level of the water course and will be made of gravel concrete. Th vertical walls will be raised up to an upper side of approximately 20cm from the upper externe generator of the pipe.
These walls will have a thickness of 10 to 15 cm depending on the depth, and can be made fro prefabricated elements. In the background, concrete cunette style ensuring continuity of flow.

The interior faces will receive a coating smoothed with cement mortar, and the application of a greas mortar on cunette and bench. The closing device will be either a ductile iron or steel cover (heav series) on a metal frame, or a reinforced concrete slab, fitted with a lifting ring.
These manholes can be visited during regular or temporary maintenance. Their design depends c their destination. There are manholes, siphoid manholes, grease traps, etc.

2.2.5 GENERAL ELECTRICITY SUPPLY NETWORKS

2.2.5.1 EXCAVATIONS

a - Trenches

- Opening of the trenches:

The trenches will be carried out in accordance with the plans and indications of the Project Manage The depth of the trenches above the upper generatrix of the pipes must be at least that indicated c the network plan and in the description. The minimum widths of trenches at the base will be given b the formula L = 2 D
The bottom will be perfectly drawn up and purged of the stones encountered.

- Shoring:

The necessary shoring will be established according to the rules of the art and formed of wood c appropriate dimensions for the use of which they will be intended. They will be carried out contiguot if the nature of the land or the duration of the excavation work requires it, and all precautions will b taken if necessary to prevent the sinking of the land. They are included in the opening price of th trenches in the price schedule and will not be subject to specific invoicing.

- Sanitation of the trenches:

The water encountered in the excavations, whether it comes from aquifers or infiltration of all origir and of all kinds, will be conducted by the Contractor in sumps, where they will be removed by him.

The Contractor will be required to dig, clean out and maintain these sumps as well as the drains an any special installations leading the water to the sumps. These drains and installations must ensure minimum of excavation sanitation.

- Preparation of the bottom of the excavation:

A bed of sand or sifted earth with a thickness of at least ten (10) centimeters will be placed on th bottom of the excavation. In the presence of rocks or stones, the bedding will be twenty (2(centimeters thick. Before any laying of sheaths, the trench thus prepared will be checked by th Project Manager who will be notified in time.

The Contractor will keep, on the site, all the equipment and personnel necessary for verifying th depth and alignment of the trench.

- Backfilling of the trenches:

From the bottom and up to at least twenty (20) centimeters above the ducts, the backfilling will b carried out by hand, either with filler sand, or if the conditions are favorable, with the unconsolidate cuttings carefully purged. of stones or hard materials and rammed in layers of ten (10) centimeters o the sides and around the sleeves.

The Contractor may proceed with backfilling only after authorization from the Project Manager, wh will have checked in particular the outer coverings of the sheaths, the wedges, etc ...
The rest of the backfill will be made with the cuttings expurgated from the blocks of the rock, plar and animal debris, except unfavorable conditions (clay soil for the crossings of pavements etc ...) b layer of twenty (20) cm maximum, suitably pounded and watered if necessary to obtain a density i place at least equal to 95% of the maximum density obtained in the modified Proctor test.

b - Installation of the sleeves
Before its implementation, each sheath, special part and device must be on site, carefully cleaned an purged of any foreign element.
The Contractor must present the sleeves in line with each other, facilitating their alignment by means c temporary shims. It is forbidden to take advantage of the play of the assemblies to offset th successive sheath elements with an angular value greater than that permitted by the manufacturer.
During installation, every precaution will be taken to prevent the introduction, inside the sleeves, c debris or foreign bodies so as not to damage the inside of the pipe. The ends of the fitted sleeve must be carefully plugged with wooden plugs during work interruptions.
The Contractor will have the right to cut the pipes when this operation is justified by the requiremen of the installation. The work site must imperatively be reestablished on the male end in the event c assembly by gluing or by flexible joint. However, making hot-formed joints on site will be prohibited.
In the event of abusive use of falls, the Contractor shall, at his expense, resume work.

2.2.6 SANITATION WORKS

2.2.6.1 COVERED CHANNELS

Reinforced concrete gutters and gutters are made as follows:
Execution of channel excavations
Execution of a N ° 1 clean concrete 5 cm thick.
Laying of the raft steels with waiting for the walls
Concrete N ° 5 10 cm thick, with incorporated screed
Execution of concrete walls of variable height according to the altitude of the surrounding land
Concrete filling N ° 1 between the wall and the surrounding terrain
Backfilling around the structure and connecting the land with compacted backfill to prevent water fro flowing against the outside of the vertical walls.
The wall formwork will be carried out using standard formwork PS. (neat facing), to remain visibl Fine leveling and edges pulled with iron of all the parts seen.
Retrofits with coating overloads are prohibited. The concrete that will present honeycombs will b dismantled and redone to the exclusion of any other solution.
Execution of the slabs for the cover with the same type of concrete as that used for the walls and c corresponding dimensions.

2.2.6.2 SEPTIC TANK AND SUMP

The septic tank will include 2 compartments A, B and C occupying 2/3 and 1/3 of the total theoretic volume respectively. The total theoretical volume depends on the number of users, the sludg accumulation rate (estimated according to each region), and the emptying period, which is set at years. The revenge of the pit will be at least 30 cm. The height of liquid in compartment A must b greater than or equal to 1.20m.
The aerobic bacterial filter will be housed in a compartment which can be contiguous to the compartments of the pit itself. The bacterial filter compartment shall be of such length that the volum of the filter is greater than at least 1.60 m3. The air filter will also receive wastewater after it hc passed through a separator tank. The effluent is distributed in the filter from top to bottom c

uniformly as possible thanks to a distribution grid on which rests a cut and perforated PVC pipe whic receives the effluent from compartment B. Another grid supports the filter mass . This will have particle size varying from 45 to 80 mm and a minimum height of 80 cm. The filter and the screer should be washed with a water jet every 6 months.

Downstream of this manhole, the effluent will be discharged into a sump or filter well. This manhol will be closed by a perforated metal grid fitted with an anti-insect grid with a mesh equal to or le than 1.2 mm x 1.2 mm in stainless steel. The upper ventilation of the septic tank will be located compartment A and extended by a 120 mm diameter PVC pipe terminated in the upper part by a fitted on its 2 openings with an anti-insect grid with a mesh size equal to or less than 1.2 mm. x 1. mm. The T-end must be at least at the height of the top chaining of the neighboring construction.

The circulation of the effluent and of the air between the various compartments described above ar ensured by several PVC pipes, the characteristics of which (diameters and positions) must imperativel comply with those indicated on the working drawings. In particular, the black water supply pipe wi have its lower generator positioned between 7.5 and 10 cm above the nominal water level whic hydraulically corresponds to the level of the passage from compartment A to compartment B. I downstream end will be wedged at approximately 40 cm from this nominal level, and decompression hole allowing the escape of the air expelled by the waterfalls will be provided at th level of the bend.

The pipes ensuring the passage of the effluent between compartments A and B and between B an the filter compartment will be placed at the same altitude (generator above the nominal level) an both will have their upstream end approximately 30 cm lower.

The connection between the filter compartment and the downstream manhole will be placed in th lower part and will allow both the passage of the effluent downstream and the rise of the ventilatic air upstream.

Air circulation openings will be made in the upper part between the filter compartment, compartmer B and compartment A. The slab and the cover of the structures will be in reinforced concrete with minimum thickness of 12 cm, concrete dosed 350 kg / m3.

The walls will be in masonry of solid cement agglomerates of at least 20 cm thick, including vertic and horizontal chains in BA, coated with water-repellent cement mortar and bottom covered with waterproofing screed including all constraints for waterproofing. all.

Exact dimensions of the structure according to calculations and plans (in order to take into account an deficiencies in maintenance, the dimensions obtained by calculation have been increased b approximately 20%).

The walls in contact with the earth will receive two crossed layers of current cutback bitumen, typ FLINTCOAT.

All compartments are fitted with airtight buffers and manholes established at ground level, judicious placed and designed to allow the disgorging of chutes and communication pipes, cleaning c distribution and filtration devices, maintenance operations and the execution of oil changes.

2.2.6.3LOST WELLS

In the absence of a natural outlet or collective sanitation network, the rainwater collected on the sit and channeled into the gutters will be directed to a soak-up well.

The soaker wells intended to receive rainwater will be constructed as sumps, but without it bein necessary to ensure the impermeability of the masonry of the vertical walls at the wellhead. They w have a diameter of 180 cm. They will be planned to be dug either up to a maximum depth of 1 meters, or until they meet a rocky horizon that cannot be crossed by manual earthwork, or up to meters above a sheet of water. If there is no prior indication of the level of the water table and if th earthworks were to meet this water table, the well would be backfilled with impermeable cla materials compacted to a minimum height of 2 m.

*** END OF LOT ***

CIVIL WORKS

3.1 GENERAL SPECIFICATIONS

The purpose of this Special Technical Specifications (CPTP) is to recall for this batch, the referenc texts and the Regulations, the quality and presentation of the equipment and materials used in th construction of the works and their implementation.

The works include the implementation of the services of the trade and of shaped works of th profession, in supply and installation, including all constraints to obtain "complete" works.

3.2 REFERENCE TEXTS - REMINDER OF THE REGULATIONS

3.2.1 General information on the reference texts

The completion of the works is subject to compliance with the laws, laws, administrative, regulator technical and technological in force in the Republic of Cameroon, as well as those published in Franc made applicable in Cameroon.

The texts published in France are for the most part collected in the official journal and the publishe REEF:

- by the CSTB (4 avenue du Recteur POINCARE - 75782 PARIS)
- and EYROLLES editions (61 boulevard St Germain - 75005 PARIS).

All of these documents are not attached to the contract, but deemed to be known and followed by th Contractor for the execution of the works. The most commonly applied documents are summaril stipulated, without limitation in Articles 2.21. to 2.24. of this chapter.

The reference date of these documents will be that of the offer.

3.2.2 Legislative, administrative texts - official regulations

Will apply:

- laws, decrees, orders, general, particular and local regulations concerning the construction c buildings open to the public.

In fire safety, the regulations applied will be:

- fire safety regulations, collections n ° 1011 (Imprimerie du Journal Officiel RF).

3.2.3 Unified technical documents

a - Basic DTU

The Contractor is required to respect and apply the following DTUs:

- DTU N ° 12 Earthmoving for buildings
- DTU N ° 13.1Shallow foundations
- DTU N ° 13.2Deep foundations
- DTU N ° 20 Masonry, reinforced concrete, plastering
- DTU N ° 20.11Masonry walls and walls
- DTU N ° 26 Coatings, hydraulic binders
- DTU N ° 81.1Masonry restoration
- DTU N ° 52.1Sealed floor coverings
- DTU N ° 55 Sealed wall coverings and prescriptions having the value of DTU specifications
- DTU N ° 21.3Prefabricated reinforced concrete slabs and flights of stairs, simply placed c substantially horizontal supports
- DTU N ° 21.4The use of calcium chloride and admixtures containing chlorides in the preparation c grouts, mortars and concrete.

b - DTU in knowledge

The Contractor for the realization of his works must have knowledge of the DTU and other trades an in particular:

- DTU N ° 36 Joinery
- DTU N ° 36.1Wood joinery
- DTU N ° 37.1Metal joinery

- DTU N ° 43 Waterproofing of roofs and inclined roofs
- DTU N ° 53 Glued floor coverings
- DTU N ° 58 Suspended ceilings
- DTU N ° 30 Wooden frames and stairs
- DTU N ° 52.1 Glued floor coverings
- DTU N ° 55 Sealed wall coverings
- DTU N ° 59 Painting

c - Calculation rules

The structures must be calculated in accordance with the following calculation rules:

. Reinforced concrete - masonry

- technical rules for the design and calculation of reinforced concrete structures and structures (CCB 68 rules),
- technical rules for the design and calculation of reinforced concrete structures and structure according to the limit states method (BAEL 91 rules).

. Various concrete

- DTU 20.11 / Simplified calculation rules for walls and masonry walls (CSTB 1530-193, October 1978)
- Erratum (CSTB 1549-194, December 1978)
- Erratum n ° 2 (CSTB 1569-199, May 1979)
- DTU 23-1 / Calculation rules for walls and poured concrete walls (CSTB 1359-166, January 1976)

. Floors

- Specifications common to floor processes (CPTP "floors")

Title I: ribbed floors with prefabricated joists.

Title II: solid slabs made from prefabricated pre-slabs and concrete.

- DTU 14.1 / Applicable calculation rules for reinforced or prestressed concrete buildings receivin casing.

. Constructions

General rules for the construction of residential buildings (decree n ° 69-596 of 14 June 1969) as well as the decrees and application circulars.

. Fire

FB rules / Prediction methods by calculating the fire behavior of concrete structures (CSTB, Apı 1980).

. Foundations

DTU 13.1 / Rules for the calculation of shallow foundations (CSTB 784.90, February 1968).

. Wind

Rules NV 65 / Rules defining the effects of wind on buildings and annexes (Eyrolles and CSTI December 1978).

d - Specifications

The prescriptions of these notebooks are applicable but will be replaced or supplemented by th general and specific provisions provided for by the administrative regulations concerning building open to the public and labor legislation.

3.2.4 General and specific standards

Materials, materials and works must comply with the prescriptions of the following French standard published by AFNOR (Tour Europe - 92400 COURBEVOIE FRANCE), collected mainly at the REEF c CSTB (4, Avenue du Recteur POINCARE 75782 PARIS).

- NFB 35.015 and 016 Rounds and bars for BA
- NFB 10 and 12 ... Quarry products
- NFB 01, and 02, 06, 08, 14, 15, 18, P 61, P 72, P 85 (dimensions, assumptions, calculation method test methods and materials)

3.2.5 Memorandum of recommendations from professional organizations

The specifications and recommendations of professional bodies will be followed by the Contracto both for the quality of the materials and for the installations (the list below is not exhaustive).
- Technical Booklet, Booklets, recommendations, memoranda and technical opinions from CSTB (Scientific and Technical Center for Building).
- Technical Institute of Building and Public Works.
- Recommendations concerning the coverings of external facades (for adaptation an recommendations).
- Catalogs, technical sheets and manufacturers recommendations
- Mementos n ° 1, 2, 3 - Professional recommendations concerning the choices, the design and th execution of manufactured concrete blocks, gray brochures 1971 - 1972.
- Recommendations for the execution of facade walls (Securities and UNM) - Green leaflet 1972.
- Recommendations and mementos published by the National Building Federation (Restoration an sealed coverings, etc ...).

3.2.6 Regulatory texts - FIRE SAFETY

The fire safety regulations applicable to this project will include:
- Cameroonian official texts in force on the date of the contract
- the French regulations in force in France on the same date, namely:
- Decree n ° 73.1007 of October 31, 1973 relating to protection against the risks of fire and panic i establishments open to the public.
- the order of 25 June 1980 general provisions for all types of establishments.
- the circular of March 3, 1982 - technical instructions n ° 246-247-248.
- the decree of September 10, 1970 relating to the fire protection of residential buildings.
- all other texts (regulations, standards, DTU, etc.) to which the regulations refer.

On the other hand, we will comply with the specific requirements of the Cameroonian administration.

3.2.6.1 Project classification

Buildings, divided into types according to the nature of their operation, are subject to common genere provisions and to the specific provisions which are specific to them. The buildings are moreove whatever their type, classified in category according to the number of the public and the personnel. The number of public and staff admitted to the various buildings is determined by the destination c the premises and the program.

3.2.6.2 Fire resistance of structures and floors

For the sizing of the load-bearing elements (pillars, beams, walls, etc.) of the floors and partition account will be taken of the regulatory fire resistance degrees.

3.3 EXPLOITATION LOADS

The values of the operating loads defined below have the character of nominal values in accordanc with standard NFP 06 001. They are considered as characteristic values for the application of th calculation rules. They define the contractual obligations of the constructor and the limits of a norme use of the construction. The values are given in KN / m².

In addition to the permanent loads (self-weight of the floors, the framework, the partitions, th coverings, the waterproofing, the plinths, etc.) the structure of the buildings will be dimensioned an calculated according to the following operating loads:

- Offices proper 2.5 KN / m²
- Reception hall 2.5
- Roof covering containers (rain) 0.15
- Workshops, laboratories the equipment to be taken in addition 2.5
- Circulations, stairs 4.0

3.4 STUDIES AND PLANS

For the services of commercially manufactured structures, the Contractor must provide th manufacturer's technical sheets and CSTB's technical opinions.
The number of copies of documents produced must allow transmission, provisionally and definitively, c well as archives.

3.5 IMPLEMENTATION

3.5.1 Design of structures

The works of this lot are designed from the documents referred to in the article Reference texts t meet the standards of solidity, fire resistance and thermal insulation, as well as the appearance an finish required also by the rules of art.

3.5.2 Transport - storage - conservation

For all the works in his lot, the Contractor must:
- on-site transport of equipment and materials
- handling and assembly of materials, including handling and lifting equipment
- storage with arrangement of stores in affected areas, including dismantling and removal c arrangements of storage areas upon completion of its work
- the conservation of materials with precautions and protection against humidity, bad weather, fir and theft
- the preservation of works of other trades.

3.5.3 TESTS OF WORKS

The tests will focus on the stability, strength, wear, operation, flame retardant degree and fireproc degree of the structures. They will be carried out according to the requirements of the DTUs of Frenc standards, rules, booklets and mementos published by CSTB (documents stipulated in the Referenc texts article).
It may be prescribed during execution that certain structures are tested at the request of the Inspectic Office. A report is sent each time there are tests, checks or analyzes.
All testing costs are the responsibility of the Contractor.

3.5.4 Special requirements - General

a - Consistency of the structures

The works of this lot include the supplies and their implementation, including all constraints.

b - Means of the Entrepreneur

The Contractor shall have all the means necessary for the supply of his materials, for the realization c his works and in particular the scaffolding, the lifting devices and equipment, the transport fc bringing the materials to the site, their handling as well as that the production, transport an consumption of energy and water necessary for this lot. He must also install the forms, areas, deck platforms, ramps, paths necessary for the realization of his works.

c - Reservations, openings, sealings, plaster connection

The Contractor of the Big Work lot will have to carry out from detailed plans provided by the othe trades:
- the reservation in its works of all the necessary holes for Contractors from other trades,
- the incorporation in its works of all the fastening systems (rails, sockets, cleats, etc.) necessary for th other Contractors who will supply the parts on the job.

d - Cleanings

- Routine cleaning for this lot:

The Contractor must leave the site clean and free of all rubble, waste and rubbish during and afte execution of his work, he must also remove and evacuate them to landfills, at his expense. Th cleaning is carried out, local by room, and as and when it is carried out. The overall cleaning will b carried out once a week before the day fixed for the site meeting.

- Delivery cleanings:

Apart from the aforementioned routine cleaning and those provided for by the painting company, t
Contractor must carry out a delivery cleaning to rid the supports of projections, splashes and d
caused by his works, including removal and evacuation to landfills of rubble, rubbish and rubbish.
- Special cleanings:
The Project Manager reserves the right to carry out, depending on the condition of the site and at th
time he deems appropriate, one or more thorough cleanings, very carefully.
These special cleanings must be entrusted to a company whose invoice will be settled under th
following conditions:
- or to one or more companies recognized as responsible
- or to the Client in the event of cleaning required by his needs.

3.6 EARTHWORKS COMPLEMENTARY

3.6.1 GENERAL

The work will be carried out in accordance with the requirements of DTU 12, as well as the indicatior
of this CPTP, chapter 1.23. The company holding the lot has for task the realization of the platforms c
construction as well as the arrangement of the surroundings of the buildings.
The works will include:
- location of buildings,
- excavations in channels or shafts for foundations,
- excavations for manholes buried under paving, including slopes,
- backfilling of excavations after completion of the works,
- backfilling of embankments under paving, compaction and leveling of platforms,
- leveling of the surroundings after execution.

The Contractor will remain fully responsible for any disturbance or movement of the land. N
supplement will be allowed due to the possible presence of water from aquifers, seepage or an
other cause related to the nature of the land.

3.6.2 BUILDINGS LAYOUT

The company holding this lot has an obligation to ensure the siting of all the buildings to b
constructed in accordance with the plans of the Project Manager and those of the design offices. H
will have the basic staking established at his own expense by a certified surveyor.
The stakes are attached in plan and in altitude to fixed marks. The Contractor is required to ensur
their conservation, as well as their relocation if the needs of the work so require.
When a route is possibly carried out for another trades by the Contractor of the Structural work lo
the holder of this lot requests "assistance" and "control" of this trades. It is stipulated that the level lir
is drawn by the contractor of the Structural work lot.
All installation and staking work will be subject to a reception.

3.6.3 EXCAVATIONS

3.6.3.1 Full body excavations

Carried out by mechanical means or by hand, they include crossings of all kinds of terrain. In th
vicinity of a work to be preserved, the Contractor is deemed to have made the necessar
reconnaissance and to have taken all necessary precautionary measures.

3.6.3.2 Excavations and holes or in channels

The Contractor is required to take all necessary precautions to maintain the walls. He must also kee
the bottom of the excavation out of water in order to avoid any scour.

3.6.3.3 Exhaustion

For work outside the water table, the Contractor must take all measures to prevent the erosion of th
embankments by runoff water and the degradation of the feet of the walls that risk causing damag
(protection by polyane, creation of gutters, slopes, sumps ...)

In the event that it is confirmed that the earthwork is to be carried out in the water table, th Contractor must present to the Project Manager the most suitable solution for the earthworks and th arrangements to be made during and after the earthwork.

3.6.3.4 Evacuation of surplus land

Land that cannot be reused will be evacuated to public landfills.

In the event that the site does not allow the installation of an access ramp for trucks, it is up to th Contractor to propose any different mechanical means of evacuating the land (hoist, grasshopper) t the Supervisor. artwork. The means chosen must respect the possibilities of parking and circulation c adjacent roads.

3.6.3.5 Land disposal from excavated material

In the event that the cuttings are used as backfill, the soil can be stored on the site. The Contracto must ensure that this storage does not cause pushes or movements on existing parts, and that th location does not serve as a deposit of rubbish or various materials.

3.6.4 FILLS

The backfill will be made up either of the cuttings placed in deposit with a view to their reuse (if the quality allows it), or by soil coming from outside. 90% compaction will be required for paving c buildings.

The Contractor must deliver, at the end of the earthworks, a stable excavation with platforms c excavation bottom, the levels of which are defined on the plans (under slabs poured on grade). Th altitude tolerance is + or - 5 cm.

3.6.5 RECEPTION OF EXCAVATIONS

At the end of the earthworks, the Contractor has the Project Manager certify the proper execution c his work. This reception can be done in parts in the case of an earthwork in sections.

3.7 INTERIOR BURIED PIPES

3.7.1 DEFINITION OF SERVICES

Inside the buildings, the main sewage and sewage collectors, as well as the main drinking wate supply sections will be buried under the paving.

The manholes or connection boxes of the "dry" type are placed at all changes of direction. The include the concrete manhole proper, reservations for the arrivals and departures of pipes accordin to their number, the shaping of scanty concrete scoops.

These manholes cannot be visited. The networks must be clearly designed so as to avoid clogging c the pipes while respecting the admissible slopes and choosing the shortest paths to ensure the rapi flow of effluents.

Depending on their position, the manholes are closed by fixed concrete covers or directly by the bod of the paving. Their dimensions are 40 cm x 40 cm for an average depth of 40 cm.

The supply, the connection to the piping networks, is the responsibility of the plumbing lot and th installation is the responsibility of this lot. The final adjustment, if necessary, is provided by the seale coverings package.

3.7.2 TESTS

Leakage and functional tests must be carried out before the pipes are made inaccessible. They ar the responsibility of the Contractor and must be carried out according to the recommendatior appearing in DTU 60.1, article 4.312.3 (Water pressure tests).

3.7.3 UNPLASTIFIED PVC PIPING FOR SANITATION

Up to diam. 250 mm
Standard NFP 16.382 assembly by gluing or sealing ring.

3.7.4 DRAIN

In the trenches adjacent to a buried structure, installation of perforated PVC pipes of great lengtl surmounted by drainage material in pebbles 20/10 over one meter in height coated with a rot-proc filter felt around the periphery, connection to the EP network with minimum slope of 5 mm.

3.8 CONCRETE AND REINFORCED CONCRETE WORKS

3.8.1 COMPOSITION OF CONCRETE

The materials used in the composition of the concrete will comply with the requirements of th standards and in particular those of the NF P 18 010 to NF P18 880 series and DTU 13, 20, 21, 2(52.

a - Aggregates
See standards NFP 18.301 and 304, articles 2.1 and 3.3 of DTU 20. The aggregates must be clea washed free of soil and dust. A granulometry of the aggregates and concrete tests on cylinders an bars will be carried out in order to determine the composition corresponding to the require characteristics.

- The sands will preferably be riverine and have a particle size of 0.8 / 2.5.

The aggregates will preferably be rolled and of particle size 5/25. A sieving device will be installe on the site by the contractor

- The cement dosages will be defined in terms ofction of the type of cement used by th company awarded the contract and subject to the choice of
  Project manager.

b - Binders
See standards NFP 15.301 and following, 15.401 to 15.46. Before use, the cement must be ol enough for it to cool completely. The dosages of the binders will be established according to th cements used and the required resistance qualities. They will be subject to the approval of the Proje Manager.

c - Adjuvants
See standard AFNOR P 18.303 and circular 80.08 1980 - Monitor of 8/12/1980 (accelerator retarders, plasticizers, air entrainers, water repellents). Any adjuvants used are only accepted unde the conditions described below:

- they must appear on the list approved by COPLA (Permanent Commission for Hydraulic Binders an Concrete Admixtures)
- they are implemented in accordance with the manufacturer's specifications.

d - Concrete mixing water
Must comply with the requirements of NFP 18.303 for physical and chemical characteristics. Th dissolved salts must not risk compromising the quality of the concrete, nor the conservation of th reinforced concrete.
In particular, the presence of chloride, sodium salt or magnesium cannot be tolerated in a proportic greater than that which is allowed in drinking water. An analysis, at the expense of the Contracto may be requested by the Project Manager.

