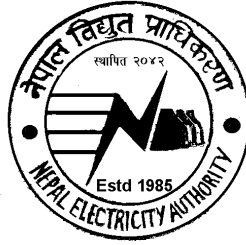


**Nepal Electricity Authority
Transmission Directorate
Grid Development Department
Kohalpur-Mahendranagar 132 kV Second Circuit
Transmission Line Project**



BIDDING DOCUMENT

for

***Road & Drain Maintenance Civil works at Pahalmanpur
Substation, Kailali***

National Competitive Bidding (NCB)

Tender no.: KM-NCB-074/75-01

Issued on:

Issued to:



Abbreviations

BD	Bidding Document
BDF	Bidding Forms
BDS	Bid Data Sheet
BOQ	Bill of Quantities
COF	Contract Forms
DP	Development Partners
DoLIDAR	Department of Local Infrastructure Development and Agricultural Roads
ELI	Eligibility
EQC	Evaluation and Qualification Criteria
EXP	Experience
FIN	Financial
GCC	General Conditions of Contract
GoN	Government of Nepal
ICC	International Chamber of Commerce
IFB	Invitation for Bids
ITB	Instructions to Bidders
JV	Joint Venture
LIT	Litigation
NCB	National Competitive Bidding
PAN	Permanent Account Number
PPA	Public Procurement Act
PPMO	Public Procurement Monitoring Office
PPR	Public Procurement Regulations
PL	Profit & Loss
SBD	Standard Bidding Document
SCC	Special Conditions of Contract
TS	Technical Specifications
VAT	Value Added Tax
WRQ	Works Requirements



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Invitation for Bids

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Nepal Electricity Authority
Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project
Attariya,Kailali
Tel: 091-551359

Invitation for Bids (IFB)
National Competitive Bidding

Tender No: KM-NCB-074/75-01 “Road & Drain Maintenance Civil works at Pahalmanpur Substation,Kailali “ (First date of publication: **2074-08-15**)

1. Nepal Electricity Authority(NEA) invites sealed bids from eligible bidders for Road & Drain Maintenance Civil works at Pahalmanpur Substation,Kailali. The Bidding Document, may be purchased during office hours on all working days by interested eligible Bidders upon submission of a written application at the Project Office, *Attariya, Kailali* and upon payment of a nonrefundable fee of **Rs 3,000.00** by bank voucher to the Project account no. **00511011391 at Laxmi Bank Limited** or bank draft drawn in favor of the Project. The Bid documents shall be available for sale up to one day before the last date of Bid submission within the office hours in the above mentioned address.
2. For the purpose of the bidders who choose to submit their bid electronically through e-procurement section of NEA’s website <http://www.eproc.nea.org.np>, the bidders may either purchase the hard copy of bidding documents or may choose to download the necessary parts of the bidding documents, prepare their bid and submit their electronic bids as specified in the instruction to bidders. In case, the bidder chooses to submit the bid electronically, the bidder shall be required to deposit the non refundable fee as specified above and electronic scanned copy (*.pdf format) of the bank deposit voucher shall also be submitted along with the electronic bid files.
3. Interested Bidders must produce a copy of the valid Company/Firm registration certificates, VAT/ PAN registration, Tax clearance certificate at the time of the purchase of the Bid Documents.
4. Bids must be submitted to the Project Office, *Attariya, Kailali* on or before 12:00 Noon on **2074-09-17**. Documents received after this deadline will not be accepted. Alternatively, e-submission of bids must be as per the e- notice of NEA website. Late bids will be rejected.
5. Bids shall be opened in the presence of Bidders' representatives who choose to attend at 14:00 hours on **2074-09-17** at the above mentioned office. Absence of any Bidder shall not affect opening of the Bids.
6. Bids must be valid for a period of 90 days after bid opening and must be accompanied by bid security, amounting to a minimum of **NRs. 2,50,000.00** which shall be valid for 30 days beyond the bid validity period. For the ebidder the bid security must be scanned and submitted along with the electronic bid file in *.pdf format.
7. If the last date of purchasing, submission and opening falls on a government holiday then the next immediate working day shall be considered as the last day.
8. Bidders are advised to visit site and assess the actual site conditions before submitting their bid.
9. NEA will not be responsible for any cost or expenses incurred by the Bidders in connection with the preparation or delivery of Bids.
10. NEA reserves the right to accept or reject any Bids, partly or wholly, without assigning any reason whatsoever.
11. The estimated cost of the works is **NRs. 95,37,567.56** (with VAT).



SECTION - I

Instructions to Bidders

A. General	
1. Scope of Bid	<p>1.1 In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of Works as specified in Section V (Works Requirements). The name, identification, and number of Contracts of the National Competitive Bidding (NCB) are provided in the BDS.</p> <p>1.2 Throughout this Bidding Document:</p> <ul style="list-style-type: none">(a) the term “in writing” means communicated in written form and delivered against receipt;(b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and(c) “day” means calendar day.
2. Source of Funds	<p>2.1 GoN Funded: In accordance with its annual program and budget, approved by the GoN, the implementing agency indicated in the BDS plans to apply a portion of the allocated budget to eligible payments under the contract(s) for which this Bidding Document is issued.</p> <p>Or</p> <p>Public Entities' own Resource Funded: In accordance with its annual program and budget, approved by the public entity, the implementing agency indicated in the BDS plans to apply a portion of the allocated budget to eligible payments under the contract(s) for which this Bidding Document is issued.</p> <p>Or</p> <p>DP Funded: The GoN has applied for or received financing (hereinafter called “funds”) from the Development Partner (hereinafter called “the DP”) indicated in the BDS toward the cost of the project named in the BDS. The GoN intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.</p> <p>2.2 DP Funded: Payment by the DP will be made only at the request of the GoN and upon approval by the DP in accordance with the terms and conditions of the financing agreement between the GoN and the DP</p>



	<p>(hereinafter called the “Loan/Grant Agreement”), and will be subject in all respects to the terms and conditions of that Loan/Grant Agreement. No party other than the GoN shall derive any rights from the Loan Agreement or have any claim to the funds.</p>
<p>3. Fraud and Corruption</p>	<p>3.1 The Government of Nepal (GoN) requires that the Procuring Entities as well as bidders, suppliers and contractors and their sub-contractors under GoN/DP-financed contracts, shall adhere to the highest standard of ethics during the procurement and execution of such contracts. In this context, the Employer;</p> <p>(a) defines, for the purposes of this provision, the terms set forth below as follows:</p> <ul style="list-style-type: none"> (i) “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party; (ii) “fraudulent practice” means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation; (iii) “coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; (iv) “collusive practice” means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party. (iv) “obstructive practice” means: <ul style="list-style-type: none"> (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a GoN/DP investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (bb) acts intended to materially impede the exercise of the GoN’s/DP’s inspection and audit rights provided for under sub-clause 3.5 below. <p>(b) will reject bid(s) if it determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;</p> <p>3.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :</p> <ul style="list-style-type: none"> (a) give or propose improper inducement directly or indirectly, (b) distortion or misrepresentation of facts,



- (c) engaging in corrupt or fraudulent practice or involving in such act,
- (d) interference in participation of other competing bidders,
- (e) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
- (f) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Employer the benefit of open competitive bid price,
- (g) contacting the Employer with an intention to influence the Employer with regards to the bids or interference of any kind in examination and evaluation of the bids during the period from the time of opening of the bids until the notification of award of contract.

3.3 PPMO, on the recommendation of the Procuring Entity may blacklist a Bidder for a period of one (1) to three (3) years for its conduct including on the following grounds and seriousness of the act committed by the bidder:

- (a) if convicted by a court of law in a criminal offence which disqualifies the Bidder from participating in the contract,
- (b) if it is established that the contract agreement signed by the Bidder was based on false or misrepresentation of Bidder's qualification information,
- (c) if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for, or in executing, a GoN/DP-financed contract.

3.4 A bidder declared blacklisted and ineligible by the GoN, Public Procurement Monitoring Office (PPMO) and/or the DP in case of DP funded project, shall be ineligible to bid for a contract during the period of time determined by the GoN, PPMO and/or the DP.

3.5 The Contractor shall permit the GoN/DP to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the GoN/DP, if so required by the GoN/DP.

3.6 DP Funded: In pursuance of the fraud and corruption policy, the DP.

- (a) will reject a proposal if it determines that the bidder recommended for award has directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (b) will cancel the portion of the loan/ credit/ grant allocated to a contract if it determines at any time that representative(s) of the GoN or of a



	<p>beneficiary of the fund engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the GoN having taken timely and appropriate action satisfactory to the DP to remedy the situation.</p>
<p>4. Eligible Bidders</p>	<p>4.1 A Bidder may be a natural person, private entity, or government - owned entity—subject to ITB 4.5—or any combination of them in the form of a Joint Venture (JV) under an existing agreement, or with the intent to constitute a legally-enforceable joint venture. In the case of a JV:</p> <p>(a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. Maximum number of JV shall be as specified in the BDS. The qualification requirement of the parties to the JV shall be as specified in Section III Evaluation and Qualification Criteria, and</p> <p>(b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during Contract execution.</p> <p>4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of any country or eligible countries mentioned in the BDS. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed sub Contractors or suppliers for any part of the Contract including related services.</p> <p>4.3 A Bidder shall not have a conflict of interest. A Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process, if:</p> <p>(a) they have controlling partners in common; or</p> <p>(b) they receive or have received any direct or indirect subsidy from any of them; or</p>
	<p>(c) they have the same legal representative for purposes of this bid; or</p> <p>(d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or</p> <p>(e) a Bidder participates in more than one bid in this bidding process either individually or as a partner in a joint venture. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same sub Contractor in more than one bid; or</p>



	<p>(f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Contract that is the subject of the Bid; or</p> <p>(g) a Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract.</p> <p>4.4 A firm that is under a declaration of ineligibility by the GoN/DP in accordance with ITB 3, at the date of the deadline for bid submission or thereafter, shall be disqualified.</p> <p>4.5 Enterprises owned by Government shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the GoN.</p> <p>4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.</p> <p>4.7 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.</p> <p>4.8 Firms shall be excluded in any of the cases, if</p> <p>(a) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Nepal prohibits any import of goods or Contracting of works or services from that country or any payments to persons or entities in that country.</p> <p>(b) DP Funded: as a matter of law or official regulation, Nepal prohibits commercial relations with that country, provided that the DP is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required;</p>
	<p>(c) DP Funded: a firm has been determined to be ineligible by the DP in relation to their guidelines or appropriate provisions on preventing and combating fraud and corruption in projects financed by them.</p> <p>4.9 The bidder shall meet the eligibility criteria specified in section III (Evaluation and Qualification Criteria) of bid document.</p>
<p>5. Eligible Materials, Equipment and Services</p>	<p>5.1 The materials, equipment and services to be supplied under the Contract shall have their origin in any source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.</p> <p>5.2 For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials</p>



	<p>and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.</p>
<p>B. Contents of Bidding Documents</p>	
<p>6. Sections of Bidding Document</p>	<p>6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.</p> <p style="padding-left: 40px;">Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section III Evaluation and Qualification Criteria (EQC) Section IV Bidding Forms (BDF) Section V Works Requirements (WRQ) Section VI Bill of Quantities (BOQ)</p>
	<p style="padding-left: 40px;">Section VII General Conditions of Contract (GCC) Section VIII Special Conditions of Contract (SCC) Section IX Contract Forms (COF)</p> <p>6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.</p> <p>6.3 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.</p> <p>6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.</p>
<p>7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting</p>	<p>7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer’s address indicated in BDS or raise any question or curiosity during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer shall be required to make available as soon as possible the answer to such question or curiosity in writing to any request for clarification, provided that such request is received as mentioned in ITB 7.5. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.</p> <p>7.2 The Bidder is encouraged to visit and examine the Site of Works and its surroundings and obtain for itself, on its own risk and responsibility,</p>



	<p>all information that may be necessary for preparing the bid and entering into a Contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.</p> <p>7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.</p> <p>7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.</p> <p>7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer as mentioned in BDS.</p>
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	<p>7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer as mentioned in BDS.</p> <p>7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.</p> <p>7.7 Non attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.</p>
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<p>8. Amendment of Bidding Document</p>	<p>8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing agenda.</p> <p>8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.</p> <p>8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2</p>
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C. Preparation of Bids



<p>9. Cost of Bidding</p>	<p>9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.</p>
<p>10. Language of Bid</p>	<p>10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.</p>
<p>11. Documents Comprising the Bid</p>	<p>11.1 The Bid shall comprise the following:</p> <ul style="list-style-type: none"> (a) Letter of Bid; (b) completed Schedules, in accordance with ITB 12 and 14, or as stipulated in the BDS; (c) Bid Security, in accordance with ITB 19; (d) alternative bids, at Bidder's option and if permissible, in accordance with ITB 13; (e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2; (f) documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the Contract; (g) Technical Proposal in accordance with ITB 16; (h) In the case of a bid submitted by a JV, the JV agreement, or letter of intent to enter into a JV including a draft agreement, indicating at least the parts of the Works to be executed by the respective partners; and (i) Any other document required in the BDS.
<p>12. Letter of Bid and Schedules</p>	<p>12.1 The Letter of Bid, Schedules, and all documents listed under ITB 11, shall be prepared using the relevant forms in Section 4 (Bidding Forms), if so provided. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p>
<p>13. Alternative Bids</p>	<p>13.1 Unless otherwise indicated in the BDS, alternative bids shall not be considered.</p> <p>13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS, as will the method of evaluating different times for completion.</p> <p>13.3 When specified in the BDS pursuant to ITB 13.1, and subject to ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements</p>



	<p>of the Bidding Document must first price the Employer's design as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.</p> <p>13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section V (Works Requirements). The method for their evaluation will be stipulated in Section III (Evaluation and Qualification Criteria).</p>
<p>14. Bid Prices and Discounts</p>	<p>14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified below.</p> <p>14.2 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV (Bidding Forms). In case of Unit Rate Contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.</p> <p>14.3 The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.</p> <p>14.4 Unconditional discounts, if any, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with ITB 12.1.</p> <p>14.5 If so indicated in ITB 1.1, bids are invited for individual Contracts or for any combination of Contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all Contracts are submitted and opened at the same time.</p> <p>14.6 Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Table of Adjustment Data in Section IV (Bidding Forms) and the Employer may require the Bidder to justify its proposed indices and weightings.</p>



	<p>14.7 The bidder is subject to local taxes such as VAT, social charges or income taxes on nonresident international personnel, and also duties, fees, levies on amounts payable by the employer under the Contract.</p> <p>All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.</p>
15. Currency of Bid and Payment	15.1 The currency of the bid and payment shall be in Nepalese Rupees.
16. Documents Comprising the Technical Proposal	16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
17. Documents Establishing the Qualifications of the Bidder	17.1 To establish its qualifications to perform the Contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section IV (Bidding Forms).
18. Period of Validity of Bids	<p>18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.</p> <p>18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended 30 days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its Bid.</p>
19. Bid Security	19.1 The Bidder shall furnish as part of its bid, in original form, a bid security as specified in the BDS. In case of e-submission of bid, the Bidder shall upload scanned copy of Bid security letter at the time of electronic submission of the bid. The Bidder accepts that the scanned copy of the Bid security shall, for all purposes, be equal to the original. The details of original Bid Security and the scanned copy submitted with e-bid should be the same otherwise the bid shall be non-responsive.
	19.2 The bid security shall be, at the Bidder's option, in any of the following forms:



	<p>(a) an unconditional bank guarantee from "A" class commercial bank or;</p> <p>(b) a cash deposit voucher in the Employer's Account as specified in BDS.</p> <p>In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV (Bidding Forms) or in another Form acceptable to the employer. The form must include the complete name of the Bidder. The bid security shall be valid for minimum thirty (30) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.</p> <p>19.3 The bid security issued by any foreign Bank outside Nepal must be counter guaranteed by an "A" class commercial Bank in Nepal.</p> <p>19.4 Any bid not accompanied by an enforceable and substantially compliant bid security shall be rejected by the Employer as nonresponsive. In case of e- Submission, if the scanned copy of an acceptable Bid Security letter is not uploaded with the electronic Bid then Bid shall be rejected.</p> <p>19.5 The bid security of unsuccessful Bidders shall be returned within three days, once the successful bidder has furnished the required performance security and signed the Contract Agreement pursuant to ITB 38.1 and 39.1.</p> <p>19.6 The bid security shall be forfeited if:</p> <p>(a) A Bidder requests for withdrawal or modification of its bid as against of the ITB clause 24.3 during the period of bid validity specified by the Bidder on the Letter of Bid, except as provided in ITB 18.2</p> <p>(b) a bidder does not accept the correction of arithmetical errors pursuant to clause 31.1 ;</p> <p>(c) a bidder changes the prices or substance of the bid while providing information pursuant to clause 27.1;</p> <p>(d) a bidder involves in fraud and corruption pursuant to clause 3.1;</p> <p>(e) the successful Bidder fails to:</p> <p>(i) furnish a performance security in accordance with ITB 38.1; or</p> <p>(ii) sign the Contract in accordance with ITB 39.1</p> <p>19.7 The Bid Security of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.</p>
<p>20. Format and Signing of Bid</p>	<p>20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly</p>



	<p>marked “ALTERNATIVE”. In addition, the Bidder shall submit copies of the bid in the number specified in the BDS, and clearly mark each of them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.</p> <p>In case of e-submission of bid, the Bidder shall submit his bid electronically in PDF or web forms files as specified in ITB Clause 21.1(b), If a Bidder submits both the electronic bid and a bid in hard copy within the bid submission deadline, then the submitted Bids shall be accepted for evaluation provided that the facts and figures in hard copy confirm to those in electronic bid. If there is any major discrepancy in fact and figures in the electronic bid and bid in hard copy, it shall be treated as two separate bids from one Bidder and both the Bids shall be disqualified, as per ITB Clause 4.3 (e).</p> <p>20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for unamended printed literature, shall be signed or initialed by the person signing the bid.</p> <p>20.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.</p>
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D. Submission and Opening of Bids

21. Sealing and Marking of Bids

21.1 Bidders may always submit their bids by mail or by hand or by courier. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Procedures for submission, sealing and marking are as follows:

(a) Bidders submitting bids by mail, by hand or by courier

i. Bidders shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as

“ORIGINAL”, “ALTERNATIVE” and “COPY.” These envelopes containing the original and the copies shall then be enclosed in one single envelope.

ii. The inner and outer envelopes shall:

(aa) bear the name and address of the Bidder;

(bb) be addressed to the Employer as provided in BDS 22.1;

(cc) bear the specific identification of this bidding process indicated in BDS 1.1; and

(dd) bear a warning not to open before the time and date for bid opening.

iii. If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

(b) Bidders submitting bids electronically

Bidders shall follow the electronic bid submission procedures specified below:

i. **For e-submission**, the bidder is required to register in the e-GP portal <https://www.bolpatra.gov.np> for downloading and submitting the bid electronically.

ii. Interested bidders may either purchase the bidding documents from the employer's office as specified in the invitation for bid (IFB) or bidders registered in the e-GP portal of PPMO may download the bidding document from

<http://www.bolpatra.gov.np> after login. If bidders choose to download the bidding document and submit the bid electronically, then the cost of the bidding document shall be deposited as specified in IFB. In addition, electronic scanned copy (.pdf format) of the bank deposit voucher/cash receipt should also be submitted along with the electronic bid files.

iii. The bidder shall then prepare/fill the documents and forms included in the issued bid documents or the downloaded bid



documents from the e-GP portal of PPMO - http://www.bolpatra.gov.np . as applicable. The required documents and forms shall be prepared in PDF form and/or shall be filled in the web forms in the e-GP system as specified below.			
S. N.	Document	Requirement	Remarks
1	Letter of Bid	Mandatory	PDF/Web Forms
2	Bid Security (Bank Guarantee)	Mandatory	PDF
3	Company registration	Mandatory	PDF
4	VAT registration	Mandatory	PDF
5	Tax clearances certificate or evidence of tax return submission	Mandatory	PDF
6	Power of Attorney of Bid signatory	Mandatory	PDF
7	Bank Voucher for cost of bid document	Mandatory	PDF
8	Joint venture agreement	Mandatory	Mandatory in case of JV Bids Only
9	Qualification Information	Mandatory	Web Forms (Experience, Turnover, etc.)
10	Applicable Price Adjustment Table	If applicable	Non Submission of figures of price Adjustment by the bidder shall not be considered for price adjustment
11	Completed BOQ	Mandatory	Web Forms
<p><i>Note:</i></p> <p>a) The documents specified as "Mandatory" should be included in e-submission and non submission of the documents shall be considered as non-responsive bid.</p> <p>b) Bidders (all partners in case of JV) should verify/update their</p>			



	<p><i>profile documents as appropriate for the specific bid before submitting their bid electronically.</i></p> <p>iv) The Bidder shall then upload the PDF bid files and submit the complete bid online through e-GP portal of PPMO- http://www.bolpatra.gov.np within the specified date and time.</p> <p>v) Bidders are advised to download the bid submission report to ensure that all the documents/ files are up to date and complete.</p> <p>vi) The Bidder / Bid shall meet the following requirements and conditions for e-submission of bids;</p> <p>aa) The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files (not complying as per ITB Clause 21.1(d) shall be considered incomplete and rejected for further bid evaluation.</p> <p>bb) In addition to electronically submitted PDF files/web forms, the Bidder shall be required to submit original bid security letter/ documents and clarifications as specified in ITB Clause 27. If a bidder does not submit the original Bid security letter and requested documents and or clarifications within the specified time limit then the bid shall not be considered for further evaluation.</p> <p>cc) If major discrepancy is found between the electronically submitted PDF bid files and the documents/ clarifications provided by the Bidder as per ITB Clause 27, then the bid shall not be considered for further evaluation.</p> <p>dd) The facility for submission of bid electronically through e-submission is to promote transparency, non-discrimination, equality of access, and open competition in the bidding process. The Bidders are fully responsible to use the e- submission facility properly in e-GP portal of PPMO- http://www.bolpatra.gov.np as per specified procedures and in no case the Employer shall be held liable for Bidder's inability to use this facility.</p> <p>ee) When a bidder submits electronic bid through the PPMO e-GP portal, it is assumed that the bidder has prepared the bid by studying and examining the complete set of the Bidding documents including specifications, drawings and conditions of contract.</p> <p>ff) Bidders who submit electronic bid should deposit the bidding document fee as specified in IFB and upload the scan copy (in pdf format) of the deposit voucher at the time of bid submission. The deposited amount shall be verified by the Employer during the bid evaluation process. The submitted Bid shall be non-responsive and shall not be evaluated if the cost for bidding document is not deposited as specified in the IFB.</p>
22. Deadline for	22.1 Bids must be received by the Employer at the address and no later



<p>Submission of Bids</p>	<p>than the date and time indicated in the BDS.</p> <p>In case of e-submission, the standard time for e-submission is Nepalese Standard Time as set out in the server. The e-procurement system will accept the e-submission of bid from the date of publishing of notice and will automatically not allow the e-submission of bid after the deadline for submission of bid.</p> <p>22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.</p>
<p>23. Late Bids</p>	<p>23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.</p>
<p>24. Withdrawal, and Modification of Bids</p>	<p>24.1 A Bidder may withdraw, or modify its bid after it has been submitted either in hard copy or by e-submission. Procedures for withdrawal or modification of submitted bids are as follows:</p> <p>(i) Bids submitted in hard Copy</p> <p>a) Bidders may withdraw or modify its bids by sending a written notice in a sealed envelope, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2 before 24 hours prior to the last deadline of submission of bid. The corresponding modification of the bid must accompany the respective written notice. All notices must be:</p> <p>(aa) prepared and submitted in accordance with ITB 20 and ITB 21, and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL”, “MODIFICATION;” and</p> <p>(bb) received by the Employer 24 hours prior to the deadline prescribed for submission of bids, in accordance with ITB 22.</p> <p>ii) E-submitted bids.</p> <p>a) Bidder may submit modification or withdrawal prior to the deadline prescribed for submission of bids through GP system by using the forms and instructions provided by the system. Once a Bid is withdrawn, bidder shall not be able to submit another bid response for the same bid.</p> <p>b) Withdrawal and modification of bids through hard copy shall not be considered in case of e-submitted bids</p> <p>24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders after completion of the bid opening.</p>



