



**GOVERNMENT OF ODISHA  
DEPARTMENT OF WATER RESOURCES**

**INTERNATIONAL COMPETITIVE BIDDING**

W.B. Project ID: India - P089985 : IN

**PART - 1**

**BIDDING PROCEDURES**

**for**

Procurement of Works:

**“CONSTRUCTION OF ADDITIONAL SPILLWAY  
WITH HYDRO-MECHANICAL WORKS” ON LEFT  
OF GANDHI HILLOCK AT HIRAKUD DAM –  
ODISHA INDIA**

**ICB No. : ICB-1/ODISHA/ASW\_HIRA / 2017-18  
(Item Rate Contract)**

PIC No.: OR10HH0003

**DAM REHABILITATION AND IMPROVEMENT PROJECT**

Govt. of Odisha,  
through  
**The Chief Engineer & Basin Manager,**  
Upper Mahanadi Basin,  
Department of Water Resources,  
Burla, Distt.- Sambalpur, Pin-768017  
Odisha-India

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# **PART 1 – BIDDING PROCEDURES**

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# **Section - I**

# **Instructions to Bidders**

# **(ITB)**

## Section I. Instructions to Bidders

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## **Section I. Instructions to Bidders**

### **A. General**

#### **1. Scope of Bid**

- 1.1 In connection with the Invitation for Bids specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues these Bidding Documents for the procurement of Works as specified in Section VII, Works Requirements. The name, identification, and number of lots (contracts) of this International Competitive Bidding (ICB) process are specified in the BDS.
- 1.2 Throughout these Bidding Documents:
- (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**

- 2.1 The Borrower or Recipient (hereinafter called “Borrower”) specified in the BDS has received or has applied for financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which these Bidding Documents are issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the Loan (or other financing) account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

### **3. Corrupt and Fraudulent Practices**

- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.
- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

### **4. Eligible Bidders**

- 4.1 A Bidder may be a firm that is a private entity, a government-owned entity—subject to ITB 4.5—or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.
- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:
- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
  - (b) receives or has received any direct or indirect subsidy from another Bidder; or
  - (c) has the same legal representative as another Bidder; or
  - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
  - (e) participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
  - (f) any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the bid; or

- (g) any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the Contract implementation; or
  - (h) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
  - (i) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.
- 4.3 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.7. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.
- 4.4 A Bidder that has been sanctioned by the Bank in accordance with the above ITB 3.1, including in accordance with the Bank's Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants ("Anti-Corruption Guidelines"), shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available as specified in the BDS.
- 4.5 Bidders that are Government-owned enterprises or institutions in the Employer's Country may participate only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer. To be eligible, a government-owned enterprise or institution shall establish to the Bank's satisfaction, through all relevant documents, including its Charter and other information the Bank may request, that it: (i) is a legal entity separate from the government (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to the government, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt; and (iv) is not bidding for a contract to be awarded by the department or agency of the government which under their applicable laws or regulations is the reporting or supervisory authority

of the enterprise or has the ability to exercise influence or control over the enterprise or institution.

- 4.6 A Bidder shall not be under suspension from bidding by the Employer as the result of the operation of a Bid-Securing Declaration.
- 4.7 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) 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, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.8 This bidding is open only to prequalified Bidders unless specified in the BDS.
- 4.9 A Bidder shall provide such evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.

## **5. Eligible Materials, Equipment, and Services**

- 5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

## **B. Contents of Bidding Documents**

### **6. Sections of Bidding Documents**

- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8.