3.8.2 CONCRETE CLASSIFICATION AND DOSAGE

a - Classification of concrete
NF P 18.305 defines the class of concrete according to its average resistance or admissibl compressive stress:

DENOMINATION	Concrete N ° 1	Concrete N ° 2	Concrete N ° 3	Concrete N ° 4	Concrete N ° 5
Resistance Class	B 150	B 200	B 250	B 300	B 350
Resistance in bars	150	200	250	300	350

The dosage of aggregates must be adjusted according to the resistance to be obtained, the plasticit and the workability of the concrete. According to the G / S ratio (aggregates on sand), the followin results are obtained:

G / S RATIO Portland cement	COMPACT	IMPLEMENTATION	DOSAGE 350 kg CP
1.4 to 1.6	Very soft	Very good workability	Piles, diaphragm walls
1.6 to 1.8	Soft	Easy to use Dense reinforcement	Concrete foundation Pumped concrete
1.9 to 2.1	Plastic	Good resistance	Current building
2.2 to 2.3	Closed	Powerful vibration	Masterpieces

b - Dosage of reinforced and unreinforced concrete

DESIGNATION	DOSAGE				OBSERVATIONS
	Cement (kg / m3)	Grav. (m3)	Sand (m3)	Pebbles (m3)	
Unreinforced or lightly reinforced concrete					
	150	0.90	0.60		Concrete N ° 1
Slope shapes, small massifs	200	0.85	0.55		Concrete N ° 2
	250 CP	0.80	0.50		Concrete N ° 3
	35		(1)		(1) Coarse sand
Paving work	300 CLK		0.50	0.80	Concrete N ° 4
	45		(2)		(1) minimum dosage
	(1)				in the presence of water
					(2) all-terrain sand
Strip footings, beds, wells	300 CP	0.95	0.35		Concrete N ° 4
	45		(1)		(1) all-terrain sand
concrete poured into infrastructure	350 CLK	0.35	0.45	0.70	Concrete N ° 4
	45				
poured concrete in superstructure, gutters	350 CP	0.85	0.50		Concrete N ° 5
	45				
Concrete for castings	400 CPA	0.80	0.50		(1) or CSS, cement White
	55				
	(1)				
Reinforced concrete					Concrete N ° 5
reinforced concrete in elevation	350 CP	0.80	0.40		(1) or HRI
	45				
	(1)				
reinforced concrete used in infrastructure	350 CLK	0.80	0.40		Concrete N ° 5
	45				

Concrete for walls, floating screed	300 45	CPA	0.80	0.40		Concrete N ° 4
Concrete for precast elements	400 55 (1)	CPA				(1) white cement, melted
Concrete for solid slabs	350 45	CPA	0.75	0.50		Concrete N ° 5

3.8.3 CONCRETE MANUFACTURING AND TRANSPORT

See article 4.2 of DTU 20.

Concrete can be manufactured in an outdoor plant which must be approved by the Project Manage for the classes of concrete requested. Transport must then be carried out in spindle moulder trucks. After manufacture, the implementation of concrete must be done within a maximum period set at th start of the site.

- Concrete manufacturing

The manufacture of concrete must be mechanical. The type and category of mixing equipment that th Contractor proposes to use must be approved by the Project Manager, whatever the type c equipment used, the dosage of the constituents must be by weight. The storage of aggregates nec the concrete batching plant must allow each type of aggregate to be perfectly isolated. Durin mixing operations, the components are introduced in the following order:

- sand
- cement
- aggregates.

Mixing will be carried out dry for one minute. The water will be introduced immediately afterward and the whole wasted for a period normally prescribed according to the equipment used and whic cannot be less than forty seconds.

3.9 CONCRETE WORKS

a - Preconditions for any concreting

Concreting of a structure or any part of a structure will only be authorized when:

- the composition of the concrete will be approved by the Project Manager,
- The Contractor will have completed all the formwork and placed all the reinforcement for this pa of the work
- The Contractor will have supplied on the site the quantities of materials necessary for the wo concerned, as well as the equipment in working order for the manufacture, implementatio consolidation and curing of concrete,
- the Project Manager will have checked the dimensions, dimensions, alignments of the formwork an reinforcement.

b - Placement of concrete

Before placing the concrete in the formwork, the Contractor must ensure that they are clean. Th formwork must be watered before placing the concrete. The concrete will be placed in the formwo in such a way that no segregation occurs, either by rebounding on the reinforcements and formwor or by piling up concrete in isolated piles. The concrete must be laid in the thinnest horizontal laye possible, the maximum thickness of which will not exceed 30 cm. The drop height of the concrete in th formwork may not exceed 1.50 m.

After placement, the concrete will be vibrated in the mass using vibrating needles at a minimum c 3,500 beats per minute. The vibrators should be introduced vertically into the concrete and withdraw slowly. Their duration of use will be adapted so as to avoid local upsurges of mortar.

The concrete must be vibrated in depth in order to ensure a good bond between two superimpose layers of fresh concrete. However, it will be necessary to limit oneself to the depth reached by th

vibrator, when it sinks under its own weight. The Contractor must have a sufficient number of vibrato and provide at least two spare vibrators.

In general, stoppages in concreting should be avoided. The use of cement slurry on the reinforcemen is prohibited.
No stopping of concreting is allowed in the following cases:
- in the height of a post, between two successive floors,
- in the height of parapets, guardrails or bands
- within the scope of a cantilevered structure.

In beams, the concreting stop, which may be necessary, must generally be inclined at 30 ° an chocked as indicated above, the recovery plane being perpendicular to the compressed concret rods. Any work presenting a recovery plan contrary to this prescription will be refused, demolishe and rebuilt at the expense of the company on the order of the Project Manager.
The edges of concrete structures must, after stripping, be protected against shocks throughout th duration of the work. Concrete surfaces intended to remain visible must be protected by a sheet c polyethylene against projections of mortar, paint, etc.
c - Concrete cure
The Contractor shall take particular care to maintain the freshly placed concrete in conditions c humidity and temperature favorable to the hydration of the cement and to the hardening of th concrete. This cure can be ensured either by sprinkling with a very fine water jet, or by protectic using covers soaked in water, or by plastic sheet, or by the application of curing products.
The cure will be spread over at least four (4) days for normal cements and three (3) days for hig initial strength cements.
d - Correction of surfaces
Formwork stripping will only be permitted 48 hours after its implementation for vertical walls an seven (7) days for other elements, after ensuring that sufficient resistance is obtained.
All re-concreting must be carried out within 24 hours after this formwork stripping.
All facings will be kept raw from formwork. The facings seen will be perfectly regular and of uniform color and no stone bare should be visible. Any correction to be made to the surface will be th responsibility of the Contractor.
e - Brushing
The facings not seen, completed works will be leveled wherever pebble nests will be visible, then w be brushed with three (3) layers of one of the following products:
- deacidified tar
- hot bitumen
- non-acidic bitumen emulsion with a PH greater than six (6)

f - The reinforcements
The reinforcements will be cold formed to dimensions strictly in accordance with the working drawing Welds will only be accepted if they are indicated on the plans.
The reinforcements will be placed in the formwork exactly at the locations provided on the plans. The will be stowed or fixed by ligatures. A sufficient number of concrete wedges will be placed and wi allow the respect of the covering concretes.
The reinforcing bars, spacing and fixing steels are included in the reinforcing bar unit prices. N compensation will be paid to the Contractor for all steels or other materials used in the stowage an fixing or for falls and overlaps not indicated on the plans.

3.10 FORMWORKS

3.10.1 Installation of formwork

See article 3.3 of DTU 23.1.
The formworks must have sufficient rigidity to withstand, without appreciable deformation, the loac and pressures to which they are subjected, as well as accidental impacts during the execution of th works. They must be sufficiently airtight, especially at the edges, to prevent any loss of laitance.

The watertightness of the formwork must be such that only rare leaks of laitance can occur which ar not liable to affect the mechanical qualities, nor possibly the sealing qualities or appearance of th wall.

The formwork can be of different types (depending on their destination indicated below):

- rough sawn timber formwork for concrete facings intended to be plastered
- formwork in planed boards 8 to 12 cm wide for the concrete facings intended to remain visible, th formwork being with vertical joints for the columns, and with horizontal joints for beams, chains, strip parapets, etc.
- formwork in narrow wooden slats for single or double curved concrete facings, intended to b coated or to remain visible.

Prior to concreting, the formwork must be free of all foreign materials (paper, expanded polystyren wood tie wires, etc.)

The use of metal formwork will only be allowed if they are protected from solar radiation.

When the concrete is requested raw from formwork, all measures must be taken so that the face after formwork have a perfectly finished surface.

3.10.2 CLASSIFICATION of formwork

The choice of formwork materials will be made by the contracting company according to th obligation of results defined below. The supports will be delivered during a pre-reception.

In the event of non-compliance with the tolerances indicated below for each surface condition, th repair work (trimming, grinding, leveling, leveling screed, etc.) will be the responsibility of th contracting company. Formworks are classified according to the appearance of their surfaces. W distinguish:

a - PE type formwork (elementary facing).

No constraint other than that defined by standards and regulations governs this type of formwork. will only be used for buried structures that do not receive any surface treatment. The surface conditic of the elements is as follows:

- Rough appearance
- Flush balips
- Coarse transplanting
- Bones and plucked roughly drawn.

b - PCE type formwork (common facing intended to be coated).

The facing must be of the standard type. When the surface is smooth or insufficiently rough, a stitchin or bush hammering is carried out followed by cleaning or even the application of an adhesive laye based on products recognized as capable of improving adhesion and compatible with the coatin nature of the support.

The surface condition of the elements is as follows:

- Smooth appearance
- Lack of gravel nests or sandy areas.
- Flush balips.

c - PS type formwork (neat facing).

Same type of formwork as the PCE type formwork, but without balips or requiring leveling in line wit the balèvres. This formwork is used for structures to receive a cement or plaster coating. Note that must have the necessary roughness for this. The surface condition of the elements is as follows:

- Smooth appearance
- Lack of gravel nests or sandy areas.
- Flush balances without grinding.
- General flatness tolerance defined by a maximum deflection of 5 mm below the 20 cm rul between formwork or juxtaposition joints of prefabricated elements.

3.10.3 FORMWORK OF EXPANSION JOINTS

The formwork for the expansion joints will be made of a light and ductile material (compresse mineral wool), excluding expanded polystyrene. Soft Isorel will be banned. The caulking of the join will be carried out by:

- Or an elastomeric mastic of a category adapted to the variation dimension of the seal.
- Either a prefabricated gasket based on special rubber of polyvinyl chloride, a mixture c rubber and resins by agreement of the Master of work.

3.10.4 Mold release products

All the molds and formwork must receive on their facing in contact with the concrete, a produ intended to prevent any adherence of the concrete to the formwork. This product must not stain or b incompatible with sealed, painted or tinted coatings, nor attack concrete. This product must be teste at the company's expense and require the advice of the Project Manager and the Control Office.

3.10.5 shuttering

The formwork must be watered before concreting. Their surface should be damp but not wet.
Formwork stripping must be undertaken when the concrete has acquired sufficient hardening t withstand the stresses to which it will be subjected immediately afterwards, without excessiv deformation and under conditions of sufficient safety.

3.10.6 SCAFFOLDING AND PROPS

Scaffolding and props must be designed to withstand without deformation the loads transmitted t them by the formwork and their container, as well as the effects of the wind. They must be able to b adjustable at any time to keep the supported formwork at their height and straightness.
They must be arranged in such a way that they only give on the lower bearing surfaces force compatible with their resistance, and that they do not cause any compaction of the ground c deformation of the floor which would result, as a consequence, deformation of formwork.
The adjustment system must allow the props to be removed without causing any stress on the structure carried out.

3.11 Steels for reinforced concrete

3.11.1 GENERAL

The work will be carried out in accordance with the requirements of DTU 20, 20.11, 20.12, 23.1 23.6. Regarding steels for reinforced concrete, refer to standards NFA 35.015 and A 35.016.

3.11.2 CHARACTERISTICS OF CONSTRUCTION STEELS

The brand and type of steels will be subject to the approval of the Project Manager. It cannot b changed without the latter's agreement and only the steels referenced below will be used:

. Welded mesh Fe E 45
. High adhesion steel Fe E 40
. Mild steel Fe E 24.

a - Characteristics of mild steels (Adx)

. Conventional elastic limit> = 2400 kgf / cm2.
. Breaking limit between 4200 and 5000 kgf / cm2.
. Elongation 25%
. The steels must meet the standardized cold bending tests.

b - Characteristic of high adhesion steels (HA)

. Yield strength at 0.2% residual elongation:> = 4000 bars
. Elongation at break> = 14%.
. Cold bending tests on a raw specimen on a mandrel with a diameter equal to

5 times that of the bar. An angle of 180° should be reached without cracking or tearing.

3.11.3 Implementation of reinforcements for reinforced concrete

The reinforcements, at the time of their implementation and concreting must be free of traces of no adherent rust, paint, grease or wood.

They must be dimensioned (diameter and length) and shaped according to the drawings. Wedge mu be cold mechanically using dies so as to obtain the radii of curvature provided for on the drawings o failing this, notified by the conditions of use which concern each category of steel.

The reinforcements in standby must be positioned with care and kept straight with the lengt necessary to ensure the overlap with the reinforcements laid subsequently. In the event that th pending reinforcements require bending, the grade of the steel used must be that of Fe E 24 steel. Th reinforcements which present a bayonet shape would result in the rejection of the work which woul include them, therefore its demolition on the order of the Project Manager.

Coverings, connections and assemblies by welding are allowed for steels whose weldability guaranteed by their identification sheet, in accordance with standard A 35.018.

Wherever the required fire stability will be equal to 1 hour, the coating of the steels will be such thc U> 2 cm. For the same degree of stability when U <2 cm, the company will be asked for justificatior by a fire calculation.

The covering of the reinforcements is at least equal to:

- 3 cm for unformed facings subjected to aggressive actions,
- 2 cm for facings exposed to bad weather and condensation, or in contact with a liquid
- 1 cm for walls located in covered and closed rooms, not exposed to condensation.

The reinforcement cover is obtained using concrete or plastic shims.

Any concrete part showing the reinforcements will be transplanted and reconstituted with concrete c the order of the Project Manager. These coating values may be increased to maintain minimu distances to the facings for anchoring the bars, for the fire resistance of the structure or for any othe cause which would require values greater than those indicated above.

3.12 PAVING WORK

3.12.1 GENERAL

The execution of the paving must comply with the provisional professional rules "paving work" Annales IT BTP n ° 424 (May 1984).

The following only concerns rooms with a maximum distributed average overload: 8 KN / m, rollin 25 KN / axle, excluding paving for industrial use.

3.12.2 EXECUTION OF PAVING ON FULL-GROUND

A paving on grade is made up of the elements described below:

a - Form or base

In the event that the shape is constituted by the land in place, the land will be drawn up to the lev indicated on the plans.

On the other hand, if the bedrock is formed of a certain thickness of filler materials, this layer will b made up of pulverulent materials, not plastic, sand, all-coming sand and gravel. Its minimum thickne will be 20 cm. It will be compacted using mechanical machinery and erected to the level indicated c the plans.

b - Body of the paving

It consists :

- a polyane film (200 microns) placed on the form,
- a protective concrete dosed at 150 kg 3 cm thick
- concrete 8 to 12 cm thick according to plans, dosed at 350 kg, including shapes and ways of slop towards the floor drains. Mechanical tightening must be done with a vibrating rule. The concrete wi have an ABRAMS cone sag of less than 7 cm. If the surface is exposed to bad weather (sunshine, win

etc.), a curing product will be sprayed on the surface to prevent drying out. This product must b compatible with the resistance of the subsequent floor covering.
- a reinforcement formed from a layer of welded mesh 3.5 mm2 in diameter, located at mid-thickne of the body of the paving. Reinforcement frames (diam. 8) are provided at 45 ° in the re-entra angles.

3.13 MASONRY

3.13.0 GENERAL

The work will be carried out in accordance with the requirements of DTU 20 - 20.11 and th professional recommendations of the national masonry union.

3.13.1 HEAVY AGGLOMERATES

Masonry of 20/40 hollow agglomerated blocks made with cement mortar, conforming to forms NF 14.101, 15.201, 14.301, 14.401. Their installation is carried out conventionally with crossed joints c cement mortar 1.5 to 2.5 cm thick. The thicknesses of these masonry are variable, but the most commc are 7cm, 10cm, 15cm and 20cm.

Only class B 60 or B 80 hollow concrete blocks and class B 120 and B 160 solid blocks will be used accordance with standard NF P 14 101 to NF P 14 402 and must be of local origin.
They will not contain any defects such as cracking, deformation or tearing, their flat and rectilinec faces. The faces intended to be coated will be rough and will exhibit good adhesion.
These materials will be standard materials delivered to the site in pallets, so as not to be damage or made in situ. Any scuffed element must be immediately rejected for scrap.

Tensile masonry work rate

Masonry with lime mortar		1.00 bar
CP 35 mortar	1.50	
CP 45 mortar	1.75	
HRI Mortar	2.00	

3.13.2 CEMENT MORTARS

a - Common mortars

Common mortars are understood to mean those used in the preparation of screeds and cemer plasters, or necessary for the various seals.
The sands used will be exclusively river sands. The grains will be hard, "screaming" by hand possibl washed. Granulometry 08 / 2.5 in accordance with the prescriptions of standard NF P 15 010 to NF 15 510 and NF P 18 010 to NF P 18880.
The cements used will comply with the requirements of paragraph 2.11 of the specifications of DT 52.1. No adjuvant will be incorporated.

b - Dosage of mortars in Kg / m3 of sand

	Skinny		Way		Fat	
Lime XH 10	200	300		450		
Lime XEH 60	250		350		450	
LM 100, CLK 100		250		350		450
CN 160 - CM 160		300		350		450
CPA 35, HRI	300		350	450		
CPF-CMM-CHF-CLK 35		300		350		500
- d ° - bold	150		175			

c - Use of mortars

DESIGNATION	MORTAR				OBSERVATIONS
	Fat	Way	Skinny	Bastard	
Ordinary plaster					HRI, CLK, CMM for wet plaster or aggressive water
Gobetis					400 kg CP 35
Waterproof coating					
Grouting					
Filler masonry					
hollow bricks					
solid load-bearing bricks					
facing bricks					
Rubble					
freestone					
pozzolan breeze blocks					or plaster
ordinary screed					XEH lime: CPA 350 kg
Paving					
waterproof screed					
wear screed					+ water repellent
					900 kg CP + 2 to 6 kg / m² Carborundum
Color in screed					0.6 kg / m² of powder
Screed under lino or plastic floor					400 kg CPA
tiling					
Tile grout					500 kg CP
					900 kg CP

d - Special mortars

Special mortars are understood to mean manufactured mortars receiving various adjuvants either fc coloring, or for hardening, or for modifying the appearance. The sands used will be exclusively rive sands.

The kernels will be hard "screaming" by hand possibly washed. Granulometry: 0.8 / 2.5 accordance with the requirements of standard NF 18 304. The cements used will comply with th requirements of paragraph 2.11 of the specifications of DTU 52.1 with the incorporation of additives The tables below define the dosage and recommended use of the mortars commonly used construction.

3.13.3 COATINGS

a - Coated with cement mortar

Surface preparation

The surfaces to be coated will receive the following preparation:

- masonry of rubble, bricks or agglomerates.

The joints must be degraded three (3) cm deep for rubble and one (1) cm for bricks an agglomerates then brushed as well as the facing. The entire surface will be washed until moistene and the joints will be relined.

- concrete masonry

The concrete will be, if necessary, pitted so as not to have any smooth part, then brushed and washe until humidification.

Preparation of plasters

- Ordinary plasters:

The renderings will be carried out in three successive layers, the total thickness of which is one and half centimeters (0.015 m) for the interior renderings and two centimeters (0.02 m) for the exteric renderings:

The first layer called gobetis will aim to level the surface to be coated. The mortar will be throw violently with a trowel;

The second layer will constitute the plaster itself, the tightly mixed mortar will be thrown with forc with a trowel, pushed back with a trowel and dressed regularly.

The third coat, if it is a roughcast, will be applied with a broom or with devices driven by hand c mechanically.

Before one layer is completely dry, it will be covered with the next one. The last will be smoothed wit a wooden or plastic float.

When the mortar has rejected its water and assumed a certain consistency, the smoothing will b repeated several times, without wetting the surface until the shrinkage due to desiccation no longe gives rise to any cracking. After completion, the plaster must be homogeneous, uniform in appearanc without cracks or blisters.

- Cement-tight plasters:

The interior plasters of the water tanks will be made with the addition of SIKA or similar product; Th Contractor will be required to strictly follow the product manufacturer's instructions, both for th preparation of the surfaces to be coated as well as for the seals, ducts passages and minimum coatin thicknesses (on average at least three centimeters - 0.03 m) .

- Waterproof coatings with flinkoate:

A waterproofing coating by flinkoate whitewash will be applied in two crossed coats on the exteric surfaces in contact with the ground of buried reinforced concrete structures.

b - Yokes

The screeds covering pavements, floors, landings, roofs, etc. (their supports having been cleaned an washed beforehand) will consist of a layer of mortar five centimeters (0.05 m) thick.

The mortar will be compressed and smoothed several times to avoid chapping. In dry weather, th screed will be covered and watered. If necessary, bush hammering will be done at the start of setting

c - Waterproofing - Siding

The operations aimed at ensuring the waterproofing of structures, either inside the tanks or on th exterior surfaces, will be based on the use of products subject to the approval of the Proje Manager.

The application of these products must be carried out in accordance with the manufacturer instructions, if they must be incorporated into concrete, or if their action is complex or their applicatic delicate. If it is a process using only a product in current use, the origin of the material, its thickne and the method of application will be subject to the approval of the Project Manager.

The execution must be carried out in accordance with the rules of the art and the standards in forc for the product used.

3.13.4 WINDOWS SUPPORTS

The window sills will be prefabricated or cast in place in concrete dosed at 350 kg cement / m3 wit an average thickness of 0.06 m lightly reinforced by smooth circles of 8 mm. These slabs, onc installed, must have a slope towards the outside, rejingot support piece, drip edge, etc. The tightne between the frame and the frame must be ensured by means of a bead of waterproof mastic such c SIKAFLEX or similar approved. The top of the window sills will receive a screed of20 mm thick.

3.13.5 LAYING AND SEALING OF WOODEN JOINERY FRAMES

Before any implementation, the company must check that the printing layer will have been carried ou
on the pre-frames, any implementation of unprotected pre-frames will be refused and dismantled a
the expense of the Co-contractor. All the pre-frames will be fitted with sealing brackets, at the rate o
a mild steel bracket, commercial model, screwed for each0.80 mlength. In each particular case, th
length of the sealing legs will vary on demand. The seals will be made with cement mortar dosed a
500 kg / m3, as well as the fillings.

*** END OF LOT ***

FRAMEWORK-COVER

4.1 GENERAL SPECIFICATIONS

The purpose of this special technical specifications (STC) is to recall for this batch, the reference tex and the regulations, the quality and the presentation of the equipment and materials used in th construction of the works and their implementation.

4.2 FRAMEWORK MIXED (concrete and metal)

4.2.1 Reference texts - reminder of the regulations

General information on the reference texts

The completion of the works is subject to compliance with the laws, laws, administrative, regulator technical and technological in force in the Republic of Cameroon, as well as those published in Franc made applicable in Cameroon.

The texts published in France are for the most part collected in the official journal and the REE edited by the CSTB (4 avenue du Recteur POINCARE - 75782 Paris).

All of these documents are not attached to the contract, but deemed to be known, the most commonl applied are summarily stipulated.

4.2.1.1 APPLICABLE STANDARDS AND REGULATIONS

a) regulations

The calculations will be carried out in accordance with the national requirements of the submittin country which are comparable in nature to the following French regulations:

- calculation rules for CM 66 steel constructions
- rules defining the effects of snow and wind on buildings and annexes
- rules NV 65 - revised 67, 1970 - 1974 and annexes.

b) standards

- DTU "specifications for metal constructions relating to the building" - CSTB n ° 343
- AFNOR standards

4.2.2 NATURE AND QUALITY OF STEELS

4.2.2.1 General

All materials and supplies used will be of first quality and of recent manufacture.

4.2.2.2 Frame

The steels used must meet the standards in force in Cameroon and in the bidding country, which ar comparable to the following French standards:

- structural steels for general use, grades and qualities NF A 35 - 501 (edition August 1974)
- NF A 36 - 101 strips and hot rolled
- NF A 35-375 round for edges.

The steel qualities for the frames will be as follows:

- elements not contributing to the strength or stability of the building: sheets less than 5 mm thick (fc gutters and downspouts, for example) E 24 steel.

Main and secondary structures:

. E 24.2: moderately stressed without risk of brittle fracture
. E 24.2: if the installation requires operations without fear of brittle fracture
. E 24.3: if a certain resistance to brittle fracture is required
. E 24.4: if high brittle fracture strength is required. All steels will comply with standard NF A 03-115 General technical delivery conditions for steel and in particular as regards:

- execution of tests on acceptance

- mechanical tests
- chemical composition
- dimensional defects and tolerances.

The dimensions and tolerances will comply with the standards in force in Cameroon and in the countrie of the tender comparable to the following French standards:

- NF 45-206 Hot rolled IPE beams
- NF A 45-201 Normal beams and normal U-profiles
- NF A 45-211 Beams with wide wings with parallel faces HE-NF A 46-012 Wide flats.

4.2.2.3 BOLTS

4.2.2.3.1 Ordinary bolts

The bolts used will be of class 5.8. They will be manufactured by stamping and then threading part c the rod for the screws, by stamping a hexagonal part and then tapping for the nuts. The dimensions c the bolts and nuts will comply with the NF standards or equivalent in force (NF E 27 005) with I.5 thread.

In the event of alternating forces or vibration, use special washers - grower washers or fan washers c other devices (see particular technical specifications). The matting of the nets is prohibited.

4.2.2.3.2 High strength bolts

They will comply with standard NF E. 27-701 "high resistance bolting with controlled tightenin intended for the execution of metal constructions" or equivalent.

In accordance with this standard, the mechanical characteristics of HR bolts will be as follows:

Classes	Yield strength Re N / mm² min	Tensile strength
8.8	640	800 - 1000
	900	1000 - 1200

The special steels to be used for the manufacture of HR bolts will comply with standard NF A 35-55 "special steels for bolts suitable for heat treatment - 1. HR bolts for the execution of civil engineerin structures" or equivalent.

However, the nuances used may be different from those indicated in the standard after agreemer between the manufacturer and the user.