	<p>24. In case of bids submitted in hard copy no bid shall be withdrawn or modified in the interval between 24 hours prior time of the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.</p> <p>In case of e-submitted bids no bids shall be withdrawn or modified in the interval between deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof</p>
<p>25. Bid Opening</p>	<p>25.1 The Employer shall open the bids in public at the address, date and time specified in the BDS in the presence of Bidders` designated representatives and anyone who choose to attend.</p> <p>25.2 The Employer shall download the e-submitted bid files. The e-procurement system allows the Employer to download the e-submitted bid files (report) only after bid opening date and time after login simultaneously by at least two members of the Bid opening committee.</p> <p>25.3 Electronically submitted bid shall be opened at first in the same time and date as specified above. Electronic Bids shall be opened one by one and read out. The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files shall be considered incomplete.</p> <p>25.4 Thereafter, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be Permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked “MODIFICATION” shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only envelopes that are opened and read out at bid opening shall be considered further.</p>
	<p>25.5 All other envelopes shall be opened one at a time, reading out: the name of the Bidder; the Bid Price(s), including any discounts and alternative bids and indicating whether there is a modification; the presence of a bid security and any other details as the Employer may consider appropriate. Only discounts and alternative offers read out at bid opening shall be considered for evaluation.</p> <p>No bid shall be rejected at bid opening except for late bids, in accordance with ITB 23.1.</p> <p>25.6 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there</p>



	<p>is a withdrawal, or modification; the Bid Price, per Contract if applicable, including any discounts and alternative offers; and the presence or absence of a bid security. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.</p>
<p>E. Evaluation and Comparison of Bids</p>	
<p>26. Confidentiality</p>	<p>26.1 Information relating to the examination, evaluation, comparison, and post-qualification of bids and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.</p> <p>26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.</p> <p>26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.</p>
<p>27. Clarification of Bids</p>	<p>27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31. In case of e-submission of bid, upon notification from the employer, the bidder shall also submit the original of documents comprising the bid as per ITB 11.1 for verification of submitted documents for acceptance of the e-submitted bid.</p> <p>27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.</p>
<p>28. Deviations, Reservations, and Omissions</p>	<p>28.1 During the evaluation of bids, the following definitions apply:</p> <p>(a) "Deviation" is a departure from the requirements specified in</p>



	<p>the Bidding Document;</p> <p>(b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and</p> <p>(c) “Omission” is the failure to submit part or all of the information or documentation required in the Bidding Document.</p>
<p>29. Determination of Responsiveness</p>	<p>29.1 The Employer’s determination of a bid’s responsiveness is to be based on the contents of the bid itself, as defined in ITB 11.</p> <p>29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,</p> <p>(a) if accepted, would:</p> <p>(i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract;</p> <p>or</p> <p>(ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer’s rights or the Bidder’s obligations under the proposed Contract; or</p> <p>(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.</p> <p>29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section V (Works Requirements) have been met without any material deviation, reservation or omission.</p>
	<p>29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.</p>
<p>30. Nonconformities, Errors, and Omissions</p>	<p>30.1 Provided that a bid is substantially responsive, the Employer may waive any non-conformities in the bid.</p> <p>30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.</p> <p>30.3 Provided that a bid is substantially responsive, the Employer shall</p>



	<p>rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods indicated in Section III (Evaluation and Qualification Criteria).</p> <p>30.4 If minor discrepancies are found such as in technical specification, description, feature which does not make the bid to be rejected, then the cost, which is calculated to the extent possible due to such differences, shall be included while evaluating the bid.</p> <p>30.5 If the value of such non-conformities is found to be more than fifteen percent of the quoted amount of the bidder on account of minor discrepancies pursuant to ITB 30.4, such bid shall be considered ineffective in substance and shall not be involved in evaluation.</p>
<p>31. Correction of Arithmetical Errors</p>	<p>31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:</p> <p>(a) only for unit price Contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;</p> <p>(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p>
	<p>(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.</p> <p>31.2 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security shall be forfeited.</p>
<p>32. Evaluation of Bids</p>	<p>32.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.</p> <p>32.2 To evaluate a bid, the Employer shall consider the following:</p> <p>(a) the bid price, excluding Value Added Tax , Provisional Sums, and the provision, if any, for contingencies in the Summary Bill of Quantities, for Unit Rate Contracts, or Schedule of Prices for lump sum Contracts, but including Day work items, where priced competitively;</p> <p>(b) price adjustment for correction of arithmetic errors in</p>



	<p>accordance with ITB 31.1;</p> <p>(c) price adjustment due to discounts offered in accordance with ITB 14.4;</p> <p>(d) adjustment for nonconformities in accordance with ITB 30.3;</p> <p>(e) application of all the evaluation factors indicated in Section III (Evaluation and Qualification Criteria);</p> <p>32.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.</p> <p>32.4 If this Bidding Document allows Bidders to quote separate prices for different Contracts, and to award multiple Contracts to a single Bidder, the methodology to determine the lowest evaluated price of the Contract combinations, including any discounts offered in the Letter of Bid, is specified in Section III (Evaluation and Qualification Criteria).</p> <p>32.5 In case of special evaluation in civil works, if the bid for an Unit Rate Contract, which results in the lowest Evaluated Bid Price, is seriously unbalanced, front loaded or substantially below updated estimates in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder as mentioned in BDS to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract..</p> <p>32.6 In case of e-submission bids, the Employer evaluates the bid on the basis of the information in the electronically submitted bid files. If the Bidder cannot substantiate or provide evidence to establish the information provided in e-submitted bid through documents/clarifications as per ITB Clause 27.1, the bid shall not be considered for further evaluation.</p>
<p>33. Comparison of Bids</p>	<p>33.1 The Employer shall compare all substantially responsive bids in accordance with ITB 32.2 to determine the lowest evaluated bid.</p>
<p>34. Qualification of the Bidder</p>	<p>34.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).</p> <p>34.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.</p>



	34.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
35. Employer's Right to Accept Any Bid, and to Reject Any or All Bids	35.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.
F. Award of Contract	
36. Award Criteria	36.1 The Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
37. Letter of Intent to Award the Contract/Notification of Award	<p>37.1 The Employer shall notify the concerned Bidder whose bid has been selected in accordance with ITB 36.1 within seven days of the selection of the bid, in writing that the Employer has intention to accept its bid and the information regarding the name, address and amount of selected bidder shall be given to all other bidders who submitted the bid.</p> <p>37.2 If no bidder submits an application pursuant to ITB 40 within a period of seven days of the notice provided under ITB 37.1, the Employer shall, accept the bid selected in accordance with ITB 36.1 and Letter of Acceptance shall be communicated to the selected bidder prior to the expiration of period of Bid validity, to furnish the performance security and sign the contract within fifteen days.</p>
38. Performance Security	<p>38.1 Within Fifteen (15) days of the receipt of Letter of Acceptance from the Employer, the successful Bidder shall furnish the performance security as under mentioned from A class Commercial Bank in accordance with the conditions of Contract using Sample Form for the Performance Security included in Section IX (Contract Forms), or another form acceptable to the Employer. The performance security issued by any foreign Bank outside Nepal must be counter guaranteed by an "A" class commercial Bank in Nepal.</p> <p>i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.</p> <p>ii) For the bid price less than 15 percent of the cost estimate, the performance security amount shall be determined as follows:</p> <p>Performance Security Amount = [(0.85 x Cost Estimate – Bid Price) x 0.5] + 5% of Bid Price.</p>



	<p>The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.</p> <p>38.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily. The process shall be repeated according to ITB 37.</p>
<p>39. Signing of Contract</p>	<p>39.1 The Employer and the successful Bidder shall sign the Contract Agreement within the period as stated ITB 38.1.</p> <p>39.2 At the same time, the Employer shall affix a public notice on the result of the award on its notice board and make arrangement for causing such notice to be affixed on the notice board also of the District Development Committee, District Administration Office and District Treasury and Controller Office. The Employer may make arrangements to post the notice into its website, if it has; and if it does not have, into the website of the Public Procurement Monitoring Office, identifying the bid and lot numbers and the following information: (i) the result of evaluation of bid; (ii) date of publication of notice inviting bids; (iii) name of newspaper; (iv) reference number of notice; (v) item of procurement; (vi) name and address of bidder making contract and (viii) contract price</p> <p>39.3 Within thirty (30) days from the date of issuance of notification pursuant to ITB 37.1 unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall promptly respond in writing to any unsuccessful Bidder who, requests for debriefing.</p> <p>39.4 If the bidder whose bid is accepted fails to sign the contract as stated ITB 39.1, the Public Procurement Monitoring Office shall blacklist the bidder on recommendation of the Public Entity.</p>
<p>40. Complaint and Review</p>	<p>40.1 If a Bidder is dissatisfied with the Procurement proceedings or the decision made by the Employer in the intention to award the Contract, it may file an application to the Chief of the Public Entity within Seven (7) days of providing the notice under ITB 37.1 by the Public Entity, for review of the proceedings stating the factual and legal grounds.</p> <p>40.2 Late application filed after the deadline pursuant to ITB 40.1 shall not be processed.</p> <p>40.3 The chief of Public Entity shall, within five (5) days after receiving the application, give its decision with reasons, in writing pursuant to ITB 40.1:</p>



	<p>(a) whether to suspend the procurement proceeding and indicate the procedure to be adopted for further proceedings; or</p> <p>(b) to reject the application.</p> <p>The decision of the chief of Public Entity shall be final for the Bid amount up to the value as stated in 40.4.</p> <p>40.4 If the Bidder is not satisfied with the decision of the Public Entity in accordance with ITB 40.3, is not given within five (5) days of receipt of application pursuant to ITB 40.1, it can, within seven (7) days of receipt of such decision, file an application to the Review Committee of the GoN, stating the reason of its disagreement on the decision of the chief of Public Entity and furnishing the relevant documents, provided that its Bid amount is more than Rupees Twenty Million (Rs. 20,000,000). The application may be sent by hand, by post, by courier, or by electronic media at the risk of the Bidder itself.</p> <p>40.5 Late application filed after the deadline pursuant to ITB 40.4 shall not be processed.</p> <p>40.6 Within three (3) days of the receipt of application from the Bidder, pursuant to ITB 40.4, the Review Committee shall notify the concerning Public Entity to furnish its procurement proceedings, pursuant to ITB 40.3.</p> <p>40.7 Within three (3) days of receipt of the notification pursuant to ITB 40.6, the Public Entity shall furnish the copy of the related documents to the Review Committee.</p> <p>40.8 The Review Committee, after inquiring from the Bidder and the Public Entity, if needed, shall give its decision within one (1) month of the receipt of the application filed by the Bidder, pursuant to ITB 40.4.</p> <p>40.9 The Bidder, filing application pursuant to ITB 40.4, shall have to furnish a cash amount or Bank guarantee from "A" class commercial bank equivalent to zero point five percent (0.5%) of its quoted Bid amount with the validity period of at least ninety (90) days from the date of the filing of application pursuant to ITB 40.4.</p> <p>40.10 If the claim made by the Bidder pursuant to ITB 40.4 is justified, the Review Committee shall have to return the security deposit to the applicant, pursuant to ITB 40.9, within seven (7) days of such decision made.</p>
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SECTION - II
Bid Data Sheet

A. General	
ITB 1.1	The number of the Invitation for Bids is : <i>KM-NCB-074/75-01</i>
ITB 1.1	The Employer is: <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project , Nepal Electricity Authority (NEA)</i>
ITB 1.1	The number and identification of lots comprising this bidding process is: <i>Contract No.: KM-NCB-074/75-01 “ Road & Drain Maintenance Civil works at Pahalmanpur Substation,Kailali “</i>
ITB 2.1	The name of the Project is: <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project</i> The DP is: <i>Not Applicable</i> The implementing agency is: <i>Not Applicable</i> GoN Funded or DP Funded: <i>GoN Funded</i>
ITB 4.1 (a)	Maximum number of partner in a joint venture shall be : <i>3(Three)</i>
ITB 4.2	Eligible countries - <i>all countries,</i>
B. Bidding Document	
ITB 7.1	For clarification purposes only, the Employer’s address is: <i>The Project Manager Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project Nepal Electricity Authority Attariya,Kailali Tel. No.: 091-551359, Fax No.: 091-551359 Mobile:9841555690 Email:kohalpur132kv@gmail.com</i>
ITB 7.4	A Pre-Bid meeting shall not be held. A site visit shall not be organized by the Employer.
ITB 7.5	Time for request: Requests for clarification should be received by the Employer no later than 10 days prior to the deadline for submission of bids.
C. Preparation of Bids	



ITB 10.1	The language of the bid is: English
ITB 11.1 (b)	<i>Only the required Schedules in accordance with ITB 12 and ITB 14 are required to be submitted.</i>
ITB 11.1 (i)	The Bidder shall submit with its bid the following additional documents: <i>i) Up to date Firm/Company Registration Certificate</i> <i>ii) Tax Clearance Certificate or Submissions of Tax Returns up to FY 2073/74</i> <i>iii) VAT, PAN Registration Certificate</i> <i>iv) Joint Venture Agreement if any</i> <i>v) A written declaration made by the Bidder stating that the Bidder is not ineligible to participate in the Bid; has no conflict of interest in the proposed bid procurement proceedings and has not been punished for the profession or businesses related offence.</i> <i>vi) Power of Attorney</i>
ITB 13.1	Alternative bids “ <i>shall not be</i> ” permitted.
ITB 13.2	Alternative times for completion / “ <i>shall not be</i> ” permitted.
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: <i>Not Applicable</i>
ITB 14.6	The prices quoted by the Bidder “ <i>shall not be</i> ” subject to adjustment during the performance of the Contract.
ITB 18.1	The bid validity period shall be: <i>Ninety (90) days..</i>
ITB 19.1	The Bidder shall furnish a bid security, from "A" class commercial bank with a minimum of <i>NRs. 2,50,000.00</i> , which shall be valid for <i>30 days</i> beyond the validity period of the bid.
ITB 19.2 (b)	Account Name: <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project</i> Bank Name: <i>Laxmi Bank Limited</i> Bank Address: <i>Hattisar, Kathmandu</i> Account Number: <i>00511011391</i>
ITB 20.1	In addition to the original of the bid, the number of copy is: <i>NA</i>
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall indicate: (a) The name and description of the documentation required to



	<p>demonstrate the authority of the signatory to sign the Bid such as a Power of Attorney; and</p> <p>(b) In the case of Bids submitted by an existing or intended JV, an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.</p>
D. Submission and Opening of Bids	
ITB 21.1	Bidders <i>shall</i> have the option of submitting their bids electronically. *
ITB 22.1	<p>For bid submission purposes only, the Employer's address is :</p> <p><i>The Project Manager</i> <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project</i> <i>Nepal Electricity Authority</i> <i>Attariya, Kailali</i> <i>Tel. No.: 091-551359, Fax No.: 091-551359</i> <i>Email:kohalpur132kv@gmail.com</i></p> <p>The deadline for bid submission is :</p> <p>Date : 2074/09/17</p> <p>Time : 12:00 Hrs (NST)</p>
ITB 25.1	<p>The bid opening shall take place at :</p> <p><i>The Project Manager</i> <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project</i> <i>Nepal Electricity Authority</i> <i>Attariya, Kailali</i> <i>Tel. No.: 091-551359, Fax No.: 091-551359</i> <i>Email:kohalpur132kv@gmail.com</i></p> <p>Date : 2074/09/17</p> <p>Time : 14:00 Hrs (NST)</p>
E. Evaluation and Comparison of Bids	
ITB 29.5	<p><i>Add the new Sub-Clause 29.5</i></p> <p>The Bid shall be rejected as non-responsive if</p> <p>a. The Bid does not contain wax sealed bid proposal. b. The Bid is received by NEA after the deadline for submission of Bids. c. The Bid is requested to be withdrawn by the Bidder as per Clause ITB</p>



	<p>24.3.</p> <p>d. It is proved that bidders have submitted the bids by making such arrangements that limits the participation of other bidders or influences the bid price in any manner.</p> <p>e. If the Bidder failed to provide satisfactory reason to clarification requested by the Employer regarding the proposal which is considered unbalanced, front loaded or substantially below updated estimate as per clause ITB 32.5.</p> <p>f. Qualification criteria as per Section 3 are not met.</p> <p>g. If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification.</p> <p>h. If the Bidder request for the modification or withdrawal of the Bid after the deadline for submission of Bids</p> <p>i. If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified.</p> <p>j. The description provided by the bidders pertaining to the qualification is found to be false or is substantially incomplete.</p> <p>k. Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.</p> <p>l. If a bidder bids in more than one bid and / or signs in more than one bid proposal.</p> <p>m. If numbers of partners in a JV consortium is more than three and the percentages of liability and roles, responsibilities and duties among the joint venture partners are not clearly mentioned.</p> <p>n. The bidder submitted the bid without purchasing .</p> <p>o. The Bid Document is issued in the name of one firm and Bid proposal submitted by another firm. The bid has been purchased in the name of single firm and submitted in the name of Joint Venture and vice versa.</p> <p>p. The Bid is not signed and stamped by the bidder or their authorized representative.</p> <p>q. The documents and guarantee/bank voucher as required by the bid are not attached with the bid proposal.</p> <p>r. Joint venture agreement is not attached, in case the bidder is participating in the bid in Joint Venture.</p> <p>s. The power of attorney to sign the bid on behalf Bidder and the joint venture (if any) is not attached.</p> <p>t. The bid is conditional.</p> <p>u. The Bid fails to satisfy that Bid is fully cognizant of the scope and details of the work involved.</p> <p>v. The Bid does not contain technical information and documents for major items required by the Specifications for materials on which the bidder is offering. (wherever required).</p> <p>w. The offered goods are not substantially in compliance with the specification. (wherever required).</p>
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	<p>x. If the attached Technical Data Sheet in the specification is not properly completed and/or data furnished are not supported by the catalogues, brochures and test reports etc (wherever required).</p> <p>y. The bidder is blacklisted in its contractual obligations in past NEA and GoN Contracts.</p> <p>z. If the required documents are not submitted authenticated English version. However the documents in Nepali language issued from the concerned authority of Nepal will also be accepted.</p> <p>aa. The bidder does not offer all the items and quantity specified in Price Schedule.</p> <p>bb. The Bid Security (Bid Bond) is not enclosed pursuant to ITB Clause 19 or is not acceptable in form and / or substance.</p> <p>cc. The Bid has price escalation clause.</p> <p>dd. The Bid Security submitted is not specifically mentioned to be applicable to the offer of the Bidder.</p> <p>ee. The Bid Bond submitted by someone other than the Bidder does not clearly mention that the Bond is submitted on behalf of the Bidder in the Bid Bond itself.</p> <p>ff. The Bid Bond is not in the name of Joint Venture, in case of Joint Ventures.</p> <p>gg. The bid price of lowest substantially responsive bidder is substantially higher than the estimated price.</p> <p>hh. If the Bidder submits the bid through e-bidding and submitted documents are not in confirmation with the BDS, section G, Special Instruction to Bidders for e- Bidding.</p>
<p>ITB 32.5</p>	<p>The amount of the performance security be increased by Eight (8) percent of the quoted bid price.</p>

G. Special Instruction to Bidders for E-Bidding

21.1* Bid submission procedure through electronically (e-submission):

- Interested bidders may either purchase the Bidding documents from the Employer's office as specified in the Tender Notice or choose to download the necessary part of bidding documents from e-procurement section of NEA's web site <http://www.eproc.nea.org.np>. In case, the Bidder choose to download the bidding documents, prepare his bids on downloaded documents, and submit his bid electronically, the Bidder is required to deposit the cost of bidding document (as specified in the bid notice) in the bank account specified in the IFB. In addition, electronic scanned copy



(pdf format) of the Bank deposit voucher shall be also required to be submitted along with the electronic bid files.

- The Bidder shall fill the following documents and forms (in hard copy), signed by the authorised representative and with seal of the company.
- The Bidder shall then scan the completed original documents, forms in PDF files with appropriate filename as shown in the table above. PDF (Adobe acrobat) version must be 6.0 or above.

S.No.	Document	PDF File name	Requirement	Remarks
1	Form of Bid	Bid form -1	Mandatory	
2	Bid Security (Bank Guarantee)	Bid security-2	Mandatory	
3	Company registration	Company reg-3	Mandatory	All firms in case of JV
4	VAT registration	VAT Reg-4	For National firms	All firms in case of JV
5	Tax clearances certificate,	Tax-5	For National firms	
6	Power of Attorney of Bid signatory	Power of Attorney -6	Mandatory	
7	Joint venture agreement	JV doc-7	Mandatory	In case of JV Bids only
8	Qualification Information	Qualifications-8		
9	BOQ with rate, amount and total amount	BOQ-9	Mandatory	
10	Bank Voucher for cost of Bid Document	Bank Voucher-10	Mandatory	

Note: Mandatory means the mentioned files must be included in e-submission and non-submission of such file shall be considered as non-responsive bid.

- For e-submission purpose the Bidder shall, at first, register in the e-procurement section NEA's web site <http://www.eproc.nea.org.np>
- After preparing all the required bidding documents in PDF scan files as specified as above, the Bidder shall upload the PDF bid files and submit his complete bid online through e-procurement section of NEA's website <http://www.eproc.nea.org.np> within the specified date and time.



- The e-procurement system will accept the e-submission of bid from the date after publishing of notice and will automatically not allow the e-submission of bid after the deadline for submission of bid, as specified above.
- The standard time for e-submission is Nepalese Standard Time as set out in the server of MIS Department of NEA. In case of e-submission of bids, the e-procurement system will, automatically, not allow the e-submission of bid after the deadline for submission of bid.
- When a bidder submits his bid in hard copy the e-procurement section **does not allow** the bidder to submit his Substitution or Modification or Withdrawal through e-procurement section of NEA's web site.
- Bidders may submit his Substitution or Modification or Withdrawal either in hard copy or through e-submission.
- For Substitution of Bid, the Bidder shall follow similar steps with a Substitution letter in PDF file.
- For Modification or Withdrawal of bid the Bidder is required to submit PDF scan copy of their Modification or Withdrawal letter and a written Power of Attorney of the signatory for Modification/ Withdrawal, duly signed by Authorised Representative/s of the Firm / all authorised Joint Venture partners.
- When a Bidder submits electronic bid by downloading the bidding documents from the NEA's webpage it is assumed that the Bidder prepares his bid by studying and examining all the Bidding documents including specifications and conditions of contract.
- In case, the Bidder choose to download the bidding documents and deposit the cost of bidding document (as specified in the bid notice) in the Project's account such deposited amount shall be verified by the office during bid evaluation process. The bid shall be non-responsive and shall not be evaluated if the specified cost for bidding document is not deposited in the specified account of the Project for the said document.

B) Requirements and Conditions for E-Submission of Bid:

- The Bidder shall submit his bid electronically in PDF files in the manner specified above, and submission of hard copy of "original plus two copy of bid" is not mandatory.
- In case, if both the electronic bid and original bid in hard copy are submitted to the Employer within the bid submission dead line, the Bidder's electronic bid and original



bid in hard copy will be accepted for evaluation provided if the facts and figures in hard copy confirm to the PDF files in electronic bid. If there is any discrepancy in fact and figures in the electronic bid and original bid in hard copy it will be treated as two separate bids from one Bidder and hence, both the electronic bid and original bid in hard copy shall be disqualified

- However, for electronically submitted bid in PDF files, the Bidder shall be required to submit documents/ clarifications upon request from the Employer.
- The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files shall be considered incomplete and rejected for further bid evaluation.
- In addition to electronically submitted PDF files, the Bidder shall be required to submit documents and clarifications as required by the Employer. Non-submission of such documents and or clarifications by the Bidder within specified time may cause forfeiture of Bid Security.
- In case of major discrepancy found between electronically submitted PDF bid files and documents/ clarifications provided by the Bidder, the bid shall not be considered for further evaluation.
- The Bidder shall attach the Bid Security Guarantee in the format attached in the Bid Document. The Bid Security may be forfeited
 - if the Bidder does not respond and/or submit the documents and or clarifications when requested by the Employer.
 - if major discrepancy is found between e-submitted bid information and documents/clarifications provided by the Bidder during verification process as requested by the Employer.

C) Bid Opening Process

- Electronically submitted bid shall be opened first at the Bid opening time.
- The e-procurement system allows the Employer to download the e-submitted bid files from the Bidders only after the time for opening the bids.
- The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files shall be considered incomplete and rejected for further bid evaluation.
- After opening of e-submitted bids files, all files shall be printed and recorded at the time of bid opening.