#### **PART 1 Bidding Procedures**

- \* Section I. Instructions to Bidders (ITB)
- \* Section II. Bid Data Sheet (BDS)
- \* Section III. Evaluation and Qualification Criteria
- \* Section IV. Bidding Forms
- \* Section V. Eligible Countries
- \* Section VI. Bank Policy-Corrupt and Fraudulent Practices

**PART 2 Works Requirements**

\* Section VII. Works Requirements

**PART 3 Conditions of Contract and Contract Forms**

\* Section VIII. General Conditions (GC)

\* Section IX. Particular Conditions (PC)

\* Section X. Contract Forms

- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Documents.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the Bidding Documents, responses to requests for clarification, the minutes of the pre-Bid meeting (if any), or Addenda to the Bidding Documents in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its bid all information and documentation as is required by the Bidding Documents.

**7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting**

- 7.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Employer in writing at the Employer's address specified in the BDS or raise its enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the clarification result in changes to the essential elements of the Bidding Documents, the Employer shall amend the Bidding Documents following the procedure under ITB 8 and ITB 22.2.
- 7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility 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.
- 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.

- 7.4 If so specified in the BDS, the Bidder's designated representative is invited to attend a pre-bid meeting. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by Bidders, 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 Documents in accordance with ITB 6.3. Any modification to the Bidding Documents 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. Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

## **8. Amendment of Bidding Documents**

- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
- 8.3 To give Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer should extend the deadline for the submission of bids, pursuant to ITB 22.2

## **C. Preparation of Bids**

### **9. Cost of Bidding**

- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

### **10. Language of Bid**

- 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.

## **11. Documents Comprising the Bid**

11.1 The Bid shall comprise the following:

- (a) Letter of Bid and Appendix to Bid, in accordance with ITB 12;
- (b) Completed schedules as required, including priced ---- Bill of Quantities, in accordance with ITB 12 and 14;
- (c) Bid Security or Bid-Securing Declaration, in accordance with ITB 19.1;
- (d) Alternative bids, 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 continued qualified status or, if post-qualification applies, as specified in accordance with ITB 4.8, the Bidder's qualifications to perform the contract if its Bid is accepted;
- (g) Technical Proposal in accordance with ITB 16; and
- (h) Any other document required in the BDS.

11.2 In addition to the requirements under ITB 11.1, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.

11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

## **12. Letter of Bid and Schedules**

12.1 The Letter of Bid and Schedules, including the ---- Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.2. All blank spaces shall be filled in with the information requested.

## **13. Alternative Bids**

13.1 **Unless otherwise specified in the BDS**, alternative bids shall not be considered.

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.



- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must first price the Employer's design as described in the Bidding Documents 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.
- 13.4 **When specified in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works, and such parts **will be identified in the BDS**, as will the method for their evaluating, and described in Section VII, Works Requirements

#### **14. Bid Prices and Discounts**

- 14.1 The prices and discounts (including any price reduction) quoted by the Bidder in the Letter of Bid and in the Preliminary Bill of Quantities shall conform to the requirements specified below.
- 14.2 The Bidder shall fill in rates and prices for all items of the Works described in the Preliminary Bill of Quantities. Items against which no rate or price is entered by the Bidder shall be deemed covered by the rates for other items in the Preliminary Bill of Quantities and will not be paid for separately by the Employer. An item not listed in the priced Preliminary Bill of Quantities shall be assumed to be not included in the Bid, and provided that the Bid is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive bidders will be added to the bid price and the equivalent total cost of the bid so determined will be used for price comparison.
- 14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any discounts and the methodology for their application in the Letter of Bid, in accordance with ITB 12.1.
- 14.5 **Unless otherwise specified in the BDS** and the Contract, the rates and 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. In such a case, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Employer may require the Bidder to justify its proposed indices and weightings.
- 14.6 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts 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. Discounts shall be submitted in accordance with ITB 14.4, provided the bids for all lots (contracts) are opened at the same time.

- 14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 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.

## **15. Currencies of Bid and Payment**

- 15.1 The currency(ies) of the bid and the currency(ies) of payments shall be **as specified in the BDS.**
- 15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data in the Appendix to Bid are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

## **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 Bidder's proposal to meet the work requirements and the completion time.