4.2.3 MINIMUM SAMPLE DIMENSIONS

- The I, T and U profiles will have a height of at least 80 mm
- The angle irons will not be less than 40 x 40 x 4 mm
- The gussets, sheets, wide dishes will have a minimum thickness of 5 mm this thickness may be reduce to 4 or 3 mm for the elements entering into the constitution of gutters and downspouts. The bolt minimum diameter 12 mm, minimum number 2 per assembly.

4.2.4 EXECUTION

4.2.4.1 Loads and overloads

The works will be executed taking into account the loads and overloads defined by the CM66.

4.2.4.2 Operating overloads

The works must be carried out for the foreseeable overloads defined by the CM66.

4.2.4.3 Permanent loads

- Self-weight of the frame
- Weight of various fixed equipment

4.2.4.4 Variable expenses
- Weight of mobile equipment
- Weight of the products contained in the equipment

4.2.4.5 Stress due to thermal variations
The forces caused by temperature variations of the following structures will be taken into account:
- pipes at fixed points or forces due to friction on the supports
- various metal structures according to their rigidity and their supports.

Effects of temperature variations:
- maximum temperature variation + 15 ° to be increased by at least 50% for elements subject t direct sunlight.

4.2.4.6 Wind loads
The charges will comply with NV rules. In particular, the values of the dynamic pressures will be take according to the geographical situation and the characteristics of the site where the structure located, except for exceptions from the specifications.

4.2.4.7 Combinations of loads
The structures must be studied for the foreseeable loads and overloads under the conditions define below:
Permanent loads
- Weight of the frame
- Weight of fixed equipment, piping, removable parts, protections and maintenance device permanently attached.

Mobile loads
- flat-rate surcharges planned on the roofs
- reactions of lifting and handling equipment
- weight of the products contained in the equipment
- loads of vibratory origin
- wind loads - normal dynamic pressure
- wind loads - extreme dynamic pressure
- loads due to temperature variations
- loads due to earthquakes

It will be checked that under the most unfavorable combinations of factored loads and overloads, th construction remains stable and that for each element the stresses remain below the elastic limit Te c the metal.
The values of the weighting coefficients and the characteristic constraints for each stress case will b those of the CM66 rules.

4.2.4.8 Allowable deformations

4.2.4.8.1 Arrows
The admissible deformations are those specified in the CM66 rules. These are amended c supplemented as follows:
- Roofing and cladding elements:
1/200 of the range under loads and overloads
- Console beams:
1/400 of the length of the overhang.

4.2.4.8.2 Column displacements
Displacements at the head of the columns must not exceed the following values:
- 1 / 200th under normal wind,

- 1 / 150th under normal wind combined with the horizontal forces of a single bridge.

4.2.5 Constructive provisions

4.2.5.1 General

The frames will be fully welded in the workshop and bolted on site.
Standard profiles or beams reconstituted by welding will preferably be used.
In order to facilitate protection against corrosion, constructive arrangements forming a receptacle fo water and dust, as well as back-to-back assemblies of the irons, should be avoided. Worksho assemblies will be carried out, preferably with continuous welding.

4.2.5.2 Assemblies

The assemblies will be carried out as follows:
- in the workshop: bolting, welding or riveting
- on site: bolting

For welding on site, the Contractor must obtain the agreement of the Project Manager.
The assemblies involved in the stability: embedments, trusses on columns, beams on columns, bracin will be carried out with HR bolts. It must be possible to dock the parts to be assembled without the ai of the bolts involved in the resistance of the assembly. To this end it will be necessary to provide a adjustment with shims or additional bolts.

4.2.5.3 Painting

4.2.5.3.1 Surface preparation

Nature

The surface preparation will, in general, be carried out by sandblasting. This will be carried out such a way as to completely eliminate scale, rust, grease and other foreign bodies.
The surfaces after sandblasting must, according to the cases presented, one of the two aspects belo taken by reference to the images of the Swedish standard SIS 05.59.00.1967
- sa 2 1/2, for systems with zinc undercoats
- sa 3, for the system comprising more noble products, such as epoxies, for example.

Sandblasting

Sanding will be carried out, using sand with sharp edges. It will have a high silica content (> 98% free from limestone or clay and perfectly dry (crushed sea pebbles, so-called Fontainebleau o Nemours sand, for example).
The grain size will be chosen judiciously, depending on the work to be performed. In principle, it w be between 0.3 and 1.5 mm. The compressed air used will be free of moisture and oil; its pressur will be between 1 and 3 bars, on thin sheet metal (thickness less than 3 mm). Between 2.5 and 5 bar in the case of heavy plates or profiles.
Structures, parts of structures or equipment liable to be damaged by sand projections, will b carefully protected by the care of the Contractor.
Before the application of the primer, sanding will be completed by brushing or dusting with a dr grease-free air jet, in order to remove any deposit of sand or dust.
Dry sandblasting should only be carried out with a relative humidity of the ambient atmosphere of le than 90% (ninety).
One will avoid pushing the sanding operation until the formation of roughness likely to tear th primary film.
The primer must be applied as quickly as possible after sandblasting (at most 6 hours after) an before rust blooms.
In the case of sandblasting on site, the applicator will comply with safety standards and, in particula the equipment used must be waterproof, the electric motors earthed.

These precautions are not exhaustive, the Contractor being solely responsible for respecting th clauses of the specifications, and required to carry out the sanding work according to the rules of th art and to achieve a surface condition that satisfies the required conditions.
The Project Manager may prohibit sandblasting operations if this is not carried out in accordance wit the above prescriptions.

4.2.5.3.2 System adopted

A painting system will be chosen in which the films formed by the paints of different families can b superimposed without inconvenience. The system will include different layers each having a role c inhibitor of the corrosion process of the steel and having a perfect adhesion on the metal.

Primary layer

Rustproof, it should allow the bonding of the intermediate layer.

Middle layer

It must ensure the connection between the primer and the topcoat.
It must be impermeable to the corrosive environment outside.

Topcoat

It must be as impermeable as possible and ensure resistance to the mechanical actions imposed on i friction, impact, deformation.
If this is the case, it must also be able to resist the corrosive action of chemical agents in th surrounding environment.
The system used may be the one indicated above, unless there is information to the contrary in th particular technical specifications of the "paint" batch.

4.2.6 MANUFACTURING OF FRAMES

4.2.6.1 Control of raw materials

Acceptance of the steels will be made in the presence of a designated recipient of the Met Construction Contractor in accordance with the prescriptions of standard NF A 35-501.
A copy of the report will be sent to the Project Manager for approval.
The impact tests will only be carried out for steels of grades 2, 3 and 4.
The certificate of chemical analysis will be provided at the request of the Project Manager or if th Metal Construction Contractor considers it desirable for certain lots.
The control will also be an external appearance examination as well as a verification of th dimensional characteristics defined by the standards.

4.2.6.2 Storage

The storage of the elements in humid places or exposed to bad weather should be limited as much c possible. Prolonged contact with other metals, cement, damp wood, should be avoided.

4.2.6.3 Applicable standards

Unless otherwise specified below, the manufacture and assembly will be carried out in accordanc with the DTU specifications n ° 32.1 concerning the metal construction of steel frames and for higl adhesion bolts, in accordance with special booklet n ° 67- 17 quinquies - circular n ° 59 of Septembe 14, 1967 of the Common Prescriptions applicable to bridge and road works.

4.2..6.4 Execution tolerances

The execution tolerances are those mentioned in the specifications DTU n ° 32-1; except as indicate below.
The manufacturer must pay particular attention to the dimensional control before shipment, as well c to the location and marking of the elements.

4.2.6.5 Sizing

The cutting will be carried out by sawing, by chasing or by flame cutting. The cuts must be deburre the sharp angles chamfered or softened.

4.2.6.6 Planing and dressing of parts

If necessary, to obtain sufficient straightness and flatness for normal use of the profiles, the parts w be dressed or leveled. These operations will be carried out without impact on the press or on the rolle machine and without leaving any local mark on the metal.

4.2.6.7 Drilling and reaming

Making the holes:

The holes will be drilled, either:

- by punching possibly followed by a bore
- by drilling

After punching and for assemblies under considerable stress, a bore will be carried out. The amount c metal to be removed in any case will not be less than 3 mm

4.2.6.8 Bolted connections

- If the transmission of forces must be effected by direct contact, the surfaces that must ensure th transmission must be carefully adjusted (post joints, plates at the base of the posts, stops, etc.). Th corresponding indication must be shown on the plans.
- If assemblies are carried out in the workshop, the elements will, before any assembly, be perfectl scraped and cleaned.

a) Bolting with high strength bolts with controlled tightening

The parts to be assembled can be punched or drilled. It will not be necessary to ream the punche holes.

All assemblies will have between the nut and the part a steel washer of at least the same quality c the screws used.

The surfaces that must be in contact will not receive paint protection, they must be perfectly flat.

The surface treatment can be done by shot blasting, sandblasting, torch pickling or metal brushing. Th processing methods are specified in the particular technical specifications.

b) Ordinary bolts

The surfaces to be in contact will be carefully protected against corrosion. The parts to be tightene must always bear on the smooth part of the rod and never on the threads.

The bolts will be fitted with a device preventing loosening in the event of alternating forces c vibrations (blade nut, grower washers, star washers).

c) Tolerances: the tolerances allowed will be as follows:

- Profiles: the tolerances on the transverse dimensions of the profiles will be those specified by th standards in force.
- Drilling: whatever the drilling mode, the tolerance in the irregularity of the distance of the holes w be d / 10, being the diameter of the holes, the tolerance in the irregularity of the alignment of th holes will also be of d / 10.

However, in any case, the tolerances accepted above should not prevent the concordance of the rive holes of superimposed parts from being sufficient to allow the rivets to enter their housing freely.

e) Blank assembly

Blank mounting will only be required if the market so provides. In this case, no element or section c element must leave the Contractor's workshop without having first been assembled with what attached to it. These provisional assemblies will be used to verify the accuracy of the preparation c the assemblies to be carried out on site. Each assembly must be able to be unbolted without causin elastic deformation of the other parts.

The parts to be assembled must be brought together using suitable clamps; the pins will be tolerate to obtain the relative displacement of the parts, provided they are driven in with a hand hammer, s as not to deform the holes.

4.2.6.9 Welded assemblies

Welding will be carried out using an electric arc with coated metal electrodes. However, the marke may provide for the use of welding under flux, the Contractor will be left with the possibility c proposing the use of another welding process.

In the event that dimensional manufacturing tolerances could lead to the end-to-end assembly of jois whose profiles do not exactly match in thickness, height or width, the Contractor will endeavor t match the ends to be butted together, when nothing is necessary. 'will oppose it moreover, in order t obtain the best matches of profiles.

Chamfers for welded joints will be prepared with a planer, chisel, grinding wheel or automatic tord However, in the case of use of steels with a high elastic limit, the automatic torch will only be tolerate on the condition of not creating a fragile martensitic zone.

General regulations

After having been prepared in accordance with the detail drawings, the parts to be welded will b assembled beforehand, in the position they are to occupy, by means of clamps or other device ensuring, without excessive effect, a suitable tightening, in a manner not to be shaken during weldin and cooling.

The necessary precautions will be taken to minimize deformations and stresses due to calorific effec and shrinkage. We will also take all precautions to avoid possible quenching. The order in which th various welds must be performed will be followed exactly.

The parts to be welded must be very dry. Electrodes whose coating is particularly hygrophilic - (bas electrodes in particular) must be baked according to the instructions indicated by the supplier and b kept in the study until the moment of their use.

The deposit of weld bead must not cause a groove in the base metal. The surface of the weld shoul be even and as smooth as possible; it will be reloaded or ground if necessary so as to present neithe lack of thickness, nor discontinuity, nor burr, nor excessive bulging.

In the particular case where steels with a high elastic limit are used, any hardfacing must be carrie out with the necessary precautions not to create a fragile martensitic zone. Any weld showing a crac longitudinally or transversely must be repeated.

4.2.7 PACKAGING-TRANSPORT

4.2.7.1 Packaging

The metal frame builder must take the packaging for transport from the place of manufacture to th site of the construction site.

All packages will be carefully marked and the pieces brought together to form bundles c inseparable sets. Small parts (gussets, bolts, etc.) will be crated.

4.2.7.2 Loading - transport - unloading

Loading at the place of manufacture, transport from the place of manufacture and unloading at th assembly site are the responsibility of the Contractor.

On the site, the builder must store the metal structural elements in the location designated for th purpose. He must avoid any deformation of the profiles resulting from improper storage and an injuries resulting from incorrect handling.

He will be responsible for security and order in the storage area. At any time, the Project Manage will be able to carry out the inspections he wishes to carry out on the elements already delivered an to be informed of the packing of the parts stored on the site.

4.2.8 WORK ON THE SITE - ASSEMBLY

4.2.8.1 Site regulations

The constructor must comply with the specific regulations issued and valid on the work site. He mu also comply with all health and safety regulations in force on the work site.

4.2.8.2 Transport and handling

Upon receipt of the parts on the site, the Project Manager reserves the right to carry out an inspectio and to refuse any part that may have been damaged in transport, as well as any part whose qualit or execution defects do not would only be recognized at this time.

Storage on the site must be carried out under conditions suitable for ensuring the durability c protection against corrosion and non-deformation of the parts.

In the event of deformation caused by handling and transport to the site, the parts will be taken bac or replaced under the same conditions as when they were received on the site.

4.2.8.3 Verification of foundations

Before any assembly operation, the carpenter is required to check that the foundations and seals hav been carried out in accordance with the established plans.

In the event of errors or poor workmanship, the builder must immediately notify the Project Manage who will indicate any new arrangements to be made.

4.2.8.4 Mounting

The manufacturer is responsible for the choice and the importance of the means to be implemented order to carry out the assembly in the best conditions and within the allotted time.

However, the Project Manager reserves the right to refuse the use of any machine that does n present sufficient safety or is obviously insufficient in view of the work to be carried out.

The builder must employ experienced personnel under the supervision of the chief assembler. This on must be constantly in possession of all the technical documents which it will need. These documen should include:

1 ° / a technical file defining the structure in all the details concerning the lifting, assembly an adjustment operations.

. Layout plan with the main dimensions of the structure, sealing details etc.

. Assembly details with indication:

- dimensions and quality of bolts, rivets, electrodes
- weld seams with welding program
- tightening torques, in the case of HR bolts

. Assembly program with diagram of the successive operations and indications of the work involved the conditions of stability (sealing of the posts, pouring of the floor)

. Site installation.

2 ° / a work schedule indicating the main and specific phases of the work with the start and end date of the work.

The assembly will be done by carefully observing the plumbs, alignments and levels.

4.2.8.5 Bolting

Unless otherwise prescribed by the market, on-site assembly will be carried out by bolts.

The nuts must be fully tightened and in the event that the bolts work in traction, if there are no locknu available to prevent loosening, they must be blocked by suitable matting of the threads or by an device. equivalent (welding for example).

In bolted assemblies supporting significant forces, the length of the cylindrical body of the bolts will b
greater than the total thickness to be tightened and these bolts will be fitted with nuts with washers c
a thickness greater than this excess length.
Under no circumstances should the threaded part prevail over a sheared section.
In assemblies transmitting significant forces, bolts placed on profiles having inclined faces will be fitte
with washers of varying thickness, so as to ensure correct rest of the head or nut and to allow norme
tightening.
4.2.8.6Adjustment-timing
The adjustment and setting operations will be carried out with the greatest care, the position chec
will be carried out by competent personnel using the control instruments appropriate to each case.
The parts will have to rest temporarily on their supports by means of stable wedges allowing th
realization of the seals in good conditions (sufficient clearance).
The deformation of the parts must be avoided during the execution of the adjustment and settin
operations. In the event of buckling, twisting, punching, etc. the repair of the parts will be th
responsibility of the manufacturer.
In the event of mortar or resin sealing, the anchor bolts can only be tightened after final adjustmer
and in any case after the sealant has reached the expected strength.
4.4 FRAMEWORK STEEL
For technical specifications concerning this part, refer to point 5.2
4.5 BLANKET
4.5.1Reference texts - Reminder of the regulations
General information on the reference texts
The realization of the works is subject to compliance with the laws, legislative, administrativ
regulatory, technical and technological in force in the REPUBLIC OF CAMEROON, as well as thos
published in FRANCE made applicable to CAMEROON.
The texts published in FRANCE are mainly collected in the official journal and the REEF published b
the CSTB (4 avenue du Recteur POINCARE - 75005 Paris).
All of these documents are not attached to the contract, but deemed to be known. The most commonl
applied are summarily stipulated.
4.5.2 Applicable standards and regulations
The materials used must comply with DTU 40.11 to 40.45 and technical opinions from CSTB.
(Afnor standards NF A 50 411 and NF A 50 452; Technical Reviewsrib DTU 40.32)
The recoveries will take into account the North-East tornado winds and will comply with article 3.3 c
DTU 40.32.
The connection pieces will be those provided for in the DTU and manufacturers' instructions (ridg
edges, ridge edge flashings, etc.) to the exclusion of any other element.

4.5.3 Work's extent
The work of this lot generally includes: acceptance of the structural work; Security measures for staf
Supply and implementation:
the cover with all the accessories to ensure a complete out of water
mortar flashings and caulking,
ventilation of the soffits
Determination of downspouts and gutters and site cleaning
a) Material
Thickness 63/100
42 mm minimum wavelength
Galvanization at 45 g / m²
b) Storage
The bins will be dried before being stored; they must be sheltered, on wedges and isolated from an
contact with the ground and walls.
The supports will be sufficient to avoid any deformation.
c) Installation

Following CTSB approval in particular:
- maximum distance between purlins
- fixation on all waves, including central waves
- oval holes and washers.

They will be laid with a single length equal to the rampant. The aluminum trays will be maintained b
lag bolts placed at the top of the waves. We will have:
- a bituminous plate between the sheet and the rider
- a stamped aluminum jumper
- bituminous washer
- a metal washer

We will then tighten the lag screw.

*** END OF LOT ***

FLOORING/TILING

5.1 GENERAL SPECIFICATIONS

The purpose of this special technical specifications (STC) is to recall for this batch, the reference tex and the regulations, the service limits between the various trades, the quality and presentation of th equipment and materials entering in the construction of works and their implementation.
The works include the implementation of the services of trade and shaped works of the profession, supply and installation, including all constraints for "complete" works.

5.2 REFERENCE TEXTS - REMINDER OF THE REGULATIONS

Tile wall coverings will comply with the specifications of the specifications for sealed wall covering intended for residential premises, offices and educational establishments, established by th coordination group of technical texts (DTU n ° 55 of April 1961).
The floor coverings will comply with the specifications of the specifications for sealed floor covering applicable to living quarters, offices and established by the scientific and technical building cente (DTU N ° 52.1 October 1973).

5.3 LIMITS OF SERVICES WITH THE VARIOUS LOTS

Not applicable

5.4 QUALITY AND PRESENTATION OF MATERIALS

5.4.1 STONEWARE

Porcelain stoneware tiles and accessories must come from well-known factories, corresponding at lea to CERABATI products. Their dimensions and manufacturing tolerances will be those defined b standards NFP 61.311 0 314 or DTU n ° 52.1 for thin elements, it being understood that the "goo choice" manufacturing quality corresponds to the second classification.
The characteristics of fine vitrified porcelain stoneware tiles must be guaranteed by the test repo justifying their physical qualities.

5.4.2 ENAMELLED STONEWARE

The same original prescriptions as for porcelain stoneware, these elements will be manufactured b single firing at high temperature of a support similar to porcelain stoneware and covered wit enamel. This enamel must be fully fusible and therefore perfectly bonded to the gel and waterproc support.

5.4.3 EARTHENWARE

They will be of identical origin to those of CERABATI porcelain stoneware elements with characteristi defined by DTU N ° 55 and standards 61.331 to 334.

5.4.4 CEMENT

The cement used for making the mortars for laying and plastering will be exclusively CPA 325 cemer without any secondary constituent. It will be supplied with marked bags.

5.4.5 SAND

The sand for making mortars or for forming will comply with standard NFP 18.301 - 0.8 / 2. calibration. It will be free from any earthy or marly material, crisp in the hand, not sticking to i screened and washed if necessary.

5.4.6 GLUES

The adhesives used must be recognized by a technical opinion from CSTB and receive the approval c the inspection office.

5.4.7 EXPANSION JOINT AND THRESHOLD BARS

In addition to the joints imposed by the DTU and filled with permanent plastic mastic, the constructic joints will be finished to the charge of this lot on all the tiled parts by adhesive finishing profiles i light alloy TYPE DINAC or similar.
On the ground, model 1230 80 mm wide.

On vertical walls, 2130 models 80 mm wide and at an angle as appropriate.
In addition, in connection between floors of different nature, it will be provided according to t
specification, metal stop angles 30 mm x 30 mm

5.4.8 SAMPLES

The Contractors will be required to provide, at the request of the Project Manager, a sample of eac
of the planned items, both equipment and materials and prototypes.
No order for material may be placed by the Contractor except at its own risk as long as th
acceptance of the corresponding sample has not been materialized by the signature of the Proje
Manager. These samples will be required to undergo checks and tests in accordance with thos
provided for by the standards in force, with the rules of the profession or with those provided for
the contractual documents. In the event that, following these tests, it is found that the sample
deposited do not meet the specifications of this document, the Project Manager will prohibit the use c
this material on the site and will refuse any work during which he will have been employed. Th
supply of another product to replace the one initially planned will be required and it will be carrie
out on the latter, under the same conditions,
The Contractor may not claim any additional time or compensation following the temporary c
definitive refusal of a batch of a type of material or supply.
The supply of all these samples is the responsibility of the Contractor.

5.5 IMPLEMENTATION

The technical requirements of DTU N ° 52.1 to 55 are supplemented by the following details:
- Thick porcelain stoneware tiles will be laid either with reduced straight joints or with 3 to 4 mm wid
joints using the so-called "rule and batting" method.
- in addition to construction expansion joints, the Contractor shall provide wherever he deem
necessary, decompression joints which he will fill with a product such as PRC or similar.
- The joints will be carried out at the earliest 24 hours after the installation of the elements.
- Contact with areas of non-adherent "sounding hollow" tiling or coating will result in the refusal an
the obligation to repair the floor of the entire room in question.
- The Contractor will receive the supports on which he will have to apply his materials, in the presenc
of the Project Manager. He will make the necessary justified reservations which must be lifted befor
his intervention. From the reception of the supports he will be responsible for the good performanc
and the good execution of his works.

5.5.1 EXECUTION SUBJECTS

The proposed prices include implicitly all the subjection of cuts and waste for connection on angle
pipes, thresholds, etc ... They also include the connections to be made after passage of the sleeves an
various pipes and the distribution of the cuts. By splaying openings leading to different floors, th
tiling will be stopped at the halfway point of the doors.
Also implicitly included for all tiling and coverings are grouting using ordinary or white cemen
cleaning, and, for floors, spreading white sawdust.

*** END OF LOT ***

WOODEN JOINERY /METTALIC WORKS

6.1 GENERAL SPECIFICATIONS

The purpose of this special technical specifications (STC) is to recall for this batch, the reference tex and the regulations, the quality and the presentation of the equipment and materials used in th construction of the works and their implementation.

The works include the implementation of trade services and crafted works of the profession, in suppl and installation, including all constraints to obtain "complete" works.

6.2 REFERENCE TEXTS - REMINDER OF THE REGULATIONS

The Contractor must carry out the work covered by this contract while observing the requiremen defined by the DTU, CSTB specifications, French standards, French and Cameroonian offici documents relating to the work in force on the date of signature of the contract, including:

- DTU 36.1 (wood carpentry work)
- Decree 69.596 of June and annexes.

6.3 SAMPLES

Samples of all the works and hardware provided for in this lot will be subject to the approval of th Project Manager before the start of mass production. They will be stored in the sample room unt reception.

6.4 QUALITY AND PRESENTATION OF MATERIALS

6.4.1 Wood joinery - PLYWOOD FALSE CEILINGS

The woods used for the joinery to be painted or varnished will be hard hardwoods, of choic equivalent to that of class B as defined by standard NF B 53.501, base KOTIBE, SIPO, NIANGC IROKO or others.

Plywood and slatted panels will be defined by standards NF B 54.006 and 53.504, it being clearl specified that the required appearance is the appearance of visible woods involving class A veneers.

The works must be carried out in accordance with the General Technical Specifications published b CSTB and constituting DTU n ° 36.1. All materials must comply with the specifications of the standarc in force at the time of the execution of the work.

The Contractor's attention is drawn to the need for unity of appearance of certain visible woode composite elements such as solid doors.

The Contractor must endeavor to harmonize the different woods used. He will make all arrangemen so that the veneers on the doors and panels are of the same origin, even if the manufacturers of th finished materials are different. The panels will be chosen and harmonized for color and grain. Th Project Manager reserves the right to choose the timber at cut rate with the Contractor.

6.4.2 False ceilings in mineral tiles

These false ceilings will be made of mineral fiber panels, free of asbestos and formaldehyde, th surface of which will be painted in the factory.

The panels must have an M0 classification for fire resistance.

False ceiling panels must have guaranteed stability in an atmosphere of 90% relative humidity.

The panels will be supported by an apparent primary frame in lacquered metal, this frame bein suspended from the metal frame by threaded rods.

6.5 QUALITY OF THE WOOD IMPLEMENTED

According to the definitions of the French standard B. 53.001, for the joinery to be varnished, onl wood obtained with first choice parts, cabinet quality, such as KOTIBE, SIPO, IROKO, will be admittec All the wood used will be of first quality, sound, perfectly dry, the degree of humidity in accordanc with the requirements of the local climate, without vicious knots, presenting no significant deterioratio such as spalling, frost, internal cracks or rolling etc. ... and guaranteed against all possible illnesses.

The wood will also not be able to present traces of insects, the cracks will only interest the surface c the parts and will be few.
These woods, with the exception of soft woods, the use of which is expressly specified in th description, will be chosen according to their dimensional stability, their mechanical qualities, an supply possibilities.
The Contractor will be responsible for diseases that may occur in his works after their implementatic (mold, fungi, etc.)
It will also be responsible for all the twists, cracks, bursts, etc ... due to the use of imperfectly dr wood.

6.6 MANUFACTURING QUALITY

The joinery will be of an aesthetic aspect. Their profiles and sections will be studied accordingly an will include all the metal reinforcements necessary for their good performance.
The finish will be perfect, the rough facings well flush, those wrought perfectly straightened so thc there is no trace of sawing or blurring, the edges very straight and without spalling, the whol carefully sanded.
All the moldings will be assembled with tabs, without counter profiling.