- Envelopes marked with "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" and in case of e-submission the files in PDF format under "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" shall be opened and read out first. Bids for which acceptable notice of "WITDRAWAL" or "SUBSTITUTION" has been submitted shall not be opened. In case of e-submission bids, the Employer evaluates the bid based on the information as per electronically submitted bid files. For clarification/ verification purpose, the Employer may request the Bidder to submit documents/ clarifications. In case, if the Bidder can not substantiate or provide evidence to prove the information provided in e-submitted bid through documents/ clarifications, the bid shall not be considered for further evaluation and Clause [bid forfeit] as above shall be applicable.
- Proposed facility for submission of bid electronically through e-submission is to increase transparency, non-discrimination, equality of access, and open competition. The Bidders are fully responsible to use the e-submission facility in e-procurement section of NEA's website <http://www.e-nea.org.np> in specified procedures and in no case the Employer shall be held liable for Bidder's inability to use this facility.

D) Bid Evaluation and Comparison process for e-submitted bid

- In case of e-submitted bids, the Employer evaluates the bid based on the information as per electronically submitted bid files. For clarification/ verification purpose, the Employer may request the Bidder to submit documents/ clarifications.
- In case, the Bidder could not substantiate or provide evidence to prove the information provided in e-submitted bid through documents/clarifications, the bid shall not be considered for further evaluation and respective ITB Clause for forfeiture of bid security shall be applicable.
- The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files (not complying with the ITB Clauses) shall be considered incomplete and rejected for further bid evaluation.

E) Qualification Information

In case of e-Bidding, the Bidder is required to submit the documents to prove minimum qualification requirements only and not the detail documents.

F) Bid Security Format

Form of Bid security shall include the provision as



‘This Bank Guarantee shall not be withdrawn or released merely upon return of the original Guarantee by the Bidder unless notified by the Employer for the release of the Guarantee’



SECTION - III

Evaluation and Qualification Criteria

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders by post-qualification exercise. GoN/DP requires bidders to be qualified by meeting predefined, precise minimum requirements. The method sets pass-fail criteria, which, if not met by the bidder, results in disqualification. In accordance with ITB 32 and ITB 34, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section IV (Bidding Forms).

1. Evaluation

In addition to the criteria listed in ITB 32.2 (a) - (e) the following criteria shall apply:

1.1 The evaluated amount of quantifiable nonconformities, errors and/or omissions shall be determined by ascertaining the price of such effect on an equal basis by adjusting the same to the quoted price of the bid. A bid having minor deviations and having no material deviation to cause any serious effect upon the scope, quality, characteristics, terms and conditions, performance or any other requirements stated in the bidding documents and acceptable to the Employer can be considered to be substantially responsive.

2. Qualification

2.1 Eligibility

Criteria		Compliance Requirements			Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
<i>2.1.1 Conflict of Interest</i>					
No conflicts of interest in accordance with ITB Sub-Clause 4.3.	must meet requirement	existing or intended JV must meet requirement	must meet requirement	not applicable	Letter of Bid
<i>2.1.2 Government-owned Entity</i>					
Bidder required to meet conditions of	must meet requirement	existing or intended JV must meet	must meet requirement	not applicable	Forms ELI - 1, ELI - 2, with attachments



ITB Sub- Clause 4.5.		requirement			
<i>2.1.3 UN Eligibility</i>					
Not having been declared ineligible based on a United Nations resolution or Employer's country law, as described in ITB Sub-Clause 4.8.	must meet requirement	existing or intended JV must meet requirement	must meet requirement	not applicable	Letter of Bid
<i>2.1.4 Other Eligibility</i>					
Firm Registration Certificate	must meet requirement	not applicable	must meet requirement	not applicable	Document attachment
Business Registration Certificate	must meet requirement	not applicable	must meet requirement	not applicable	Document attachment
VAT and PAN Registration certificate	must meet requirement	not applicable	must meet requirement	not applicable	Document attachment
Tax Clearance Certificate or Submissions of Tax Returns up to FY 2073/74	must meet requirement	not applicable	must meet requirement	not applicable	Document attachment
Power of attorney. In case of JV signed and seal by all the JV partners	must meet requirement	Notarized Power of attorney	not applicable	not applicable	Document attachment
Original JV agreement	not applicable	must meet requirement	not applicable	not applicable	Document attachment
In case of JV Power of attorney to person who sign the JV agreement and combined Power of Attorney for the Bid	not applicable	not applicable	must meet requirement	not applicable	Document attachment



SECTION - IV

Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of its Bid.



Letter of Bid

The Bidder must accomplish the Letter of Bid in its letterhead clearly showing the Bidder's complete name and address.

Date:

Name of the contract:

Invitation for Bid No.:

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8;
- (b) We offer to execute in conformity with the Bidding Documents the following Works:
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is:
- (d) The discounts offered and the methodology for their application are:
- (e) Our bid shall be valid for a period of *[insert validity period as specified in ITB 18.1]* days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (g) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries or any countries [insert the nationality of the Bidder, including that of all parties that comprise the Bidder if the Bidder is a consortium or association, and the nationality of each Subcontractor and Supplier];
- (h) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;
- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding



process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

- (j) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible, under the Employer's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (k) We are not a government owned entity/We are a government owned entity but meet the requirements of ITB 4.5;¹
- (l) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (m) We declare that, we have not been black listed as per ITB 3.4 and no conflict of interest in the proposed procurement proceedings and we have not been punished for an offense relating to the concerned profession or business.
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive; and
- (o) If awarded the contract, the person named below shall act as Contractor's Representative:
- (p) We agree to permit the Employer/DP or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the Employer.

Name:

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date



1 Use one of the two options as appropriate.

Table of Price Adjustment Data

**[To be used if Price Adjustment is applicable
as per GCC 45.1]**

Code	Index Description	Source of Index*	Base Value and Date	Employer's Proposed Weighting Range (coefficient)	Bidder's Proposed Weighting (coefficient)**
1	2	3	4	5	6
	Non - adjustable (A)			0.15	0.15
	Labor (b)				
	Materials (c)				
	Equipment usage (d)				
		Total			1.00

*Normally following source of index shall apply. Public Entity shall choose applicable Index for each item.

(a) Labor: "National Salary and Wage Rate Index" - "Construction Labor" of Nepal Rastra Bank
or
rate fixed by District Rate Fixation Committee

(b) Material: "National Wholesale Price Index" - Construction Materials" of Nepal Rastra Bank



(c) Equipment usage:

"National Wholesale Price Index" - "Transport Vehicles and Machinery Goods" of Nepal Rastra
Bank

or

"Fuel" Price fixed by Nepal Oil Corporation.

** Bidders proposed weightings should be within the range specified by the Employer in column - 5



Table of Price Adjustment Data
[To be used if Price Adjustment is applicable
as per GCC 45.7]

Code	Construction Material*	Unit	Base Price (NRs/Unit) (Ex-factory)	Source (Factory)**
1	2	3	4	5

* Major construction materials to be specified by Employer in column - 2.

** Base Price and source normally to be specified by Employer (or alternatively informed to be proposed by bidder) in column 4 and 5.

Note:

The base prices of the construction materials shall be taken as of 30 days before the deadline for submission of the Bid as quoted by the Bidder and verified by the Employer. For the purpose of calculation of price adjustment, the Ex-factory price of the same source shall be taken into consideration.



Bid Security Bank Guarantee

*Bank's Name, and Address of Issuing Branch or Office
(On Letter head of the 'A' class Commercial Bank)*

Beneficiary: *name and address of Employer*

Date:

Bid Security No.:

We have been informed that *[insert name of the Bidder]* (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") to you for the execution of *name of Contract* under Invitation for Bids No. ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we..... *name of Bank*. hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of*amount in figures* (*amount in words*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn or modifies its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity,
 - (i) fails or refuses to execute the Contract Agreement, or
 - (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
- (d) is involved in fraud and corruption in accordance with the ITB

This guarantee will remain in force up to and including the date*number*.....days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

This Bank guarantee shall not be withdrawn or released merely upon return of the original guarantee by the Bidder unless notified by you for the release of the guarantee.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

. . .*Bank's seal and authorized signature(s)*. . .



Note:

The bid security of has been counter guaranteed by the Bank on
..... (Applicable for Bid Security of Foreign Banks).



Technical Proposal Format

Personnel

Equipment

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Others



Bidder's Information and Qualification Format

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Others



Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI - 1: Bidder's Information Sheet

Bidder's Information	
Bidder's legal name	
In case of JV, legal name of each partner	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Bidder's authorized representative (name, address, telephone numbers, fax numbers, e-mail address)	
Attached are copies of the following original documents.	
1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.	
2. Authorization to represent the firm or JV named in above, in accordance with ITB 20.2.	
3. In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1.	
4. In case of a government-owned entity, any additional documents not covered under 1 above required to comply with ITB 4.5.	



Form ELI - 2: JV Information Sheet

Each member of a JV must fill in this form

JV / Specialist Subcontractor Information	
Bidder's legal name	
JV Partner's or Subcontractor's legal name	
JV Partner's or Subcontractor's country of constitution	
JV Partner's or Subcontractor's year of constitution	
JV Partner's or Subcontractor's legal address in country of constitution	
JV Partner's or Subcontractor's authorized representative information (name, address, telephone numbers, fax numbers, e-mail address)	
Attached are copies of the following original documents.	
1. articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.	



2. Authorization to represent the firm named above, in accordance with ITB 20.2.
3. In the case of government-owned entity, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.



SECTION - V

Works Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Works to be procured.



Specification for Materials and Civil Works



A.SPECIFICATION FOR MATERIALS CIVIL WORKS

1. GENERAL NOTES FOR CONTRACTOR AND DEFINITIONS

- 1.1 The work shall be carried out according to the specifications whether specifically mentioned in it or not. No extra in any form shall be paid unless it is definitely stated as an item in the Bill of Quantities. Whenever the specifications are not given or ambiguous, the relevant International Standards and further amendments or decision of the Employer/Engineer shall be considered as final and binding.
- 1.2 The work shall be carried out simultaneously with the electrical, plumbing, sanitary and other services and in cooperation with the contractors of the above services. The work shall be carried on till it is completed satisfactorily along with the completion of essential portion of other services. The contractor shall keep the other contractors informed well in advance of the proposed program of the work so that the proposed work is not hindered. The contractor shall further cooperate with other contractors in respect of any facilities required by them e.g. making holes in shuttering for pipes, electric conduits, fan hooks etc. However, nothing extra shall be admissible to him for such reasonable assistance and facilities afforded to other contractors and the contractor shall be deemed to have taken factor into consideration while quoting his rates.
- 1.3 The work shall be related to the drawings which the contractor is presumed to have studied. All the engineering construction drawings as required for construction shall be prepared by the Contractor and submitted to the employer for approval. Nothing extra will be paid for preparation of construction drawing and any item because of its shape, location or other difficult circumstances, even if the schedule makes no distinction as long as the item is shown in the drawing.
- 1.4 The source of materials stated in the specifications are those from which materials are generally available. However, materials not conforming to the specifications shall be rejected even if they come from the stated sources. The contractor should satisfy himself that sufficient quantity of material of acceptable specification is available from the stated or other sources.



Where terms "Resident Engineer/Employer ", "Representative", "Contractor", "Works" etc. are used, they shall have the meaning defined in the Conditions of Contract or defined in the subsequent specification.

1.5 "Owner" shall mean,

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1.6 The requirements of specifications for the materials shall be fulfilled by the Contractor without extra charge including transportation or any other taxes involved that is the item rates quoted shall be deemed to have taken these into account.

2. GENERAL OFFICIAL ACCESSORIES

2.1 OFFICE ACCOMMODATION

The contractor shall provide at his own expense adequate temporary accommodation and toilet facilities for his worker as well as working office space for his staffs and Employer/ Engineer on duty for construction supervision and keep the same in good order. This may be done to suit site conditions with the approval of the Employer / Engineer. The above mentioned temporary structures shall be removed on the completion of works at contractors own cost.

2.2 BOARDS

A board of size of 1.5m x 1.0m shall be made and put at an approved place on the site. This board shall be painted in approved color with names of (a) The proposed construction and owner (b) The Contractor (c) The Engineer/Employer and (d) any other specialist consultant, as directed by the Employer/ Engineer. This shall be provided by the Employer/Engineer.

2.3 DRAWING, INSTRUCTION, MEASUREMENTS

All the work shall be done according to the drawings and instructions of the Employer/ Engineer and the Contractor shall arrange to test materials and/ or portions of the works at his own cost in order to prove their soundness and sufficiency. If after any such test and in the opinion of the Employer/ Engineer any work or portion of work is found to be defective or unsound, the Contractor shall pull down and re-execute the same at his own cost. Defective materials shall be removed from the site.



2.4 PREPARING AND CLEARING THE SITE

The site described and shown on the plans shall be cleared of all obstructions, loose stones and materials, rubbish of all kinds as well as brush-wood. All holes or hollows whether originally existing or produced shall be well rammed and leveled off as directed.

2.5 TREES

No trees shall be cut without prior permission. If any trees have to be cut, this shall form an extra item. For the purpose of the specification a tree shall be defined as growth whose circumference of the trunk at 300mm from the base is not less than 900 mm.

2.6 MEASURING MATERIALS

Materials requiring measuring shall be measured separately in boxes of appropriate sizes before being mixed. They should be calibrated and marked with red if necessary in presence of the Employer/Engineer.

2.7 TEMPORARY PROTECTION

All trenches, walls, newly laid concrete or other work requiring protection from weather or accidental injury shall be protected by means of tarpaulin or in any other way so as to keep the work safe. Nothing extra shall be paid for this matter.

2.8 QUALITY OF WORK

Materials, tools and plants and workmanship shall be the best of several kinds obtainable in the market and as approved by the Employer/ Engineer.

2.9 LEAVE CLEAN

On completion, all works must be cleaned, rubbish removed and the works and land cleaned of surplus materials, debris and other accumulations and everything left in clean and orderly condition.

2.10 SAMPLES

Samples of each class of work required shall be submitted by the Contractor for the approval of the Employer/ Engineer and after such approval these samples shall be deposited at a place chosen by the Employer/ Engineer. The Contractor will be required to perform all works under the contract in accordance with these approved samples.

2.11 PROVISIONAL ITEMS



All provisional items in the schedule shall be carried out at the discretion of the Employer/Engineer, and may or may not form part of the contract. In case, the provisional items are carried out by the Contractor the rates shall be settled as for extra items as stated in the conditions of contract.

2.12 STORAGE

Safe, dry and proper storage shall be provided for all materials, particularly for cement. The capacity of the cement storage shall be equal to one-fourth of the total quantity to be used but may not exceed 200 tones at the site of work.

2.13 CONTRACTOR'S LABORATORY

The Contractor shall provide a laboratory with equipment at his own cost within 25 days after signing the "Form of Agreement" then maintain till the Contract period for carrying out the tests therein under the supervision of the Employer/ Engineer to be removed on completion of the work. The laboratory shall be at least 20 meter square housed in a weatherproof building designated and used exclusively for the purpose of testing. The laboratory shall be maintained in a clean, tidy and orderly fashion to the satisfaction of the Employer/ Engineer. The Contractor's laboratory shall have the following equipment in working condition, labor and materials required for tests.

Universal testing machine 100 tons with compression and tension	...	1 set.
Standard I.S. Sieves for testing sand and aggregates upto 40mm.	...	2 set.
Weighing balance upto 10 kg.	...	1 set.
Field balance minimum 5 gm.	...	1 set.
Weighing scale minimum 1 gm.	...	1 set.
Glass measuring flask 1/2 liter and 1 liter	...	4 sets.
Oven for sand drying	...	1 set.
Slump cone	...	1 set.
Cube molds metal for one casting	...	6 nos.
Water tank for curing of concrete cubes, work		



benches, tables, etc. to the satisfaction of
the Employer/ Engineer ... 36 sets.

Alternately, if the Contractor is unable to provide the laboratory, the testing of construction materials shall be done in another laboratory with prior approval of the employer.

2.14 SURVEYING EQUIPMENT

The Contractor should supply following surveying instrument if necessary and required for above for checking of contractor's work to the Employer/ Engineer.

- a) Theodolite (least count 10") - 1 set.
- b) Level (Dumpy level) - 1 set.
- c) Measuring tape (Tazima Standard) - 2 sets.
- d) Necessary staff and other equipments.

The Contractor shall maintain the equipment in a serviceable condition and immediately corrected or replaced if it is found to be inaccurate. The contractor must perform the concrete cube casting and testing in presence of Employer/ Engineer and as directed by him. All casting of testing cubes should be carried out at actual site condition and should be cured according to the main casted slab or beams. The Contractor shall perform tests on materials and concrete cubes as specified as presence of the Employer/ Engineer and as directed by him and shall submit to the Employer/ Engineer two copies of the results of each test, such results being entered on forms as approved by the Employer/ Engineer. The third copy of the result of each test shall be retained in the Contractor's Laboratory. Without relieving the Contractor any of his responsibilities for the testing of materials the Employer/ Engineer may, as and when desired, carry out any of the tests, using the facilities provided by the Contractor, for this work.

3. MATERIALS

3.1 GENERAL

The materials supplied and used in the works shall comply with the requirements of these Specifications. They shall be new, except as may be provided elsewhere in the Contract or permitted by the Employer/ Engineer in writing. The materials shall be manufactured, handled and used in a workmanlike manner to ensure completed work in accordance with the Contract. Where an Indian Standard is specified, the latest version of the standard quoted shall be considered to apply.



3.2 SOURCES

The source of materials should be selected and notified to the Employer/ Engineer and approved by him. The use of any one kind or class of material from more than one source is prohibited, except by written permission of the Employer/ Engineer. Such permission, if granted, will set forth the conditions under which the change may be made. The source or kind of materials shall not be changed at any time without written permission of the Employer/ Engineer. If the product from any source proves unacceptable at any time, the Contractor shall make such arrangements as may be necessary to assure acceptable material, either by alterations in plant operations or by a change of source. Claims for increased costs which may be occasioned by such alterations or changes will not be given consideration, unless the source of the unacceptable material was designated in the Contract as a source of material.

When any manufactured product, either new or used, is furnished by the owner, the location at which such material will be delivered to the Contractor will be designated in the contract. In such cases the contractor shall haul the materials from the designated delivery point to point of use, and compensation for such hauling will be considered to be included in the Contract unit price for placing the materials in the finished work.

3.3 INSPECTION AND ACCEPTANCE OF MATERIALS

Final inspection and acceptance of materials will be made only at the site of the work. The Employer/ Engineer reserves the right to sample, inspect and test materials throughout the duration of the work, and to reject any materials which are found to be unsatisfactory at the time of use.

A preliminary inspection of materials may be made at the source for the convenience of the Contractor, but the presence of Employer/ Engineer at the source shall not relieve the Contractor of the responsibility of furnishing materials which comply with these specifications. The Employer/ Engineer shall have free entry at all times to those parts of any plant which concern the manufacture or production of the materials ordered.

3.4 SAMPLES AND TESTS

The Contractor shall submit sample of all materials for the approval of the Employer/ Engineer prior to commencement of work. The Contractor shall give immediate notification of the placing of orders for shipment of materials to permit testing. He shall furnish without charge all samples required and he shall afford such facilities as the Employer/ Engineer requires for collecting and forwarding such samples.

The Contractor shall not make use of or incorporate into the work the materials represented by the samples until the tests have been made and the materials are found to comply with the requirements of the specifications, except that any materials which have



a satisfactory record of compliance with the Specifications may, at the discretion of the Employer/ Engineer, be used until the tests are completed. If the material fails to pass the tests, no further use thereof shall be made until the Contractor has taken steps satisfactory to the Employer/ Engineer to correct the deficiencies.

When required by the Employer/ Engineer preliminary samples of the character and quantity prescribed shall be submitted by the Contractor or producer for examination and shall be tested in accordance with the methods referred to in this Specification. The acceptance of a preliminary sample, however, shall not be construed as acceptance of materials from the same source delivered later. Only the materials actually delivered for the work will be considered, and their acceptance or rejection will be based on the results of the tests and inspections prescribed in these Specifications.

3.5 DEFECTIVE MATERIALS

All materials which do not conform to the requirements of the Contract will be rejected whether in place or not. They shall be removed immediately or taken away from the site immediately there after. No rejected material, the defects of which have been subsequently corrected, shall be used in the work unless approval in writing has been given by the Employer/ Engineer. Upon failure of the Contractor to comply promptly with any order of the Employer/ Engineer given under this Clause, the Employer/ Engineer shall have authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any monies due to the Contractor.

3.6 TRADE NAMES AND ALTERNATIVES

For convenience in designation in the Contract, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and his catalogue information. The use of an alternative article or material which is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:

- a) The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor and he shall furnish all information as required by the Employer/ Engineer. The Employer/ Engineer shall be the sole judge as to the quality and suitability of all alternative articles or materials and his decision shall be final.
- b) Whenever the specifications permit the substitution of a similar or equivalent material or article, no tests or action relating to the approval of such substitute material will be made until the request for substitution is made in writing by the Contractor accompanied by complete data as to the quality of the material or article proposed. Such request shall be made in ample time to permit approval without delaying the work.



3.7 FOREIGN MATERIALS

Materials which are manufactured, produced or fabricated outside Nepal shall be delivered to a distribution point in Nepal, unless otherwise required in these specifications or the special provisions, where they shall be retained for a sufficient period of time to permit inspection, sampling, and testing. The Contractor shall not be entitled to an extension of time for acts or events occurring outside Nepal and it shall be the Contractor's responsibility to deliver materials obtained from outside Nepal to the point of entry into Nepal in sufficient time to permit timely delivery to the job site. The Contractor shall provide the facilities and arrange for any testing required at his own cost. All testing by the Contractor shall be subject to witnessing by the Employer/Engineer. The manufacturer, producer or fabricator of foreign material shall furnish to the Employer/Engineer a "Certificate of Compliance" with the specifications where required. In addition, certified mill test reports clearly identifiable to the lot of material shall be furnished where required in these specifications or otherwise requested by the Employer/Engineer. Where structural materials requiring mill test reports are obtained from foreign manufacturers, such materials shall be furnished only from those foreign manufacturers who have previously established, to the satisfaction of the Employer/Engineer, the sufficiency of their in-plant quality control, as deemed necessary by the Employer/Engineer, to give satisfactory assurance of their ability to furnish material uniformly and consistently in conformance with these specifications. At the option of the Employer/Engineer, such sufficiency shall be established whether by submission of detailed written proof thereof or through in-plant inspection by the Employer/Engineer.

3.8 CONTRACT DOCUMENTS

The Contractor is bound to execute and realize the Project works covered under these contract documents.

These contract documents to cover the said work shall along with that is normally understood therein comprise of

- a) These Tender Documents.
- b) All Tender and Working Drawings issued by the owner prepared by this Employer/Engineer.
- c) All site instructions made in the site order book or log book by the Employer/Engineer .
- d) All instructions given to the contractor by the Employer/Engineer be in the form of sketches, directions along with requests for additional data, shop drawings, measurements details etc. from the contractor related of this work.



- e) All shop drawings and samples approved by the Employer/ Engineer.
- f) All manufacturer's specifications, data brochures information etc. approved by the Employer/ Engineer.
- g) All aspects of work checked and approved by the Employer/ Engineer either on, or off, the project site.
- h) All samples and guidelines that the Employer/ Engineer shall instruct the Contractor to follow. In particular covering all works where the contractor shall follow the existing designs, decoration, methods of construction, finishes proportions, elevations etc. of the existing building.

4. EXCAVATION OF EARTH FOR FOUNDATION AND OTHERS

4.1 LAYOUT AND SITE CLEARANCE

Laying and setting out of buildings, boundary wall, pipe lines and septic tank and soak pit including site clearance by removal of grass, shrubs etc. maximum depth of excavation and filling 0.30 m. including dressing and leveling.

The Contractor is required to accurately lay out each structure and other facilities as per the instructions and guidance of the the Employer/Engineer and his representative at site. For this the Contractor has to establish points for foundations of the structures as shown in the drawings by establishing reference points fairly permanent to enable regular confirmations by the Employer/Engineer for their accuracy. Ground levels have to be established near to each structure as well for common height control of the structures as per the specific instructions of the Employer/ Engineer.

The site described in plan shall be cleared of all grass, shrubs etc. The maximum depth of excavation or filling shall be 0.3 m. The surplus excavated material shall be disposed within a lead of 200 m as directed.

No payment shall be made separately for site clearance. The unit price of layout and site clearance shall be incorporated in the unit bid price of earthwork in excavation and filling.

4.2 EARTH WORK

Earthwork in excavation in trenches, raft foundation etc. in soil including dressing of sides, ramming of bottom, lift upto 2.0m. stacking of excavated materials at least 2 m clear from the edge of excavation and then returning the stacked soil in 0.15m layer when required in plinth, under floors, sides of foundations, laying and depositing the



layer by watering and ramming and then disposing of all surplus excavated soil as directed within a lead of 200 m.