## **17. Documents Establishing the Qualifications of the Bidder**

- 17.1 In accordance with Section III, Evaluation and Qualification Criteria, to establish that the Bidder continues to meet the criteria used at the time of prequalification, the Bidder shall provide in the corresponding information sheets included in Section IV, Bidding Forms, updated information on any assessed aspect that changed from that time, or if post-qualification applies as specified in ITB 4.8, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
- 17.2 If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
- 17.3 Any change in the structure or formation of a Bidder after being prequalified and invited to Bid (including, in the case of a JV, any change in the structure or formation of any member thereto) shall be subject to the written approval of the Employer prior to the deadline for submission of Bids. Such approval shall be denied if (i) a Bidder proposes to associate with a disqualified Bidder or in case of a disqualified joint venture, any of its members; (ii) as a consequence of the change, the Bidder no longer substantially meets the qualification criteria set forth in Section III, Qualification Criteria and Requirements; or (iii) in the opinion of the Employer, the change may result in a substantial reduction in competition. Any such change should be submitted to the Employer not later than fourteen (14) days after the date of the Invitation for Bids.

## **18. Period of Validity of Bids**

- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Employer in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Employer as non responsive.
- 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 for twenty-eight (28) 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, except as provided in ITB 18.3.
- 18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be determined as follows:
- (a) In the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor **specified in the BDS**.
  - (b) In the case of adjustable price contracts, no adjustment shall be made.
  - (c) In any case, bid evaluation shall be based on the bid price without taking into consideration the applicable correction from those indicated above.

## **19. Bid Security**

- 19.1 The Bidder shall furnish as part of its bid, either a Bid-Securing Declaration or a bid security as specified in the BDS, in original form and, in the case of a bid security, in the amount and currency specified in the BDS.
- 19.2 A Bid-Securing Declaration shall use the form included in Section IV, Bidding Forms.
- 19.3 If a bid security is specified pursuant to ITB 19.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder's option:
- (a) an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company);
  - (b) an irrevocable letter of credit;
  - (c) a certified cashier's or certified cheque; or
  - (d) another security **specified in the BDS**,

From a reputable source from an eligible country. If the unconditional guarantee is issued by a financial institution located outside the Employer's Country, the issuing financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable. 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 substantially similar format approved by the Employer prior to bid submission. The bid security shall be valid for twenty-

eight (28) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

- 19.4 If a bid security or Bid Securing Declaration is specified pursuant to ITB 19.1, any bid not accompanied by a substantially responsive bid security or Bid-Securing Declaration shall be rejected by the Employer as non responsive.
- 19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the performance security pursuant to ITB 42.
- 19.6 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7 The bid security may be forfeited or the Bid-Securing Declaration executed:
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or
  - (b) if the successful Bidder fails to:
    - (i) sign the Contract in accordance with ITB 41; or
    - (ii) furnish a performance security in accordance with ITB 42.
- 19.8 The bid security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the bid security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.
- 19.9 If a bid security is **not required in the BDS pursuant to ITB 19.1**, and
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, or
  - (b) if the successful Bidder fails to sign the Contract in accordance with ITB 41; or furnish a performance security in accordance with ITB 42;
- the Borrower may, **if provided for in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time **as stated in the BDS**.

## **20. Format and Signing of Bid**

- 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 marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the bid, in the number **specified in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

- 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 where entries or amendments have been made shall be signed or initialled by the person signing the bid.
- 20.3 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.4 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

## **D. Submission and Opening of Bids**

### **21. Sealing and Marking of Bids**

- 21.1 The Bidder shall enclose the original and all copies 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.
- 21.2 The inner and outer envelopes shall:
- (a) bear the name and address of the Bidder;
  - (b) be addressed to the Employer in accordance with ITB 22.1;
  - (c) bear the specific identification of this bidding process specified in the BDS 1.1; and
  - (d) bear a warning not to open before the time and date for bid opening.
- 21.3 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.