6.7 HARDWARE STORE

Models will be submitted for approval to the Project Manager for all hardware parts. Taking int account the high degree of ambient humidity, all the hardware parts will be effectively protecte against corrosion even the hidden parts, either by hot anodic deposition 40 microns, or by passivatior The screws, nuts, squares and all elements susceptible to wear by friction will be made of stainle metal, as well as all the springs.
In addition, all the hardware will be printed, either in the factory or on its arrival on the site and it wi be the same for all the notches reserved for the fixing of this hardware.
Whatever they are, the hardware supplies must correspond at least to the qualities giving rise to th SNFQ and NF SNFQ punches.
All hardware will be of first quality.

6.8 FRAMES OR BUILDINGS

All the frames will be in wood assembled with tenon and mortise, in hard wood to be painted c varnished, with or without transom depending on the case.
The frames of so-called "fire-rated" or "flame-resistant" doors must also be of a make and typ approved by CSTB.
The frames will include all the shock-absorbing rubber buffers limiting the noise when closing.

6.9 CAULKING

The value of each of the works will implicitly include that of all the caulking, treated or not. Thes caulks will be made of wood of the same type as those with which they are in contact.

6.10 KEYS

Three keys will be provided with each lock. The same key will be provided with a label bearing th inscription of the room, after reception they will be delivered on a transportable wooden board.

6.11 WOOD TREATMENT (PRESERVATION)

All the wood defined in this estimate will be treated at the expense of this batch, or soaked, afte flow but before assembly, with an insecticide, fungicide, of CTBF brand and quality compatible wi standard NFP 23.305 and DTU 36.1.

6.12 WOOD TREATMENT (PROTECTION)

Before leaving the factory, the wood must be protected against moisture absorption.

All carpentry must have arrived on the site equipped with protection. The nature and date c application of this protection must be indicated on each structure in accordance with standard NF 23.305.

6.13 IMPLEMENTATION

The Contractor shall supply and install all the anchoring brackets and accessories necessary for fixin his works, without them needing to be reminded in detail.

The joinery will be installed with the greatest precision and perfect plumb, and they will be fixed such a way that they cannot move during the execution of the seals. All shims and temporary struts w be placed to prevent the deformation of the elements, due to the plasters or caulking.

The edges of the joinery that risk being degraded will be protected by temporary furring.

6.13.1 Games

Before painting, the necessary clearance will be given to all the doors to avoid any paint connectior which would in this case be at the Contractor's expense.

6.13.2 Revisions

At the end of the work, the Contractor will have to completely overhaul his works.

The replacement of all the parts which would have been damaged during the work and the lubricatic of all the moving parts.

6.14 DEFINITION AND LOCATION OF WORKS

The work of the wood carpentry batch concerning all the wood carpentry works in the project an more particularly the interior doors, transoms in the corridors, reception furniture if necessary.

6.15 LIMITATION OF SERVICES

The contractor holding the woodworking trades will be responsible for:

The supply, shaping and installation of all interior doors in solid wood or honeycomb in the buildin including all locks and hardware, padding etc.

The supply, shaping and installation of inspection hatches in the ducts and technical buildings c buildings housing the market).

The supply, the shaping and the installation of transoms in the corridors of the buildings housing th services of the Health Training (FS) concerned. (FS) including supply and installation of NACO frames.

The supply, shaping and installation of reception desks, if applicable.

Including studies, drawings, details of the works and samples, if necessary, the supply of all th materials entering into the composition of the elements, the fabrication in the workshop and th transport to the work of the elements, the adjustment and adjustment of the elements, the supply an installation of hardware and seals.

METAL JOINERY - LOCKS

9.1 GENERAL SPECIFICATIONS

The purpose of this Special Technical Specifications (CPTP) is to recall for this batch, the referenc texts and the regulations, the quality and the presentation of the equipment and materials used in th construction of the works and their implementation.

The works include the implementation of trade services and crafted work of the profession, supplying poses, including all constraints to obtain "complete" works.

The works, subject of this contract, including glazing - mirroring work, as they appear on the graph and written documents.

9.2 REFERENCE TEXT - REMINDER OF THE REGULATIONS

9.2.1 METAL JOINERY - LOCKS

The Contractor must carry out the work that is the subject of the contract by observing the prescriptior defined by the DTU, the CSTB booklet, French standards, orders, circulars, ordinances and in genere all French and Cameroonian official documents. relating to the work in force on the date of signatur on the contract and in particular to:

- calculation rules for metal constructions CM 66

- DTU n ° 32.1 specifications applicable to metal construction works published by CSTB, issue 6
specifications 575 of June 1964
- DTU n ° 32.2 specifications applicable to metal construction works and aluminum alloy structure
published by CSTB, issue 85, specification 741 of April 1967, and addendum n ° 1 to th
specifications, delivery 124 specification 1073 of November 1971, and addendum n ° 2 issue 14
cahier 1201 of September 1973.
All guardrails will comply with the specifications of standard NFP 01.012.

9.2.2 GLASSWARE

The reference organizations are as follows:
- prescriptions defined by CSTB
- DTU 39.1 Glazing
- DTU 39.4 Mirroring and Glazing in thick glass
- standards and in general all official documents in force on the date of signature of the contracts.
This document refers only to the CSTB technical specifications, the AFNOR standards and the UN
specifications, being recalled in the prescriptions of these specifications.
In addition, the rules and technical services of the manufactures will be taken into account.

9.3 QUALITY AND PRESENTATION OF MATERIALS

9.3.1 STEEL

The steels used will be of the "merchant rolled" sheet metal and all lock profiles or square steel tub
Rectangular or thin welded round, SN series for locksmith work.
The rolled products used must comply with approved French standard specifications (class
metallurgy).

9.3.2 LIGHT ALLOYS

The profiles will be in extruded light alloy, of a standard type of copper content will be less thc
0.2%. Models are subject to the approval of the Project Manager for all hardware parts. Whateve
they are, they must be accepted with the SNFQ or NF, SNFQ hallmarks.

9.3.3 PROTECTION

All steel structures will be delivered with protection:
- or by application after degreasing and descaling of a primer with a high zinc content
- or by hot galvanizing 40 microns.
This treatment will be carried out after welding.
For the screwed elements, these will be assembled and white adjusted, dismantled, treated an
screwed back with stainless steel screws, bolts or nuts.
Before painting, all the works will be received. Those whose protection has been damaged, eve
partially, will be dropped off and returned to treatment.
Light alloy works will be treated by anodic oxidation from 20 to 25 microns (class 20, AWAA label).

9.3.4 SPECIAL REQUIREMENTS FOR HARDWARE

The attention of the Contractor is drawn to the supply of hardware: locks, hinges, crutches, anchors e
... which must be of first quality, resistant and perfectly installed.
Taking into account the high degree of ambient humidity, all the hardware parts will be effectivel
protected against corrosion, even the hidden parts, either by hot anodic deposition of 40 microns c
by passivation.
Models will be submitted for approval to the Project Manager for all hardware parts. Whatever the
are, they must be accepted with the SNFQ or NF, SNFQ stamp.
The recessed locks and lever handles must be at least 14 mm thick partition, brass follower, ste
faceplate.
The wall-mounted locks and cane slats will have a removable steel box, bronze follower.

The crutches will be of the type with integral chromed brass entry plate.
The incorporated lock barrels will also be chrome-plated.

9.3.5 SAMPLES

The Contractor will also give the Project Manager the detailed and complete specification of all th items of the hardware proposed, indicating the origin, and attaching a sample in accordance with th requirements of the program.
Samples will be kept as a witness of the agreed service after agreement of the Project Manager.

9.3.6 GLASSWARE

The materials used must comply with the standards in force:
- NFB 30.001: terminology of glass defects
- NFB 32.001: windows, glasses and mirrors: terminology
- NFB 32.500: safety glass: terminology, classification, thickness
- NFP 78.301: glazing: qualities
- NFP 78.401: glazing glass: dimensions.

9.4 METAL JOINERY IMPLEMENTATION - LOCKSMITH

The profiles will be perfectly drawn up and straightened, the sheets leveled.
Welds by whatever means they are carried out will be perfectly leveled and ground, even on site.
Fixings by screws will be made for elements having a minimum of 2 mm for the part to be screwe and 4 mm for the tapped part.
The holes will be milled. The use of self-drilling screws is prohibited. In any case, the Contractor mu submit to the Project Manager, before any start of execution, large-scale drawings of all th assembled works.
Locksmithing works will be fixed in the masonry by metal anchoring brackets or by split sealing of th uprights and ties or by other procedures having received the approval of the Project Manager.
The strength of the profiles will be calculated according to the dimension of the structure and i weight to avoid any warping, buckling, torsion, etc. The sheet metalwork will be of sufficient thickne: to avoid any deformation during their implementation.
The fastening screws will be of first quality with very large tightening and stainless whenever th constraints of assembly require it.

9.5 GLAZING IMPLEMENTATION

The installation of the glazing will be the responsibility of the Contractor of this lot.
The volumes will be rebated with a close barrier, supplied by the Contractor for the wood joinery l or the metal joinery lot.
Before installing the glazing, the Contractor of this lot must take delivery of the exterior joiner ensure that it is properly squared, check that the glazing joints provided by the Contractor of th wood joinery lot comply with standards and the guarantees required.

9.6 VERIFICATION OF DIMENSIONS

Before any execution, the Contractor of this lot will be responsible for verifying the dimensions on sit of all exterior joinery, checking squaring, etc.
These dimensions result from studies for wood or aluminum carpentry lots.

9.7 GLAZING MARKING

Immediately after installation, the glazing will be marked in white

*** END OF LOT ***

ALUMINUM JOINERY

7.0 GENERAL

The Special Technical Clauses (STC) forms a whole and must be known as a whole by each of th entrepreneurs.

The purpose of this STC is to describe and specify the aluminum work necessary for the construction c the market concerned.

The contractor must provide for everything that arises from the work to be done without being able t dispense with fully performing all the works necessary for the completion of all the work in his lot an according to the rules of the Art.

7.1 DEFINITION AND LOCATION OF WORKS

The work of the aluminum batch concerns all the aluminum works in the project and more particularl the interior doors, the sliding windows and exterior fixed frames and the frame assemblies.

7.2 LIMITATION OF SERVICES

The contractor holder of the body of state aluminum carpentry will be responsible for:

the supply, shaping and installation of all interior doors in glazed aluminum frame including all locl and hardware, panic bars for emergency doors, etc.

The supply, shaping and installation of sliding windows, fixed, with or without fixed transom of an size, including all locks and hardware.

The supply, shaping and installation of fixed glass units with.

Including studies, drawings, details of the works and samples if necessary, the supply of all th materials used in the composition of the elements, the manufacture in the workshop and the transpo to the work of the elements, the adjustment and adjustment of the elements, the supply and installatic of hardware and gaskets.

The supply and installation of all the windows are carried out in close collaboration with this lot an will be remunerated in the carpentry lot.

Work to be carried out by the Major Work lot

All fittings, plugging and patching services in masonry and plaster are the responsibility of th Structural Work.

Work to be carried out by the painting batch

All services relating to the protection of surfaces, protection of frames and hardware during paintin work are the responsibility of the painting body.

7.3 REFERENCE TEXT, REMINDER OF THE REGULATIONS

The contractor will comply with the standards and texts in force at the time of the work and mor particularly:

NFP 24-101 Metal carpentry, terminology
NFP 24-201 24-202 metal joinery
NFP 24-301 Metal windows and doors
NFP 78-301 and 401: Window glasses
DTU N ° 36 Carpentry
DTU N ° 39 (ref. "AFNOR DTU P 78-201)

7.4 COORDINATION WITH THE VARIOUS LOTS

The aluminum joinery contractor will submit to the Project Manager in 3 copies within the agree timeframe the schedule of his interventions, the detailed plans of the works concerned by this body c state, the samples and any document necessary for the other lots to stop the work. details of th execution of their works and the dates of their interventions.

*** END OF LOT ***

PAINTING

9.1 GENERAL SPECIFICATIONS

The purpose of this particular technical specifications (CPTP) is to recall for this batch, the referenc texts and the regulations, the service limits between the various trades, the quality and presentation c the equipment and materials entering into the construction of works and their implementation.
The works include the implementation of the services of trade and shaped works of the profession, i supply and installation including all constraints to obtain "complete" works.
The works, subject of this contract, include the painting work of the building complex, as they appec on the graphic and written documents.

9.2 REFERENCE TEXTS - REMINDER OF THE REGULATIONS

The reference organizations are as follows:
- prescriptions defined by CSTB (DTU 59.1 Painting work)
- standards and in general all official documents in force on the date of signature of the contracts
- decisions of the permanent paint markets group.

This document refers only to the CSTB technical specifications, the AFNOR standards and the UN specifications, being recalled in the prescriptions of these specifications.
In addition, the rules and technical services of the manufactures will be taken into account.

9.3 QUALITY AND PRESENTATION OF MATERIALS

All products must come from factories known for their quality of workmanship.
The composition of traditional paints or paints that do not bear a mark must comply with CST requirements and be subject to verifications on samples taken during the construction site provided fc in these same requirements.
In the case of covering with a layer of paint or varnish by application of a product from a differe family, or delivered by another manufacturer, even if this product is considered to be similar, th company must, before making it use, submit to the Project Manager the certificate from eac manufacturer guaranteeing the compatibility of the covering layer with respect to the covered laye and vice versa.
In any case, the Contractor assumes full responsibility for incidents and damages resulting from th incompatibility of the layers of paint and varnish.

If a trademark is indicated below, it is indicative, and should always be considered as followed b the term "equivalent".
If the Contractor proposes to use products that he considers to be equivalent, he is required to atta to his proposal the identification elements enabling the Architect to determine that the produc offered are effectively equivalent.
Product identification data sheets must include the following information:
- attachment to official AFNOR UNP standards
- characteristics and performances:
  a) type (e.g. glycero, acrylic, in solution, emulsion, dispersion)
  b) ready to use or not, diluent and adjustment products for use
  c) density
  d) dust-free and recoatable drying
  e) thickness of dry fuel in microns for a specified covered area
  f) concordance or disparity of each of the products with the performances concerning susceptibility soiling exposed in the CSTB book n ° 80 (book 695) relating to the tests
  g) appearance and relief

In the absence of these details and the agreement of the Project Manager, the latter may still requi the use of the products appearing in this estimate.

Acceptance of the system and products offered by the Contractor is always subject to the execution c
the test surfaces provided for below:
- if the results were not those obtained with the systems and products referred to in this estimate, th
Project Manager would be entitled to demand that the requirements of this document be complie
with.
- if the Contractor, as a tradesman, foresees a doubtful result of the techniques and produc
recommended by the Project Manager, he must make reservations by letter, giving reasons for h
reservations.
The acceptance by the Project Manager of a proposal, whether it includes the brand offered in
similar fashion or a brand given by the Contractor, in no way removes the Contractor's responsibilit
for the quality of the work to be done. provide.
The manufacturer (s) of the selected products must give, on the site and in the presence of the Proje
Manager, all useful information concerning the conditions of use, the method of application, the dryin
characteristics, the various products to be used, and in short, ensure full technical assistance, at th
expense of the painting contractor.
To ensure perfect technical assistance, the manufacturer can be summoned, like the Contractor, t
several or all of the meetings concerning the site, at the request of the Project Manager.
Paints, coatings and varnishes designated by their brands must be housed in sealed containers at th
factory. The cans must be unsealed at the time of use according to the needs of the site.

9.3.1 PAINT BRANDS

In order to give Contractors as much detail as possible on the quality of the paints required for th
work, the Project Manager requests the use of paint from the "MASTER" brand as a basic solution.
The Contractor will be able to offer other paints of a quality at least equivalent to the brand an
type of quality referenced.
However, the Project Manager reserves the right to revert to the brand and the referenced quality,
the event that it is considered that the paints offered by the Contractor are not considered at lea
equivalent.

9.4 IMPLEMENTATION

Work should only be carried out on perfectly dry substrates.
The application of paints, varnishes, coatings and similar preparations must only be carried out und
climatic and hydrometric conditions prescribed in the contractual technical documents.
The paints and varnishes must be, before and during use, maintained in a state of perfe
homogeneity by mixing, and possibly sieving.
The paints must be able to be applied either by roller, spray gun or brush. The choice of tool is t
responsibility of the Contractor (unless specified in the description) depending on the nature a
surface condition of the materials and the possibilities of the site. However, all primer or primer coa
are still applied with a brush.
The work will be carried out for the products designated by their brand according to t
manufacturer's instructions which must be specified:
- in the notices
- on the labels
- and for traditional products according to CSTB prescriptions.
The fixed price must always include the following operations contributing to the finished work:
- preparatory operations made according to the degree of finish
- all layers
- supply and implementation of products, materials, scaffolding tools
- the fittings after the joinery clearances
- the connections to the plinths after laying the floors
- fittings after cleaning
- the fittings after the tests during the work and on acceptance

- protection, by all appropriate means, of surfaces which may be attacked or necessary carefi
recoating.

9.4.1 RECOGNITION OF SUBJECTILES

The surfaces to receive the application of paint layers are carefully examined by the Proje
Manager, in the presence of the Contractors.
This recognition of the different substrates will be undertaken before any start of the execution of th
painting work, and the Contractor of this lot must, if necessary, formulate the reservations that h
considers essential for the good realization of these works, failing which, he will be responsible for th
resistance of his materials or the poor finish of painted surfaces. These reservations must be presente
in writing to the Project Manager who ultimately decides on the respective responsibilities of th
companies.

The Contractor of the painting batch will not be able, thereafter, to formulate any reserve as for th
good behavior or the defective aspect of his works due to the substrates used.
Defects, such as cracks, unevenness, false plumb, grilled plaster, plaster, etc ... will be redone c
rectified depending on the nature of the defect, either by the responsible contractor or by the painte
In all cases, these repair costs are the responsibility of the defaulting Contractor.
In the event that the repair work is carried out by the painter, the amount of this work is establishe
jointly between the companies concerned and is the subject of an inter-company account.
In the event of disagreement, arbitration by the Project Manager will be required.
By the fact of bidding, companies declare that they are relying on its decision.
The amount of costs resulting from poor workmanship is then deducted from the account of th
defaulting company.

9.4.2 PRELIMINARY ACTIVITIES
All the primers necessary for a perfect execution, as well as those necessary for a perfect adhesion c
the paints will be due, the enumerations of primers given in the course of the description of the wor
are not limitative and constitute only minima.
The price agreed for the execution of the painting includes the preparatory operations such c
ginning, brushing, sanding, filling, puttying, dusting, washing, degreasing, unrolling, filling porous par
etc ... which are necessary for the proper presentation of the paint. 'work. These operations a
carried out in accordance with the technical specifications of CSTB.

Definition of the main operations:

a) Brushing and ginning
In general, the Contractor must carefully brush or hard brush all surfaces.
On the metal it has the possible raw scraping with the removal of rust and scale.
The removal of large projections (cement, plaster, etc ...) incumbent on the plaster.

b) Recapping
It consists in locally sealing the small cavities that remain on the surface.
This filling work necessarily involves the coating of all the notched parts and fittings.

c) Sanding
Raking operations, filling the porous parts are necessarily accompanied by sanding to remove grair
and imperfections harmful to the surface condition. Sanding will be carried out as follows:
- with pumice or abrasive paper with water in the case of very careful work
- sandpaper and dry sandpaper in other cases.

d) Degreasing
It is carried out with trichlorethylene with mop wiping for all exuding wood and with a known bran
degreaser for all metal works where it is necessary.

e) Remediation of poured concrete surfaces
The Contractor is required to obtain information from the Contractor for the Structural Work packag
and, possibly, from the manufacturer of the formwork release product, on the means of removin
traces to ensure the adhesion of the paint.
The paint manufacturer must be kept informed of this consultation by the Contractor, in order to b
able to formulate objections if necessary.
On all surfaces with too high a PH 8 alkalinity, the Contractor must provide for the application of
neutralizing solution that does not require rinsing.

f) Anti-rust printing
The printing carried out on the works of locksmiths, metal frames, pipes, carried out by the holders
each of the lots only constitutes a provisional anti-rust protection intended to protect the wor
between the moment of installation and the intervention of the painter.
The latter must therefore provide all the primary coats on the full surface and the brushing and ro
scraping of the chipped parts, as well as degreasing if necessary.

g) Filling plasters
The walls and ceilings to be painted will be delivered by the Gros Ouvre lot, poured into t
formwork with finished facing.
It will be up to the Painting Contractor to perform the necessary fillers.
Application work includes: grinding of cement, or concrete, using Carborundum stone.

*** END OF LOT ***

ELECTRICITY - STRONG CURRENTS - LOW CURRENT - AIR CONDITIONING - VENTILATION

10.1 STRONG CURRENTS

10.1.1 GENERAL

The purpose of this special technical specifications (CPTP) is to remind the Contractor of this lot of th measures to be taken to comply with the reference texts, regulations, legislation in force, limits c services between various trades, the quality and presentation of equipment and materials used in th construction, their implementation and the constraints to be observed which take into account c overall context.

The works include the implementation of trade services and crafted works of the profession, suppl and installation, including all constraints to obtain <<complete>> works.

The written and graphic documents defining the means constitute for the Contractor of this lot, c obligation of result.

10.1.2 REQUIREMENTS AND REGULATIONS TO BE OBSERVED

The installations will be carried out in accordance with:

- the services defined by the general design file and in particular in this technical document
- by reference to legislative and regulatory texts, French standards, DTUs as well as opinior formulated by the energy distributor, manufacturers and those of committees concerned with safety.

Electrical installation

The electrical installation will comply with the standards and regulations in force, in particular th following texts:

- (NF 12. 100 - C 12. 200 - C 13. 200 - C 14.00 - C 15.150 - C 90.120)
- NF 15.100 standards concerning low voltage electrical installations
- DTU 70.1 and 70.2

The following provisions cannot replace the official prescriptions and priority will always be given the regulations that the Contractor undertakes to observe even if they correspond for him to a mo expensive solution than what he had foreseen when bidding. .

The prescriptions imposed by the Distributor will always be taken into consideration if there is contradiction with the above prescriptions or the specifications of the specifications.

10.1.3 ENTREPRENEUR'S RELATIONS WITH DISTRIBUTOR COMPANIES

The Contractor must get in touch with the services of the distributing companies; he must obtain information useful for the performance of his work, submit to all checks and visits by agents of the services and provide all documents and supporting documents requested.

In particular, the Contractor must:

- obtain from the said companies all the necessary agreements both for the distribution pipes and the interior installations.

establish the supply demand for all buildings in electric current. For this purpose, he must obtain a complete the forms and hand them over to the Project Manager or his representative for signature.

10.1.4 INSPECTION

Checks and tests

The contractor is required to carry out the following checks and tests:

- measurements of the earth electrodes
- insulation measurements of the installations which will be carried out between conductors and relation to the earth. This value should be at least 500,000 ohms.
- installation balancing measures
- checking the rating of the protection devices
- operating tests of differential circuit breakers

The contractor must carry out the dismantling and reassembly operations necessary to carry out th checks.

It will also provide all the equipment necessary for carrying out these measurements and controls.
In the event that these verifications are not satisfactory, the contractor shall immediately and at h
expense proceed to the restoration of the installations.

10.1.5 WORK FOR THE CONTRACTOR

Are the responsibility of the Contractor and included in the complete installation as defined, in th
various documents even in the event that the work is not carried out by him:
- all drilling, trenches, seals, filling of holes and trenches, sleeves to be provided
- the seals of the tubes on the ground
- all the various connections resulting from the fixing of the devices
- the anti-rust protection of the various ferrous metal parts.

The Contractor is responsible for the consequences that this work may have on the solidity of th
constructions or traces of cracks that may appear subsequently.

10.1.6 WORK LIMIT

The work will start downstream of the distributor's service limits, unless otherwise indicated in th
specifications.
The work to be carried out includes the supply, transport, installation of the power supply, connectio
and adjustment of all the devices and accessories necessary for the proper functioning of th
installation, the tests prior to provisional acceptance and the 'maintenance of the installation during th
period corresponding to the warranty period.

The facilities include:
- all the pipes relating to the lighting network
- all the electrical installations intended to receive the disconnection, protection and control devices c
the general, divisional and terminal circuits, unless otherwise indicated in the specifications
- in general, all the work provided for in the specifications or on the plans.

10.1.7 COORDINATION WITH OTHER ENTREPRENEURS

The Contractor of this lot must intervene on the site in conjunction with the Contractors of othe
interested bodies to carry out his work without compromising the work progress program. In particula
he must come to an agreement with the Structural Contractor to lay his conduits.

10.1.8 CHOICE OF MATERIAL

All equipment covered by UTE standards must comply with these:
- when, for a given equipment, the standards provide for the attribution of the national mark
conformity with the NF USE standards or of the USE quality mark, only equipment bearing this ma
must be used.
- in the event that the standards do not provide for a mark in accordance with the above standard
the quality of this material must be guaranteed by the presentation of a conformity report issued b
an authorized body
- when there is no standard concerning the equipment, it must present all the guarantees of solidit
duration of isolation and good functioning desirable. In particular, it must comply with general
fundamental technical regulations or specifications concerning the use for which it is intended.

Protection against electric shock

Protection against direct contact

This will be mainly ensured by the isolation of live parts and the installation of unprotected equipme
in boxes, cabinets, or premises intended solely for electrical service.

Protection against indirect contact

This protection will prevent a contact voltage established following an insulation fault from being ab
to remain at values higher than tables 41A and 41B of NF C 15100 TT diagram.

Measure B1 of chapter VI of this standard relating to the earthing of metallic masses is therefor
adopted. The interconnection of the masses is carried out by connecting all the metal masses of th
devices supplied by a given cabinet and by connecting all the cabinets to the general earth circuit.
Protections against thermal effects in normal service.
These measures will protect people against the risk of burns and the installations against the risk c
fire.
They will be ensured by the suitable choice of materials as well as the calculation of the installatior
taking into account the external influences to which the equipment is subjected.
Over-current protection
Overload protection
They will be provided by overcurrent devices, the non-operating current of which will always be le
than the admissible current of the pipeline, corrected for depreciation factors due to installation an
environmental conditions.
Short circuit protection
In all cases, the tripping time must be less than the thermal stress limit of the cable; the short-circu
current of the furthest point must be greater than the tripping current of the protection device; th
short-circuit current at the location of the protection must be less than the breaking capacity of th
protective device.
Protection selectivity
When several protection devices are placed in series, their characteristics must be chosen so as t
eliminate only the part of the installation in which the fault is located. All of these protections must b
established by amperometric and non-chronometric devices.