4.2.1 EXCAVATIONS

The foundation rafts etc. shall be excavated to the dimensions shown on the drawings and to depth, at which in the opinion of the Employer/ Engineer stratum of good hard soil is observed.

The excavation shall be carefully carried out to the levels, shapes and dimensions as shown in the drawings or as directed by the Employer/ Engineer to receive the concrete work. Should any of the excavation be taken down below the specified levels, the Contractor shall fill in such excavation at his own expense with concrete well rammed in position until it is brought upto the proper levels. Filling in with excavated materials will not be allowed for this purpose. No extra charge will be given for the lift of the excavated materials upto 2.0m. The excavated earth shall be stacked at least 4m from the edge of foundation. The Contractor, at his own cost, shall dispose off all surplus excavated soil as directed by the Employer/ Engineer within a lead of 200m.

If foundations are made broader or longer than directed, the extra length and breadth shall be filled in after the foundations are built with earth rammed hard, by the Contractor at his own cost. The Contractor shall at his own expense and without extra charge, make provision for all extra excavation in slope, pumping, dredging or bailing out water and these trenches shall be kept free from water while the foundation work is in progress. The Contractor shall also at his own cost remove such portions of boulders or rocks, as are required to make the bottom of the trench horizontal and level. Nothing extra shall be admissible for pumping and/or bailing out water unless otherwise taken separately in the Bill of Quantities.

The trenches, rafts shall be inspected by the Employer/ Engineer before the concrete is laid therein, when the trench level shall be recorded. The filling in of side of trench excavations can be done in not more than 0.15m layers. Each layer shall be well watered and rammed hard before adding the next layer. Such fillings shall be brought upto the ground level with out extra charge and shall form part of the item of excavation.

4.2.2 TIMBERING OF TRENCHES FOR FOUNDATION AND OTHER WORK

When foundations are to be taken deep, the sides of the trenches shall be protected by erecting timber shoring and strutting. Timbering shall be close or open depending on the nature of the soil and work. The arrangement of timbering, sizes and spacing of members shall be as directed by the Employer/ Engineer. Nothing extra on this account shall be admissible unless otherwise taken separately in the Bill of Quantities.

4.2.3 TRIMMING AND LEVELING



The bottom of all foundation should be trimmed and leveled in accordance with the drawings.

4.2.4 DISPOSAL

Disposal of the surplus earth shall be done within the site as directed by the Employer/ Engineer. Nothing extra shall be paid for such disposal within the lead of 200m. The earth excavated shall be used for filling and terracing.

4.2.5 MEASUREMENT

Measurement shall be the product of the exact length and width of the lowest step of the footings according to the drawing or the Employer/ Engineer's instructions and the depth measured vertically. Where the ground is not level, average depth shall be taken. Rate shall be inclusive of all the works described above.

Note: Rate analysis shall be submitted at the time of submission along with bill of quantities.

4.3 PLINTH FILLING/BACK FILLING

Filling in plinth with materials brought from outside in 0.15 m layers under floors including watering, ramming consolidation and dressing complete.

- a) Sand
- b) Earth
- c) Random rubble filling

The earth for filling shall be brought from within the site within a lead of 300 m, to be approved by the Employer/Engineer, prior to filling. If the earth from within the site be of unsuitable quality, earth shall be brought from outside the site. The sand shall be either a pit sand or river sand as approved.

The work shall be done with earth/sand in 0.15 m layers, each layer being well watered and rammed thoroughly.

4.3.1 MEASUREMENT

The measurement shall be taken for the consolidated thickness of earth/sand and paid in cubic meter. Pit or stack measurement shall not be done for payment. Quantity of earth fill under this item shall be calculated as the sum total of earth filling required in trenches around foundations, over raft, under floors or any other filling less the total quantity involved in foundation excavation. It shall include excavation of earth/sand, transportation, screening if necessary, filling and the cost of labor etc. all complete.



5. CONCRETE WORK

5.1 Plain Cement Concrete (P.C.C.) WORKS

Providing and laying plain cement concrete excluding cost of formwork complete as required

- i) PCC 1:3:6 (1 cement: 3 sand: 6 stone aggregate)
- ii) PCC 1:2:4 (1 cement: 2 sand: 4 stone aggregate)

5.1.1 MATERIALS

Cement, sand and stone aggregate shall conform to the specifications as under plain Cement Concrete work for RCC works.

5.1.2 MIXING

All proportions shall be by volume except cement which shall be proportioned by weight and as specified. Mixing shall be done in a mechanical mixer as per specifications of reinforced cement concrete work. However, in special cases, hand mixing may be allowed by the Employer/ Engineer when the following procedure shall be adopted. The several materials shall be accurately gauged in boxes and thoroughly mixed on a water tight platform of adequate size, being turned over at least thrice till the color is uniform and then twice wet. Water shall be added gradually and not more than necessary or specified by Employer/ Engineer that much concrete shall be mixed which can be used within half an hour. Each stack shall however be not larger than consuming one bag of cement. All such stacks shall be placed distinct from each other.

5.1.3 LAYING

Concrete shall be laid in horizontal layers of not more than 0.15 m thick and gently rammed.

5.1.4 CURING

After laying, the concrete shall be kept wet for seven days constantly by ponding. If cast in hot weather, it shall be covered with gunny bags which shall be kept constantly wet. Other work on concrete shall not start until 3 days after laying of concrete. Concrete curing shall be done strictly for seven days. Any failure of keeping the concrete work in constant wet condition, the work will be done by Employer/ Engineer and cost of above work shall be deducted from Contractor's bill.

5.1.5 MEASUREMENT



Measurement shall be in cubic metre of exact length, breadth and depth. This shall be exclusive of any form work required to complete the item. Rate shall include all materials and labour.

Note: Rate analysis shall be submitted at the time of submission along with Bill of quantities.

6. Reinforced Cement Concrete (RCC) GENERAL

Providing and laying PCC for RCC work with stone aggregate 20 mm and down gauge well graded excluding the cost of formwork and the cost of the reinforcement

- i) M 15
- ii) M 20

6.1 MATERIALS

The materials used in the works shall be of the qualities and kinds specified. Materials delivered to the works shall be equal to the approved samples which shall be deposited with the Employer/ Engineer at least 30 days before it is required for use in work. The quantity of all necessary materials should be checked by the Employer/ Engineer for any casting. Delivery shall be made sufficiently in advance of constructional requirements to enable further samples to be selected and tested if so desired by the Employer/ Engineer. No material shall be used in the works until approved. Materials failing to comply with the approved samples and specification shall be immediately removed from the works at the Contractor's Cost.

6.1.1 WATER

Water used in mixing concrete shall be free from injurious amounts of oils, acids, alkalis, organic materials or other deleterious substances. It should be clean as drinking water.

6.1.2 CEMENT

The cement shall be ordinary Portland cement of approved brand and manufacture and shall comply in all respects with the I.S. 269-1967 for ordinary Portland Cement. It shall be delivered on the site in packages with an unbroken seal fixed by the manufacturer and plainly marked with the name of brand and the manufacture. It shall be stored in a dry place, in regular piles not exceeding six bags high and in such a manner that it will be efficiently protected from moisture and contamination, and that the consignments can be used up in the order in which they are received. Set cement shall be immediately removed from the work and replaced by the Contractor at his own expense. If desired, tests shall be made by taking samples of cement from stores or elsewhere from the works. The selection of samples and procedure for testing shall comply with appropriate I.S. specification.



6.1.3 AGGREGATE

All aggregates shall conform to I.S. 383 - 1970. Aggregate shall, where possible, be derived from a source that normally produces aggregate satisfactory for concrete, and if requested by the Employer/ Engineer, the Contractor shall supply evidence to this effect. If instructed to do so, the contractor shall supply samples of the aggregate for the purpose of making preliminary concrete test cubes as herein-after specified.

Aggregate shall consist of naturally occurring sand and gravel or stone crushed or uncrushed, or a combination thereof. They shall be hard, strong, dense, durable, clean and free from veins and adherent coating. As far as possible, flaky and elongated pieces should be avoided.

Aggregate shall not contain any harmful materials, such as iron pyrites, coal, mica, shale or similar laminated materials, clay, alkali, soft fragments, organic impurities etc. in such quantity as to affect the strength or durability of the concrete or in addition to the above for reinforced concrete, any material which attack the reinforcement. Aggregate which are chemically reactive with the alkalis of cement are harmful, as cracking of concrete may take place. These aggregate shall be protected from spilling oils, mobiles, diesels over it on site.

6.1.4 FINE AGGREGATES (SAND)

The fine aggregate shall be natural sand or sand derived by crushing suitable gravel or stone and shall be free from coagulated lumps. Sand derived from a stone unsuitable for coarse aggregate shall not be used as the fine aggregate.

The fine aggregate shall conform to the requirements of I.S. 383 - 1970. Fine aggregate shall not contain more than 3% of material removable by decantation test, nor more than 1% dry lumps. The total of coal, clay lumps, shale, soft fragments and other deleterious substance shall not be more than 5%.

The percentage of clay lumps shall be determined by examining the various fractions that remain after the material has been tested for grading. Any particles that can be broken with fingers shall be classified as clay lumps and the total percentage of clay lumps shall be determined on the basis of the total original weight of the sample. The fine aggregate shall be well graded from fine to coarse and shall meet the following gradation requirements:

Table - 1 GRADATION FOR FINE AGGREGATE

Sieve designation Percentage by weight passing



Sieve Designation	10mm	No.4	No.16	No.30	No.50	No.100
Fine Aggregate	100	95-100	45-80	25-55	10-30	2-10

Blending will be permitted in order to meet the gradation requirements for the fine aggregate.

6.1.5 COARSE AGGREGATE

The coarse aggregate shall be crushed stone aggregate. The pieces of aggregates shall be angular. Friable, flaky and laminated pieces, mica, shale shall only be present in such quantities as not to affect adversely the strength and durability of the concrete as ascertained by tests on concrete cubes. After twenty four hours immersion in water, a previous dried sample shall not have gained in weight more than 5% and not more than 10% if it is to be used in plain concrete or elsewhere as described. The coarse aggregate shall conform to the requirements of I.S. 383 - 1970. The percentage of wear at 500 revolutions of Los Angeles Rattler Test shall not be more than 50%. The coarse aggregate shall meet the gradation of Table-2. Moreover it should conform previous specification on coarse aggregate.

Table - 2 GRADATION FOR COARSE AGGREGATE.

Percentage by weight passing

Sieve Designation	50mm	40mm	25mm	20mm	10mm	No.4	No.8
40mm & down	100	90-100	20-25	0-15	0-5		
20mm & down			100	90-100	20-25	0-10	0-5

All R.C.C. work shall be carried out in strict accordance with this specification, I.S. Specifications and the working drawings. Any discrepancies in the dimensions on the drawings or any points not clear to the Contractor shall be brought to the notice of the Employer/ Engineer or clarified in advance before proceeding with the work.

The Contractor shall allow for all wastage in all materials. He shall also allow for all tests of concrete materials and if required produce manufacturer's certificate for cement and steel unless issued by the Owner.

- 1) All form work should be get checked for leveling and dimensions as well as all necessary supporting spouts from the Employer/ Engineer.
- 2) Only after getting the formwork checked, reinforcement should be placed properly as according to the drawing and detailing.
- 3) The date and time of any casting of concrete should be informed to the Engineer/Employer's 2 days in advance.



No concrete work shall be cast in the absence of the Employer/ Engineer. The Contractor shall personally check that both the formwork and reinforcement have been correctly placed and fixed and satisfy himself that all work preparatory to casting is completely ready, before requesting the Employer/ Engineer for final inspection and approval.

6.1.6 ADMIXTURES

The use of admixtures to improve the workability is allowed only if there is proved evidence that neither the strength nor the other requisite qualities of concrete and/or steel accessories grout, etc. are impaired by their use. The use of admixtures containing calcium chloride, fluorides, nitrates and sulphates is prohibited. The decision of the Employer/ Engineer on all matters relating to the use of admixtures shall be final.

Admixtures shall be stored in suitable waterproof building. Any material which has deteriorated or which has been contaminated whether during transit to the site, at the site or otherwise, shall not be used in the work and shall be immediately removed from the site and replaced at the expense of the contractor.

6.1.7 MIX DESIGN

Concrete mixes for various specified design strengths shall be worked out by the Contractor. The mix proportions shall be selected to ensure that the workability of the fresh concrete is suitable for the conditions of handling and placing, so that after compaction it surrounds all reinforcement or tendons and ducts and completely fills the formwork. When the concrete is hardened its quality shall be such as to comply with the strength, durability and other requirements taking into account the conditions to which it will be exposed.

Any standard method of mix design may be used. For determining the "required average strength" the specified minimum shall be taken as one in ten. Unless the Contractor can prove from his past experience that he is capable of achieving a high degree of control a "FAIR" control should be assumed in the initial mix design. Before arriving at the average strength values due regard shall be given to the criteria acceptance of site concrete.

The mixes designed by the Contractor shall be used on works only after obtaining a written approval of the Employer/ Engineer. It is to be understood that the mix design shall be entirely the responsibility of the Contractor and such approval by the Employer/ Engineer shall not relieve him of his responsibility in respect thereof. Sand shall be of an approved quality, clean, sharp and free from injurious amount of dust, mica, shells, soft and flaky particles, shale, alkali, organic matter, loam or other deleterious substances. The sand shall be taken from a source approved by the Employer/Engineer and if



required by him it shall be thoroughly washed, screened and graded by the contractor at no extra cost and to the satisfaction of the Employer/ Engineer.

The whole of the ingredients of the coarse aggregate shall consist of hard stones and shall contain no soft or elongated pieces. If it is considered necessary, the Employer/ Engineer may instruct it to be washed, screened and graded at no extra cost.

6.1.8 MEASUREMENT AND PROPORTIONING OF CONCRETE MATERIALS

The aggregate shall be measured by volume in a gauge box of correct and approved size based on the weight of the material or by other approved accurate means. The gauge box or other container shall be filled with the aggregate without compacting to a predetermined uniform depth, accurate allowance being made for bulking due to moisture content of the fine aggregate, if required on site.

The cement shall be measured by weight, one or more complete bags containing 50 kgs. being used for a single batch of concrete and as the size of the mixer shall permit this to be done. One weighing machine shall be placed in standby condition on casting day and if the Employer/ Engineer feels that any concrete bag contains less than 50 kg, he can measure the weight of it and will direct the Contractor to fulfill necessary weight of cement from contractor's side.

The normal proportions of cement and aggregate shall comply with the quantities specified below for the concrete described for each part of the work. The specified quantities shall be altered if instructed after examination of the aggregate materials in samples or in bulk in order to obtain the dense concrete with approved materials. Any such alterations within the range of 1 part of fine aggregate to $1\frac{1}{2}$ parts of coarse aggregate and 1 part of fine aggregate to $2\frac{1}{2}$ parts of coarse aggregate shall be made without any alteration in the charge made by the Contractor.

6.2 PROPERTIES OF CONCRETE

The minimum cement content of the mixture shall be as below in specified in clause no 6.2.1

6.2.1 CONCRETE PROPORTIONS

The minimum cement content of mixture shall be as below:

Grade	Minimum cement content in Kg/cu.m.
M 15	300



M 20

400

6.2.2 WATER CEMENT (W/C) RATIO

In general, w/c ratio of the concrete mix shall be kept minimum during casting. Generally one bag of cement concrete mix shall use 35.6 litres of water or as necessary. As moisture content of fine and coarse aggregate varies, for workability of concrete mix, the Employer/ Engineer may vary the water quantity and once the water quantity to be placed for one bag of cement concrete mix, is fixed by the Employer/ Engineer, the Contractor shall follow it strictly. As information to the Contractor, the Employer/ Engineer will depute one checking supervisor to the mixing batch, the quantity of water used shall be varied to suit the moisture content of the aggregate, and shall be just sufficient to produce a dense concrete, consistent with practical workability.

6.2.3 CONCRETE GRADE AND STRENGTH

The compressive strength (cube strength) for Portland cement concrete shall be in accordance with I.S. 456-2000.

Grade	Preliminary Test at 7 days	Work Test at 28 days
M 15	100 Kg/cm ²	155 Kg/cm ²
M20	135 Kg/cm ²	205 Kg/cm ²

6.2.4 CONTROL OF CONCRETE

(i) Preliminary Tests

The Contractor shall be called upon to submit representative samples of materials to be used for concrete in order that they may be tested at a laboratory and the suitability of materials established. All expenses in connection with the above materials, tests shall be done by the Contractor.

(ii) Works Cube Tests

During the progress of the work, 15 cm cubes shall be made as per I.S. 456-2000 as necessary and tested in accordance with I.S. 516-1959.

6.2.5 MEASUREMENT OF CONSISTENCY

The consistency shall be determined by making trial mixtures with dried aggregate. The consistency of the trial mixture of approved consistency shall be measured as instructed.

The slump of approved trial mixture shall be measured and this slump shall not be exceeded throughout all batches of concrete made from the same materials mixed in the



same proportions as the trial mixtures and used in these parts of the works as instructed. In no case, the slump shall exceed 50mm. for concrete in slabs, or exceed 25 mm. for consolidated by mechanical vibration. The slump test shall be made on concrete actually being placed in the works at the commencement of each grade of concrete placing and such other times as instructed.

The apparatus used for the slump test shall be standard cone. When cone is filled, it shall be raised vertically clear of the concrete and the measurement of the slump shall be measured. Care shall be taken to prevent vibration of the sample being tested. If the Employer/ Engineer requires the use of other means for testing the consistency of the concrete it shall be done as instructed without any extra charge. For this standard I.S. Method shall be followed.

6.2.6 CONCRETE MIXING

The cement and aggregates shall be thoroughly mixed together in the specified proportions by volume or weight in a batch type mechanical mixer, unless another type of mixer is approved. The water shall be admitted to drum of the mixer only when all the cement and aggregates constituting one batch be in the drum. The concrete shall be mixed until the mixer is of uniform color and in no case for less than one minute. If the drum rotates at lower speeds, the minimum period shall be increased inversely proportional to that speed. The period of mixing shall be measured from time when all the materials and water are in the drum. The entire contents of the drum shall be discharged before materials for the succeeding batch are fed into the drum. Materials spilled from the skip or other container shall not be used. No partly set or frozen concrete shall be used in the work. Partly set concrete shall not be remixed with the cement or aggregate of the next batch.

6.2.7 DISTRIBUTION OF CONCRETE

The concrete shall be distributed from the mixers to the position of placing in the works by approved means that do not cause segregation or otherwise impair the quality of the concrete. While transporting concrete over slabs and over beams by any suitable means, the contractor shall conform that the tied bar i.e. upper bar and lower bar shall not get distorted or displaced from its original place.

6.2.8 PREPARATIONS FOR PLACING CONCRETE

Before the concrete is placed, the shuttering shall be tied - up and any water accumulated therein shall be removed. All saw dust, chips, nails, and other debris shall be washed out or otherwise removed from within the formwork. The reinforcement shall then be inspected for accuracy of fixing. Immediately before placing the concrete, the formwork shall, except in frosty weather, be well wetted and inspection opening closed.



6.2.9 PLACING CONCRETE

The interval between adding the water to the dry mix and completion of the concrete placing operation shall not exceed 20 minutes nor, when an approved admixture that accelerates the initial setting of the cement be used, exceed ten minutes or as directed by the Employer/ Engineer.

Except where otherwise approved for slabs and large sections concrete shall be placed in the formwork by shovels or other approved implements and shall not be dropped from height more than 1.5 m nor handled in a manner to cause segregation. Accumulations of hardened concrete dropping on the reinforcement shall be avoided. Concrete shall be sorted along the formwork to that position.

Each layer of concrete while being placed shall be compacted by approved methods of ramming or mechanical vibrations to form a dense surface free from honey combing and tolerably free from water marks and air holes or other blemishes. The concrete shall be tamped against the face of the formwork so as to produce dense fair surface. The number and type of mechanical vibrations shall be approved before compacting by vibration. Placing and compaction of concrete shall be done in such a manner as not to disturb concrete already placed, and reinforcement projecting from concrete already placed shall not be vibrated or jarred. For concreting reinforced concrete walls and other structures having least lateral dimensions of 13mm. or under, each layer of concrete while being placed shall be properly compacted by approved methods of mechanical vibrations produced by internal or external mechanical vibration.

The laying of concrete over slabs should be uniform thick of required thickness after vibration. This can be conformed by dipping wooden pegs of required length. The level of all slabs should be in level unless otherwise specified and directed by the Employer/ Engineer. If required, the Employer/ Engineer will check the thickness and give order to the contractor to fill up the newly vibrated slab concrete surface. Any slab thickness after construction, if found less thickness than specified, the contractor will be responsible for above job.

Any water accumulating on the surface of the newly placed concrete shall be removed by approved means and no further concrete shall be placed thereon until such water is removed. No fresh concrete shall be brought into contact with the concrete containing cement of different type. Unless otherwise approved or instructed, concrete shall be placed in a single operation to the full depth of slabs, beams, and members similar thereto and shall be placed in horizontal layers not exceeding 0.50m deep in walls, columns until completion of the part of the work between construction joints as specified hereafter or of a part of approved extent. At the completion of a specified or approved part of a construction, joints of the form and in the position herein after specified shall be made. If a temporary cessation of concrete placing be unavoidable elsewhere, a construction joint shall likewise be made.



6.3 PLACING CONCRETE IN EXTREME WEATHER

Work shall be done according to clause 20.1.6 of I.S. 456- 2000.

6.4 VIBRATION

6.4.1 APPEARANCE

The concrete that is to be compacted by vibration should appear anything from earth dry to slightly glistening. The mix should have the appearance of lacking in fines.

6.4.2 VIBRATORS

The contractor must use vibrator on beams and slabs to compact the newly laid concrete. Generally two types of vibrator shall be used.

a) **NEEDLE OR IMMERSION TYPE OF VIBRATOR**

Casting fall beams and columns shall be compacted by means of needle type of vibrator. 4" dia needle type vibrator shall be used over beam section more than 350mm x 400mm and rest of section need only 2" dia needle type vibrator.

b) **FLAT BOTTOM VIBRATOR FOR SLABS**

The contractor shall require flat bottom type of vibrator to compact all concrete over slabs. No immersion type of vibrator will be allowed to compact the concrete over slab.

Moreover, the contractor shall require at least two number of vibrator for one casting and other should kept in standby position. In case vibrator got damaged or not in working condition during casting, the vibrator shall be immediately replaced. If the contractor shall fail to replace another vibrator during casting, no further casting of concrete will be permitted. The contractor shall in that case, immediately remove the remaining concrete mix from the site of work.

6.4.3 PLACING

Segregation is likely to take place when the concrete is tipped into the form work and this should be avoided. The concrete mix should not contain surplus water and sand which will develop segregation under influence of vibratory compaction. The distribution of new concrete should be uniform over the whole section and the surface kept horizontal all the time thus ensuring the movement of concrete is downward only. Vibrators shall not be used as a spreading or distributing agent.

The vibrators shall be of rotary out of balance immersion type or the electro-magnetic type and operate at a frequency of not less than 4,000 cycles per minute. The vibration



shall be of such a power - input as to produce an acceleration of 1 to 3 m/sec in the mass of the compacted concrete. The vibrators shall be provided for continuous operation.

6.4.4 DISPOSITION OF VIBRATORS

Internal vibrators shall be disposed within the mix, when placed, so as to maintain the whole of the concrete under treatment in an adequate state of agitation such that de-aeration and effective compaction may be attained at a rate commensurate with the supply of concrete from the mixers. Insertion of vibrators at about 450 mm centre to centre is considered sufficient.

6.4.5 PERIOD OF VIBRATION

Vibration shall continue during the whole period occupied by placing the concrete, the vibration being adjusted so that the centre of vibration approximates to centre of the mass being compacted at the time of placing. The concrete should not be over vibrated and the period of insertion of internal vibrator should be about 15 seconds at any point.

6.4.6 COMPACTNESS

The concrete shall be judged to be compacted when the mortar fills the spaces between the coarse aggregate so as to form a glistening and even surface except for slight irregularities where the coarse aggregate breaks this smooth surface. When this condition has been attained, the vibrators shall be withdrawn slowly.

The vibrator must not be placed against the steel or the formwork, the minimum distance being 8 mm. It must be placed in such a position that formwork, reinforcement and recently laid concrete are subjected to the minimum amount of vibration.