### **22. Deadline for Submission of Bids**

- 22.1 Bids must be received by the Employer at the address and no later than the date and time specified in the BDS. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures specified in the BDS.
- 22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents 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.

### **23. Late Bids**

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.

### **24. Withdrawal, Substitution, and Modification of Bids**

24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "Withdrawal," "Substitution," "Modification;" And
- (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

24.3 No bid may be withdrawn, substituted, or modified in the interval between 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.

### **25. Bid Opening**

25.1 Except in the cases specified in ITB 23 and 24, the Employer shall publicly open and read out in accordance with ITB 25.3 all bids received by the deadline, at the date, time and place **specified in the BDS**, in the presence of Bidders` designated representatives and anyone who choose to attend.

25.2 First, 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 "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid

authorization to request the substitution and is read out at bid opening. 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 bids that are opened and read out at bid opening shall be considered further.

- 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; the presence or absence of a bid security, if required; and any other details as the Employer may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. The Letter of Bid and the---- Bill of Quantities are to be initialled by representatives of the Employer attending bid opening in the manner specified in the BDS. The Employer shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 23.1).
- 25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; and the presence or absence of a bid security, if one was required. 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. A copy of the record shall be distributed to all Bidders.

## **E. Evaluation and Comparison of Bids**

### **26. Confidentiality**

- 26.1 Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with the bidding process until information on Contract award is communicated to all Bidders in accordance with ITB 40.
- 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.
- 26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.

### **27. Clarification of Bids**

- 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, given a reasonable time for a response. 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, including any voluntary increase or decrease, 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.

- 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.

## **28. Deviations, Reservations, and Omissions**

- 28.1 During the evaluation of bids, the following definitions apply:

- (a) "Deviation" is a departure from the requirements specified in the Bidding Documents;
- (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
- (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Documents.

## **29. Determination of Responsiveness**

- 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 ITB11.

- 29.2 A substantially responsive bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

- (a) if accepted, would:
  - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
  - (ii) limit in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the proposed Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

- 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 VI, Works Requirements have been met without any material deviation, reservation or omission.

- 29.4 If a bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.



### **30. Nonmaterial Nonconformities**

- 30.1 Provided that a bid is substantially responsive, the Employer may waive any non-conformities in the Bid.
- 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.
- 30.3 Provided that a bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall 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 method specified in Section III, Evaluation and Qualification Criteria.

### **31. Correction of Arithmetical Errors**

- 31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
- (a) 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;
  - (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
  - (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.
- 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1, shall result in the rejection of the Bid.

### **32. Conversion to Single Currency**

- 32.1 For evaluation and comparison purposes, the currency (ies) of the Bid shall be converted into a single currency **as specified in the BDS**.

### **33. Margin of Preference**

- 33.1 **Unless otherwise specified in the BDS**, a margin of preference for domestic bidders shall not apply.

### **34. Subcontractors**

- 34.1 **Unless otherwise stated in the BDS**, the Employer does not intend to execute any specific elements of the Works by sub-contractors selected in advance by the Employer.
- 34.2 In case of Prequalification, the Bidder's Bid shall name the same specialized subcontractor as submitted in the prequalification application and approved by the Employer.
- 34.3 In case of Post qualification, the Employer may permit subcontracting for certain specialized works as indicated in Section III 4.2. When subcontracting is permitted by the Employer, the specialized sub-contractor's experience shall be considered for evaluation. Section III describes the qualification criteria for sub-contractors.
- 34.4 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works **as specified in the BDS**.

### **35. Evaluation of Bids**

- 35.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 35.2 To evaluate a bid, the Employer shall consider the following:
- (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary ---- Bill of Quantities, but including Day work items, where priced competitively;
  - (b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
  - (c) price adjustment due to discounts offered in accordance with ITB 14.4;
  - (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;
  - (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 30.3;
  - (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria;
- 35.3 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.
- 35.4 If these Bidding Documents allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Bid Form, is specified in Section III, Evaluation and Qualification Criteria.
- 35.5 If the bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the

Bidder to produce detailed price analyses 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 analyses, 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 to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

### **36. Comparison of Bids**

- 36.1 The Employer shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 35.2 to determine the lowest evaluated bid.