Material specifications

Choice of material
The electrical equipment will be chosen according to the installation conditions and the externa
influences to which the installations are subjected.
Protection against the presence of water
Since water is not present in all rooms, devices inside buildings in wet rooms will simply be protecte
against water spray, i.e.
IP x 3 x.
Devices outside buildings will be protected against falling rain, i.e. an IP x 5 x.
Protection against mechanical impact
This protection will have to be adapted to each particular case but will nevertheless be divided in
two main classes:

Inaccessible material (ceiling light)
This material will not need any special protection and will have a protection index 3 (IP x 3).
Accessible material
In some premises, activities may require equipment with a protection index 6 (IP x 6). This index m
however be reduced if the equipment is protected by other mechanical means or if it is located
areas with reduced traffic.
The contracting company will get in touch with the public or private services concerned in order
obtain all the information and agreements useful for the execution of the works. He will submit to
checks and visits by engineers, inspectors and agents of the competent services.
He must provide all the documents and supporting documents that will be requested of him and m
complete all the necessary steps to obtain the agreements and authorizations essential for
execution of the work.
The contracting company must present before the start of the work a complete sampling of
material of this lot that it will use to carry out the installation. This sampling must remain on the site
the end of the work and will be stored in a site reserved for this purpose.

The supply of the contracting company will include all the materials and equipment necessary for th complete realization, in working order, of the works designated and described in this description. This includes, in particular, the supply of all the components of the installation, transport to the site, th installation, adjustments and tune-up of all the components and devices necessary for the prope functioning of the installation, checks and tests prior to acceptance, free maintenance of the installatic during the warranty period, supply of installation plans in accordance with the realization with cabl routing plan.
The contracting company will be required to check the characteristics, sizing and quantities provide by the Project Manager as part of this file. In case of error, omission or doubt, he will immediatel refer it to him. The contracting company undertakes to provide an installation that complies with th specifications of this document and in perfect working order. He will not be able to report an omissic or a bad interpretation of the file to refuse to supply or to assemble a device, a cable or a devic whose absence would jeopardize the safety or the correct functioning of the installation. part or all. is up to him to assess during his study of execution the difficulties of realization which may arise.

10.1.9 ELECTRICAL CIRCUIT (Piping and wiring)

10.1.9.1 RODS

Furling in general
They must be of the following types:
- Gray ICD or ICT (for ductwork embedded in concrete, laid before screed or in slits in partitions.
- Rigid gray IRO (for exposed installations).
- PVC (for paths, in buried networks, road crossings, etc ...

The minimum diameter of the sheaths will be 20, and their installation conditions will comply with th specifications of the Standards.

This lot will have to supply and install all the conduits and ducts for the installations of:
- Electricity

10.1.9.2 PIPING
From the divisional switchboards, distribution will be carried out in accordance with the plans ar diagrams of the installation drawn up by the contracting COMPANY. All the pipes will be in HO 7V U 1000 RO2 V copper. They will be placed under ICO - IRO - ICD conduit etc. depending on wheth they are in false ceilings, recessed or fixed directly to the walls.
The cables used for the general LV network will be U1000 RO2V series, buried in ducts.
ICO / IRO / ICD conduits:
The conduits will be in central and deformable gray insulation installed in recessed or visible IRO.
HO7 Wires / U 1000 R02V Cables
Wires and cables, solid or cabled copper core
Withstand voltage (750V and 1000V) PVC insulation, section according to use power.
Calculation elements for secondary pipelines:
They are those taken from the protection panels and supplying the various uses: machines, moto lights, sockets.
The intensity of calculation to be taken into account for the determination of the section of these pi will never be abundant.
It will be deducted from the nominal installed power increased by the starting current assigned coefficient K: I calculation: I nominal + KI starting.
This coefficient will be 1/3 for motors in common use and will vary according to the frequency starts, the time interval between each operating cycle and the manufacturers' recommendations.

The planned installation must have an average power factor such that its use does not entail, throug its normal operation, a consumption of reactive energy resulting in a penalty on the part of th distributor or disturbances in the framework of a particular internal network. .

Section of active conductors:

The section of the conductors will be chosen according to the tables of standard C 15 100, ensurin that the design intensity of the pipeline is always less than the admissible current of the cabl corrected for the depreciation factors due to the conditions. environment (temperature installatic method), while respecting the maximum authorized voltage drops.

Neutral conductor cross section:

When the powers distributed in tri + N are balanced, the neutral section can be reduced according t the values in table 52 K of NF C 15 100.

Pressure drop:

The voltage drop in the pipes between the origin of the installation and any point of use must not b greater than the values in table 52 J of NF C 15 100, namely:

Lighting

6% in total, broken down into 3% for the main pipes and 3% for the secondary pipes

Strength

8% in total, divided into 4% for the main pipes and 4% for the secondary pipes (the latter 4% als apply to the driving forces in operating mode, this value may however be increased at the time c peak start-up according to the tolerances indicated by the engine manufacturer).

All purpose

The voltage drop in the main pipes will always be 3%, that of the secondary pipes will comply wit the specific requirements above.

Identification of pipes:

The identification of the electrical pipes must be established in order to allow their subsequer identification during checks and maintenance of the installation.

Each cable will have a labeling made by ring, collar, sleeve, indicating its destination or a numbere mark corresponding to the indications of the cable books, table diagrams, installation plans, etc.

Main pipes laid in the open air

This labeling will be carried out at each end and end, change of level, direction, crossings, on eith side of the branch boxes and in general every 10 meters for straight courses.

Main buried pipes

This labeling will be carried out at each holding and ending as well as on each visible or accessib part of the course (draft chamber and bypass, etc.)

Secondary pipes laid in the open air

This labeling will be carried out at each tenant, ending up during the journey according to the nee and complexity of the installation.

Recessed secondary pipes

. the conductors will be marked with the appropriate coloring.

. the labeling on the ducts will be carried out according to the implementation of the embeddi (before or after construction, insulated sleeves, or prefabricated octopus).

Cable conductors

This marking will comply with NF C 15 100, that is to say:

. double green / yellow coloring for the earth

. blue for neutral

. orange, red violet, brown, black for the phases according to table 51 GC of NF C 15 100.

10.1.9.3 Wiring

The wiring must be carried out in accordance with the plans and documents.

They will be from the following series:

- U 1000 RO 2V

- A05 VV-V (wired VGV)
- H07 VV and H07 VR
- U 1000 RO 2V - HFG 1000 (underground installation)

Unless otherwise specified, the sections of the power cables may not be less than 1.5 mm².

The watertight entries will be made by PVC or brass cable glands.
All general cabling will bear their markings (holding - ending -n °) and their fixings on the cable tra support, with 3 clamps per meter.

10.1.10 PROTECTION AND EARTHING

Equipotential connections.
The equipotential connections will be made on the sanitary facilities and, in general, in the roon where there are water distribution installations; they will be united in a single point at the neare protective conductor.
Taken from the ground
The resistance of the earth electrodes must be less than or equal to 3 Ohms. A preliminar measurement of the resistivity of the ground will be carried out by the contracting company allowing to obtain this resistance in the most economical way.
If this value is not reached, the contracting company will have to establish a number of localize outlets interconnected to the earth electrode at the bottom of the excavation until the required value obtained.
Disconnection bars will be used to carry out resistance monitoring measurements. The bars can only b removed using a special tool to prevent any intervention by unqualified personnel.
The connections between buried conductors must be carried out by soldering, in a very careful manne
The quality of the solder will be chosen to prevent the formation of electrolytic couples and no aci will be used for the pickling.
Constitution of localized earth connections:
The localized earth connections will be either vertical or horizontal. The choice of the embodiment wi be made according to the characteristics of the land where they will be located. The earth electrod will consist of a bare wire conductor, with a section greater than or equal to 29 mm2, buried at th bottom of excavations, and forming a loop around the building. This conductor may be formed eithe by a cable made in accordance with standard NF 32 O12, chosen from one of classes 2, 3, 4, 5, or or by a flat or cylindrical braid.
No class 1 rigid cable, bar or round cable will be used. This conductor will be between 2 layers 10cm of topsoil free from hard bodies. If necessary, this conductor can be connected to piles to rea the given resistance value. These piles will be made of steel coated with a thick layer of copper. Th copper-steel connection must be of very high quality in order to prevent the formation of electroly couples leading to the destruction of the piles.
If the contracting company carries out the earth connection in a different way, it must notify the proje manager before the start of the work.
Earth connection output:
Each earth electrode will end inside the building, on a disconnecting bar mounted on an insulati support. The connection between the earth electrode and its disconnecting bar will be made in insulated conductor, in copper with a cross section of 29mm². This conductor will be connected to t earth by means of a connection accessory comprising either a cable clamp or a connection terminal.
If it is necessary to extend the output of the earth conductor, the junction between the strands will made by crimped sleeve (AMP sleeve type) or by brazed sleeve, excluding any screwed or bolt junction accessory. In the case of using solder, no acid will be used for the pickling.
Identification of the earth connections:
Each sectioning bar will be identified by engraved labels bearing the following indications:
Designation of the earth electrode "to earth" on the side of the terminal connected to the tak from the ground.

Designation of the connected installation, on the side of the terminal connected to the installatic (neutral mass, interconnections, etc.)
Measurement terminals:
Each earth electrode will be accompanied by a measurement terminal. This terminal will allow th tightening of a conductor of 1.5mm2 or more. It will be placed near a disconnection bar an connected to the earth terminal of the bar. It could possibly be integrated into the disconnection bar.

10.1.11 ELECTRICAL BOX

Signaling, regulation, intervention devices and possibly all other devices corresponding to th protection, control and monitoring of the installation will be grouped in the electrical box. The locatic and arrangement of each box are shown on the plans.
Enclosure sufficiently sized to allow good ventilation of the installed equipment. Reserve 30% of fre volume after execution corresponding to the description.
Cable entry at the top or bottom through rubber grommets or an insulating cable gland.
No output cable in chute.
The ends of the flexible conductors will be fitted with crimped terminals which will be insulated b retractable sleeves.
Each individual connection will be blocked by screw and nut with flat washers and lock washers.
Equipment will be identified by engraved screw-on labels (self-adhesive labels are prohibited).
The terminal blocks will also be identified by dilophane labels at each of their ends.
The earth conductors will be individually connected to a pre-drilled collective terminal, placed nec the general terminal blocks.
The conductors will be identified by the conventional colors:

- the double green / yellow colorings will be exclusively reserved for protective conductors,
- the light blue color will be reserved exclusively for neutral conductors.

Doors earthed by flexible braids fitted with eyelets.
Interior pocket with the principle diagram and the equipment plan.
The cabinets will be of the tropicalized type, with a closing door. Each cabinet will receive:

. Differential circuit breakers (calibrated as appropriate).
. Modular circuit breakers for circuit protection.
. The remote switches.
. An earth terminal.

The protections will be chosen according to their breaking capacity, which must be greater than th intensity of the short-circuit that can be generated at this point, taking into account the distance fro the source and the section of the pipe.
The circuit breakers must comply with the UTEC 63.120 standard.
The choice of circuit breakers must be made taking into account the nominal current, the setting curren the breaking capacity, the response time and the type and number of trip units. Differential typ circuit breakers will have a trip threshold of 300mA and 30mA. The selectivity of the defects will b carried out in accordance with standard C. 15.100; in particular for differential devices, selectivit must be by time delay.

10.1.11.1 Tap-off accessories

It is specified that no device or device box can serve as a junction point or box respectively.
The junction boxes will be of recessed or exposed model, of dimensions appropriate to the number conductors and connections.
The identification will be made by final numbering on the gluing plans.

10.1.11.2 Identification of pipelines

The identification of the electrical pipes must be established in order to allow their subsequer identification during checks and maintenance of the installation.

Each cable will have a labeling made by ring, collar, sleeve, indicating its destination or a numbere mark corresponding to the indications of the cable books, table diagrams, installation plans, etc.

Main pipes laid in the open air
This labeling will be carried out at each end and end, change of level, direction, crossings, on eithe side of the branch boxes and in general every 10 meters for straight courses.

Main buried pipes
This labeling will be carried out at each holding and ending as well as on each visitable or accessibl part of the course (draft chamber and bypass, etc.).

Secondary pipes laid in the open air
This labeling will be carried out at each tenant, ending up during the journey according to the neec and complexity of the installation.
- Recessed secondary pipes
- The conductors will be identified by the appropriate coloring.
- Labeling on the conduits will be carried out according to the installation (before or after constructio insulated sleeves, or prefabricated parts).

- Cable conductors
This marking will comply with NF C 15.100, that is to say:
- double green / yellow coloring for the earth
- blue for neutral
- orange, red, purple, brown, black for the phases according to table 51 GC of NF C 15.100.

10.1.12 ELECTRICAL APPLIANCES AND EQUIPMENT

Small equipment:
All the equipment (switches, push-button, sockets, etc.) will be of the tropicalized type with housing an insulating plate.
The sockets, unless otherwise specified, will be of the comfort type rated at 10 A, 20 A or 32 A, the will include an earth connection.
Lighting:
Incandescent lamps
The incandescent lamps will be tungsten filament and will meet the specifications of NFC 72 - 100.
They will be equipped with:
Sockets E 27 with screw for powers between 60 to 150W.
E 40 screw sockets for higher powers.
Autonomous emergency lighting unit
Self-contained 60 lumens NP incandescent unit, 1 hour battery life.
An idle setting device will be provided on all the blocks.
Depending on the location, the blocks include the inscriptions "exit" "Emergency exit", or arro indicating the direction of the nearest exit.
The connection of each unit will be made downstream of the protection device and upstream of th corresponding normal lighting control device.

10.1.12.1 Cable trays

They will be made of hot-dip galvanized steel placed on supports, in horizontal and vertical laye their general paths being in accordance with the plans.

Their characteristics and numbers must allow the laying of all the main or secondary connections (nc executed in ducts), and a reserve available in capacity of 25%.
The Co-contractor of this lot will ensure all of their supply and implementation
The cable trays will be separate for:
® Strong currents
® Low currents (VDI wiring, etc.)

10.1.13 LIGHTING

10.1.13.1 General
The various circuits and lighting controls will be carried out in principle, in accordance with the plar and documents in the tender dossier.
However, some connections and locations being given for information only, any modification thereof i a room, during execution, could not result in an impact in added value.
As a general rule, the lighting is the economic lamp for offices, and any other hospital wards an rooms and of incandescent type in the sanitary tubes for the exterior.
All lighting fixtures will be of the compensated type.

A Choice of lamps
The Co-contractor will take into account the following basic specifications for the choice of fluorescer tubes fitted to the devices in certain premises.
Technical rooms - Depots - etc ...
- Tube 36 Watts white industry
Offices and housing
- economy bulb INCANDIA, Philips or equivalent

B Specifications
General
Supply voltage
The supply voltage is 220 Volts 50 Hz.

Interference suppression
The devices are suppressed in accordance with EEC directives 76/890

Equipment
All devices are fitted with their lamp (s).
The bases, the terminal blocks must be individually replaceable.

Compensator
The power factor (cosine phi) of the assembly made up of the ballasts and lamps of the same devi must be at least equal to 0.93.

10.1.13.3 Type of lighting device
In the following sections all devices are specified in quality and performance. As an indication, indicate "Manufacturer" references meeting the specification. The order of enumeration is alphabeti and not preferential. Any device offering equivalent performance can be offered.

10.1.13.4 Lighting controls

The lighting controls will be carried out as follows

- Individual, local or remote control
- Grouped, on tables corresponding to the zones concerned

The equipment will bear the Quality Label and will be of a screw fixing model, visible or recessed, c the waterproof type or not, depending on the nature of the premises or their external location.

The specific locations (work plans) will be defined later.
The colors of non-watertight recessed fittings will be left to the choice of the Client and the Proje Manager.

10.1.14 ELECTRICAL PROTECTION
10.1.14.1 RCD

These measures protect people against the risk of contact with the masses of the active part which could be accidentally energized.

theInterdifferential with a sensitivity less than or equal to 500 mA is the protection device thc will be used. Each box will be equipped with a head circuit breaker for each circuit (lights, sockets, a conditioners, etc. The eneo branch circuit breaker will be equipped with a 500 mA differential.

Divisional protection will be provided by DPN circuit breakers from Legrand or Merlin Gerin.

In general, the protections will be developed based on the studies carried out.

All outlets will be safety eclipses.

Protection against electric shock
Protection against direct contact
This will be mainly ensured by the isolation of live parts and the installation of unprotected equipmei in boxes, cabinets, or premises intended solely for electrical service.
Protection against indirect contact
This protection will prevent a contact voltage established following an insulation fault from being abl to remain at values higher than tables 41A and 41B of NF C 15100 TT diagram.
Measure B1 of chapter VI of this standard relating to the earthing of metallic masses is therefor adopted. The interconnection of the masses is carried out by connecting all the metal masses of th devices supplied by a given cabinet and by connecting all the cabinets to the general earth circuit.
10.1.14.2 Protections against thermal effects in normal service.
These measures will protect people against the risk of burns and the installations against the risk c fire.
They will be ensured by the suitable choice of materials as well as the calculation of the installatior taking into account the external influences to which the equipment is subjected.
Over-current protection
10.1.14.3 Overload protection
They will be provided by overcurrent devices, the non-operating current of which will always be le than the admissible current of the pipeline, corrected for depreciation factors due to installation an environmental conditions.
10.1.14.4 Short circuit protection
In all cases, the tripping time must be less than the thermal stress limit of the cable; the short-circu current of the furthest point must be greater than the tripping current of the protection device; th short-circuit current at the location of the protection must be less than the breaking capacity of th protective device.

10.1.15 SURGE PROTECTOR
The aim is to protect installations and equipment against overvoltages of atmospheric origin.
Essential protection of electrical installations. It is installed at the head of the row of the subscribe board or division board. It feeds from the top, thanks to the vertical feed comb. Its transplantin terminals from the top allow the direct supply of interlocking devices or differential circuit-breake

incoming from the top / outlet from the top. Its earth output from the bottom allows a direct connectic to the earth terminal block.

10.1.16 DISTRIBUTIONS

10.1.16.1 Choice of pipes

The pipes will be chosen according to the laying conditions and external influences: temperatur presence of water, presence of solid bodies, mechanical shocks.
Therefore, all LV cables must have a nominal voltage at least equal to 1000 V. These cables mu receive the agreement of the client and the project manager after presentation of the sample.

They will generally be from the series:
- U 1000 RO 2 V for cables laid in the open air.
- H O7 VU (U 500 V) for the conductors installed in the conduits.
- U 1000 RO 2 V for cables in buried conduits.

These cables will be multipolar for sections less than or equal to 25 mm^2 and can be either unipolar c multipolar for the other sections, this depending exclusively on the means of implementation of th company and the availability of suppliers.

AT PROVISIONAL ACCEPTANCE
Immediately after completion of the work, the Contractor will notify the Project Manager in writing The latter will proceed with the provisional acceptance, in the presence of the Contractor with representative of the Distributing Company.
This reception will give rise to a report signed by both parties and by the representative of th Distributor.
The Contractor shall be required to replace immediately, at his expense, any part or work not conformity with the prescriptions or regulations in force and to take responsibility for all repai resulting from these replacements.

B FINAL ACCEPTANCE
Final acceptance will only be declared if the installation has been in regular operation for one yea from the date of provisional acceptance.

10.2 LOW VOLTAGE

General
The purpose of this CPTP is to define the low current installations to be set up in the various premis of the project.
The works include the implementation of trade services and crafted works of the profession in supp and installation, including all constraints to obtain "complete" works.
10.2.2 Company relations with the Administration
The Contractor for this lot will get in touch with the departments concerned and take care of t regulatory procedures and formalities for obtaining the network lines, its connection to the pub network and acceptance of the installation by the PTT.
In addition, he must inform the Employer of the provisions of the descriptive estimate which would be accepted by the Administration when submitting his tender.

10.2.3 Quality of materials
All the materials used will be fully tropicalized. They must bear the NF USE quality mark whenever exists for a material in question.

10.4 VENTILATION

10.4.1 General

The purpose of this special specifications (CPTP) is to recall for this batch, the reference texts and th regulations, the quality and the presentation of the equipment and materials used in the construction c the works and their implementation.

The works include the implementation of trade services and crafted works of the profession in suppl and installation, including all constraints to obtain "complete" works.

10.4.2 Standards and Regulations to be observed

- Standards of the French Association for Standardization (AFNOR)
- DTU n ° 653 of April 1958 from CSTB
- Rules of the Autogenous Welding Institute
- Draft classification of welds and construction code of pressure vessels, not subjected to the action c flame.
- Unified rules for fans
- Electrical installation:
  Technical conditions to be met by the distribution of electrical energy
  (interministerial decree of April 30, 1958 and decree of November 14, 1962)
- USE and UTE standards in particular, the C15 100 standard
- Safety regulations against the risks of fire and panic in establishments open to the public.

10.4.3 Contractor's obligations

The contractor for this lot must provide technical documentation for the proposed equipment. Until fin acceptance, the maintenance will be free of charge.
The contractor of this lot will be after final acceptance, likely to ensure the maintenance of h installation and will therefore provide a proposal for an annual maintenance contract covering th replacement of parts and labor.

*** END OF LOT ***

1.1 GENERAL SPECIFICATIONS

The purpose of this special technical specifications (CPTP) is to remind the Contractor of this lot of th measures to be taken to comply with the reference texts, regulations, legislation in force, limits of service between the various trades to the quality and presentation of the equipment and materials used in th construction, their implementation and the constraints to be observed which take into account an overc context.

1.2 APPLICABLE STANDARDS AND REGULATIONS

For the realization of the installations, the Contractor must comply with the laws, regulations and standarc in force at the time of the execution of his works and, in particular:

- The French decree of 14 November 1962 concerning the protection of workers against electric currents.
- To the regulations of the water supply company:
- DTUs relating to plumbing installations:

DTU n ° 60.1 and additives, DTU n ° 60.31 to 60.33 for PVC pipes

DTU 61.1 for gas installations, DTU n ° 60.41 specifications applicable to PVC pipe work: wastewate evacuation.

- French standards NF P 41.201 to 204 plumbing work.
- To French standards NF S: Fire fighting equipment.
- To standard NF C 73.220: Electric storage water heater.

The capital gains resulting from additional work to bring the installations into conformity with th aforementioned texts would necessarily be borne by the Contractor.

All the devices are expected to be fully installed, including all supplies, methods and accessories, the col water supply, hot water supply, if any, and the drain, connected to the corresponding pipes.

The taps will be in chrome-plated brass or not with a diameter corresponding to the draw-off orifice except when the description explicitly requests a larger diameter.

The devices will be of choice B and must have the label indicating this choice. Any device that does n have a label will be refused.

1.3 REQUIREMENTS AND REGULATIONS TO BE OBSERVED

The installations will comply with the standards and regulations in force, in particular:

- Security regulations in ERP
- Standards NFP 41-7201 to 204
- Standards NFA 48 - 720 to 723
- NFA 49 - 112 standards
- NFA 49 - 150 standards
- NFA 51 - 120 standards
- NFA 73 - 220 standards
- NFC 73 - 221 standards
- NFC 73 - 222 standards
- NFC 73 - 139 standards
- NFD 35 - 322 standards
- NFD 35 - 323 standards
- NFD 35 - 325 standards
- NFT 54 - 003 standards
- NFT 54 - 017 standards
- NFT 54 - 030 standards
- DTU 60-1 and additives
- DTU 60-31 and additives
- DTU 60-41
- Hydraulic REEF in the building

Orders of August 2, 1977 and July 30, 1979

11.4 HOT WATER DISTRIBUTION - COLD WATER

11.4.1 CORROSION OF PIPING

A water analysis will be carried out in accordance with the memorandum of DTU 60-1 additive 4, if is planned to use black or galvanized steel tubes.
If water treatment is necessary, this will be the subject of a technical opinion and will be compatibl with the characteristics of the water and those of the installation. This, unless it is necessary to us copper or plastic tube "AVADIS" or for cold water only, unplasticized pressure PVC tube.

11.4.2 BASE FLOW RATES PIPING DIAMETER

The basic flow rates of the devices will be determined according to the REEF table (hydraulics in th building).
In the absence of special requirements in the description, the cumulative flows will be determine according to the probable flows defined by curve 3 of sheets n ° 03-005 a and b, of the form fc sanitary facilities by R. Del becque. The pressure drops will be determined using the flamingo formul
A minimum residual pressure of 0.5 bar is required at the most disadvantaged point of use.
The speeds will not exceed: - 1 m / sec inside the premises
- 1.5 m / sec in risers
- 2 m / sec in the basement

11.4.3 NOMINAL TUBE PRESSURE

It will be at least equal to 1.5 times the operating pressure of the installation. It will be the same fc all the installed equipment.

11.4.4 RELATED PIPES

11.4.4.1 Fixings - brackets

The maximum spacing of the supports is fixed by the NFP 41-201 standard for copper and ste pipes. It is fixed by DTU 60-31 with regard to pressure PVC. In order to fight against the noise an vibrations propagating in the pipes, it is advisable to interpose between the pipe and the suppo collar a sleeve made of insulating material, to use only insulated seals and to use the sleeves in th crossings. floors or vertical walls.
All piping should be left free to expand. In large installations, dilation lyres must be provided.

11.4.4.2 External corrosion protection

Depending on the nature of the pipes used, appropriate protection must be provided against the ris of external corrosion.

11.4.5 BUILT-IN PIPES

They will be made of protected copper (cintoplast sheath for example). The laying of pipes in th tiling mortar is prohibited. It is allowed in the sand form. It is also used in the insulating form, but in th case, special attention must be paid to the sound insulation of the pipes.

11.4.5.1 Assemblies

They will be made using silver-based solder exclusively.

11.4.6 UNDERGROUND PIPES

Depending on their nature, they will be mechanically protected against external corrosion accordance with the requirements of chapter VI of addendum n ° 3 to the DTU. 60-1, in particular hot asphalt paving.