6.4.7 CONSTRUCTION JOINTS

Construction joints shall be made in the positions hereinafter specified or elsewhere as approved. Such joints shall be truly vertical or horizontal as the case may be, except that in an inclined or curved members the joint shall be strictly at right angles to the axis of the member.

Construction joints shall be made horizontally at the top of the foundations and horizontally 8 mm. below the lowest beam soffit at the head of columns. Concrete in the ribs and slabs of small tee, all beams shall be placed in one operation, but, for large beams concrete in the rib upto a level 2.5 mm. below the slab soffit shall be placed first. Concrete in haunches or splays on the beams or braces and concrete in the head of adjoining portion of the columns shall be placed at the same time as that in the beams or braces. Concrete in splays at the junction of walls and slabs shall be placed at the same time as that in the slab. Construction joints in the length of a beam shall be avoided



where practicable, but where joints are unavoidable they shall be made as previously approved by the Employer/ Engineer. Construction joints in slabs shall be made parallel to the main reinforcement, and where required at right angles to the main reinforcement, they shall be made at a place previously approved by the Employer/ Engineer.

Before placing new concrete against concrete already set, the face of the old concrete shall be cleaned and scum removed. The face shall be roughened and any loose aggregate removed there from. Immediately before placing the new concrete the face of the old concrete shall be thoroughly wetted and a coating of neat cement grout applied. The new concrete shall be well rammed against the prepared face before the grout sets. Construction joints will not be paid separately.

6.4.8 PROTECTION AND CURING OF CONCRETE

Immediately after placing or finishing, concrete surface not covered by forms shall be protected from loss of surface moisture for at least seven days when the average daily temperature is at least 21°C, where Portland cement has been used. Protection from loss of surface water shall be done by any of the following methods where applicable to the type of work involved:

- i) By water covering.
- ii) By covering of surfaces with water impervious paper.
- iii) By application of approved impervious membrane.

Surfaces from which forms have been removed before the curing period has elapsed shall be protected as specified for surfaces not covered by forms. Membrane curing shall not be used on surfaces required to receive additional concrete or concrete fill, nor on cement finish costs that are to receive dust proofing or hardening treatments, nor during hot weather.

Water curing shall be performed by keeping the concrete surface wet by ponding, by continuous spraying or by covering the surface with an approved water-saturated covering such as 2.5 mm. of sand or sawdust, or by one or more layers of burlap. The exposed concrete surfaces shall be saturated with water throughout the full stipulated curing period. Where forms remain in place during the curing period, they shall be kept sufficiently wetted with clean water to reduce cracks and to prevent joints from opening in the forms.

The impervious membrane curing compound shall be an approved non-bituminous, colourless, liquid sealing compound in atomized form so as to preserve the natural color of the concrete. The curing compound shall be applied as soon as surface water has disappeared from concrete surfaces with approved pressure spraying equipment in accordance with the manufacturer's directions and in sufficient thickness to form an effective water seal. No compounds shall be used which will adversely affect the subsequent installation of finished flooring.



Joints of sheet membrane used for curing shall be lapped at least 150mm and sealed with water proof tape as recommended by the manufacturer. Polyethylene sheet shall be considered the water-impervious paper for purposes of interpretation of this item. No liquid curing compound may be used without specific written approval of the Employer/Engineer regarding type, manufacturer, location and extent of use and application procedures.

6.4.9 FINISHES

The concrete surface shall in general be smooth finish. However, immediately after stripping form work, minor defects and honey combed areas shall be patched and holes filled before the concrete is thoroughly dry, patch areas shall be chipped away to 2.5 mm depth, with regular edges perpendicular to the surface. Area to be patched shall be thoroughly wet including the areas at least 150 mm. wide entirely surrounding them, just prior to placing the patching mortar. Mortar shall be of the same material and proportions as used for the concrete, without coarse aggregate. A sufficient quantity of white cement shall be substituted for part of the ordinary cement so that the patching mortar, when dry, will match the surrounding concrete. Water in the mix shall be kept to a minimum and mortar shall be retempered without adding water and shall be allowed to stand for one hour prior to use during which time it shall be mixed to prevent setting. The mortar shall be thoroughly compacted into place, screeded so as to leave the patch slightly higher than surrounding surfaces, left undisturbed for one to two hours to permit initial shrinkage and finished to match the adjoining work. Where patches exceed 2.5 mm. deep, they shall be trimmed and wet as specified, after which the opening shall be filled to within 2.5 mm. of the surface. After sufficient shrinkage time has elapsed, the patching shall proceed as described above.

Patches shall be kept wet for five days. Tie holes left by the withdrawal of rods, or holes left by removal of ends of ties shall be filled solidly with mortar. For holes passing entirely through the wall, plunger-type grease gun or other device to force mortar through the wall, starting at the back face, shall be used. When a hole is completely filled, excess mortar shall be struck off with a cloth flush with the surface. Holes not passing entirely through walls shall be filled solidly with mortar. Any excess mortar shall be struck off with a cloth on the wall surface. The surface of non-shuttered faces concrete work other than slabs shall be smoothed with a wooden float (or if approved with a steel trowel) to give a finish equal to that of the rubbed down shuttered faces. Concealed concrete faces shall be left as it is except that honeycombed surfaces shall be made good.

The top faces of slabs not intended to be surfaced shall be leveled and floated to a smooth finish at the levels or falls shown on the drawings or elsewhere.



The floating shall not be executed to the extent of bringing excess fine material to the surface. Ribbed surfaces of slabs shall where instructed be formed at the time of taming and leveling. Indentation in slab or stair surfaces shall be formed by approved implements giving the depth and patterns instructed. The top faces of slabs intended to be covered with screed, granolithic or similar surfacing shall be left with a spade finish.

The soffits of slabs and faces of walls intended to be rendered shall be roughened by approved means to form a key. Concrete surfaces to take finishes other than those specifically referred to herein shall be prepared in an approved manner to suit the finish as instructed.

6.4 TEST ON STRUCTURE

The Employer/ Engineer shall instruct that a loading test be made on the works or any part thereof if in his opinion such a test be deemed necessary for one or more of the following reasons:

- a) The site - made concrete test cubes failing to attain the specified strength.
- b) Over - loading during construction of the works or part thereof.
- c) The shuttering being prematurely removed.
- d) Concrete improperly cured.
- e) Any other circumstances attributable to alleged negligence on the part of the Contractor which in the opinion of the Employer/ Engineer may result in the works or part thereof being less than the expected strength.
- f) Any reason other than the foregoing.

The test shall be made at the contractor's own cost. If the test be instructed to be made for one or more of the reasons from (a) to (e) inclusive, and If the test be instructed to be made for the reason (f), the contractor shall make the test and shall be reimbursed for all cost relating thereof irrespective of the result of the test.

For the purpose of the load test on floors, roofs and similar structures and their supports, the test load shall be equivalent to 1 and 2/3 times the superimposed load for which the works or part thereof to be tested have been designed. The test load shall not be applied within 90 days (or 28 days if rapid hardening Portland cement be used) of the completing of placing of the concrete in the part of the works to be tested, and the latter shall not be supported during the test by shuttering or other nonpermanent support. Means shall be taken to ensure that in the event of a failure under the test temporary support of the loaded member shall be immediately available. The test shall proceed strictly as instructed. For the loading test on floors, roofs or similar structures the result shall be deemed satisfactory if upon removal of the test load the residual deflection does not exceed one - quarter of the maximum deflection after 24 hours loading. If the residual deflection exceeds this amount the test loading shall be repeated, and the result shall be deemed to be satisfactory if the residual deflection after removal of the second



test load does not exceed one-quarter of the maximum deflection occurring during the second test.

If the result of the loading test be not satisfactory, the Employer/ Engineer shall instruct that part of the works concerned shall be taken down or removed and reconstructed to comply with this specification, or that such other remedial measures shall be taken as to make the works secure. If the test be instructed to be made for one or more of the reasons (a) to (e) inclusive as herein before specified, the Contractor shall take down or remove and reconstruct the defective work or shall take the remedial measures instructed at his own cost.

6.5.1 MEASUREMENT

In calculating the contents of any R.C.C. member, for measurement proposes the dimensions adopted shall be structural concrete members exclusive of any finish,

6.5.1.1 RAFT SLABS AND BEAMS

It shall be measured in cu.m. of work done as per drawing. Measurement shall be done for the raft concrete below the column junction to the raft slab/beam. Nothing extra shall be paid for any odd size or shapes.

6.5.1.2 BEAMS

Measurement shall be between R.C.C. columns or resting on walls cubic metre of the work done as shown on the drawing. The depth shall be taken from the bottom of the stem to the top of the slab or projections if any. Lintels when connected to main RCC structure shall be measured as beams.

6.5.1.3 COLUMNS

These shall be measured in cu.m. of work done according to the drawings from top of the footing or raft slab to the top of slab in case of ground floor and from top of slab to the top of slab for all other floors. Unless specified otherwise nothing extra shall be admissible for any odd size and for any special section and shape of column i.e. square, rectangular, round, elliptical etc. and laid at any angle as may be shown on drawings.

6.5.1.4 SLABS

These shall be measured in cubic metre of the work done as per drawings. These shall be measured from beam to beam, wall to wall or beam to wall including bearing part on the wall. Unless otherwise specified in the schedule nothing extra shall be admissible for slabs laid to slope, canopy slabs or those of any shape or section any cantilevered part of



any projections small or big beyond the bearing beam or wall as may be shown on drawings or the slabs sunk for lavatory. Plaster shall be paid for separately.

6.5.1.5 WALLS

These shall be measured from end of slab/column/beam, termed wall. It shall be paid in cubic metre excluding the finish.

6.5.1.6 LINTELS

All lintels spanning over independent openings unrelated to main RCC structure shall be measured under lintels, in cubic metre of the work done according to drawing. Width of the lintels shall be taken according to wall thickness specified unless set back or projected from wall as shown on the drawing. Unless otherwise described or shown on the drawings, bearing over the openings shall be depth of the lintel or 150 mm which ever is higher.

6.5.1.7 STAIRS

These shall be measured in cu.m. of the concrete work done as per drawing. Unless specified otherwise nothing extra shall be admissible for steps laid in any shape or not straight in plan.

6.5.1.8 FOLDED STAIRCASE

The folded staircase shall be measured excluding the vertical main column. It shall be measured for step of any shape size and paid in cubic metre excluding the finish.

6.5.1.9 FINE AND LOUVERS

The RCC fine or louvers as provided shall be measured and paid cubic metre. Nothing extra shall be allowed due to its shape, location or size.

6.5.1.10 FACIA AND PARAPETS

These shall be measured in cu.m. of the concrete work down as per design, drawing, exclusive of finishing. For sills, all projection upto 100 mm beyond the wall on either side shall be made without any extra charge and these shall be inclusive of forming pattern of drip mould.

6.5.1.11 MULLIONS

The RCC mullions shall be measured in cubic metre. Nothing extra shall be admissible for its location, shape or size.



6.5.1.12 WATER TANK

These shall be measured in cu.m. of concrete work done for all the slab, walls etc. forming the water tank. Nothing extra shall be allowed for its shape, size and location. It shall be paid in cubic metre of the concrete work.

6.5.1.13 COLUMN FOOTINGS

These shall be measured in cu.m. of the concrete work done as per design, drawing. Unless specified otherwise, nothing extra shall be admissible for any particular shape of the footing.

7. REINFORCEMENT

7.1 INSTALLMENT OF REINFORCEMENT STEEL

Supplying and fixing tor steel reinforcement in RCC work including bending, binding with GI wire, placing in position including the cost of binding wire, as per drawing

Reinforcement shall be free from pitting due to corrosion, loose rust, mill scale, paint, oil, grease, adhering earth, or other materials that may impair the bond between the concrete and the reinforcement or that may in the opinion of the Employer/ Engineer cause corrosion of the reinforcement or disintegration of the concrete.

7.2 BAR REINFORCEMENT

Bar reinforcement described as "TOR steel" shall be hot rolled deformed bars or cold twisted steel bars. With respect to manufacture, quality, physical properties and related requirements, reinforcement of the fore-going descriptions shall comply with appropriate parts of IS Standards Nos. 432-1966, 1139-1966 and IS 1786-1966 for mild steel and tor steel respectively.

7.3 CERTIFICATES AND TESTS FOR REINFORCEMENT

For each consignment of bar reinforcement used in the works, the Contractor shall, if required, supply a certificate giving the ultimate strength, yield stress and elongation and the result of the cold bend test for each type and each size of bar. Tests for the purpose of obtaining the information shall conform to relevant I.S. specification.

The reinforcements supplied for which the Manufacturer's test sheets or other records are not available, or where in the opinion of the Employer/ Engineer has been subject to corrosion or other bad effects, the Employer/ Engineer shall select as many test pieces as he deems necessary, and the Contractor shall supply and deliver the test pieces free of cost without reimbursement and pay the cost of preparing and testing them as well. This test shall be performed in presence of the Employer/ Engineer.



7.4 DIMENSIONS OF REINFORCEMENT

The size of reinforcement bar described in the working drawings or elsewhere shall be the minimum and the rolling margin and other tolerances shall be wholly above this size. The length of a reinforcement bar shall not be less than the length on the drawing or elsewhere and shall not be more than 50 mm in excess of that length. Bar bending schedule shall be prepared by the Contractor and submitted for approval of the Employer/ Engineer. Such schedules shall be prepared based on reinforcement details, prior to the execution of the work. Nothing extra shall be paid for this.

7.5 BENDING REINFORCEMENT

Reinforcement bars shall be bent by approved means producing a gradual and even motion. Bars shall comply with the dimensions described in the drawings. Overall dimensions of bent or internal dimensions of bending or the like shall be within a tolerance of 30 mm. Any discrepancies or inaccuracies found by the Contractor in the drawings or other documents shall be immediately reported to the Employer/ Engineer whose interpretation and requirements relating there to shall be accepted. The internal radius of bends shall be not less than twice the size of the bars unless described to the contrary on the bending lists or elsewhere in the drawing. Hooks and other anchorage bends for tor steel shall be bent to an internal radius of the twice diameter of the bar. This internal radius of the bends of corners of binders or stirrups or links shall be half.

7.6 FIXING REINFORCEMENT

Reinforcement shall be accurately fixed and by approved means maintained in the position described in the drawings. Bars intended to be in contact shall be securely wired together at all such points with 16 gauge soft iron tying wire. Binders, stirrups and links shall tightly embrace the bars with which they are intended to be in contact and shall be securely wired or, if approved, spot welded thereof.

Reinforcement shall be lapped, joined or spliced only at the positions described. Splices and the like found to be necessary elsewhere shall be formed only if and as instructed. Lapping shall be provided as shown in the drawing and as permitted. Where practicable bars in each member shall be assembled and fixed in the form of a rigid cage or skeleton before placing in the moulds or formwork. For this, all lapping bar on beams and slabs shall be scattered i.e. as far as possible minimum number of laps shall be permitted in one section of slab and only one lap will be permitted at one section in case of beams. In case of columns the lapping of bar shall be permitted only at the centre zone of column.

7.7 LAPPING LENGTH

- a) In case of beams and slabs, lapping length shall be 57 dia. of designed bar.
- b) In case of columns the lapping length shall be 45 dia. of the designed bar.



Immediately before concreting, the reinforcement shall be checked for position, cleanliness, freedom from rust or retarding liquid. Means shall be taken to ensure that reinforcement remains correctly in position with required cover during the placing and compacting of the concrete.

Reinforcement projecting from work being concreted or already concreted shall not be bent out or its correct position for any reason unless approved and shall be protected from deformation or other damage. Reinforcement left projecting for bending with future extensions shall be thoroughly coated with cement grout wash or encased in concrete or other-wise protected from corrosion as instructed.

7.8 COVER OF CONCRETE AND SPACING OF BARS

Unless otherwise described, the clear cover of concrete to the reinforcement shall be as follows:

7.8.1 Horizontal, Vertical or Inclined Slabs

15 mm or the size of the bars whichever is greater.

7.8.2 Lintels

20 mm or the size of the bar whichever is greater.

7.8.3 Beams

25 mm or the size of the main bars whichever is greater. Binders and the like 15 mm minimum.

7.8.4 Columns

Cover for main bars for columns not exceeding 20 mm diameter shall be 25 mm and the main bars in columns exceeding 20 mm diameter shall be 40 mm or the size of the main bars whichever is greater, 15mm minimum for rectangular binders or links or helical binding.

7.9 CHAIRS AND SUPPORTS FOR REINFORCING BARS

Chairs of appropriate depth in suitable form shall be installed on all top bars in case of slab. The shape of chair shall be checked by the Employer/ Engineer. The spacing for slab top bar chairs will be such that during casting time, the reinforcement shall not get disturbed.

7.10 CONCRETE CHAIR BLOCK FOR BOTTOM BARS



All bottom bar in slabs shall be raised as accordance with cover for concrete by means of small concrete blocks tied with binding wires. These blocks shall be placed at sufficient intervals during casting time, to maintain the cover for reinforcement.

In case of beams, the bottom blocks as well as side reinforcement shall be provided with concrete chair blocks so that the reinforcement shall not get disturbed during casting.

7.11 MEASUREMENT

For the purpose of ascertaining payments due to the Contractor the basis of measurements of bar or wire reinforcement used in the works shall be the calculated weight in kg which shall be computed from the sizes and lengths of the bars or wires described on the working drawings or elsewhere. No allowance in the weight shall be made for cutting to waste, rolling margin, extra length, lapping of bars or other tolerances. Nothing extra, whatsoever shall be admissible on bars 12 mm and below, rolled by the Contractor directly from the market on actual weight basis. The Contractor is deemed to have taken this factor into consideration and quoted his rate accordingly in the tender. The Contractor's rate for unit weight of bar reinforcement shall be deemed to include all allowances omitted in calculating the weight and for any other tolerances, and for providing tying wire, spacer bars, chairs and cover blocks as specified hereinafter for carriage and handling, for bending hooking, cranking, and for fixing and maintaining in the correct position in the works. Standard laps of the lengths as shown in the drawing or as instructed at site shall be admissible. Standard hooks (9 times the dia. for each hook for tor steel) shall be added to the finished length to arrive at the length of the bar for cutting and measurement. No hooks are required for ribbed or tor steel.

8. FORMWORK

8.1 CENTERING AND SHUTTERING

Centering and shuttering of plywood and steel formwork in slabs, walls, beams etc. including propping, strutting etc. and removal of forms including applying form oil to shuttering.

8.2 DESIGN

Formwork shall be designed and constructed for removal so that the concrete can be properly placed and thoroughly compacted. Formwork shall be firmly supported and adequately strutted, braced, or tied. It shall be capable of adjustment to the lines and dimensions of the finished concrete and it shall be sufficiently strong to resist without distortion, the pressure of concrete during its placing and compaction, and other loads to which it may be subjected. It shall not be liable to suffer distortion under the influence of the weather. When concrete is to be vibrated, special care shall be taken to ensure that



the formwork will remain stable and the joints tight. The safety and adequacy of centering and shuttering shall be the sole responsibility of the Contractor. The Contractor shall if required supply to the Employer/ Engineer drawings and calculations for the formwork he proposes to use, for the concrete work.

8.3 MATERIAL FOR FORMWORK

All surface of the formwork shall be of plywood or steel plate which shall give uniform concrete surface after removal. No wooden planks or other means of form work shall be acceptable. For struts and props the Contractor shall use sal wood 75mm x 100mm props or Iron lifting type strut over form base i.e. it shall not get depressed at the time of loading or casting. Any strut, if found defective shall be replaced as directed by Employer/ Engineer.

8.4 DEFLECTION AND CAMBER

The Contractor shall make allowance for any settlement or deflection of the formwork that is likely to arise during Construction, so that the hardened concrete conforms accurately to the specified line and level. The Contractor shall also make allowance in the formwork for any camber specified by the Employer/ Engineer to allow for the elastic deflection of structural members and deflection due to creep of the concrete. In the absence of any specified camber, the soffit of all beams and slabs shall be given a camber equal to 1/240 of the span length to ensure that the structure has the prescribed shape after removal of the forms.

8.5 SUPPORTS

Formwork shall be constructed so that the formwork to the sides of members can be removed without disturbing the soffit formwork or its supports. Props and supports shall be designed to allow the formwork to be adjusted accurately to line and level and to be erected and removed in an approved sequence without damage to the concrete. Supports shall be carried out which is sufficiently strong to afford the necessary support without damage to any portion of the structure. This may mean in some cases that it be carried down to the foundations or other suitable base. Props and bracing shall be provided for the temporary support of composite construction where separately specified.

8.6 JOINTS AND EDGES

All joints in the formwork shall be close-fitting to prevent leakage of cement slurry from the concrete. At construction joints, formwork shall be tightly secured against previously cast or hardened concrete to prevent the formation of stepping or ridges in the concrete. Formwork shall be constructed to provide straight and true angles, arises or edges. Where cambers are shown on the Drawings, the fillets shall be accurately cut to size to



provide a smooth and continuous chamfer. Formwork panels shall have true edges to permit accurate alignment at sides and provide a clean line at construction joints in the concrete which shall be fixed with their joints either vertical or horizontal, unless otherwise specified.

8.7 SUNDRIES

Formwork shall be provided to the top surface of concrete where the slope or the nature of the work requires it. Provision shall be made for forming holes and chases for services and for building in pipes, conduits and other fixings, as shown on the drawings. The material and position of any ties passing through the concrete shall be as directed by the Employer/ Engineer. Except where corrosion of a metal tie is unimportant, it shall be possible to remove a tie so that no part of it remaining embedded in the concrete shall be nearer to the finished surface of the concrete than the specified thickness of cover to the reinforcement. Any holes left after the removal of ties shall be filled with concrete or mortar of approved mix.

8.8 CLEANING AND TREATMENT OF FORMWORK

Spaces to be occupied by concrete shall be free from all rubbish, chipping, shavings, sawdust, dirt and tying wire etc., before concrete is placed. The formwork to be in contact with the concrete shall be cleaned and treated with a suitable non-staining form oil or other approved material. Care shall be taken that oil or composition is kept away from contact with the reinforcement or with concrete at any construction joints. Surface retarding agents shall not be used except with the permission of the Employer/ Engineer. Formwork shall be thoroughly cleaned after each use. Damaged or distorted formwork shall not be used.

8.9 PAINTING ON FORMWORK

The concrete repellent painting on all contact surface of the formwork shall be of approved non bituminous colourless form oil so as to preserve the natural color of the concrete. The repellent compound shall be applied so as to effect quick removal of form work. It shall be applied as per the manufacture's direction. No compound shall be used which will adversely affect the concrete work or surface. No form repellent compound may be used without specific written approval of the Employer/ Engineer regarding type, manufactures, location and extent of use and application procedures.

8.10 REMOVAL OF FORMWORK

All formwork shall be removed without shock or vibration that might damage the concrete. Before the soffit and props are removed the surface of the concrete shall be



exposed where necessary in order to ensure that the concrete has hardened sufficiently. In no circumstances shall formwork be struck off until the concrete reaches cube strength of at least three times the stress to which the concrete may be subjected at the time of striking. The formwork to vertical surfaces such as walls, columns and sides of beams may be removed after 24 hours in normal weather conditions although care must be taken to avoid damage to the concrete, especially to arises and features. In cold weather a longer period may be necessary before striking. Suitable curing methods should immediately follow the removal of the formwork. The following minimum times shall elapse before removal of formwork:

The times given for the removal of props are based on the assumption that the total live load plus dead weight to be supported at the time of removal is not more than one half the total design load. For horizontal members where the loading is a higher proportion of the total design load these times may need to be increased.

8.11 MEASUREMENT

Measurement for payment shall be done of the area on which centering shuttering has been done. It shall include the application of the form oil and removal of the formwork as well.

9. BRICKWORK

9.1 BRICK MASONRY WORK

Chimney made brick work in foundation and plinths in cement mortar 1:4 (1 cement : 4sand)

9.1.1 BRICKS

The bricks shall be table molded with sand from good brick earth and shall be of uniform size, unless otherwise specified. They shall be uniform deep red, cherry or copper color, thoroughly well burnt without being vitrified, regular in shape and size, and shall have sharp and square sides and edges and parallel faces to ensure uniformity in the thickness of the courses of brick work. The bricks shall be free from cracks, chips, flaws stones or humps of any kind. They shall not show appreciable signs of efflorescence either dry or subsequent to soaking in water. The bricks shall be sound, hard, homogeneous in texture and produce a clear ringing sound when struck with a trowel. In no case, the minimum crushing strength of bricks shall be less than 1000 lbs/sq. inch. The bricks shall be provided with frogs. All bricks which absorb water more than one-sixth of their own dry weight after being soaked for one hour by immersion in water shall be rejected.