11.4.7 REQUIREMENTS ACCORDING TO THE TYPE OF PIPING

11.4.7.1 PVC pipe

When the pipes are made of PVC, they must comply with standards NFF 341-201 to 204 and F 3(401.

For the implementation of this material, the Contractor must comply with the prescriptions an recommendations defined by DTU n ° 60-33, in particular with regard to the support, the assembl and the necessary precautions in relation to the mechanical forces and dilation effects.

When these pipes are used for EU-EV chutes, they will necessarily be extended in primary ventilatic by a PVC tube of the same diameter as the chute or these pipes will be extended outside the roc and will be surmounted by a ventilation lantern.

The pipes likely to evacuate hot water will be made of high-chlorinated PVC resistant witho deformation at a minimum temperature of 100 °.

The fittings will be made of molded PVC.

The use of parts shaped and welded from tubes is prohibited, in particular for siphons.

11.4.7.2 Copper pipelines

When the pipes are made of copper, the hardened copper tube must be used.

The pipes must be assembled by welded fitting or by copper or copper alloy fittings with a colla ring or capillary solder. The welds must be made with silver alloy rods.

In hot water distribution : the hardened copper tube will be assembled by capillary welding - thes tubes must be protected to allow free expansion.

Not allowed : Installation of copper piping upstream of galvanized steel installation.

Embedding : The embedded pipes must be in annealed copper and have no soldering in th embedded parts.

11.4.8 TAPS - EQUIPMENT

- Plumbing fixtures for sanitary devices are defined with the equipment in the descriptive estimat They will be of "NF" quality.
- If the operating pressure exceeds 4 bars, pressure reducers must be installed to protect the valves.
- In large installations, anti-rams will be placed at the head of each riser. A sufficient number of sto and drain cocks will be installed.

11.5 WASTEWATER / WATER-VALVES EVACUATIONS

11.5.1 SIZING OF PIPES

. Connecting the devices

They will not be less than the diameters prescribed by the hydraulic REEF in the building.

. Debits

The basic flow rates of the devices will be determined in accordance with the REEF table. Th cumulative probable flows will be based on the curves defined by R.DELEBECQUE.

. Descents

They will be determined according to the table in the REEF "Drop pipes and downpipes, diameters".

. Collectors

They will be determined according to Bazin's formula with a 5 / 10th fill. The speeds will b maintained as far as possible, between 1 and 3 m / sec.

11.5.2 VENTILATIONS

- Primary ventilation

Each EU-EV chute will be extended to the roof in the same diameter as the downspout, to form th primary ventilation of the chute.

- Secondary ventilation

They are mandatory on all devices other than toilets in the event of a single EU-EV fall. They will al be carried out in the case of installation of several devices on the same flow bypass. They will b sized in accordance with the REEF table "drop pipes and downpipes, diameter".

11.5.3 NATURE OF THE PIPELINES

- unless otherwise specified in the description, they will be made of PVC in accordance with the table of standard NFT 54017 depending on their use
- EU discharge: Table II
- secondary ventilations: Table IV
- basement collector: Table V

11.5.4 YOUR VISIT

At the foot of the waterfall, at each bend and every 25 meters partly horizontal, inspection tees wi be placed.

11.5.5 IMPLEMENTATION

It will be carried out, in accordance with DTU 60.33 of November 1981, in particular with regard t the assemblies, the floor or wall penetrations which will be fitted with sheaths, and the possibilities c expansion of the pipes.

In this regard, sliding assemblies will be placed on any straight length of pipeline greater than 1 between two fixed joints. The distance between two fixed points will never be greater than:

- 3 m: for individual emptying or device collectors
- 4 m: for vertical pipes
- 8 m: for general collectors with horizontal fall.

11.6 STORM WATER DISCHARGES

Calculation basis

The calculations of the rainwater networks will be made from the indications of the plans of the Proje Manager.

The connecting stumps will be conical stumps.

Calculation Notes

The Contractor will retain full responsibility for the calculations and sizing of the various networks. Detailed supporting calculations may be requested by the Project Manager.

*** END OF LOT ***

NB: Any technical specification needed for the good execution of this project which are n elaborated in these technical clauses must have the written approval of the Engineer befo application. Failure to do so, the tasks executed shall not be paid.

Essential ESHS issues of worksite management

The ESHS topics identified during the Environmental and Social Impact Assessment study of the project, which present a major risk for the worksites management are:

a) ESHS resources and facilities and ESHS monitoring organization	YES
b) Project Areas management (base camps, quarries, borrow pits, storage areas)	YES
c) Health & Safety on worksites	YES
d) Local recruitment and ESHS trainings of local staff (capacity building), ESHS trainings of subcontractors and local partners (transfer of knowledge)	YES
e) Relations with stakeholders, information and consultation of local communities and authorities	YES
f) Traffic management	YES
g) Hazardous products	YES
h) Wastewater (effluents)	YES
i) Protection of water resources	YES
j) Atmospheric emissions, noise and vibrations	YES
k) Waste management	YES
l) Biodiversity: protection of fauna and flora	YES
m) Site rehabilitation and revegetation	YES
n) Erosion and sedimentation	YES
o) Control of infectious and communicable diseases (HIV/AIDS, malaria, etc.)	YES / NO

ESHS requirements not applicable under this Contract

The ESHS norms, standards and discharge limit values recommended by the specialised international organisations affiliated to the United Nations shall apply to the Contract:

no ☒

Social inclusion requirements

Within the framework of the social inclusion requirements specified in Article 39.12 of the ES Specifications, the number of days of inclusion to be achieved is **900** days. This number of days takes i account the working days (From Monday to Saturday) of all the social layer, particularly the Jun Engineers and civil technicians, environmental and social engineering from the universities and institutes Bamenda and the neighborhoods, youths, women grouped or not within associations or NGOs. T number of working days per month is estimated at 24 days (including Saturday). Works on Saturd according to the labor law, must have received the authorization from the ministry in charge, through Regional Delegation. The targeted people for this requirement will represent 70% of all the workers the project.

The company will thus recruit within its team for both road and drainage works, the targeted peop below:

- ❑ Young people: aged from 22 to 35 years old, with a minimum 15% representation of all the targ people for social inclusion requirement.
- ❑ Women: the range age will be from 25 to 50 years. Among the 70% of the local employment, t class will represent at most 50%.
- ❑ Disadvantaged or marginalized communities: particularly the displaced people or the refugees fr war. They will represent a minimum of 10% of the targeted people.
- ❑ Aged people and people living with disabilities: They will represent a minimum of 10% of targeted people.

In terms of employment, these people are currently

- ❑ Informal workers
- ❑ Job seekers and NEET (people who are neither in employment, education nor training)
- ❑ Vocational trainees
- ❑ Daily or seasonal workers

Among the people benefiting from these requirements, there shall be at least:

- ❑ Low-skilled people: a minimum of 10% will be required with the level of at least Class 6 of prim school.
- ❑ People with disabilities: those who can be able to work despite the form of disability. They represent 5% of the workers.
- ❑ People directly affected by the project: This layer is not concerned for they will recei compensation for their goods affected.

For refugees of displaced people, proof must be provided by their census structures (NGOs, associati Delegation of social welfare or any other structure concerned…)

For the other social group, proof of their statue shall be providing or a confirmation statement from quarter head, Chief, or the council or and administration.

ESHS Specifications

ıroughout the present ESHS Specifications (hereinafter called **"the ESHS Specifications"**), a reference onditions of Contract, abbreviated by CC, means a reference to both the General Conditions of Contract e Particular Conditions of Contract. Readers should apply due care, when being referred to a specific Cl Sub-Clause, to:

Read first the Clause or Sub-Clause text from the General Conditions of Contract;

Then check whether this text has been amended by the Particular Conditions of Contract, and if so, which extent.

Under CC Sub-Clause 1.5 – Priority of Documents, when interpreting the Contract, the terms of the Particular Conditions of Contract prevail over those found in the General Conditions of Contract.
Any term in these ESHS Specifications which is identical to a term in the Conditions of Contract shall have the same meaning as the one defined in the Conditions of Contract.
Any term in capital letters in these ESHS Specifications is defined in CC Sub-Clause 1.1 – Definitions.

Document N°. 6

SCHEDULE OF UNIT PRICES

SCHEDULE OF UNIT PRICE FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE		
UNIT PRICE SCHEDULE		
No.	**DESIGNATION**	**AMOUNT IN FIGURES**
LOT 1,2,3. (Prices of Lot 1 to Lot 3)	PRELIMINARY WORKS	
	Site installation(Bringing and withdrawal of equipment, site hoarding, Storage and office space including the security post)	
101	This non-revisable price remunerates the installation and withdrawal of installations including all preparatory operations. It includes in particular: a)The supply and withdrawal of all the materials necessary for the execution of the works; at) Installation of the company in a place approved by the client b) Construction of the site security fence, vs) Construction of the site hut in accordance with article 1 of the CCTP d) Arrangement, maintenance (site cleaning) and guarding of company premises (offices, store, storage and preparation areas, etc.); e) Supply of site panels f) the restoration of the premises after acceptance of the works g) Temporary site supply (water and electricity) h) Establishment of the site laboratory and the means for its operation i) All risk construction insurance j) Quality assurance plan This price will be remunerated at a fixed rate in two fractions, 70% of which after the installation of the installations. 30% for the site withdrawal and the submission of the proofing file on paper and digital. The Package:	

	102	execution program / project including execution plans on paper and digital These services mainly concern: ·program of execution studies (methodology, planning, human resources, equipment); Complementary topographic surveys; The development of execution plans; Suitability and material control tests; Tests during the work; Additional geotechnical tests Any other study or calculation note necessary for the execution Or at the end of the work. This price is paid according to the advancement of works. the Lumpsum at:	
	103	Implantation of structure This price is a flat-rate payment for the construction work of the buildings in accordance with the plans, are included in this item and in accordance with the CCTP. He understands: - The setting up of chairs, poles and other stakes; - The execution of the work by an expert approved by the Project Manager; - The establishment of tamper-evident markers (two) and their maintenance during the structural work; - The supply to the Project Manager of a certificate of implantation This price is fixed including all constraints The Lumpsum at:	
	104	Construction of 1 borehole system with solar lighting and connection to ENEO and Camwater grid This price renumerates the construction of one borehole system with solar lighting and connection to ENEO and Camwater grid This price concerns The general supply of drinking water will be made by constructing and connecting to a borehole. It comprises of : Geophysical testing to determine water depth and soil conditions. Drilling and installation of pipes including all its necessary accessories. Installation of a pump with an output of 2.5m3/h, including all necessary electrical connections Cosnstruction of tank stand in reinforced concrete dosed at 350Kg/m3 . Construction of two (02) water points - Execution of trenches for underground drinking water pipes according to the execution plan. Storage for possible reuse of spoil. - The excavated material not reused must be evacuated.	

		supply and installation of pipes of all necessary dimensions for the distribution of water to the tanks and water points - 'Installation of a warning mesh in PVC mesh of 41mm, width 45 cm in blue color over the entire length of the trenches. . Supply and installation of a 2000litres capacity tank . Supply and installation of a solar system for the bore hole for the pumpong of the water . providing provision for The connection to The eneo grid and also connecting The system to The cmawtaer grid The price applies to the Lumpsum. The Lumpsum at	

	ESSS measures & Signalisation This price compensates for the progress of the work and according to the price breakdown provided by the contractor in his offer, the means and measures taken to monitor and carry out all the ESSS requirements specified in the Works Specifications and in the ESIA. It is at least: Overall framework for the implementation of the ESMP Recruitment of a Hygiene, Safety, Health and Environment (HSSE) manager Beautification/improvement of the aesthetic of the landscape around the environment of the new food market Sensitize the population on the necessity to preserve shops and its equipment Mutilation of landscape	
105	Implemented a planting plan for trees and acceptable vegetation Protection of soil/water pollution Purchase kits anti-pollution kits Construct storage areas for hydrocarbons with a rain cover Install storage tank to store used oil Well labelled waste collection containers should be put I place Construct spots to clean vehicles and other machinery Sign a contract with a certificated company for waste management Measures to prevent COVID-19, MST, fight again malaria and waterborne diseases Organize preventive campaigns to fight against malaria, COVID-19, waterborne diseases and MST Put in place a health emergency team Share condom and face mask	

	Measures to Prevent Perturbation of economic activities Sensitize traders before the start of work Measures prevent Risk of work and circulation accidents Provide to workers Individual Protection Equipment Put in place the services of a nurse in case of emergency Make conventions with local health centres in case of emergency Signal around work site should be placed at viewable points Measure to establish network perturbation (water, electricity, etc.) and perturbation of its services Install new networks before removing old ones to limit disagreements Measures to prevent Visual pollution from the poor waste management Sensitize shopkeepers about hygiene and waste management, Install rubbish bins Monitoring and supervision measures for the implementation of the ESMP Various charges for the administration's participation in the implementation of support measures This price compensates for the assumption of responsibility for the Mission expenses of the various members of the Administration who may be requested for the success of the project. Sub divisional ESMP monitoring committee Monthly ESSS monitoring and surveillance reports NB: Work not described above relating to ESSS measurements must be included in the related prices. The lumpsum at:	
	EARTHWORKS	
201.00	General cleaning This price remunerates the excavated material and includes: Excavation excavation including evacuation of excess land outside the right of way of the works in a place approved by the Project Manager. This price applies per square meter including all constraints: Square meter:	
202.00	Mass Excavation of foundation to ground level @ approx. 1.5m for buildings	

	This price remunerates the execution of excavations in full mass in accordance with the STC. The works include: Full-body excavations, according to the contour lines and plan of the layout of the Buildings indicated on the execution plans, up to the good foundation soil, including all constraints; - disposal of reusable spoil; - landfill of excess excavation - the preparation of excavation bases; shoring or shielding the walls if necessary This price applies per cubic meter of excavation. Cubic meter	
203.00	Excavation of foundation trenches 60cm deep & 60cm wide This price remunerates the execution of excavations of foundation trenches in full mass in accordance with the STC. The works include: Full-body excavations, according to the contour lines and plan of the layout of the Buildings indicated on the execution plans, up to the good foundation soil, including all constraints; - disposal of reusable spoil; - landfill of excess excavation - the preparation of excavation bases; shoring or shielding the walls if necessary This price applies per cubic meter of excavation. Cubic meter	
204.00	Excavation of foundation footing This price remunerates the execution of excavations of footings in full mass in accordance with the STC. The works include: Full-body excavations, according to the contour lines and plan of the layout of the Buildings indicated on the execution plans, up to the good foundation soil, including all constraints; - disposal of reusable spoil; - landfill of excess excavation - the preparation of excavation bases; shoring or shielding the walls if necessary This price applies per cubic meter of excavation. Cubic meter	
205.00	Leveling and grading for yard pavement This price remunerates the execution of leveling and grading for yard in full mass in accordance with the STC.	

	The works include: Full-body excavations, according to the contour lines and plan of the layout of the Buildings indicated on the execution plans, up to the good foundation soil, including all constraints; - disposal of reusable spoil; - landfill of excess excavation - the preparation of excavation bases; shoring or shielding the walls if necessary This price applies per cubic meter of leveling and grading Cubic meter		
206.00	Mass Backfilling of foundation to basement level depth with selected earth This price remunerates the execution of excavations in wells or ditches in accordance with the CCTP. The works include: This price covers, per cubic meter, the supply and installation of rockfill P 50 = 500 kg as defined in the Technical Specifications for the protection of the supports and the slopes. It includes in particular: - the supply, sorting and loading of the materials - their transport to the installation site, - offloading and temporary storage, - their removal and placement block by block, in accordance with the TS (remember that placement by direct dumping is forbidden), - the adjustment and smoothing of the slope, - the earthwork on the berms at the foot of the slope, - the procedures to ensure the durability of the slope before the placement of the riprap, - the supply and installation of an anti-contaminant geotextile prior to the installation of the riprap, - temporary protection and pumping to allow dry operation, - the adjustment and control of the dimensions of the massifs, - the final and careful placement around the supports, - the bonding of the riprap together with concrete, - the requirements defined in the Technical Specifications. The volume taken into account will be the theoretical volume defined on the execution plans approved by the project manager. This price applies regardless of the transport distance. This amount will be paid in monthly instalments according to the progress of the work carried out. This price applies per cubic meter of excavation. Cubic meter		

	Planting of trees	
207.00	This price renumerates the planting of trees in accordance with the CCTP The works include: digging of the hole where the trees will be planted selcetion of environmentally friendly trees to be planted planting of the trees on fertile soils , proctecting the trees from animals destruction This price applies per planting of trees Sum	
LOT 3	MAJOR WORK	
301.00	FOUNDATION	
301.10	Mass Blinding concrete dosed at 150kg/m³ This price remunerates the supply and implementation of lean concrete dosed at 150 KG per cubic meter of concrete placed with a thickness of 5cm in accordance with the requirements of the STC. It comprises of : - Cement ; - Sand ; Gravel 5/15. This price applies per cubic meter Cubic meter	
301.20	Reinforced concrete retaining wall dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 400 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
301.30	Foundation footing dosed at 350kg/m³ for pillars This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications.	

	It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of reinforced concrete. Cubic meter.....	
301.40	Foundation columns dosed at 350kg/m³ for pillars This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of reinforced concrete. Cubic meter.....	
301.50	Foundation ground beams dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of reinforced concrete. Cubic meter.....	
301.60	Reinforced concrete for lift wall of 20cm thickness dosed at 350kg/m³	

	This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of reinforced concrete. Cubic meter.....	
301.70	20x20x40cm fog filled cement blocks + mortar for fooundation walls This price remunerates the supply and the implementation of masonry in full concrete blocks with cement mortar, 20cm thick in the base including all constraints, in particular: - Joint thickness (2 cm); choked with concrete - Bonding mortar dosed at 350 kg / m3; - Harpage with frame posts - Verticality and flatness. This price applies to the square meter of masonry implemented. The square meter	
301.70	Mass rough concreting on ground floor dosed at 100kg/m^3 This price remunerates the supply and implementation of concrete dosed at 100 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 10cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of rmass rough concrete Cubic meter.....	
302.00	GROUND FLOOR ELEVATION	
302.10	15x20x40cm cement blocks + mortar	

	This price remunerates the supply and the implementation of masonry in full concrete blocks with cement mortar, 20cm thick in the base including all constraints, in particular: - Joint thickness (2 cm); - Bonding mortar dosed at 350 kg / m3; - Harpage with frame posts - Verticality and flatness. This price applies to the square meter of masonry implemented. The square meter	
302.20	Reinforced concrete for Columns dosed at 350kg/m^3 in cluding decorated pillars This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
302.30	Reinforced concrete lintels dosed at 350kg/m^3 This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
302.40	Reinforced concrete beams dosed at 350kg/m^3	

	This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
302.50	Reinforced concrete ramp dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
302.60	Decking with hollow blocks & reinforced concrete dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 10cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; . Decking blocks20x20x50cm; . HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per meter square of decking.	

	Square meter.....	
302.70	Metallic rails on verandas,staircase and balconies This price pays per meter length, the realization of the metallic hand rails for the stair case, veranda and balconies in accordance with the prescriptions of the STC. It comprises of : - the supply of the necessary tools, equipment and materials; the realization of the metallic hand rails that ois placement , painting with anti rust and final coating of the hand rails Meter length	
302.80	Reinforced concrete for lift wall of 20cm thickness dosed at 350kg/m^3 This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 20 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.	
	This price applies per cubic meter of reinforced concrete. Cubic meter.....	
302.90	Apply plaster rendering on all internal & external wall surface of building made of a dash bond coat; batching: 650 kg/m3 and a finishing coat with batching: 400 kg/m3 It comprimises : - formwork - Cement ; This price applies per cubic meter of plastering: Cubic meter.....	
303.00	FIRST FLOOR ELEVATION	
303.10	15x20x40cm cement blocks + mortar This price remunerates the supply and the implementation of masonry in full concrete blocks with cement mortar, 20cm thick in the base including all constraints, in particular: - Joint thickness (2 cm); - Bonding mortar dosed at 350 kg / m3;	

	- Harpage with trame posts - Verticality and flatness. This price applies to the square meter of masonry implemented. The square meter	
303.20	Reinforced concrete for Columns dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
303.30	Reinforced concrete lintels dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....	
303.40	Reinforced concrete beams dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork	

	- Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....		
303.50	Reinforced concrete staircase dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per cubic meter of reinforced concrete. Cubic meter.....		
303.60	Decking with hollow blocks & reinforced concrete dosed at 350kg/m³ This price remunerates the supply and implementation of concrete dosed at 350KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 10cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. He understands : - The formwork - Cement ; . Decking blocks20x20x50cm; . HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. This price applies per meter square of decking. Square meter.....		

303.70	Metallic rails on verandas,staircase and balconies This price pays per meter length, the realization of the metallic hand rails for the stair case, veranda and balconies in accordance with the prescriptions of the STC. It comprises of : - the supply of the necessary tools, equipment and materials;		
	the realization of the metallic hand rails that ois placement , painting with anti rust and final coating of the hand rails Meter length		
303.80	Reinforced concrete for lift wall of 20cm thickness dosed at 350kg/m^3 This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 20 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with CCTP specifications. It comprimises : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25.		
	This price applies per cubic meter of reinforced concrete. Cubic meter.....		
303.90	Apply plaster rendering on all internal & external wall surface of building made of a dash bond coat; batching: 650 kg/m3 and a finishing coat with batching: 400 kg/m3 Execution, all supplies and constraints included, of a cement mortar plaster 1.5 cm thick , flatness and straightening of the edges made of a dash bond coat; batching: 650 kg/m3 and a finishing coat with batching: 400 kg/m3 according to the rules of the art. it comprise of: - formwork - Cement ; This price applies per cubic meter of plastering: Cubic meter.....		
400.00	ROOF WORKS		

401.00	Selected 5x15 hard wood for roofing framing and anchoring including braces and pulins this price renumerates the supply, treatment against insectides amd placement of 5x15 hard wood for roofing framing and anchoring including braces and pulins and as specified in the special technical clauses (STC) The square meter	
402.00	Reinforced concrete works at 350kg/m³ on terrace for copings & other designed structures This price remunerates the supply and implementation of concrete dosed at 350 KG of CPJ 35 cement per cubic meter, pouring in layers of approximately 30 cm, vibrated, reinforcement of elements conforming to the execution plans, previously executed in formwork ordinary) and following the approved concrete formulation in accordance with STC specifications. It comprises of : - formwork - Cement ; - HA and smooth reinforcing bars; - Sand ; Gravel 5/15 and 15/25. Decking (concrete N ° 5) This price applies per cubic meter of reinforced concrete. Cubic meter.....	
403.00	Parapet wall all round the building including gutters and drainage outlets of dia.100 This price remunerates the supply and installation of Wood for roof trust members (King post, rafters, struts and brace) of 3x15cm treated against insecticides including all installation constraints and as specified in the special Technical Clauses (STC). : The Cubic Meter	
404.00	Insulation layer and water proofing of paraplet and roof slabs of 5cm including plumbing outlets This price remunerates the supply and installation of Purlins of 3x7.5cm and treated against insecticides including all installation constraints and as specified in the special Technical Clauses (STC). : The Cubic Meter	
405.00	Acquisition and installation of orrugated aluminium roofing sheets 7/10 on all roof surface on single slope This price remunerates the supply and installation of Aluminium roofing sheets for facial board protection including all installation constraints and as specified in the special Technical Clauses (STC). : The Meter Length.....	

LOT 5	FLOORING/TILING	
501.00	Supply and installation of 1st choice 60x60 floor tiles of varying grades and patterns for all floors with high sticking properties for basement floors, acceses & terraces This price remunerates the supply and installation of 1st choice 60x60 floor tiles including all installation constraints and includes: Supply of tiles; The supply of mortars for laying tiles on the floor;	
	The supply of cement-based mortars for laying wall tiles; Surface preparation; The laying of tiles and their cleaning; This price applies per square meter of tiles installed. The square meter	
502.00	Supply and installation of 15 x 15 graded & designed tiles for external walls including brick tile designs This price remunerates the supply and installation of 15x15 graded and designed tiles for eternal wall including brick tile designs and including all installation constraints and includes: Supply of tiles; The supply of cement glue mortars for laying wall tiles; Surface preparation; The laying of tiles and their cleaning; The square meter	
503.00	Supply and installation graded & designed tiles 20 x 20 for toilet walls This price remunerates the supply and installation of graded and designed tiles 20x20 toilet walls tiles including all installation constraints and includes: Supply of tiles; The supply of cement glue mortars for laying wall tiles; Surface preparation; The laying of tiles and their cleaning; The square meter	
LOT 6	WOODEN/METALLIC/ALIMINIUM JOINERY WORKS	
	Staff work with plaster of paris painted to selected colours and pattern including decoration and entire ceiling surface	

600.00	this price remunerates the supply and installation of Staff work with plaster of paris painted to selected colours and pattern including decoration and entire ceiling surface square meter.....	
601.00	Supply and installation of window 180x120 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions This price remunerates the supply and installation of glazed walls in natural tinted anodized aluminum including all installation constraints and includes: The supply of frames and grille in ALU; The supply of high strength glass	
	The supply of hinges, locks and other fixing accessories. This price applies per square meter. Square meter	
602.00	Supply and installation of window 120x120 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions This price remunerates the supply and installation of glazed walls in natural tinted anodized aluminum including all installation constraints and includes: The supply of frames and grille in ALU; The supply of high strenght glass The supply of hinges, locks and other fixing accessories. This price applies per square meter. Square meter	
603.00	Supply and installation of window 80 x 80 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions This price remunerates the supply and installation of glazed walls in natural tinted anodized aluminum including all installation constraints and includes: The supply of frames and grille in ALU; The supply of high strenght glass The supply of hinges, locks and other fixing accessories. This price applies per square meter. Square meter	

604.00	Supply and installation of sliding glass paneled metallic doors 400 x 300 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions This price remunerates the supply and installation of metal doors including all installation constraints and in accordance with the STC includes: The supply of hinges, locks and other fixing accessories. anti-rust paint and all other constraints. PMP 3 (180 x 220 cm) Unit		
605.00	Supply and installation of sliding glass paneled metallic doors 180 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions This price remunerates the supply and installation of metal doors including all installation constraints and in accordance with the STC includes: The supply of hinges, locks and other fixing accessories. anti-rust paint and all other constraints. PMP 3 (180 x 220 cm) Unit		
606.00	Supply and installation of fireproof metallic panel doors 100 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions This price remunerates the supply and installation of metal doors including all installation constraints and in accordance with the STC includes: The supply of hinges, locks and other fixing accessories. anti-rust paint and all other constraints. PMP 3 (100 x 220 cm) Unit		

607.00	Supply and installation of wooden panel doors 90 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions This price remunerates the supply and installation of wooden doors (Bibinga, Moabi or similar), the choice will be subject to the approval of the project manager including all implementation constraints and includes: The supply of frames and leaves; The supply of hinges, locks and other fixing accessories. This price applies per unit. Isoplane door (90x220cm) Unit	
608.00	Supply and installation of wooden panel doors 80 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions This price remunerates the supply and installation of wooden doors (Bibinga, Moabi or similar), the choice will be subject to the approval of the project manager including all implementation constraints and includes: The supply of frames and leaves; The supply of hinges, locks and other fixing accessories. This price applies per unit. Isoplane door (80x220cm) Unit	
609.00	Fixed glazed curtain walls + protective grilles in aluminium on facade This price remunerates the supply and installation of glazed walls in natural tinted anodized aluminum including all installation constraints and includes: The supply of frames and grille in ALU; The supply of high strenght glass The supply of hinges, locks and other fixing accessories. This price applies per square meter. Square meter	

610.00	Supply and installation of a metallic frame on façade with IPE and tube elements as designed This price remunerates the supply and installation of glazed walls in natural tinted anodized aluminum including all installation constraints and includes: The supply of frames and grille in ALU; The supply of high strenght glass The supply of hinges, locks and other fixing accessories. This price applies per square meter. Square meter	
611.00	Acquisition and installation of metallic toilet cabins including all suggestions This price remunerates the supply and installation of wooden doors (Bibinga, Moabi or similar), the choice will be subject to the approval of the project manager including all implementation constraints and includes: The supply of frames and leaves; The supply of hinges, locks and other fixing accessories. This price applies per unit. Isoplane door (75x210cm) Unit	
LOT 7	PAINTING	
701.00	Double layer Pantex 800 water paint of varying colours and patterns for internal walls This price remunerates the application of the Pantex 800 type vinyl paint on interior walls, including all installation constraints and includes: - the supply of tools, execution material as well as ladders and scaffolding; '- the protection of all works contiguous to the surfaces to be treated by this lot; - cleaning of the said works insofar as the soiling is caused by it; '-The fittings, insofar as these result from the normal process of execution; '- it includes all the cleaning work of the support; -The prime coat -The implementation of Pantex 800 type paint in double layer by layer; The square meter :	

702.00	Double layer Pantex 1300 water paint of varying colours and patterns for external walls Application of vinyl paint such as Pantex 1300 or equivalent on external walls This price remunerates the application of the vinyl paint type Pantex 1300 or equivalent on external walls, including all installation constraints. - the supply of tools, execution material as well as ladders and scaffolding; '- the protection of all works contiguous to the surfaces to be treated by this lot; '- cleaning of the said works insofar as the soiling is caused by it; '-The fittings, insofar as these result from the normal process of execution; '- it includes all the cleaning work of the support; -The prime coat -The implementation of Pantex 1300 type paint in double layer by layer; The square meter :	
703.00	Double layer Pantex 1300 water paint of varying colours and patterns for decking base & other visible elements Application of Double layer pantex 1300 water paint on decking base and other visible elements This price remunerates the application of pantex 1300 on a decking base, including all installation constraints. The square meter :	
LOT 8	ELECTRICITY	
801.00	CONDUITS & DUCTS	
801.10	Supply and installation of ICD flexible ducts Ø 30,Ø 25 or equivalent including connection accessories	
	This price remunerates the supply and installation of the sleeves, the wiring of the lighting circuits, electrical outlets, computer, computer security system, TV, junction boxes, box, connection element etc. in accordance with STC,	
	ICD flexible ducts Ø 25,Ø 20 or equivalent including connection accessories Linear meter: _____	
	Supply and installation of horizontal metallic connection racks 30cm wide minimum	

801.20	This price remunerates the supply and installation of the cable in accordance with the CCTP; It applies to the linear meter implemented, all suggestions included Linear meter: _____	
	CABLING	
801.30	Supply and installation of U 1000 R2V 3G 3mm cable from NEXANS or similar (for wiring junction boxes and lamps) Linear meter: _____	
801.40	Supply and installation of U 1000 R2V 3G 2.5mm cable from NEXANS or similar (for socket outlets) Linear meter: _____	
801.50	Supply and installation of a complete earthing system using arestor connections This price remunerates the supply and installation of the 29 mm2 bare copper cable at the bottom of the excavation in accordance with the CCTP; It applies to the linear meter implemented, all suggestions included	
801.60	PROTECTION & CONTROL DEVICES Supply and installation of Double ignition switch 10 A 230 V model Legrand Kaptika or similar + cup Unit _____	
801.70	Supply and installation of 2P + E 16 A socket outlet 1 x 10/16 A recessed wall model Legrand Kaptika or similar with cups Unit _____	
801.80	SCHNEIDER ELECTRIC round screw boxes or similar.	
	Unit _____	
801.90	SCHNEIDER ELECTRIC 140 * 140 * 40 junction box or similar. The unit _____	
801.10	SCHNEIDER ELECTRIC 160 * 160 * 40 junction box or similar. Unit _____	

801.11	Supply and installation of 6-module flush-mounted cabinet, Legrand model or similar Unit _____	
801.12	Supply and installation of Circuit breaker IC60N CIRCUIT 1P + N 10A C Unit _____	
801.13	Supply and installation of Circuit breaker IC60N CIRCUIT 1P + N 16A C Unit _____	
801.14	Supply and installation of Circuit breaker per floor Unit _____	
801.15	Supply and installation Legrand 10 A connection bar fuse box wiring Unit _____	
801.16	Supply and installation Legrand 16 A connection bar fuse box wiring Unit _____	
801.17	Supply and installation of 1 * 36w waterproof TL luminaire of dimension 120 of THORN model or similar Unit _____	
801.18	Connection to a transformer including individual meters, general fuse box and alternative connection to secondary power sources Prov _____	
	APPARATUS	
801.19	Supply and installation of high grade LED fluorescent lamps Linear meter: _____	
801.20	Supply and installation of high gradeTV connection Linear meter: _____	

801.21	Supply and installation of high grade 2X2 Round lamps & bulbs Linear meter: _____	
801.22	Specialized Accessories & Decorative spotlights including chandelliers & mural spots Unit _____	
	ALTERNATIVE LIGHTING	
801.23	Solar lighting supply connection network Unit _____	
801.24	FIRE SAFETY Supply and installation of CO2 type fire extinguishers and various accessories or equivalent Supply and installation of fire extinguishers 9Kg CO2 type and various accessories or equivalent. This price remunerates the supply and installation of fire extinguishers and various accessories in accordance with the STC. It applies to the unit implemented, all constraints included Unit: _____	
LOT 9	SANITARY & PLUMBING	
900.00	Rainwater evacuation network Supply and installation of EP pipes in PVC HTA EVAC EP series including: elbows, clamps, supports, gutter and all connection constraints.	
901.00	diam 100 The linear meter	
902.00	diam 160 The linear meter	
	Wastewater and blackwater evacuation networks	
	Supply and installation of EV - EU pipes in EU series PVC pipe including: elbows, tees, grooves, disgorging pads, clamps, supports and all connection constraints.	
903.00	diam 32 The linear meter	

904.00	diam 40 The linear meter	
905.00	diam 63 The linear meter	
906.00	diam 100 The linear meter	
	Cold water supply networks	
907.00	Supply and installation of EF pipes in PPR pipe including: elbows, tees, grooves, clamps, supports and all connection constraints	
908.00	diam 25 The linear meter	
909.00	diam 32 The linear meter	
910.00	Supply and installation including all constraints	
911.00	• Turkish wc with self-supporting tank, equipped with flushing mechanism, silent side float valve. ALLIA brand • 3/8 "shut-off valve including fixing to the ground, EF connection and EV outlet and all installation requirements. The linear meter	
912.00	• Ceramic washbasin from ALLIA with fixing by bolts • simple tap with fixing on throat; brass plug with re-entrant valve; feed hose 400 mm. • siphon with removable chrome-plated adjustable base for washbasin, including EF connection and PVC outlet; seal against the back wall; fixing brackets and all installation constraints Unit _____	
913.00	hygenic brush and brush holder including fixing screws and all installation accessories Unit _____	
914.00	Liquid soap soap dish including fixing screws and all installation accessories Unit _____	

915.00	Mirror 0.60 x 0.40 (cm) including fixing screws and all installation accessories Unit _____	
916.00	Toilet paper holder including fixing screws and all installation accessories Unit _____	
917.00	Floor drain DN 50 including all network connection constraints Unit _____	
	SANITATION	
918.00	Wastewater treatment networks and valves This price relates to the supply and installation of sanitation series PVC pipes, including excavations in all terrain "including rock" and any suggestions. The price applies to the linear meter of wastewater treatment network and valves carried out in accordance with the STC. diameter 100 The linear meter	
919.00	diameter 125 The linear meter	
920.00	Construction of a 30 m3 septic tank with a reinforced concrete purifier for EV treatment This price concerns Construction of a 30 m3 septic tank with a reinforced concrete purifier for EV treatment in accordance with the description in section 2.2.6.2 "SEPTIC TANK AND SUMP of the STC and all other construction constraints and construction of a deep DN 1.5 filter well in accordance with the description in section 2.2.6.3. lost wells of STC and all other construction constraints The Unit	
	WASTE BINS	
921.00	Plastic wheeled bin 240L ice remunerates the supply and installation of the garbage lementation constraints according to the model in the STC	
	The unit at ..... "	
LOT 10 1000.00	LIFT MECHANISM AND AIR CONDITIONING SYSTEM Supply and installation of a lift mechanism of 680kg capacity with electric backup battery The unit at ..... "	

1001.00	Supply and installation of individual AC units The unit at	
LOT 11	EXTERNAL WORKS AND RENDERING	
1100.00	Yard pavement with 8cm thick interlocking concrete pavement blocks These prices pay per square meter for the supply, implementation and complete execution of interlocking paving blocks 8 cm thick, suitable for motor vehicles, colored in the mass; the layout and color must be approved by the Client. Price paid per square meter for the supply, transport, implementation of the 8 cm thick interlocking paver. It comprises of : - the formatting of the platform; - blocking beams; - Polyane film (200 microns); - Layer of sand 5cm; - 8 cm thick interlocking paver; This price applies per square meter of paving stones laid. The square meter.....	
1101.00	R. Concrete rectangular covered gutters of 40x30cm including cover slabs This price pays per meter length, the realization of the RC 40x30 gutters in accordance with the STC prescriptions. He understands : - the supply of the necessary tools, equipment and materials; - Execution of channel excavations - construction of the RC 40x30 gutters; - cleaning of the track after installation. meter length	
1102.00	Reinforced concrete culverts Type C1 concrete N°5 for accesses This price pays per meter length, the realization of the culverts in accordance with the prescriptions of the STC. It comprises of : - the supply of the necessary tools, equipment and materials;	
	- the realization of the culvert in RC; Meter length	
1103.00	Planting of lawns and flowers including communication signs & signaletics lump sum	

Document N°. 7

BILL OF QUANTITIES AND ESTIMATES

DETAILED STUDIED BILL OF QUANTITIES & ESTIMATES FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT THE REGIONAL HOSPITAL ANNEX NKAMBE			
Vital Data			Nkamb Groun Floor
Plot area (m2)			1,540
Cummulative building area (m2)			1,030
Total number of pillars			100
Total floor height (floor to floor)			3
Total length of beams			560
Fence Length			0
Length of retaining wall			30
LOT: S/N	DESRCIPTION	Unit	Qtty
LOT 1	PRELIMINARY WORKS (SITE INSTALLATION)		
101	Site installation(Bringing and withdrawal of equipment, site hoarding, Storage and office space including the security post)	LS	1.00
102	Execution program / project including execution plans on paper and digital	LS	1.00
103	Implatantion of structure	LS	1.00
104	Construction of 1 borehole system with solar lighting and connection to ENEO and Camwater grid	LS	1.00
105	ESSS measures & Signalisation and demolition	LS	1.00
	SUB TOTAL LOT 1		7
LOT 2	EARTHWORKS - ROADS AND OTHER NETWORKS (VRD)		
200	EARTHWORKS		
201	General cleaning	m2	1,540
202	Mass Excavation of foundation to ground level @ approx. 1.5m for buildings	m3	2,310
203	Excavation of foundation trenches 60cm deep & 60cm wide	lm	560.
204	Excavation of foundation footing	m3	45.
205	Leveling and grading for yard pavement	m2	1,026
206	Mass Backfilling of foundation to basement level depth with selected earth	m3	770
207	Planting of trees	No	50.
	SUB TOTAL 2		
LOT 3	MAJOR WORK		

301	FOUNDATION		
301.1	Mass Blinding concrete dosed at 150kg/m³	M³	7.20
301.2	Reinforced concrete retaining wall dosed at 350kg/m³	M³	24.00
301.3	Foundation footing dosed at 350kg/m³ for pillars	M³	43.20
301.4	Foundation columns dosed at 350kg/m³ for pillars	M³	8.00
301.5	Foundation ground beams dosed at 350kg/m³	M³	22.40
301.6	Reinforced concrete for lift wall of 20cm thickness dosed at 350kg/m³	M³	0.00
301.7	20x20x40cm fog filled cement blocks + mortar for fooundation walls	M²	201.6
301.8	Mass rough concreting on ground floor dosed at 100kg/m³	M³	51.50
	TOTAL FOUNDATION		
302	GROUND FLOOR ELEVATION		
302.1	15x20x40cm cement blocks + mortar	M²	1,632.0
302.2	Reinforced concrete for Columns dosed at 350kg/m³ in cluding decorated pillars	M³	28.40
302.3	Reinforced concrete lintels dosed at 350kg/m³	M³	7.20
302.4	Reinforced concrete beams dosed at 350kg/m³	M³	67.20
302.5	Reinforced concrete ramp dosed at 350kg/m³	M³	3.92
302.6	Decking with hollow blocks & reinforced concrete dosed at 350kg/m³	M²	816.1
302.7	Metallic rails on verandas,staircase and balconies	ml	50.0
302.8	Reinforced concrete for lift wall of 20cm thickness dosed at 350kg/m³	M³	0.00
302.9	Apply plaster rendering on all internal & external wall surface of building made of a dash bond coat; batching: 650 kg/m3 and a finishing coat with batching: 400 kg/m3	M³	2,611.
	TOTAL GROUND FLOOR		
303	FIRST FLOOR ELEVATION		
303.1	15x20x40cm cement blocks + mortar	M²	1,085
303.2	Reinforced concrete for Columns dosed at 350kg/m³	M³	16.8
303.3	Reinforced concrete lintels dosed at 350kg/m³	M³	4.8
303.4	Reinforced concrete beams dosed at 350kg/m³	M³	33.6
303.5	Reinforced concrete staircase dosed at 350kg/m³	M³	3.9
303.6	Decking with hollow blocks & reinforced concrete dosed at 350kg/m³	M²	0.0
303.7	Metallic rails on verandas,staircase and balconies	ml	60.0
303.8	Reinforced concrete for lift wall of 20cm thickness dosed at	M³	0.0
	350kg/m³		
303.9	Apply plaster rendering on all internal & external wall surface of building made of a dash bond coat; batching: 650 kg/m3 and a finishing coat with batching: 400 kg/m3	M³	1,73
	TOTAL FIRST FLOOR		
LOT 4	ROOF WORKS		

401	Selected 5X15 hard wood for roofing framing and shuttering including braces and pulins	unit	450.0
402	Reinforced concrete works at 350kg/m³ on terrace for copings & other designed structures	M³	0.00
403	Parapet wall all round the building including gutters and drainage outlets of dia.100	ml	200.0
404	Insulation layer and water proofing of paraplet and roof slabs of 5cm including plumbing outlets	LS	1.00
405	Acquisition and installation of orrugated aluminium roofing sheets 7/10 on all roof surface on single slope	M²	1,030.0
	SUB TOTAL 4		
LOT 5	FLOORING/TILING		
501	Supply and installation of 1st choice 60x60 floor tiles of varying grades and patterns for all floors with high sticking properties for basement floors, acceses & terraces	M²	2,000.0
502	Supply and installation of 15 x 15 graded & designed tiles for external walls including brick tile designs	M²	1,251.
503	Supply and installation graded & designed tiles 20 x 20 for toilet walls	M²	1,142.
	SUB TOTAL 5		
LOT 6	WOODEN/METALLIC/ALIMINIUM JOINERY WORKS		
600	staff work with plaster of paris painted to selected colours and pattern including decoration on entire ceiling surface	M²	2,060
601	Supply and installation of window 180x120 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions	U	4
602	Supply and installation of window 120x120 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions	U	1
602	Supply and installation of window 80 x 80 cm with single protector glass panel and metallic bars including 4cm thickness frames, protector bars and any suggestions	U	1
603	Supply and installation of sliding glass paneled metallic doors 400 x 300 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions	U	
603	Supply and installation of sliding glass paneled metallic doors 180 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions	U	3
604	Supply and installation of fireproof metallic panel doors 100 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions	U	
605	Supply and installation of wooden panel doors 90 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions	U	1
606	Supply and installation of wooden panel doors 80 x 220 cm with single shutter with impost and thickness 4cm including frames, cylinder locks, hinges and any suggestions	U	

607	Fixed glazed curtain walls - protective grilles in aluminium on facade	M²	175
608	Supply and installation of a metallic frame on façade with IPE and tube elements as designed	LS	0
609	Acquisition and installation of metallic toilet cabins including all suggestions	U	27
	SUB TOTAL 6		
LOT 7	PAINTING		
701	Double layer Pantex 800 water paint of varying colours and patterns for internal walls	M²	1,466
702	Double layer Pantex 1300 water paint of varying colours and patterns for external walls	M²	1,251
703	Double layer Pantex 1300 water paint of varying colours and patterns for decking base & other visible elements	M²	1,892
	SUB TOTAL 8		
LOT 8	ELECTRICITY		
801	CONDUITS & DUCTS		
801.1	Supply and installation of ICD flexible ducts Ø 30,Ø 25 or equivalent including connection accessories	ml	2,000.0
801.2	Supply and installation of horizontal metallic connection racks 30cm wide minimum	ml	1,000
	CABLING		
801.3	Supply and installation of U 1000 R2V 3G 3mm cable from NEXANS or similar (for wiring junction boxes and lamps)	ml	2,000.
801.4	Supply and installation of U 1000 R2V 3G 2.5mm cable from NEXANS or similar (for socket outlets)	ml	2,000
801.5	Supply and installation of a complete earthing system using arestor connections	u	1.0
	PROTECTION & CONTROL DEVICES		
801.6	Supply and installation of Double ignition switch 10 A 230 V, model Legrand Kaptika or similar + cup	u	200.
801.7	Supply and installation of 2P + E 16 A socket outlet 1 x 10/16 A recessed wall model Legrand Kaptika or similar with cups	u	200.
801.8	SCHNEIDER ELECTRIC round screw boxes or similar.	u	50.0
801.9	SCHNEIDER ELECTRIC 140 * 140 * 40 junction box or similar.	u	50.0
801.10	SCHNEIDER ELECTRIC 160 * 160 * 40 junction box or similar.	u	50.0
801.11	Supply and installation of 6-module flush-mounted cabinet, Legrand model or similar	u	27.
801.12	Supply and installation of Circuit breaker IC60N CIRCUIT 1P + N 10A C	u	50.
801.13	Supply and installation of Circuit breaker IC60N CIRCUIT 1P + N 16A C	u	50.
801.14	Supply and installation of Circuit breaker per floor	u	15.
801.15	Supply and installation Legrand 10 A connection bar fuse box wiring	u	15.

801.16	Supply and installation Legrand 16 A connection bar fuse box wiring	u	15.0C
801.17	Supply and installation of 1 * 36w waterproof TL luminaire of dimension 120 of THORN model or similar	u	15.0C
801.18	Connection to a transformer including individual meters, general fuse box and alternative connection to secondary power sources	Prov	0.00
	APPARATUS		
801.19	Supply and installation of high grade LED fluorescent lamps	u	150.0
801.20	Supply and installation of high gradeTV connection	u	40.0C
801.21	Supply and installation of high grade 2X2 Round lamps & bulbs	u	90.0C
801.22	Specialized Accessories & Decorative spotlights including	Prov	4.00
	chandelliers & mural spots		
	ALTERNATIVE LIGHTING		
801.23	Solar lighting supply connection network	u	1.00
	FIRE SAFETY		
801.24	Supply and installation of CO2 type fire extinguishers and various accessories or equivalent	u	20.0C
	SUB TOTAL 9		
LOT 9	SANITARY & PLUMBING		
	Rainwater evacuation network		
900	Supply and installation of EP pipes in PVC HTA EVAC EP series including: elbows, clamps, supports, gutter and all connection constraints.		
901	diam 100	ml	500.0
902	diam 160	ml	500.0
	Wastewater and blackwater evacuation networks		
	Supply and installation of EV - EU pipes in EU series PVC pipe including: elbows, tees, grooves, disgorging pads, clamps, supports and all connection constraints.		
903	diam 32	ml	500.0
904	diam 40	ml	500.0
905	diam 63	ml	500.0
906	diam 100	ml	300.
	Cold water supply networks		
907	Supply and installation of EF pipes in PPR pipe including: elbows, tees, grooves, clamps, supports and all connection constraints		
908	diam 25	ml	500
909	diam 32	ml	500
	Sanitary devices		
910	Supply and installation including all constraints		

911	Turkish WC with self-supporting tank, equipped with flushing mechanism, silent side float valve. ALLIA brand • 3/8 "shut-off valve including fixing to the ground, EF connection and EV outlet and all installation requirements.	u	30.0C
912	Ceramic washbasin from ALLIA with fixing by bolts • simple tap with fixing on throat; brass plug with re-entrant valve; feed hose 400 mm. • siphon with removable chrome-plated adjustable base for washbasin, including EF connection and PVC outlet; seal against the back wall; fixing brackets and all installation constraints	u	15.0C
913	Hygenic brush and brush holder including fixing screws and all installation accessories	u	30.0C
914	Liquid soap soap dish including fixing screws and all installation accessories	u	15.0C
915	Mirror 0.60 x 0.40 (cm) including fixing screws and all installation accessories	u	30.0C
916	Toilet paper holder including fixing screws and all installation accessories	u	30.0C
917	Floor drain DN 50 including all network connection constraints	u	30.0C
	SANITATION		
	Supply and installation of EV - EU pipes in EU series P.V.C pipe including: elbows, tees, grooves, disgorging pads, clamps, supports and all connection constraints.		
918	diameter 100	ml	100.0
919	diameter 125	ml	100.0
920	Construction of a 30 m3 septic tank with a reinforced concrete purifier for EV treatment +Construction of a 10 m deep DN 1.50 filter well	ls	1.00
	WASTE BINS		
921	Plastic wheeled bin 240L	u	4.00
	SUB TOTAL 10		
LOT 10	LIFT MECHANISM AND AIR CONDITIONING SYSTEM		
1000	Supply and installation of a lift mechanism of 680kg capacity with electric backup battery	U	
1001	Supply and installation of individual AC units	U	
	SUB TOTAL 10		
LOT 11	EXTERNAL WORKS AND RENDERING		
1100	Yard pavement with 8cm thick interlocking concrete pavement blocks	m2	63
1101	R. Concrete rectangular covered gutters of 40x30cm including cover slabs	lm	8
1102	Reinforced concrete culverts Type C1 concrete N°5 for accesses	ls	
1103	Planting of lawns and flowers including communication signs & signaletics	ls	
	SUB TOTAL 11		
	TOTAL EVAT		
	VAT		
	TOTAL ATI		

Document N°. 8

SUB-DETAIL OF PRICES

SUBDETAILS OF PRICES

Price N° .....
Designation of work.....
Unit .....
Quantity .....
Daily output .....
Duration of execution .....

DESIGNATION :

No	Daily out put		Total quantity	Unit	Duration activity

	Category	No	Daily wage	Days break up	Amount
WORKMAN SHIP					
	TOTAL A				

	Type	No	Daily rate	Days break up	Amount
EQUIPMENT/MECHINES					
	TOTAL B				

	Type	Unit	Unit cost	Quantity	Amount
AND MATERIAL MISCELLANOUS					
	TOTAL C				

D	DIRECT TOTAL COST	A+B+C	
E	GENERAL SITE EXPENESES	Dx%	
F	GENERAL OFFICE EXPENSES	Dx%	
G	NET COST	D+E+F	
H	RISK + BENEFITS	Gx%	
P	TOTAL COST (HT)	G+H	
V	UNIT COST (HT)	P/Q'TY	

Document N°. 9

MODEL CONTRACT

NORTH-WEST REGIONAL ASSEMBLY

REGIONAL EXECUTIVE COUNCIL

PEACE-JUSTICE-UNITY-HARD WORK- SOLIDARITY

ASSEMBLEE REGIONALE DU NORD-OUEST

CONSEIL EXECUTIF REGIONAL

PAIX-JUSTICE-UNITE-TRAVAIL-SOLIDARITE

CONTRACT N°_____ CN/MINDDEVEL/NWRA/ITB/2024 OF 2024

AWARDED AFTER OPEN NATIONAL INVITATION TO TENDER N° ___/ONIT/NWRA/ITB/2024 OF __/__/2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT REGIONAL HOSPITAL ANNEX NKAMBE

Project Owner: THE PRESIDENT OF THE NORTH WEST REGIONAL ASSEMBLY

HOLDER :

P.O. Box_____, Tel: _____ Fax: _____

Business Registry N°._____at
Taxpayer's No._____

SUBJECT : *Execution of* _____*works;*

PLACE :_____

EXECUTION DEADLINE :_____(_____) months

AMOUNT IN CFA F:

	TOTAL
Total exclusive of all taxes	
VAT (19.25%)	
I.R (2.2%)	
TOTAL inclusive of all taxes	
Net Payment (Total exclusive taxes– IR)	

FINANCING : *[indicate the source of financing]*

BUDGET HEAD : *[to be completed]*

SUBSCRIBED ON:_____
SIGNED ON:_____
NOTIFIED ON:_____
REGISTERED ON:_____

Between:

The Government of the Republic of Cameroon, represented by The President of the North West Regional Assembly hereinafter referred to the "Contracting Authority"

On the one hand,

And

_____**(enterprise)**
P.O. Box_____Tel:_____Fax:_____
Business Registry No. _____
Taxpayer's No. _____

Represented by M _____, its General Manager, hereinafter referred to as the "Contractor"

On the other hand,

Agree on the following:

Part I: Special Administrative Conditions (SAC)

Part II: Special Technical Conditions (STC)

Part III: Schedule of Unit Prices (SUP)

Part IV: Details or Estimates

Page_____ and last of Contract N°_____ C/MINDEVEL/NWRA/ITB/2024 O
.....2024 awarded after Open National Invitation to Tender N° ___/ONIT/NWRA/ITB/202
of __/__/2024 FOR THE CONSTRUCTION OF AN EMERGENCY CENTRE AT REGIONAL HOSPITA
ANNEX NKAMBE.