9.1.2 BRICK BATS



Brick bats shall be well burnt and shall be obtained only from the bricks specified under 9.1.1.above.

9.1.3 MORTARS

All brick work shall be laid with specified mortar of good workable consistency.

Cement mortar shall be prepared by mixing cement and sand in the specified proportions the mixing shall be done in a mechanical mixer or by hand mixing as directed by Employer/ Engineer. Water shall be added as required during mixing. Care shall be taken not to add more water than what is actually needed to bring the mortar to the consistency of a stiff paste. Only the quantity of mortar, which can be used within 2 hours of its mixing shall be prepared at a time. Mortar unused for more than 2 hours shall be rejected and removed from the site of work.

9.2 WORKMANSHIP

9.2.1 SOAKING OF BRICKS

All bricks required for masonry in cement mortars shall be thoroughly soaked in clean water for at least one hour in tanks of sufficient size immediately before use. The cessation of bubbles when the bricks are immersed in water is an indication of through soaking of bricks.

9.2.2 LAYING

- a) Bricks shall be laid in English bond, unless otherwise specified. Half or cut bricks shall not be used except where necessary to complete the bond. Closer in such cases shall be cut to the required size and used near the ends of the walls.
- b) The walls shall be taken up truly plumb. All courses shall be laid truly horizontal and all vertical joints shall be truly vertical. Vertical joints in alternate courses shall come directly one over the other. The thickness of brick courses shall be kept uniform and for this purpose straight edge with graduations showing the thickness of each brick course including joint shall be used. Bricks shall be laid with frogs upwards.
- c) The walls of a structure shall be carried up regularly and nearly at one level and no portion of the work shall be left more than 3 ft. below the rest of the work. Where this is not possible, the work shall be raked back according to bond (and not left toothed) at an angle not exceeding 45 degree.
- d) All iron fixtures, pipes, outlets of water, hold fasts of doors and windows, etc. which are required to be built in walls, shall be embedded in cement mortar or in cement concrete bed as specified, in their correct positions as the work proceeds. Nothing



extra shall be paid for such extra cement mortar or cement concrete to be used for embedding the fixtures of the nature stated above.

9.2.3 JOINTS

Bricks shall be so laid that joints are quite full of mortar. The thickness of the bed joints shall in no case exceed 10 mm unless otherwise specified. The face of joints shall be raked to a minimum depth of 10 mm by raking tool daily during the progress of work when the mortar is still green, so as to provide proper key for the plaster or pointing to be done. Where plastering or pointing is not required to be done, the joints shall be struck flush and finished at the time of laying. The face of brick work shall be cleaned daily and all mortar drippings removed.

9.2.4 BRICK-ON-EDGE COPING

The top course of all plinths, parapets, steps and tops of walls below R.C.C. slabs or beams shall be laid with brick on edge, unless otherwise specified. Proper care shall be taken that the bricks forming the top corners and ends of walls shall be properly radiated and keyed into position.

9.2.5 CURING

Green work shall be protected from rain by suitable covering. Brick masonry with cement mortar shall be kept constantly moist on all faces for a minimum period of 7(seven) days.

9.2.6 MEASUREMENTS

The measurements of work shall be the product of the length height and thickness. Deductions for doors, windows and other openings including lintels shall be made to arrive at the net quantity of work. Nothing shall be paid extra for forming such openings. However, no deductions shall be made for areas less than 0.1 sq.m. overall, bearing of lintels, beams, girders and holdfast blocks but nothing extra like formwork shall be paid for embedding these. Unless otherwise specified nothing extra shall be admissible for cutting in brickwork or brick to suit RCC structures, walls in any shape other than straight or any cutting necessary for shaping the walls to the structural design. Rate shall be inclusive of all necessary scaffolding, watering, cutting of bricks, curing, materials and labour.

9.3 BRICK WORK IN SUPERSTRUCTURE

Chimney made first class brick work in super structure in cement mortar 1:4 (1 cement: 4 sand)



All the works shall be done as per specification in clause. 9.1.

9.3.1 SCAFFOLDING

Double scaffolding having two sets of vertical supports shall be provided. The supports shall be sound and strong, tied together with horizontal pieces over which the scaffolding planks shall be fixed. In buildings upto two stories, single scaffolding shall be allowed. In this case, the inner end of the horizontal scaffolding pole shall rest in a hole provided in the header course only. Only one header for each pole shall be left out. The holes left in masonry work for supporting the scaffolding shall be filled and made good, before plastering. The contractor shall be responsible for providing and maintaining sufficiently strong scaffolding so as to withstand all loads likely to come upon it.

9.3.2 MEASUREMENT

It shall be done as specified in clause 9.1 inclusive of scaffolding.

9.4 BRICK WORK HALF BRICK THICKNESS

First class chimney made half brick masonry in cement mortar 1:4 (1 cement: 4 sand) with 4.75 mm. diameter torkari steel reinforcement placed horizontally at every fourth course. It shall be laid in stretcher course as for brickwork specification. Horizontal reinforcement of 5 mm. diameter with proper anchorage to adjoining wall/walls shall be provided at every fourth course.

9.4.1 MORTAR

Mortar shall be 1:4 (1 cement: 4 sand) mixed as per specification of clause 9.1.3

9.4.2 MEASUREMENT

Measurement shall be done in square metre of the wall inclusive of the reinforcement. Deduction shall be made as for brickwork stated in clause 9.2.6.

9.5 BRICK ON EDGE SOLING

For that brick soling, the brick shall be Chimney made and will be laid as directed by the Employer/ Engineer.

The brick shall conform to as per clause 9.1.1. The base on which is to be laid on edge shall be leveled or sloped as required and compacted properly. The bricks shall be laid on edge true to line, slope and pattern as required. The line, level etc. shall be checked by pegging. The brick shall be closely packed to each other as far as practical and the gaps shall be filled with sand for compaction. The workmanship shall be to the approval of the Employer/ Engineer.



9.5.1 MEASUREMENT

The measurement shall be the net area of length and breadth of the work done and the rate shall be for all the material and labour.

10.1 STONE WORK

10.1.1 STONE WORK IN FOUNDATION AND IN SUPERSTRUCTURE

All stone work shall be made with random rubble stone from the best quarry and built in 1:4 cement mortar (1 cement : 4 sand) The stones must be approved by the Employer/Engineer before using in the construction work.

The stone shall be hard, tough sound and durable. No stone shall be less than 6" and more than 18". Face stone should be comparatively larger and uniform in size and colour to with a good appearance. Breadth of face stone should be greater than height. All the stones shall be wetted thoroughly before laying.

The joints should not be thicker than 3/4". Face joint should be thinner. No pointing shall be allowed afterwards. In the corners, the stones should be chiselled at both sides and also on the top of the stone walls where the wall is ending and such surfaces being built up. Not more than 2 feet height of masonry shall be constructed at one time.

10.1.2 MEASUREMENT

The measurement of work shall be the product of length, height and thickness. All the thickness of stone shall be measured and will be as per drawing.

11 FLOORING

11.1 CEMENT SCRREDDING/PUNNING

Providing and laying 3mm neat cement punning on floor, with 18mm screed of specified ratio including wetting the surface, mixing, laying and rubbing with steel trowel to a hard smooth and shining surface and curing.

11.1.1 WORKMANSHIP

The base surface shall be properly watered and cleaned of dust and dirt. A screed of cement/sand in the specified ratio shall be laid over it. Upon which punning shall be done. Before applying cement sand punning, the first coat should be swept clean of any dust or loose particles. The average thickness of punning shall not be less than 3mm. The pattern of the surface should be as per instruction of the Employer/ Engineer. The coat shall be finished by rubbing with a steel trowel and any depression shall be filled in and rubbed to



a shining surface. All corners and edges shall be rounded. The Contractor shall prepare a sample square metre of the punning as per instruction of the Employer/ Engineer until the quality, texture and finish required is obtained and approved by the Employer/ Engineer, after which all punning executed, shall conform with the respective approved sample. All punning shall be finished smooth, even and truly level and as per instructions of the Employer/ Engineer. The punning shall be kept wet for 7 days.

11.3.2 MEASUREMENT

The measurement shall be taken in square metre for the finished surface. The rate shall include all the materials and labour.

12. FINISHING:

12.1 PLASTERING WORKS

12.1.1 CEMENT SAND PLASTERING ON WALLS IN CEMENT SAND (C/S) MORTAR (1:4)

12.1.1.1 SCAFFOLDING

For plastering work on walls, unless otherwise specified, double scaffolding having two sets of vertical supports shall be provided. The Contractor shall be responsible for providing and maintaining sufficiently strong scaffolding so as to withstand all loads likely to come upon it.

12.1.1.2 MORTAR

The type of mortar mix to be used shall be as specified in the description of the item.

12.1.1.3 WORKMANSHIP

All joints in the masonry shall be raked out properly to a minimum depth of 1/2". Dust and mortar shall be brushed out. The surface shall then be thoroughly washed with water, cleaned and kept wet before plastering is commenced. The thickness of the plaster shall be as specified. The plaster may be applied in 1, 2 or 3 coats as specified or as directed by the Employer/ Engineer, but no single coat shall exceed 1/2" thickness.

Ceiling plaster shall be completed before the commencement of wall plaster. All wall plaster shall be started from the top and work down towards floor.

Gauges of plaster 6" x 6" shall be first applied horizontally and vertically, at not more than 6 ft. intervals over the entire surface to serve as guides for plastering and to ensure even thickness and a true surface. The surfaces of these gauged areas shall be truly in the plane of the finished plaster surface. The surface shall be finally given the type of finish as specified in the description of the item or as directed by the Employer/ Engineer. All



corners, arises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arises, junctions etc. where required shall be done without any extra payment.

In suspending work at the end of the day, the plaster shall be left, cut clean to line both horizontally and vertically. The work shall be closed on the body of wall and not nearer than 6" to any corners on arises. When recommencing, the edge of the old work shall be scraped clean and wetted before plaster is applied to the adjacent areas.

Curing shall be started 24 hours after finishing the plaster. The plaster shall be kept wet for a minimum period of 7 days. The dates of plaster shall be legibly marked on the various sections of the wall so that curing for the specified period thereafter can be watched. Any cracks which appear in the surface and all portions, which sound hollow when tapped or are found to be soft or otherwise defective, shall be cut out in rectangular shape and redone as directed by the Employer/Engineer.

12.1.1.4 MEASUREMENT

It shall be done in square metre of the surface over which the plaster has been done. The thickness of the plaster shall not be taken into account except for independent columns where the measurement shall be of finished surface allowing 12mm over the designed dimensions. Opening shall be deducted in full, and jambs and soffits shall be allowed. Openings less than 1 sq.m shall not be deducted and nothing extra shall be paid for finishing jambs, soffits and the sides of such openings. Unless otherwise specified, nothing extra shall be allowed for plaster on independent columns and beams, short with or on curved surface.

12.1.2 CEMENT SAND PLASTERING ON CEILING IN CEMENT SAND (C/S) MORTAR (1:4)

12.1.2.1 SCAFFOLDING

Stage scaffolding independent of the walls shall be provided for all ceiling plaster.

12.1.2.2 MORTAR

The mix of mortar to be used shall be as specified in the description of the item.

12.1.2.3 WORKMANSHIP

Projecting burns of mortar formed due to the gaps at joints in shuttering shall be removed. The surface shall be scrubbed clean with wire brushes. In addition, concrete surfaces shall be pack marked with a pointed tool at spacing of not more than 2" centres to ensure proper key for the plaster. The surface shall then be cleaned of all oil, grease, etc. and well wetted before the plaster is applied. The thickness of the ceiling plaster shall be 1/4" to 1/2" unless otherwise specified. The plaster may be applied in one or two coats as specified.



Ceiling plaster shall commence only after the slab above has been finished and the centering removed. In the case of ceiling of roof slabs, plaster shall commence only after the terrace work has been completed. Gauges of plaster 6" x 6" shall be first applied at not more than 5ft. intervals in both directions to serve as guides for the plastering and to ensure even thickness and a true surface. The surfaces of these gauged areas shall be truly in the plane of the finished plaster surface.

The surface shall be finally given a smooth finish, unless otherwise specified, when the work is in progress all horizontal lines and surfaces shall be frequently tested for their accuracy. Curing shall be started 24 hours after finishing the plaster and shall be continued for a minimum period of 7 days. The dates of plaster shall be marked so that curing for the specified period thereafter can be watched.

Any cracks which appear in the surface and all portions, which sound hollow when tapped or are found to be soft or otherwise defective, shall be cut out in rectangular shape and remedied as directed by the Employer/ Engineer.

12.1.2.4 MEASUREMENT

Measurement shall be done in square metre of the surface over which the plaster has been done. The rate shall include materials and labour etc.

B. SPECIFICATION FOR PLUMBING AND SANITARY WORK

1. WATER SUPPLY

This section covers the basic requirements for water supply, general requirement of plumbing connection to water supply to water systems.

All pipe work shall be so laid or fixed and maintained as to be and to remain watertight thereby avoiding waste of water, damage to property and the risk of contamination of water conveyed.

Underground piping shall be laid at such a depth that it is unlikely to be damaged by frost of traffic loads and vibrations. Special precautions shall be taken to avoid damage to the piping by corrosion, water hammering. No bend shall be made abrupt to avoid friction loss.

1.1 LAYING OF MAINS AND PIPES



The mains and pipes on site shall be laid in accordance with good standard practice. The work shall cover all materials required for such pipes and fittings. The work shall include line marking, level marking, excavation and laying filling with excavated materials, jointing of pipes, groove cutting, fixing with couplings, T-bend etc. complete with testing and ready for operation.

1.2 MATERIALS

The pipes shall be galvanized mild steel seamless screwed and socket tubes conforming to the requirements of at least IS: 1239-1938 and of at least commercial grade of INDIAN TATA tubes of medium grade or as approved by the Employer/ Engineer. All fittings for pipe shall be galvanized mild steel. All pipes shall be tested before use in laying. In general, the pipe diameter shall be in the range of 1"-2" as specified in the Bill of Quantities. Stop-cock, valve etc. shall be of appropriate diameter and capacity made from gun metal of approved quality and make. Jointing of pipes shall be as per good practice and or as directed.

1.3 METHOD OF EXECUTION

The setting and arrangement of pipes and service net work shall be prepared by the Contractor and all detail drawing shall be prepared and produced for the approval of the Employer/ Engineer. All pipes shall be completely concealed from view unless and until the requirements and as approved by the Employer/ Engineer.

No bend or curve in any line shall be made as it shall diminish the water way or internal diameter of pipe. Water pipes are cut to size ends to be connected shall be threaded and screwed with sockets, joints of G.I. to make all of them completely water tight. All branching or bend shall be done with the help of T or U bends connected with couplings and sockets.

1.4 INSPECTING & TESTING

All pipe fittings and appliances shall be inspected by the Contractor and shall produce the manufactures guarantee of the products. Any defective items shall be clearly marked as rejected and forthwith removed from the site. The Contractor shall inform the Employer/ Engineer for the check before laying.

After laying and jointing, the main shall be slowly and carefully charged with water, so that all air is expelled from the main by providing with stop-cock, allowed to stand full of water for a few days, if time permits, and then tested under pressure. The test pressure shall be 5 kg/cm or double the maximum working pressure, whichever is greater. The test pump be manually operated or power driven. The testing shall be done joints opened.



The service pipe shall then be inspected under working conditions of pressure and low when all draw off taps are closed, the service pipe shall be absolutely watertight. Any control by the Employer/ Engineer shall not relieve the Contractor of his responsibility for the accuracy of the layout, fittings, or part of them with regards to their functions and quality.

2 DRAINAGE AND SANITARY

The Contractor shall carry out survey for the detail plan for the sanitary installation or drainage installation for approval to the Employer/ Engineer.

The Contractor shall ascertain the Employer/ Engineer about the approximate level of subsoil water and flood level in relation to the sewer system.

Any drainage system be designed and produced for approval to the Employer/ Engineer.

Where no method of disposal is possible, foul water may be collected and dispersed into subsoil, the general sub-soil water level and the sub-soil conditions shall be ascertained including the absorptive capacity of the soil.

If the sub-soil dispersed or soak pit system would be followed, the pit shall not be in the vicinity of water supply source at least by 50cm.

The efficient and adequate system shall be proposed by the Contractor for approval of the Employer/ Engineer.

2.1 DRAINAGE PIPE

2.1.1 SOIL PIPES

A soil pipe conveying to a drain any solid or liquid shall be circular and shall have a minimum diameter of 100mm. The soil pipes shall be situated outside the building and shall continued upwards without diminution of its diameter to such a height to open end a safe outlet for foul air ventilation.

2.1.2 WASTE PIPE

Every pipe in building carrying off the waste or over-flow water from every bath-wash basin, sink to a drain shall be of diameter as per Bill of Quantities or as directed by the Employer / Engineer and trapped by an efficient siphon trap with adequate for inspection and clearing. The waste shall be of cast iron fixed on by clamp as per requirements.



The exposed pipes and fittings shall be painted with two coats of black enamel anti-corrosive paint. The rate for such pipe shall be measured in running meter all inclusive of bend, joint, paint etc. all complete as per Bill of Quantity.

2.2 RAIN FALL AND RUN-OFF

Rain fall statistics for the area shall be studied by the Contractor. The rain-water run-off of the site area shall discharge directly or by means of a channel into or over an inlet to surface drain.

2.3 TESTING

All soil pipes, waste pipes, vent pipes, and all other pipes when above ground shall be approved by the Employer/ Engineer. Smoke test may be conducted under pressure or 25mm of water maintained for 15 minutes after all trap seals have been filled with water.

Any leakage will be visible and the defective part of work shall be made good by the contractor on his own cost.

3 SELECTION AND INSTALLATION OF SANITARY APPLIANCES

Selection, installation and maintenance of sanitary appliances shall be done in accordance with good practice.

All sanitary appliances and fittings shall be carefully examined for defects before they are installed and also in the completion of work. The Contractor shall give notice to the Employer/ Engineer from time to time prior to installation and execution of work at least 7 days before fitting after getting approval for the make of appliances.

3.1 SANITARY WORKS AND FIXTURES

The work shall cover providing and installing sanitary works and fixtures complete set with all necessary fitting, internal and external for fixing at positions of the building including cutting and making good the damaged groove to its original finish and ready for operation after testing.

3.2 MATERIALS

All sanitary fittings shall be of Commercial Perryware, Hindustan Neycer, or similar as approved by the Employer/ Engineer. Alternatively a schedule of other manufactured



fittings may be submitted for approval of the Employer/Engineer and these shall be indicated in detail along with the tender.

3.3 FITTINGS

3.3.1 WESTERN STANDARD TOILET WITH ELEVATED CISTERN AND COMPLETE SET

European standard commode with flushing and other complete set shall be used where necessary as per site requirement and as per directed by site engineer / supervisors. Colour shall be as approved by site engineer / supervisors.

3.3.1.a URINAL

Wall mounted urinal with manual flushing shall be provided in maximum of three toilet (one in Guard house and other as specified by site engineer).

3.3.2 WASH BASIN

The wash basin shall be of white vitreous China lavatory basin of size 560mm x 456mm with one or double tap as per direction, 32mm chrome plate waste pipe 1 meter chain stay and plug, pair of C.P. built in brackets, 32mm C.P. bottle trap, 'S' or 'P' trap, 12mm lead connecting .5m long with both end coupling joint.

3.3.3 KITCHEN SINK

Sink for kitchen shall be of 60 x 45 x 22 cm with drain board; stainless steel with 12mm C.P. bibcock, 45cm long lead connector, 32mm C.P. waste line shall be provided with 1m long lead waste pipe.

3.3.4 SOAP DISC

The soap disc shall be of white glazed porcelain or C.P. wall mounted as directed by the Employer/ Engineer.

3.3.9 GLASS SELF

The glass self shall be specified size with C.P. guard rail and bracket with C.P. sorews glass shall be 6mm thick with edge round off.

3.3.10 TOWEL RAIL

Towel rail shall be one arm, two or multiple arm fixed on fixed on wall and shall be C.P.

3.3.11 MIRROR



The mirror shall be of at least 6 mm thick silver backed, best quality as approved by the Employer/ Engineer. The mirror shall be with backlight frame.

The fixing and fitting of the sanitary wares and fixtures to the plate shall be in accordance with the good practice. The material used shall be as specified or as directed by the Employer/ Engineer.

3.4 SEPTIC TANK

The septic tank shall be of brick masonry in 1:4 cement mortar, the foundation and floor shall be of M15 concrete. Inside shall be finished with 12mm cement plaster 1:4 with 1:1 cement smooth punning or as per drawing.

Roof covering slabs and baffle wall shall be of R.C.C. of M20 with sufficient reinforcement. The length of connecting pipe shall depend on the location of septic tanks as per direction. The connecting pipe shall not be less than 10cm diameter of UPVC.

3.5 SOAK PIT

Soak pits shall be constructed with brick masonry in 1:4 cement sand mortar with honeycomb and filled with at least 7.5 cm size brick bats or as per drawing and as directed by the Employer/ Engineer.

The upper portion of the lining up to the inlet valve at least 45cm in height should be made with masonry in mortar cement 1:4 for strengthening, for preventing surface water to enter into the pit and to prevent rat throwing earth into the pit. The inlet pipe shall be fixed in the wall of the pit with mortar. The pit shall be covered with R.C. slab of M15 with necessary reinforcement. The absorption area of sock pit shall depend on the nature of soil type and underground water table. The Contractor shall propose the depth and soak area and location of tanks depending on the number or users, type and nature of soil water table.

3.6 MAN HOLE

The manhole shall be made as per requirement and direction. The manhole shall be made with brickwork in 1:4 cement mortar concrete base of M15, 12mm plaster with 1:4 cement smooth punning.

The cover shall be of heavy duty metallic and double sealed, complete with painting. The manhole frame bedded in cement mortar shall be given recessed for lifting hooks.



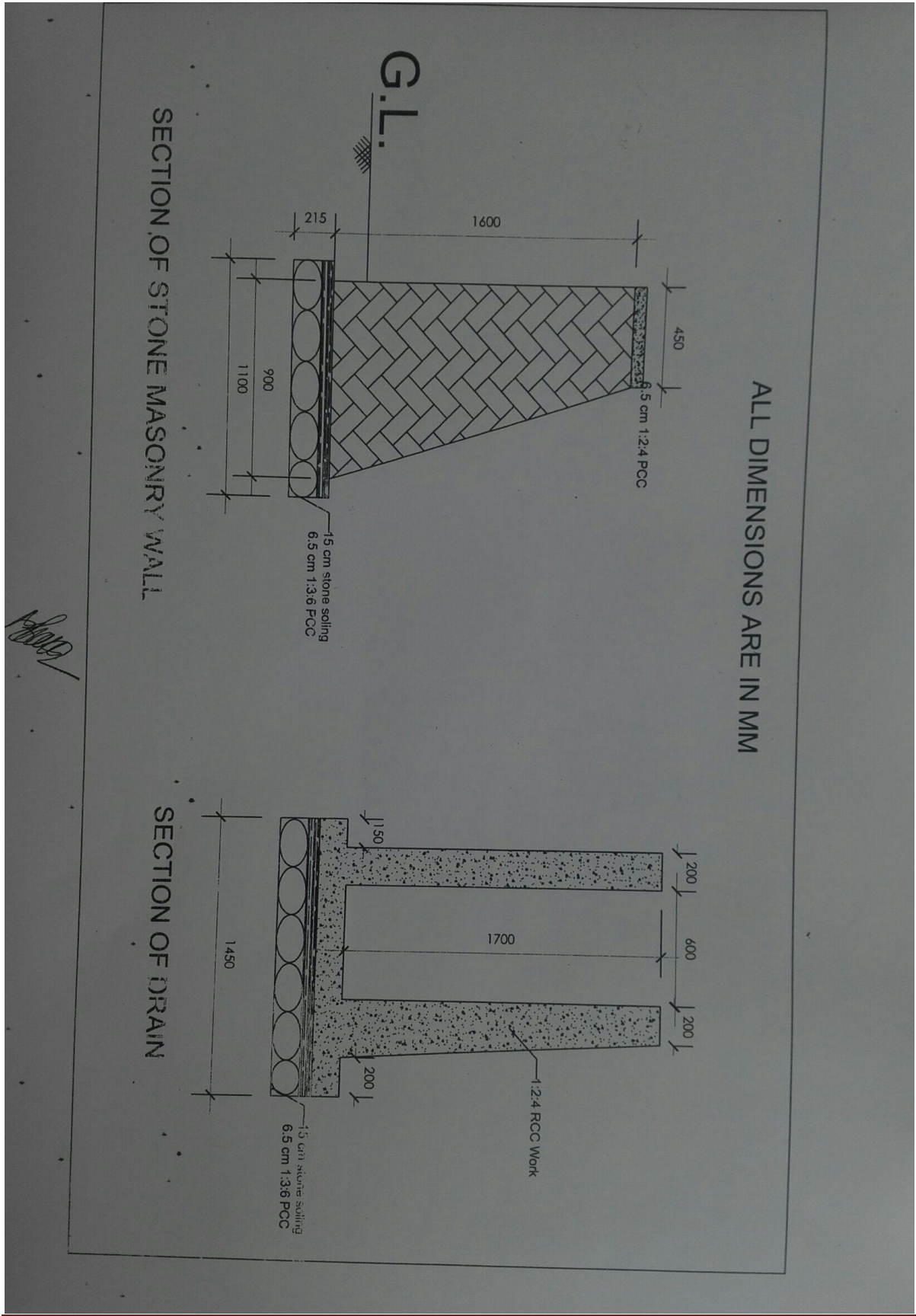
The above mention sanitary and drainage structures shall be as per drawing direction and approval of the Employer/ Engineer.