With _____,

For the execution of _____works

EXECUTION DEADLINE_____(_____) months

Amount of Contract in CFA F:

IAT	
EVAT	
VAT (19.25%)	
AIR (2.2 %)	
Net to be paid	

Read and accepted by the Contractor

(place of signature)_____**(date)**

Signature of Contracting Authority

(place of signature)_____**(date)**

Registration

Document N°. 10

FORMS AND MODELS TO BE USED BY BIDDERS

TABLE OF MODELS

Annex N° 1: Model of declaration to Tender

Annex N° 2: Model Bid Letter

Annex N° 3: Model Bid Bond

Annex N° 4: Model Final Bond

Annex N° 5: Model Retention fund (Guarantee Retention)

Annex N° 6: Schedule framework

Annex N° 7: Model attestation of site visit

Annex N° 8: Model site visit report

Annex N° 9: Model table of reference

Annex N° 10: Model table of equipment

Annex N° 11: Security plan

Annex N° 12: Indicative model for technical proposal

Annex N°13: Evaluation grid of the technical file

Annex N° 1: MODEL OF DECLARATION TO TENDER

DECLARATION OF THE INTENTION TO TENDER

I the undersigned, ...(indicate the name and capacit
of signatory),
Nationality .....
Representing the ..... company or enterprise or group with head office c
.....
..... registered in the trade register of ..... Under the numbe
.....
In my capacity as .....of .....P(
box....., hereby acknowledge receipt of the file for open National Invitation to Tende
N° ..... for the .....

And hereby declare my intention to tender for the said contract.

Done at .....

Signature of .....
In the capacity of .....
Duly authorized to sign the tenders on behalf
.....

Annex N° 2: MODEL BID LETTER

I the undersigned, ...(indicate the name and capacity of signatory)
Representing the ..... company or enterprise or group with head office at .....
..... registered in the trade register of ..... Under the number .....

Having taken cognizance of all the documents featured or mentioned in the Tender file: Open Nationc
Invitation to Tender N° ___/ONIT/NWRA/ITB/2024 of __/__/2024 **for the Construction of a**
Emergency Centre at the Regional Hospital Annex Nkambe after having personally taking account c
the situation of the site and evaluated from my point of view and under my responsibility, the nature an
difficulty of the works to be carried out;

- Hereby submit, bearing my signature, the schedule of unit prices as well as the quotations i accordance with the structure featuring in the Tender File;
- Submit and commit myself to execute the works in accordance with the Tender File, in return fc the prices which I myself establish for each type of structure which prices reveal the amount of th tender at ..... (in figures and words) CFAF exclusive of VAT and c ..... (in figures and in words) CFAF inclusive of all taxes.
- I pledge to execute the works within a deadline of ..... months.
- I pledge to maintain my offer for a duration of **Ninety (90)** days from the deadline of submissio of tenders;

The Contracting Authority shall pay the sums due for this Contract by crediting Account N°:.....
OPEN in ..... Bank ..... Branch.
Prior to the signing of the Contract, this tender accepted by you shall constitute an agreement betwee
us.

Done at .....

Signature of .....
In the capacity of .....
Duly authorized to sign the tenders on behalf
.....

Annex N° 3: MODEL BID BOND

Bank:
Reference No. .....
Addressed to the Contracting Authority: The President of the North West Regional Assembly

Whereas the undertaking ..... Hereinafter referred to as the "bidder" hc submitted his tender on ..... for Open National Invitation to Tender N ___/ONIT/NWRA/ITB/2024 of __/__/2024 **for the Construction of an Emergency Centre at th Regional Hospital Annex Nkambe,** hereinafter referred to as "the tender" and to which must b attached a bid bond equivalent to .....CFAF.

We ..... (name and address of the bank), represented by ..... (names c signatories), hereinafter referred to as "the Bank" hereby declare to guarantee payment to th Contracting Authority of the maximum sum of ....., that the bank pledges t pay in full to the Contracting Authority, bidding itself, its successors and assignees.

The conditions of this commitment are as follows:
If the Bidder withdraws his offer during the validity period specified by the Bidder in the tender; or
If the Bidder, having been notified of the award of the contract by the Contracting Authority during th period of Bid validity:

- Fails or refuses to sign the contract, even though required to do so;
- Fails or refuses to furnish the final bond for the contract (final bond) as provided for by th contract.

We undertake to pay the Contracting Authority an amount up to the maximum of the sum referred above upon receipt of his first written demand, without the Contracting Authority having to substantia his demand, provided that in its demand the Contracting Authority shall note that the amount claimed b him is due, because one or the other or both of the above condition(s) has (have) been fulfilled and h shall specify which condition(s) took effect.

This bond shall enter into force from the date of signature and from the date set by the Contracti Authority for the submission of tenders. It shall remain valid up till the thirtieth day inclusive following t end of the deadline for the validity of tenders. Any request by the Contracting Authority to cause it take effect should reach the bank by registered mail with an acknowledgement of receipt before t end of this period of validity.

This bond shall, for purposes of its interpretation, be submitted to Cameroon law. Cameroon courts sh be the only jurisdictions competent to rule on this commitment and its consequences.

Signed and authenticated by the bank
at ....., on .....
(Bank's signature

Annex N° 4: MODEL FINAL BOND

Bank: .....
Reference of the Bond N°: .....

Addressed to The President of the North West Regional Assembly "Contracting Authority"

Whereas ..... (Name and address of Contractor) hereinafter referred to "th
Contractor", pledge, in execution of the Contract, to carry out the works: Open National Invitation t
Tender N° ___/ONIT/NWRA/ITB/2024 of __/__/2024 **for the Construction of an Emergency Centr**
at the Regional Hospital Annex Nkambe.
Whereas it is stipulated in the Contract that the Contractor shall furnish the Contracting Authority a finc
bond of two percent (2%) of the amount of the Contract as security for compliance with the Contractor
performance obligations in accordance with the Contract.

Whereas we have agreed to provide the Contractor with this guarantee;
We, ... (name and address of bank),
Represented by ..... (name of signatories)
hereinafter referred to as "the Bank", and we pledge to pay to the Contracting Authority within
maximum deadline of eight (8) weeks upon his simple written request declaring that the Contractor ha
not fulfilled his contractual obligations, without being able to defer the payment nor raise any contest fo
whatever reason, the sum of .... (in letters and
words).

We hereby agree that no change or addendum or any other amendment shall release us of ar
obligation incumbent onus by virtue of this bond and we hereby derogate by the present to th
notification of any amendment, addendum or change.

This bond shall enter into force upon signature. It shall be released within thirty (30) days from the da
of the Provisional Reception of the works.

After this date the caution shall no longer be valid and shall be returned to us without any request on o
part.

Any request for payment formulated by the Contracting Authority by virtue of this bond should be do
by registered mail with acknowledgement of receipt to reach the bank during the period of validity
this commitment.

This bond shall, for purposes of its interpretation and execution, be subject to Cameroon law. Camero
courts shall be the only jurisdictions competent to rule on this pledge and its consequences.

Signed and authenticated by the bank at ..... on .....
[signature of the bank]

Annex N° 3: MODEL OF PERFORMANCE BOND (GUARANTEE RETENTION)

Bank: .....
Reference of the Bond No: .....

Addressed to: The President of the North West Regional Assembly
Hereinafter referred to as "The Contracting Authority"

Whereas ..... (name and address of Contractor) hereinafter referred to "th
Contractor", pledge , in execution of the Contract, to carry out the works **for the Construction of a Emergency Centre at the Regional Hospital Annex Nkambe.**

Whereas it is stipulated in the Contract that the Guarantee Retention fixed at ten percent (10%) of th amount of the Contract may be replaced by a joint guarantee;

Whereas we have agreed to provide the Contractor with this guarantee;
We, ... (name and address of bank),
Represented by ..... (name of signatories) and hereinafter referred to a "the Bank";

Hence, we hereby affirm that on behalf of the Contractor, we guarantee and are responsible to th Contracting Authority for a maximum amount of ..... (in figures and in letter corresponding to ten percent (10%) of the Contract amount.

And we pledge to pay to the Contracting Authority within a maximum deadline of eight (8) weeks upo his simple written request declaring that the contractor has not fulfilled his contractual obligations or indebted to the Contracting Authority within the meaning of the contract, amended where need be, by additional clauses, without being able to defer the payment nor raise any contest for whatever reaso any sum(s) within the limits of the amount equal to ten percent (10%) of the total amount of the wor featuring in the final detailed account, without the Contracting Authority having to prove or give t reasons nor the motive for the amount of the sum indicated above.

We hereby agree that no change or addendum or any other amendment shall release us of a obligation incumbent onus by virtue of this bond and we hereby derogate by the present to t notification of any amendment, addendum or change.

This bond shall enter into force upon signature. It shall be released within thirty (30) days from the da of the final acceptance of the works and upon released issued by the Contracting Authority.

Any request for payment formulated by the Contracting Authority by virtue of this bond should be do by registered mail with acknowledgement of receipt to reach the bank during the period of validity this commitment.
This bond shall, for purposes of its interpretation and execution, be subject to Cameroon law. Camero courts shall be the only jurisdictions competent to rule on this pledge and its consequences.

Signed and authenticated by the bank at ..... on .....
[signature of the bank]

Note on the presentation of schedules

The quantities, daily outputs, the duration of execution of works and the slowdowns or even the du interruptions must be clearly brought out in the schedules.

The financial schedules resulting from the schedules of works must indicate month by month, the estimate amounts of the detailed accounts of works by item and cumulatively by taking into account the incidenc of rainy seasons for the basic solution and possibly variant solution.

Annex N° 7: MODEL ATTESTATION OF SITE VISIT

LETTER HEAD HERE

TO WHOM IT MAY CONCERN

ATTESTATION OF SITE VISIT

This is to testify that Mr

.....

Manager/Technical Director/Engineer of

.....

Has effectively visited the site for

.....

.....

..... in view to tender for the said project.

This attestation is issued to serve the purpose for which it is intended for.

Annex N° 6: MODEL SITE VISIT REPORT

I) INTRODUCTION

TENDER N°.....

NAME OF THE ENTERPRISE: .....

DATE: .....

II) COMMENTARY

1- Nature of the project site:

2- Accessibility to the project site:

3- Vegetation:

4- Topography of the site:

III) AVAILABILITY OF SERVICES

IV) AVAILABILITY OF MATERIALS

V) DIFFICULTIES

VI) CONCLUSION

Annex N° 9: MODEL TABLE OF REFERENCE

LIST OF CONSTRUCTION PROJECTS EXECUTED BY THE COMPANY

N°	YEAR	NAME OF THE PROJECT	NAME OF THE PROJECT OWNER AND TELEPHONE NUMBER	CONTRACT AMOUNT	CONTRACT DURATION	DATE OF ACCEPTANCE

DONE ON .....AT .....
By .....
SIGNATURE .....

Annex N° 10: MODEL TABLE OF EQUIPMENT

LIST OF EQUIPMENT AND MATERIALS AVAILABLE FOR THE

(project name).....

N°	DESIGNATION OF THE EQUIPMENT	DESCRIPTION, MARK	AGE AND STATE	NUMBER AVAILABLE	OWNER OR NOT

DONE ON .....AT .....

By .....

SIGNATURE .....

Annex 11: SECURITY PLAN

[Below is a suggested structure of the Security Plan]

1. Security Context
2. Security analysis and threats
3. General safety organization
4. Specific security measures planned
   - 4.1. Safety Organization
   - 4.2. Movement within the country and to the area concerned
   - 4.3. Accommodation during travel
   - 4.4. Communication
5. Pre-departure information, awareness and training
6. Event management
   - 6.1 Alert management and crisis management
   - 6.2. Emergency accident and repatriation management

Annex 12: INDICATIVE MODEL FOR TECHNICAL PROPOSAL

{The following is a suggested structure of the Technical Proposal}

A – General presentation of the enterprise

{Indicate here a brief description of your company and how it is organized, and in the case of a group of each partner to participate in the works, including an organizational chart, the list of members of th management committee, shareholding.}

B – Contractor references

Indicate similar works executed and successfully completed in the last ten [10] years.

Domain	Title of the project[1]	Summary Description	Owner	Amount	Start – End works

C – Mobilisation

a) *Organisation of personnel.* {describe the structure, the composition of your teams.}

	Name[2]	Post	Attributions
Technical Personnel / of the site			
Support Personnel (head quarter and base)			

b) *Equipment and software.* {describe the equipment to be used for the works.}

N°	Designation[3]	Company	Age	Attributions

D – Description of the approach, the methodology and the work program

a) *Comment on the site of the works and the technical specifications (STC, UPS and bill of quantities cost estimate). By eventually making proposals for a technical variant and the methodology implementation*

b) *Work program.* {Work program. {Please indicate the work program. The quantities, the de output, the duration of the works and the slowdowns, even the interruptions due to the b weather, will have to be clear from the on the planning.}

---

[1] Indicate only the works for which the Consultant had a contract as a contractor or partner of a contracting group. The references will b accompanied by supporting documents such as reception reports.

[2] CVs will be accompanied by supporting documents such as certified diplomas.

[3] The equipment will be accompanied by supporting documents such as purchase invoice, certified registration certificate.

c) **PAQ:** {Please indicate your quality insurance plan.}

d) ***ESSH methodology.*** {Please propose the Environment, Social, Safety and Hygiene methodolog during the works to be put in place}

E - Summary sheets of proposed personnel, material, equipment and subcontractors proposed

{Indicate here a brief description of proposed personnel, materials, equipment and subcontracto comparing to the technical requirements (CCTP), normative standards, ...}

As an indication, the consultant can draw inspiration from the following tables:

PERSONNEL				
Post	Name and Surname	Higher diploma	Number of years of experience	Observation

EQUIPMENT				
Equipment	Made - Type and number	Supplier / Registration	Principal characteristics	Observation

Materials				
Material	Supplier	Place of supply	Duration of supply per unit of supply	Observation

SUB - CONTRACTING				
Sub-contractor	Name and Surname	Prestation and sub-contracted	Formula for remuneration (by task, all-in, direct payment, ...)	Observation

Annex 13: EVALUATION GRID OF THE TECHNICAL FILE

A. General presentation of bids	
- Presence of all documents	yes/r
- Properly bound.....	yes/r
- Table of content	yes/r
- Separators in colour apart from white.....	yes/r
- Order prescribed respected.....	yes/r
- Clearness of the documents.....	yes/r
TOTAL 1	**/6**
B. EQUIPMENT	
- Proof of ownership or hired of a Dump truck (with road worthiness certificate)	yes/r
- Proof of ownership or hired of Backhoe or loader excavator	yes/r
- Proof of ownership Concrete mixer (350liters)	yes/n
- Proof of ownership Concrete vibrator in good operating condition	yes/n
- Proof of ownership Small compacting cylinder	yes/n
- Proof of ownership or hired of 2 Pickups (with road worthiness certificate)	yes/n
- Proof of ownership or hired of Survey equipment (Total station, GPS, rolling wheel etc,)	yes/n
- Proof of ownership of small constructions equipments	yes/n
TOTAL 2	**/8**
C. QUALIFICATION OF SITE PERSONNEL	
Works Director: Be holder of at least a Master's Degree (A Level +5) in Civil Engineering and a member of the National Order of Civil Engineers with at least 10 years of working experience in building construction and public works	
- Certified Diploma of Works Director.....	yes/
- Attestation of presentation of original diploma of Works Director	yes/
- CV signed and dated by Works Director.....	yes/
- Experience as a supervisor of two building construction project of at least 500,000,000 FCFA	yes/
Site foreman 1: Be holder of at least Bachelor's Degree in Civil Engineering with at least 05 years of working experience in building construction and public works	
- Certified copy of certificate of Site foreman 1.....	yes
- Attestation of presentation of original diploma of Site foreman 1.....	yes
- CV signed and dated by Site foreman 1.....	yes
- Experience as a supervisor of two building construction project of at least 100,000,000 FCFA	yes
Site foreman 2: Be holder of at least Bachelor's Degree in Electrical Engineering with at least five years of working experience in building construction and public works	
- Certified copy of diploma of Site foreman 2.....	yes
- Attestation of presentation of original diploma of Site foreman 2.....	yes
- CV signed and dated by Site foreman 2.....	yes

- Experience as a supervisor of two building construction project of at least 100,000,000 FCFA	yes/r
Site foreman 3: Be holder of at least Bachelor's Degree in Wood Work with at least five years of working experience in building construction and public works	
- Certified copy of diploma of Site foreman 3.....	yes/r
- Attestation of presentation of original diploma of Site foreman 3.....	yes/r
- CV signed and dated by Site foreman 3.....	yes/r
- Experience as a supervisor of two building construction project of at least 100,000,000 FCFA	yes/r
Site foreman 4: Be holder of at least Bachelor's Degree in Environmental Studies with at least five years of working experience in building construction and public works	
- Certified copy of diploma of Site foreman 4.....	yes/r
- Attestation of presentation of original diploma of Site foreman 4.....	yes/r
- CV signed and dated by Site foreman 4.....	yes/r
- Experience as a supervisor of two building construction project of at least 100,000,000 FCFA	yes/r
Geotechnical Engineer: Be a Geotechnician or a holder of at least Bachelor's Degree in Civil Engineering with at least three years of working experience	
- Certified copy of diploma of Geotechnical Engineer	yes/r
- Attestation of presentation of original diploma of Geotechnical Engineer ...	yes/r
- CV signed and dated by Geotechnical Engineer	yes/r
Surveyor: Be a Senior Technician in Surveying with at least five years of working experience in building construction and public works	
- Certified copy of diploma of Surveyor	yes/
- Attestation of presentation of original diploma of Surveyor	yes/
- CV signed and dated by Surveyor	yes/
Four (04) Builders: Be Senior Technicians in Civil Engineering with at least five years of working experience in building construction and public works	
- Certified copies of diplomas of builders	yes/
- Attestation of presentation of original diploma of builders	yes/
- CV signed and dated by builders	yes/
Four (04) Electricians: Be Senior Technicians in Electrical Engineering with at least five years of working experience in building construction and public works	
- Certified copies of diplomas of Electricians	yes/
- Attestation of presentation of original diploma of Electricians	yes
- CV signed and dated by Electricians	yes
Two (02) Wood Workers: Be a Senior Technicians in Wood Work with at least five years of working experience in building construction and public works	
- Certified copies of diplomas of Wood Workers	yes
- Attestation of presentation of original diploma of Wood Workers	yes
- CV signed and dated by Wood Workers	yes

Two (02) Plumbers: Be a Technicians with at least A-level or equivalent in Plumbing with at least five years of working experience in building construction and public works	
- Certified copies of diplomas of Plumbers	yes/r
- Attestation of presentation of original diploma of Wood Workers	yes/r
- CV signed and dated by Wood Workers	yes/r
Two (02) Aluminum/glass workers: Be a Senior Technicians in Sheet Metal with at least at least five years of working experience in building construction and public works	
- Certified copies of diplomas of Aluminum/glass workers	yes/r
- Attestation of presentation of original diploma of Aluminum/glass workers	yes/r
- CV signed and dated by Aluminum/glass workers	yes/r
TOTAL 3	/42
D. THE METHODOLOGY OF INTERVENTION AND EXECUTION OF WORK	
- Organizational Chart of the enterprise.....	yes/r
- Organizational Chart of site with comments	yes/r
- Detailed technical note on the organization and execution of works...	yes/r
- Coherence synchronized planning of execution of works.....	yes/r
- Coherence of Individual Protection Plan (IPP) within the building site.....	yes/r
- Coherence of the General Security and Safety Plan (GSSP) within the building site...	yes/r
- Description of the socio - environment measures for site protection.....	yes/r
- Coherence in the methodology of execution of works	yes/
- Coherence in the organization of the site.....	yes/
- Internal quality control	yes/
-Plan of supply of constructional materials and storage conditions	yes/
- ESSH methodology (social, hygienic and security management of personnel, environmental protection, site safety, etc.) and (PGES) social and environmental impact management plan	yes/
- CCTP dully initialed on each page, signed and dated on the last page	yes/
TOTAL 4	/1
E. SUB-CONTRACTING AND LIST OF SUB-CONTRACTORS	
F. ATTESTATION AND REPORT OF SITE VISIT	
- Attestation of site visit signed by the bidder on honour.	yes/
- Site Visit report signed and dated by bidder or duly authorised representative with pictures	yes/
TOTAL 5	/
G. The company references	
References of the company in similar works for the past ten (10) years:	
- 03 certified copies of similar contract visa and legalized by a competent administrative authority equal or above 250,000,000 FCFA ATI (1st, 2nd and last pages) and PV of final reception for works realized before 2023 and provisional reception minutes for works realized from 2023.	yes/

- 02 certified copies of similar contract visa and legalized by a competent administrative authority equal to or more than 150,000,000 CFA but less than 100,000,000 FCFA ATI (1st 2nd and last pages) and PV of final reception for works realized before 2023 and provisional reception minutes for works realized from 2023.	yes/r
- 01 certified copy of similar contract visa and legalized by a competent administrative authority below 100,000,000 FCFA ATI and above 50,000,000 FCFA ATI (1st 2nd and last pages) and PV of final reception for works realized before 2023 and provisional reception minutes for works realized from 2023.	yes/r
TOTAL 6	/3
H. CCTP VISA ON EACH PAGE AND SIGNED AND DATED ON THE LAST PAGE	
Special Technical Clauses (STC)	yes/r
TOTAL 7	/1
I. PRE-FINANCING	
Pre-financing capacity of the bidder of an amount greater than or equal to 250,000,000 FCFA	yes/r
TOTAL 8	/1
J. DECLARATION OF REFERENCES	
Contracts in building constructions and public works received or ongoing within the past ten years irrespective of their amount recapitulated in a table.	yes/
TOTAL 9	/1
K. SECURITY NOTICE	
This document should express the mastery of the security context and measures to be put in place to ensure the management of any insecurity that may result during the works period	yes/
TOTAL 10	/1
L. AVERAGE ANNUAL TURNOVER	
Minimum Average annual turnover of 250,000,000 FCFA	yes/
TOTAL 11	/1
TOTAL = TOTAL1 + TOTAL2+ TOTAL3+ TOTAL4+ TOTAL5 + TOTAL6	/7

Document N°. 11

PRELIMINARY STUDIES

Note on preliminary studies

In accordance with the Public Contracts Code, the Project Owner or Delegated Project Owner must, prio to commencing the procedure to award Contracts or refer to the competent Tenders Board, ensure the draft Tender Files are prepared based on preliminary studies.

These studies must be required during the examination of the Tender File (TF) by the Tenders Board.

The Project Owner is bound to fill the questionnaire in annex 1 accompanied by justifications of the sai studies.

Annex N°. 7: Justification of preliminary studies

1. Attach the preliminary studies.
2. Indicate
   - 2.1. The date studies were carried out;
   - 2.2. The name of the Public or private Project Manager
   - 2.3. References of the Contract, if Private Manager carried it out;
   - 2.4. If maintenance works
     - 2.4.1 Description of the studies;
     - 2.4.2 Attach the outline of the itinerary bringing out readings of degradations as well as th approved programming documents.
   - 2.5 Rehabilitation or new works
     - 2.5.1 Are quantities in the quotations the same as those of the studies?
     - 2.5.2 Description of studies: Draft Preliminary Study, Detailed Preliminary Study;
     - 2.5.3 Attach the said studies.

N.B. For services of less scope, the Project Owner may furnish a justification of calculation of quantit of the Tender File.

- *The chairperson of the Tenders Board may, before taking a decision, seek expert advice on the quality the studies.*

Document N°.12

LIST OF BANKING ESTABLISHMENTS AND FINANCIAL BODIES AUTHORISED TO ISSUE BONDS FOR PUBLIC CONTRACTS

1- BANK

1. Afriland First Bank (First bank), B.P 11 834, Yaoundé;
2. Banque Atlantique Cameroun (BACM), B.P. 2 933, Douala;
3. Banque Camerounaise des Petites et Moyennes Entreprises (BC-PME), B.P. 12 962, Yaoundé;
4. Banque Gabonaise pour le Financement International (BGFI BANK), B.P. 600 Douala ;
5. Banque International du Cameroun pour l'Epargne et le Crédit (BICEC) B.P. 1 925, Douala ;
6. Bank Of Africa Cameroun (BOA Cameroun), B.P. 4 593, Douala ;
7. CitiBank Cameroun (CITIGROUP), B.P. 4 571, Douala ;
8. Commercial Bank - Cameroon (CBC), B.P 4 004, Douala;
9. Ecobank Cameroun (ECOBANK), B.P 582, Douala;
10. National Financial Credit Bank (NFC-Bank), B.P. 6 578, Yaoundé ;
11. Société Commerciale de Banques-Cameroun (SCB-Cameroun), B.P 300, Douala ;
12. Société Générale Cameroun (SGC), B.P. 4 042, Douala ;
13. Standard Chartered Bank Cameroon (SCBC) B.P. 1784, Douala ;
14. Union Bank of Cameroon (UBC), B.P. 15 569, Douala;
15. United Bank for Africa (UBA), B.P. 2 088, Douala.
16. crédit communautaire d'afrique-bank (CCA – Bank)

1- Insurance companies

17. Activa Assurances
18. AREA Assurances
19. Atlantique Assurances S.A.
20. Benefical General Insurance S.A.
21. Chanas assurances
22. CPA S.A.
23. NSIA Assurances SA
24. PRO-ASSUR S.A.
25. SAAR S.A.
26. SAHAM Assurances S.A.
27. Zenithe Insurance S.A.

PLANS