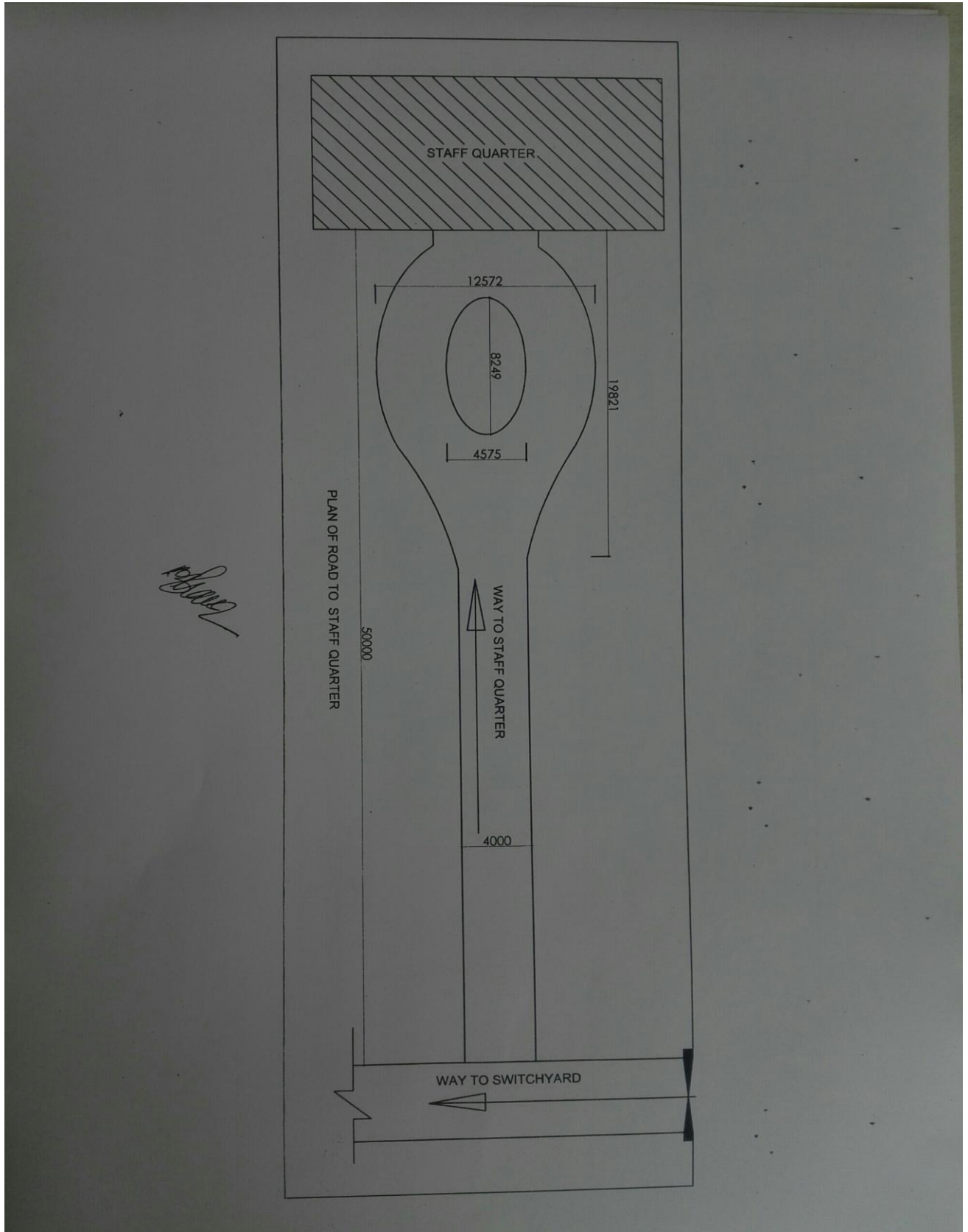
The pipes shall be measured in running meter correct to a as per Bill of Quantities for finished work inclusive of bend, tee etc. The overlaps of such pipes shall not be measured. The rate shall include all the necessary materials, labour, their fixing fittings, etc as per requirements, approval and as directed by the Employer/ Engineer. It shall contain all the performances regarding groove making, dismantling of R.C., masonry, fixing, concealing and remark with required materials to the standard specified in civil works and as per direction and approval of the Employer/ Engineer and also include labour workmanship, required fixtures with fittings all complete as directed.

4. MEASUREMENT AND PAYMENT

Measurement shall be taken in lot or job as mention in the BOQ. Payment shall be made for the job as described in BOQ the basis of unit bid price quoted in the BOQ. The rate shall be inclusive of supply of all the required material, accessories and labours for fitting work and all complete as per specification. The rate shall be inclusive of supply fitting fixing, labour etc. all complete.







Nepal Electricity Authority
Grid Development
132 kV Transmission Line Department
Kohalpur- Mahendranagar 132 kV Second circuit Transmission Line Project

Price Schedule

Tender No.:KM-NCB-074/75-01

Job : Road & Drain Maintenance Civil works at Pahalmanpur Substation,Kailali

Item No.	Description of Items	Unit	Quantity	Unit Rate (Rs.) (Exclusive of Tax)		Amount (Rs.)	Remarks
				In figure	In words		
1	Earthwork in excavation and ramming the surface as per specification as directed by site engineer	cum	323.00				
2	Dry stone soling work as per specification	cum	128.00				
3	Gabion work in 100mmx120mm hexagonal mesh size made of 10 gauge mesh wire and 8 gauge selvedge wire sone filling all complete	cum	31.50				
4	PCC 1:3:6 for floor, foundation a PCC work as per specification	cum	37.00				
5	PCC 1:2:4 for floor, foundation and super structure for RCC work as per specification	cum	110.00				
6	Form work for beams, slab in structure including, screening, fitting, oiling,dismantling, removing and transportation upto 30m	sqm	585.00				
7	Curtail,bent up, binding of MS bars according to the drawing for RCC and its transportation upto 30m	kg	6180.00				
8	Earth back filling work as per specification @ 40% of excavated material	cum	129.20				
9	Supplying and fitting of Geo-textile for bank protection under gabion walls as per standard specification	sqm	18.00				
10	Earth filling with compaction in 6" layer, watering etc. transporting from 10m distance	cum	132.00				



Nepal Electricity Authority
Grid Development
132 kV Transmission Line Department
Kohalpur- Mahendranagar 132 kV Second circuit Transmission Line Project

Price Schedule

Tender No.:KM-NCB-074/75-01

Job : Road & Drain Maintenance Civil works at Pahalmanpur Substation,Kailali

Item No.	Description of Items	Unit	Quantity	Unit Rate (Rs.) (Exclusive of Tax)		Amount (Rs.)	Remarks
				In figure	In words		
11	Gravel filling with compaction in 6" layer, watering etc. transporting from 10m distance	cum	102.00				
12	Brick work in 1:4 cem mortar in Ground wall using local made brick & including 30m transportation	cum	6.50				
13	Stone masonry 1:4 as per specification as directed by site engineer	cum	455.00				
				Total Amount (without VAT)			
				Add @ 13% for VAT			
				Grand total			

In words :-

Name of Bidder Name:

Signature of Bidder:



SECTION - VII
General Conditions of Contract



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General Conditions of Contract

A. General	
1. Definitions	<p>1.1 Boldface type is used to identify defined terms.</p> <ul style="list-style-type: none">(a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.(b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.(c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.2 hereunder.(d) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.(e) Compensation Events are those defined in GCC 42 hereunder.(f) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC 53.1.(g) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC 2.3 below.(h) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.(i) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.(j) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.(k) Days are calendar days; months are calendar-months.(l) Day works are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.(m) A Defect is any part of the Works not completed in accordance with the Contract.(n) The Defects Liability Certificate is the certificate issued by



	<p>Project Manager upon correction of defects by the Contractor.</p> <p>(o) The Defects Liability Period is the period calculated from the Completion Date where the Contractor remains responsible for remedying defects.</p> <p>(p) Drawings include calculations and other information provided or approved by the Project Manager for the execution of the Contract.</p> <p>(q) The Employer is the party who employs the Contractor to carry out the Works, as specified in the SCC.</p> <p>(r) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.</p> <p>(s) Force Majeure means an exceptional event or circumstance: which is beyond a Party's control; which such Party could not reasonably have provided against before entering into the Contract; which, having arisen, such Party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other Party.</p> <p>(t) The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.</p> <p>(u) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the SCC. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.</p> <p>(v) Letter of Acceptance means the formal acceptance by the Employer of the Bid and denotes the formation of the contract at the date of acceptance.</p> <p>(w) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.</p> <p>(x) Party means the Employer or the Contractor, as the context requires.</p> <p>(y) SCC means Special Conditions of Contract</p> <p>(z) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.</p> <p>(aa) The Project Manager is the person named in the SCC (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the</p>
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	<p>execution of the Works and administering the Contract.</p> <p>(bb) Retention Money means the aggregate of all monies retained by the Employer pursuant to GCC 46.1.</p> <p>(cc) The Site is the area defined as such in the SCC.</p> <p>(dd) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.</p>
	<p>(ee) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.</p> <p>(ff) The Start Date is given in the SCC. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.</p> <p>(gg) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.</p> <p>(hh) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.</p> <p>(ii) A Variation is an instruction given by the Project Manager which varies the Works.</p> <p>(jj) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the SCC.</p>
<p>2. Interpretation</p>	<p>2.1 In interpreting these GCC, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.</p> <p>2.2 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).</p> <p>2.3 The documents forming the Contract shall be interpreted in the following order of priority:</p>



	<p>(a) Contract Agreement, (b) Letter of Acceptance, (c) Contractor's Bid, (d) Special Conditions of Contract, (e) General Conditions of Contract, (f) Specifications, (g) Drawings, (h) Bill of Quantities (or Schedules of Prices for lump sum contracts), and (i) Any other document listed in the SCC as forming part of the Contract.</p>
3. Language and Law	3.1 The language of the Contract and the law governing the Contract are stated in the SCC.
1. Project Manager's Decisions	4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
2. Delegation	5.1 The Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
3. Communications	6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
4. Subcontracting	7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.
5. Other Contractors	8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the SCC. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification
6. Personnel and Equipment	9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid to carry out the Works, or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications



	<p>or characteristics are substantially equal to or better than those proposed in the Bid.</p> <p>9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.</p>
7. Employer's and Contractor's Risk	10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
11. Employer's Risks	<p>11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:</p> <p>(a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to</p> <p>(i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or</p> <p>(ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.</p> <p>(b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.</p> <p>11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to</p> <p>(a) a Defect which existed on the Completion Date,</p> <p>(b) an event occurring before the Completion Date, which was not itself an Employer's risk, or</p> <p>(c) the activities of the Contractor on the Site after the Completion Date.</p>
12. Contractor's Risks	12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.
13. Insurance	13.1 The Contractor shall provide insurance in the joint names of



	<p>the Employer and the Contractor from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the SCC for the following events which are due to the Contractor's risks:</p> <p>(a) loss of or damage to the Works, Plant, and Materials;</p> <p>(b) loss of or damage to Equipment;</p> <p>(c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and</p> <p>(d) Personal injury or death.</p>
	<p>13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the proportions of Nepalese Rupees required to rectify the loss or damage incurred.</p> <p>13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.</p> <p>13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.</p> <p>13.5 Both parties shall comply with any conditions of the insurance policies.</p>
14. Site Investigation Reports	14.1 The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC, supplemented by any information available to the Bidder.
15. Contractor to Construct the Works	15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
16. The Works to Be Completed within intended Completion Date	16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them within the intended Completion Date.
17. Design by contractor and Approval by the Project Manager	<p>17.1 The contractor shall be responsible for the design of permanent works as specified in SCC.</p> <p>17.2 Contractor shall be responsible for design of the Temporary Works. The Contractor shall submit Specifications and</p>



	<p>Drawings showing the proposed Temporary Works to the Project Manager, for his approval.</p> <p>17.3 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before their use.</p> <p>17.4 The Project Manager's approval shall not alter the Contractor's responsibility for design of temporary works.</p>
<p>18. Safety, Security and Protection of the Environment</p>	<p>18.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein:</p> <ol style="list-style-type: none"> a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons. b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. c. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. d. Ensure that any cut or fill slopes are planted in grass or other plant cover as soon as possible to protect them from erosion. e. Any spoil or material removed from drains shall be disposed off to designated stable tipping areas as directed by the Project Manager. f. Shall not use fuel wood as a means of heating during the processing or preparation of any materials forming part of the works. g. The Project Manager shall have the power to disallow any working practice or activity of the Contractor or direct that such practices or activities be modified should the Project Manager consider, on the advice of the relevant Government Departments, that the practices or activities will be harmful to wildlife. h. Provide on the Site such life saving apparatus as may be appropriate and an adequate and easily accessible first aid outfit or such outfits as may be required by any government ordinance, factory act, etc., subsequently published and amended from time to time.



<p>19. Discoveries</p>	<p>19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.</p>
<p>20. Possession of the Site</p>	<p>20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the SCC, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.</p>
<p>21. Access to the Site</p>	<p>21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.</p>
<p>22. Instructions, Inspections and Audits</p>	<p>22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.</p> <p>22.2 The Contractor shall permit the GoN/DP and/or persons appointed by the GoN/DP to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the GoN/DP if required by the GoN/DP. The Contractor's attention is drawn to Sub-Clause 58.2 which provides, inter alia, that acts intended to materially impede the exercise of the GoN's/DP's inspection and audit rights provided for under this Sub-Clause constitute a obstructive practice subject to contract termination.</p>
<p>23. Dispute Settlement</p>	<p>23.1 The Employer and the Contractor shall attempt to settle amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the Contract.</p> <p>23.2 Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be referred to Arbitration within 30 days after the expiration of amicable settlement period.</p>
<p>24. Appointment of the Adjudicator/ DRC Members</p>	<p>Deleted</p>
<p>25 Procedures for Disputes</p>	<p>In case of arbitration, the arbitration shall be conducted in accordance with the arbitration procedures published by the</p>



	Nepal Council of Arbitration (NEPCA) at the place given in the SCC.
B. Time Control	
26. Program	<p>26.1 Within the time stated in the SCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.</p> <p>26.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.</p> <p>26.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall Provide an updated Activity Schedule within 15 days of being instructed to by the Project Manager.</p> <p>26.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.</p>
27. Extension of the Intended Completion Date	<p>27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.</p> <p>27.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information at least 7 days prior to the intended completion date. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended</p>



	Completion Date.
28. Acceleration	<p>28.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.</p> <p>28.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.</p>
29. Delays Ordered by the Project Manager	29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.
30. Management Meetings	<p>30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.</p> <p>30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.</p>
31. Early Warning	<p>31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.</p> <p>31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.</p>
C. Quality Control	
32. Identifying Defects	32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such



	checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
33. Tests	33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.
34. Correction of Defects	34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected. 34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
35. Uncorrected Defects	35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.
D. Cost Control	
36. Contract Price	36.1 In the case of a Unit Rate contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item. 36.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.
37. Changes in the Contract Price	37.1 In the case of an Unit Rate contract: (a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 2 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.



	<p>(b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 10 percent, except with the prior approval of the Employer.</p> <p>(c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.</p> <p>37.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.</p>
<p>38. Variations</p>	<p>38.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.</p>
	<p>38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.</p> <p>38.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.</p> <p>38.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.</p> <p>38.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.</p> <p>38.6 In the case of an Unit Rate contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC 37.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with</p>



	<p>items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.</p>
39. Cash Flow Forecasts	<p>39.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.</p>
40. Payment Certificates	<p>40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.</p> <p>40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor within 30 days of submission by contractor.</p> <p>40.3 The value of work executed shall be determined by the Project Manager.</p> <p>40.4 The value of work executed shall comprise:</p> <p>(a) In the case of an Unit Rate contract, the value of the quantities of work in the Bill of Quantities that have been completed; or</p> <p>(b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.</p> <p>40.5 The value of work executed shall include the valuation of Variations and Compensation Events.</p> <p>40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.</p>
41. Payments	<p>41.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest as indicated in the SCC on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made.</p> <p>41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be</p>



	<p>calculated from the date upon which the increased amount would have been certified in the absence of dispute.</p> <p>41.3 Items of the Works for which no rate or price has been entered in BOQ shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.</p>
<p>42. Compensation Events</p>	<p>42.1 The following shall be Compensation Events:</p> <ul style="list-style-type: none"> (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC 20.1. (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract. (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time. (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects. (e) The Project Manager unreasonably does not approve a subcontract to be let. (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site. (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons. (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor. (i) The advance payment is delayed. (j) The effects on the Contractor of any of the Employer's Risks. (k) The Project Manager unreasonably delays issuing a Certificate of Completion. <ul style="list-style-type: none"> (l) Force majeure events as determined by the Project Manager. <p>42.2 If a Compensation Event would cause additional cost or</p>



	<p>would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.</p> <p>42.3 As soon as information demonstrating effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.</p> <p>42.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.</p>
<p>43. Tax</p>	<p>43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC 45.</p>
<p>44. Currency</p>	<p>44.1 The currency of Contracts shall be Nepalese Rupees.</p>
<p>45. Price Adjustment</p>	<p>45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the SCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due.</p> <p>45.2 Adjustment Formulate¹: "The adjustment to the Interim Payment Certificates in respect of changes in cost and legislation shall be determined from separate formulae for</p>

¹ For complex Works involving several types of construction work with different inputs, a family of Formulae will be necessary. The various items of Day work may also require different formulae, depending on the nature and source of the inputs



	<p>each of the types of construction work to be performed and Plant to be supplied. The formulae will be of the following general type:</p> $pn = A + b \frac{Ln}{Lo} + c \frac{Mn}{Mo} + d \frac{En}{Eo} + etc.$ <p>Where:</p> <p>pn is a price adjustment factor to be applied to the amount for the payment of the work carried out in the subject month, determined in accordance with Sub-Clause 41;</p> <p>A is a constant, specified in the Bidding Forms- Table of Price Adjustment data, representing the nonadjustable portion in contractual payments;²</p> <p>b, c, d, etc., coefficients representing the estimated proportion of each cost element (labor, materials, equipment usage, etc.) in the Works or sections thereof, net of Provisional Sums, as specified in the SCC;</p> <p>Ln, Mn, En, etc., are the current cost indices or reference prices of the cost elements for month “n,” determined pursuant to Sub-Clause 45.4, applicable to each cost element; and</p> <p>Lo, Mo, Eo, etc., are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 45.4</p>
	<p>45.3 Sources of Indices and Weightings: The sources of indices shall be those listed in the Bidding Forms- Table of Price Adjustment data, as approved by the Project Manager and stated in SCC. Indices shall be appropriate for their purpose and shall relate to the Contractor’s proposed source of supply of inputs on the basis of which his Contract shall have been computed. As the proposed basis for price adjustment, the Contractor shall have submitted with his bid the tabulation of Weightings and Source of Indices in the Bidding Forms, which shall be subject to approval by the Project Manager.</p> <p>45.4 Base, Current and Provisional Indices: The base cost indices or prices shall be those prevailing on the day 30 days prior to the latest date for submission of bids. Current indices or prices shall be those prevailing on the day 30 days prior to the last day of the period to which a particular Interim Payment Certificate is related. If at any time the current indices are not available, provisional indices as determined by the Project Manager will be used, subject</p>

² Insert a figure for factor A only where there is a part of the Contractors’ expenditures which will not be subject to fluctuation in cost or to compensate for the unreliability of some indices. A should normally be 0.15. The sum of A, b, c, d, etc., should be one.



	<p>to subsequent correction of the amounts paid to the Contractor when the current indices become available.</p> <p>45.5 Weightings: The weightings for each of the factors of cost given in the Bidding Forms shall be adjusted if, in the opinion of the Project Manager, they have been rendered unreasonable, unbalanced or inapplicable as a result of varied or additional work already executed or instructed under Clause 38 or for any other reason.</p> <p>45.6 Subsequent Legislation: If, after the date 30 days prior to the latest date for submission of bids for the Contract, there occur changes to any National Statute, Ordinance, Decree, or other Law or any regulation or by-law of any local or other duly constituted authority, or the introduction of any such Statute, Ordinance, Decree, Law, regulation or by-law which causes additional or reduced cost to the Contractor, other than under the preceding sub-clauses of this clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Project Manager and shall be added to or deducted from the Contract Price and the Project Manager shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same shall already have taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Sub-Clauses 45.2</p>
	<p>45.7 Where, price adjustment provision is not applicable pursuant to Sub-clause 45.1 then the Contract is subject to price adjustment only for construction material in accordance with this clause. If the prices of the construction materials stated in the contract is increased or decreased in an unexpected manner in excess of ten (10%) percent in comparison to the base price construction material stated in Section –IV, Bidding Forms-Table of Price Adjustment Data, then the price adjustment for the increase or decrease of price of the construction material beyond 10% shall be made by applying the following formulas:</p> <p>For unexpected increase in price</p> $P = [R_1 - (R_0 \times 1.10)] \times Q$ <p>For unexpected decrease in price P</p> $= [R_1 - (R_0 \times 0.90)] \times Q$ <p>Where:</p>



	<p>“P” is price adjustment amount</p> <p>“R₁” is the present price of the construction material (Source of indices shall be those listed in the Bidding forms)</p> <p>“R₀” is the base price of the construction material</p> <p>“Q” is quantity of the construction material consumed in construction during the period of price adjustment consideration</p> <p>If the Base price and source is to be proposed by the Bidder as per the provision made in Section –IV, Bidding Forms- Table of Price Adjustment Data then the Base price and source filled by Bidder for the construction material stated in the Bidding Form shall be subject to the approval of the Project manager and shall be as stated in SCC..</p> <p>45.8 The Price Adjustment amount shall be limited to a maximum of the initial Contract Amount as specified in the SCC.</p> <p>45.10 The Price Adjustment provision shall not be applicable for delayed period if the contract is not completed in time due to the delay caused by the contractor or the contract is a Lump sum Contract or a Fixed Budget Contract.</p>
<p>46. Retention</p>	<p>46.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.</p> <p>46.2 Upon the issue of a Defects Liability Certificate by the Project Manager, in accordance with GCC 55.1, half the total amount retained shall be repaid to the Contractor and half when the Contractor has submitted the Tax evidence document issued by the concerned Internal Revenue Office that the contractor has submitted his Income Returns . On completion of the whole works, the Contractor may substitute retention money with an “on demand” bank guarantee.</p>
<p>47. Liquidated Damages</p>	<p>47.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the</p>



	<p>Contractor's liabilities.</p> <p>47.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC.41</p>
48. Bonus	<p>48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the SCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.</p>
49. Advance Payment	<p>49.1 The Employer shall make advance payment to the Contractor of the amounts stated in the SCC by the date stated in the SCC, against provision by the Contractor of an unconditional bank guarantee from 'A' class commercial Bank in a form and by a bank acceptable to the Employer in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.</p>
	<p>49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.</p> <p>49.3 The advance payment shall be repaid by deducting proportionate amounts, as stated in SCC, from payments otherwise due Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.</p>
50. Securities	<p>50.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of</p>



	<p>Acceptance and shall be issued in an amount specified in the SCC, by a 'A' class commercial bank acceptable to the Employer, and denominated in Nepalese Rupees. The Performance Security shall be valid until a date 30 days from the date of issue of the Defect Liability Certificate in the case of a bank guarantee.</p> <p>50.2 The performance security issued by any foreign Bank outside Nepal must be counter guaranteed by an "A" class commercial Bank in Nepal.</p>
51. Day works	<p>51.1 If applicable, the Day works rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.</p> <p>51.2 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.</p> <p>51.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.</p>
52. Cost of Repairs	<p>52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.</p>
E. Finishing the Contract	
53. Completion	<p>53.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed.</p>
54. Taking Over	<p>54.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.</p>
55. Final Account	<p>55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 60 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is</p>



	<p>still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.</p>
<p>56. Operating and Maintenance Manuals</p>	<p>56.1 If “as built” Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.</p> <p>56.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC 56.1, or they do not receive the Project Manager’s approval, the Project Manager shall withhold the amount stated in the SCC from payments due to the Contractor.</p>
<p>57. Termination</p>	<p>57.1 In no case, the Contractor shall terminate the Contract unilaterally without duly notifying the Employer.</p> <p>57.2 The Employer may terminate the Contract at any time if the contractor;</p> <ul style="list-style-type: none"> a. does not commence the work as per the Contract, b. abandons the work without completing, c. fails to achieve progress as per the Contract. <p>57.3 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.</p> <p>57.4 Fundamental breaches of Contract shall include, but shall not be limited to the following:</p> <ul style="list-style-type: none"> (a) The Contractor uses the advance payment for matters other than the contractual obligations, (b) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager; (c) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days; (d) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation. (e) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 90 days of the date of the Project Manager’s certificate; (f) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager; (g) the Contractor does not maintain a Security, which is



	<p>required; and</p> <p>(h) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the SCC.</p> <p>(i) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC 58.1.</p> <p>57.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC 57.2 above, the Project Manager shall decide whether the breach is fundamental or not.</p> <p>57.6 Notwithstanding the above, the Employer may terminate the Contract for convenience.</p> <p>57.7 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.</p>
<p>58. Fraud and Corruption</p>	<p>58.1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 15 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site.</p> <p>58.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.</p> <p>For the purposes of this Sub-Clause;</p> <p>(i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.</p> <p>(ii) "fraudulent practice"⁵⁵ is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;</p> <p>(iii) "collusive practice"⁵⁶ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;</p> <p>(iv) "coercive practice"⁵⁷ is impairing or harming, or threatening to impair or harm, directly or indirectly,</p>



	<p>any party or the property of the party to influence improperly the actions of a party;</p> <p>(v) “obstructive practice” is</p> <p>(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or</p> <p>(bb) acts intended to materially impede the exercise of the GON’s/DP’s inspection and audit rights provided for under Sub-Clause 22.2.</p>
<p>59. Black Listing</p>	<p>59.1 Without prejudice to any other rights of the Employer under this Contract, GoN, Public Procurement Monitoring Office (PPMO), on the recommendation of procuring entity, may blacklist a Bidder for its conduct for a period of one (1) to three (3) years on the following grounds and seriousness of the act committed by the bidder.</p> <p>(a) if it is established that the Contractor has committed substantial defect in implementation of the contract or has not substantially fulfilled its obligations under the contract or the completed work is not of the specified quality as per the contract.</p>
<p>60. Payment upon Termination</p>	<p>60.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.</p> <p>60.2 If the Contract is terminated because of fundamental breach of Contract or for any other fault by the Contractor, the performance security shall be forfeited by the Employer.</p> <p>In such case, amount to complete the remaining works as per the Contract shall be recovered from the Contractor as</p>



	Government dues.
61. Property	61.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.
62. Release from Performance	62.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
63. Suspension of DP Loan/Credit/Grant	63.1 In the event that the Donor Agency suspends the loan/ credit/grant to the Employer from which part of the payments to the Contractor are being made: <ul style="list-style-type: none"> a. the Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Donor Agency's suspension notice; and b. if the Contractor has not received sums due him within the 30 days for payment provided for in Sub-Clause 41.1, the Contractor may immediately issue a 15-day termination notice.
64. Project Manager's Duties and Authorities	64.1 The Project Manager's duties and authorities are restricted to the extent as stated in the SCC.
65. Quarries and Spoil Dumps	65.1 Any quarry operated as part of this Contract shall be maintained and left in a stable condition without steep slopes and be either refilled or drained and be landscaped by appropriate planting. Rock or gravel taken from a river shall be removed over some distance so as to limit the depth of material removed at any one location, not disrupt the river flow or damage or undermine the river banks. The Contractor shall not deposit excavated material on land in Government or private ownership except as directed by the Project Manager in writing or by permission in writing of the authority responsible for such land in Government ownership, or of the owner or responsible representative of the owner of such land in private ownership, and only then in those places and under such conditions as the authority, owner or responsible representative may prescribe.
66. Local Taxation	66.1 The prices tendered by the Contractor shall include all taxes that may be levied in accordance to the laws and regulations in being in Nepal on the date 30 days prior to the closing



	<p>date for submissions of Bids on the Contractor's equipment, plant and materials acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Nepal on profits made by him in respect of the Contract.</p>
67. Value Added Tax	<p>67.1 The Contract is not exempted from value added tax. An amount specified in the schedule of taxes shall be paid by the Contractor in the concerned VAT office within time frame specified in VAT regulation.</p>
68. Income Taxes on Staff	<p>68.1 The Contractor's staff, personnel and labor will be liable to pay personal income taxes in Nepal in respect of their salaries and wages, as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions as may be imposed on him by such laws and regulations.</p> <p>68.2 The issue of the Final Account Certificate pursuant to clause 55 shall be made only upon submittal by the Contractor of a certificate of income tax clearance from the Government of Nepal.</p>
69. Duties, Taxes and Royalties	<p>69.1 Any element of royalty, duty or tax in the price of any goods including fuel oil, and lubricating oil, cement, timber, iron and iron goods locally procured by the Contractor for the works shall be included in the Contract rates and prices and no reimbursement or payment in that respect shall be made to the Contractor.</p> <p>69.2 The Contractor shall familiarize himself with GON the rules and regulations with regard to customs, duties, taxes, clearing of goods and equipment, immigration and the like, and it will be necessary for him to follow the required procedures regardless of the assistance as may be provided by the Employer wherever possible.</p> <p>69.3 The Contractor shall pay and shall not be entitled to the reimbursement of cost of extracting construction materials such as sand, stone/boulder, gravel, etc. from the river beds or quarries. Such prices will be levied by the local District Development Committee (DDC) as may be in force at the time. The Contractor, sub-contractor(s) employed directly by him and for whom he is responsible, will not be exempted from payment of royalties, taxes or other kinds of surcharges on these construction materials so extracted and paid for to the DDC.</p>
70. Member of Government, etc, not Personally Liable	<p>70.1 No member or officer of GoN or the Employer or the Project Manager or any of their respective employees shall be in any way personally bound or liable for the act or</p>



	obligations of the Employer under the Contract or answerable for any default or omission in the observance or performance of any of act, matter or thing which are herein contained.
71. Approval of Use of Explosives	71.1 No explosives of any kind shall be used by the Contractor without the prior consent of the Employer in writing and the Contractor shall provide, store and handle these and all other items of every kind whatsoever required for blasting operations, all at his own expense in a manner approved in writing by the Employer.
72. Compliance with Regulations for Explosives	72.1 The Contractor shall comply with all relevant ordinances, instructions and regulations which the Government, or other person or persons having due authority, may issue from time to time regarding the handling, transportation, storage and use of explosives.
73. Permission for Blasting	73.1 The Contractor shall at all times maintain full liaison with and inform well in advance, and obtain such permission as is required from all Government authorities, public bodies and private parties whatsoever concerned or affected, or likely to be concerned or affected by blasting operation.
74. Records of Explosives	74.1 Before the beginning of the Defects Liability Period, the Contractor shall account to the satisfaction of the Project Manager for all explosives brought on to the Site during the execution of the Contract and the Contractor shall remove all unused explosives from the Site on completion of works when ordered by the Project Manager.
75. Traffic Diversion	75.1 The Contractor shall include the necessary safety procedures regarding and pedestrian traffic diversion that is needed in execution of the works. The Contractor shall include in his costing of works, any temporary works or diversion that are needed during the construction period. All traffic diversion should be designed for the safety of both the motoring public and the men at work. It shall ensure the uninterrupted flow of traffic and minimum inconvenience to the public during the period concerned. As such, adequate warning signs, flagmen and other relevant safety precautionary measures shall be provided to warn motorists and pedestrians well ahead of the intended diversion as directed by the Project Manager. All traffic devices used shall be designed in accordance with the instruction of Project Manager.



SECTION - VIII
Special Conditions of Contract



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SECTION - VIII
Special Conditions of Contract

The following Special Conditions of Contract shall supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC



Special Conditions of Contract

A. General	
GCC 1.1 (q)	The Employer is : <i>Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project , Grid Development Department, Transmission Directorate, Nepal Electricity Authority</i>
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be : 6 Months
GCCs 1.1 (aa) & 4.1	The Project Manager is : <i>Nav Raj Ojha (Project Manager), Kohalpur-Mahendranagar 132 kV Second Circuit Transmission Line Project</i>
GCC 1.1 (cc)	The Site is located at <i>VDC Pahalmanpur, Kailali.</i>
GCC 1.1 (ff)	<p>The Start Date shall be : The Effective Date upon which the period until the Time for Completion of the Facilities shall be counted from, is the date when all of the following conditions have been fulfilled:</p> <ul style="list-style-type: none"> (a) The Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor; (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee; (c) The Employer has paid the Contractor the advance payment <p>Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.</p> <p>Despite what so ever stated above, the Time for Completion of the Facilities shall, at the latest, be counted down from 30 days from the date of Signing of the Contract Agreement.</p>
GCC 1.1 (jj)	The Works consist of : <i>Road & Drain Maintenance Civil works at Pahalmanpur Substation, Kailali</i>
GCC 2.2	Sectional Completions are: <i>NONE</i>
GCC 2.3(i)	The following documents also form part of the Contract:



	<p><i>Minute of Meeting as Agreed Upon</i></p> <p><i>VAT Certificate</i></p> <p><i>PAN Certificate</i></p> <p><i>Tax Clearance Certificate</i></p>																				
GCC 3.1	<p>The language of the Contract is: ENGLISH</p> <p>The law that applies to the Contract is :the law of NEPAL</p>																				
GCC 8.1	<p>Schedule of other contractors: <i>shall be notified by the Employer time to time.</i></p>																				
GCC 13.1	<p>The minimum insurance amounts and deductibles shall be:</p> <p>(a) <u>Cargo Insurance</u></p> <p>Covering loss or damage occurring, while in transit from the supplier's or manufacturer's works or stores until arrival at the Site, to the Facilities (including spare parts therefore) and to the construction equipment to be provided by the Contractor or its Subcontractors.</p> <table border="0"> <thead> <tr> <th><u>Amount</u></th> <th><u>Deductible limits</u></th> <th><u>Parties insured</u></th> <th><u>From</u></th> <th><u>To</u></th> </tr> </thead> <tbody> <tr> <td>110 % of CIP cost</td> <td>(*)</td> <td>Contractor</td> <td>Dispatch Certificate</td> <td>Arrival to Site</td> </tr> </tbody> </table> <p>Excess 5% of claimed amount subject to minimum of NRs 20,000 for normal and NRs 80,000 for act of God/major perils and collapse.</p> <p>(b) <u>Installation All Risks Insurance</u></p> <p>Covering physical loss or damage to the Facilities at the Site, occurring prior to completion of the Facilities, with extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period.</p> <p>Excess 5% of claimed amount subject to minimum of NRs 10,000 for normal period and NRs 30,000 for testing period.</p> <table border="0"> <thead> <tr> <th><u>Amount</u></th> <th><u>Deductible limits</u></th> <th><u>Parties insured</u></th> <th><u>From</u></th> <th><u>To</u></th> </tr> </thead> <tbody> <tr> <td>110 % of Contract Value</td> <td>(*)</td> <td>Contractor</td> <td>Dispatch Certificate</td> <td>Final Acceptance Value</td> </tr> </tbody> </table>	<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>	110 % of CIP cost	(*)	Contractor	Dispatch Certificate	Arrival to Site	<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>	110 % of Contract Value	(*)	Contractor	Dispatch Certificate	Final Acceptance Value
<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>																	
110 % of CIP cost	(*)	Contractor	Dispatch Certificate	Arrival to Site																	
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110 % of Contract Value	(*)	Contractor	Dispatch Certificate	Final Acceptance Value																	



(c) <u>Third Party Liability Insurance</u>				
Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities that have been accepted by the Employer) occurring in connection with the supply and installation of the Facilities.				
<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>
NRs. 1 million	As in (b) above	Contractor's Employees	Commencement of Works	Defect Liability Certificate
NRs. 1 million	As in (b) above	Employer's Personnel	Commencement of Works	Defect Liability Certificate
NRs. 1 million	As in (b) above	Employer's Personnel	Commencement of Works	Defect Liability Certificate
NRs. 4 million	As in (b) above	Third Party Personnel	Commencement of Works	Defect Liability Certificate
<u>Automobile Liability Insurance</u>				
Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the supply and installation of the Facilities. Comprehensive insurance in accordance with statutory requirements.				
<u>Workers' Compensation</u>				
In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.				
<u>Employer's Liability</u>				
In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.				



	<p><u>Other Insurances</u></p> <p>The Contractor is also required to take out and maintain at its own cost the following insurances:</p> <p><u>Details:</u> None</p> <table border="0"> <thead> <tr> <th><u>Amount</u></th> <th><u>Deductible limits</u></th> <th><u>Parties insured</u></th> <th><u>From</u></th> <th><u>To</u></th> </tr> </thead> <tbody> <tr> <td colspan="5"> <p>The Employer shall be named as co-insured under all insurance policies taken out by the Contractor except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insured's under all insurance policies taken out by the Contractor, except for the Cargo, Workers' Compensation and Employer's Liability Insurances. All insurers' rights of subrogation against such co-insured's for losses or claims arising out of the performance of the Contract shall be waived under such policies.</p> <p>The minimum cover for personal injury or death insurance shall, however, be not less than as per requirements of the Labor Act of Nepal.</p> </td> </tr> </tbody> </table>	<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>	<p>The Employer shall be named as co-insured under all insurance policies taken out by the Contractor except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insured's under all insurance policies taken out by the Contractor, except for the Cargo, Workers' Compensation and Employer's Liability Insurances. All insurers' rights of subrogation against such co-insured's for losses or claims arising out of the performance of the Contract shall be waived under such policies.</p> <p>The minimum cover for personal injury or death insurance shall, however, be not less than as per requirements of the Labor Act of Nepal.</p>				
<u>Amount</u>	<u>Deductible limits</u>	<u>Parties insured</u>	<u>From</u>	<u>To</u>							
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GCC 14.1	Site Investigation Reports are: <i>If any, shall be papered by the contractor.</i>										
GCC 17.1	The following shall be designed by the Contractor : <i>None</i>										
GCC 20.1	The Site Possession Date(s) shall be: <i>as agreed during Contract signing.</i>										
GCC 25.4	The place of arbitration shall be: <i>Kathmandu, Nepal</i>										
B. Time Control											
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 30 days from the date of the Letter of Acceptance.										
GCC 26.3	The period between Program updates is 60 days. The amount to be withheld for late submission of an updated Program is : <i>All due bills</i>										
C. Quality Control											
GCC 34.1	The Defects Liability Period is: <i>365 days.</i>										
D. Cost Control											
GCC 37.1(d)	<p><i>Add this new sub-clause:</i></p> <p>The quantities entered in the Price Schedule are only estimated quantities. After detailed site investigation and design, the Contractor shall prepare a final Price Schedule within 3 months from the date of Contract Signing and</p>										



	<p>submit to the Director for approval. The Contractor shall agree to make no claims for anticipated profit or alleged losses because of any difference between the quantities actually furnished and erected and the estimated quantities in the Contract.</p> <p>NEA reserves the right at the time of award of contract or within six months from the effective date of contract to increase or decrease the quantities of the Price-schedule by up to fifteen percent (15%) of the contract price. Taking this into consideration, the Bidder shall present a fairly balanced <i>price on Bill of Quantities</i>.</p>
GCC 41.1	<p>Payment Shall be adjusted for deductions for advance payment, retention and Income Tax deduction (TDS) as determined by the prevalent rules and regulations of GOVERNMENT OF NEPAL.</p> <p>The interest payable for the late payment shall be 0.25% per month</p>
GCC 45.1	<p>The Contract is <u>not</u> subject to price adjustment, and the following information regarding coefficients <u>does not</u> apply.</p> <p>The coefficients and indices for adjustment of prices in Nepalese Rupees shall be as specified in the Table of Adjustment Data submitted by bidder together with the Letter of Bid which is approved by the Project manager and attached as Annex-1.</p>
GCC 45.7	<i>Not Applicable</i>
GCC 45.8	<i>Not Applicable</i>
GCC 46.1	The proportion of payments retained is: 5 (FIVE) PERCENT
GCC 47.1	The liquidated damages for the whole of the Works are 0.1 PERCENT of the final Contract Price per day . The maximum amount of liquidated damages for the whole of the Works is 10 PERCENT of the final Contract Price.
GCC 48.1	The Bonus for the whole of the Works is: <i>None</i> .
GCC 49.1	The Advance Payments shall be: Ten percent (10%) of initial Contract price excluding the provisional sums, day works and VAT and shall be made to the Contractor upon submission of acceptable Bank Guarantee for advance payment.
GCC 49.3	<p>The Advance Payment will be recovered as follows:</p> <p>Deduction at the rate of ten percent (10%) from each bill (invoice) will be made to recover the Advance paid to the Contractor. If for some reason the advance could not be recovered within the initially intended time for Completion; the remaining advance amount shall be recovered from any payment due, after such date.</p>
GCC 50.1	The Performance Security shall be for the following minimum amounts



	<p>equivalent as a percentage of the Contract Price: Five percent (5%) and an additional amount of up to 8% of the Contract price if the Employer has increased the Performance Security amount pursuant to ITB Sub Clause 32.5</p> <p>The standard form(s) of Performance Security acceptable to the Employer shall be “an Unconditional Bank Guarantee” acceptable to the Employer of the type presented in Section IX of the Bidding Documents.</p>
E. Finishing the Contract	
GCC 56.1	<p>The date by which operating and maintenance manuals are required is : <i>Prior to the issuance of the Certificate of Completion.</i></p>
	<p>The date by which “as built” drawings are required is :<i>Prior to Completion Certificate.</i></p> <p>Moreover, should any change is required in the "as-built" drawings because of rectification of any defects within the Defects Liability Period, such changes shall be incorporated and "as-built" drawings shall be updated accordingly before issuance of the Final Acceptance Certificate.</p>
GCC 56.2	<p>The amount to be withheld for failing to produce “as built” drawings and/or Operating and maintenance manuals is: <i>Full value of last Invoice.</i></p>
GCC 57.2 (g)	<p>The maximum number of days is: 200 days</p>
GCC 61.1	<p>The percentage to apply to the value of the work not completed, representing the Employer’s additional cost for completing the Works, is 25 %</p>
GCC 64	<p>The Project Manager has to obtain the specific approval of the Employer for taking any of the following actions :</p> <ol style="list-style-type: none"> a. Approving subcontracting of any part of the works under General Conditions of Contract Clause 7; b. Certifying additional costs determined under General Conditions of Contract Clause 42; c. Determining start date under General Conditions of Contract Clause 1; d. Determining the extension of the intended Completion Date under General Conditions of Contract Clause 27; e. Issuing a Variation under General Conditions of Contract Clause 1 and 38, except in an emergency situation, as reasonably determined by the Project Manager; emergency situation may be defined as the situation when protective measures must be taken for the safety of life or of the works or of adjoining property.



	f. Adjustment of rates under General Conditions of Contract Clause 37;
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Annex-1

Table of Price Adjustment Data [SCC 45.1]

Code	Index Description	Source of Index*	Base Value and Date	Employer's Proposed Weighting Range (coefficient)	Bidder's Proposed Weighting (coefficient)**
1	2	3	4	5	6
	Non - adjustable (A)			0.15	0.15
	Labor (b)				
	Materials (c)				
	Equipment usage (d)				
		Total			1.00

Note: Base value and Bidder's proposed weighting coefficient to be filled as per "Bid Form of Table of Price Adjustment Data" in Bidding Forms (Section-IV) after verification by the Employer in case of the alternative provision of Bidder proposed value and weighting coefficient.

Table of Price Adjustment Data [SCC 45.7]

Code	Construction Material*	Unit	Base Price (NRs/Unit) ** (Ex-factory)	Source (Factory)**
1	2	3	4	5

** For the purpose of calculation of price adjustment, the Ex-factory price of the same source mentioned in the table shall be taken into consideration.



SECTION - IX

Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.



Letter of Intent

[on letterhead paper of the Employer]

Date:

To: *name and address of the Contractor*

Subject: *Issuance of letter of intent to award the contract*

This is to notify you that, it is our intention to award the contract *[insert date]*for execution of the *[insert name of the contract and identification number, as given in the Contract Data/SCC]* to you as your bid price *[insert amount in figures and words in Nepalese Rupees]* as corrected and modified in accordance with the Instructions to Bidders is hereby selected as substantially responsive lowest evaluated bid.

Authorized Signature:

Name:

Title:

CC:

[Insert name and address of all other Bidders, who submitted the bid]

[Notes on Letter of Intent

The issuance of Letter of Intent is the information of the selection of the bid of the successful bidder by the Employer and for providing information to other unsuccessful bidders who participated in the bid as regards to the outcome of the procurement process. This standard form of Letter of Intent to Award should be filled in and sent to the successful Bidder only after evaluation and selection of substantially responsible lowest evaluated



bid.]

Letter of Acceptance [on letterhead paper of the Employer]

Date:

To:..... *name and address of the Contractor*

Subject:..... *Notification of Award*

This is to notify that your Bid dated*date*for execution of the.....*name of the contract and identification number, as given in the Contract Data/SCC* for the Contract price of Nepalese Rupees [*insert amount in figures and words in Nepalese Rupees*], as corrected in accordance with the Instructions to Bidders is hereby accepted in accordance with the Instruction to Bidders.

You are hereby instructed to contact this office to sign the formal contract agreement within 15 days with Performance Security as specified in the SCC consisting of a Bank Guarantee in the format included in Section IX (Contract Forms) of this Bidding Document.

The Employer shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract within specified period.

Authorized Signature:

Name and Title of Signatory:



Contract Agreement

THIS AGREEMENT made theday of
between..... name of the Employer (**hereinafter**
“the Employer”), of the one part, andname of the Contractor
.....(**hereinafter “the Contractor”**), of the other part:

WHEREAS the Employer desires that the Works known as **name of the Contract**should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects in the sum of NRs**[insert amount of contract price in words and figures including taxes]** (hereinafter “the Contract Price”).

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement.
 - (a) the Letter of Acceptance;
 - (b) the Letter of Bid;
 - (c) the Addenda Nos **insert addenda numbers if any**
 - (d) the Special Conditions of Contract;
 - (e) the General Conditions of Contract;
 - (f) Bills of Quantities (BOQ);
 - (g) the Specification;
 - (h) the Drawings;
 - (i) the Activity Schedules; and
 - (j) Table of Price Adjustment Data
 - (k)**[Specify if there are any other document]**
3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Nepal on the day, month and year indicated above.

Signed by
for and on behalf the Contractor in the presence
of

Witness, Name Signature, Address, Date



Signed by.....
for and on behalf of the Employer in the
presence of

Witness, Name, Signature, Address, Date



Performance Security (On letterhead paper of the 'A' class commercial Bank)

..... *Bank's Name, and Address of Issuing Branch or Office*

Beneficiary: Name and Address of Employer

Date:

Performance Guarantee No.:

We have been informed that *[insert name of the Contractor]* (hereinafter called "the Contractor") has been notified by you to sign the Contract No. *[insert reference number of the Contract]* for the execution of *[insert name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we *[insert name of the Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert name of the currency and amount in figures*]* (..... insert amount in words) such sum being payable in Nepalese Rupees, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of **, and any demand for payment under it must be received by us at this office on or before that date.

.....
Seal of Bank and Signature(s)

Note:

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

* The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract in Nepalese Rupees.

** Insert the date thirty days after the date specified for the Defect Liability Period. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months],



figures*... (..... amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the day of**, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

Seal of Bank and Signature(s)

Note:

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

- * The Guarantor shall insert an amount representing the amount of the advance payment in Nepalese Rupees of the advance payment as specified in the Contract.
- ** Insert the date Thirty days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: “The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months], in response to the Employer’s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee”.