### **37. Qualification of the Bidder**

- 37.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid either continues to meet (if prequalification applies) or meets (if post qualification applies) the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 37.2 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.
- 37.3 An affirmative determination 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.

### **38. Employer's Right to Accept Any Bid, and to Reject Any or All Bids**

- 38.1 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**

### **39. Award Criteria**

- 39.1 Subject to ITB 38.1, the Employer shall award the Contract to the Bidder who has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

#### **40. Notification of Award**

- 40.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder.
- (i) name of each Bidder who submitted a Bid;
  - (ii) bid prices as read out at Bid Opening;
  - (iii) name and evaluated prices of each Bid that was evaluated;
  - (iv) name of bidders whose bids were rejected and the reasons for their rejection; and
  - (v) name of the successful Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the “Letter of Acceptance”) shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”). At the same time, the Employer shall also notify all other Bidders of the results of the bidding and shall publish in UNDB online the results identifying the bid and lot (contract) numbers and the following information:
- 40.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 40.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 40.1, requests in writing the grounds on which its bid was not selected.

#### **41. Signing of Contract**

- 41.1 Promptly upon notification, the Employer shall send the successful Bidder the Contract Agreement.
- 41.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

#### **42. Performance Security**

- 42.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security and, if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security in accordance with the General Conditions of Contract, subject to ITB 35.5, using for that purpose the Performance Security and ESHS Performance Security Forms included in Section X, Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the

successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.

- 42.2 Failure of the successful Bidder to submit the above-mentioned Performance Security and, if required in the BDS, the Environmental, Social, Health and Safety (ESHS) Performance Security or sign the Contract 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.

## Section II. Bid Data Sheet

	A. Introduction
<b>ITB 1.1</b>	<p>In connection with the Invitation for Bids no. : <u>ICB-1/ODISHA/ASW HIRA/2017-18.</u></p> <p>The Employer issues these Bidding Documents for procurement of Works: <b>“Construction of Additional Spillway with Hydro-Mechanical Works”</b> on left of Gandhi Hillock at <u>Hirakud Dam – Odisha</u> –India, as specified in Section VII, Works Requirements, as one proposed contract in International Competitive Bidding (ICB) process.</p>
<b>ITB 1.1</b>	<i>The Employer is: <u>Govt. of Odisha</u> through The Chief Engineer &amp; Basin Manager, Upper Mahanadi Basin, Govt. of Odisha, Department of Water Resources, Burla , Distt. Sambalpur, Odisha, INDIA Pin-768017</i>
<b>ITB 1.1</b>	<p>The name of the ICB is: <b>“Construction of Additional Spillway with Hydro-Mechanical Works”</b> on left of Gandhi Hillock at Hirakud Dam – Odisha - India</p> <p>The identification number of the ICB is:ICB-1/ODISHA/ASW_HIRA/2017-18</p> <p>This one ICB proposed contract comprise of: (i) Construction of Additional Spillway, Earth work for u/s approach channel/ Dyke, removal of existing dyke to join the main Hirakud Dam (ii) D/S spill channel(iii) Landscape Drawing (iv) Preparation of Construction Drawings (v) Hydro-Mechanical works (vi) Electrical works (vii) other works required to make system complete , as specified in Works Requirement etc</p>
<b>ITB 2.1</b>	The Borrower is: Govt of Odisha through Govt. of India
<b>ITB 2.1</b>	<p>Loan &amp; Financing Agreement: World Bank</p> <p>Loan no -7943-IN and IDA Credit no-4787 –IN</p>
<b>ITB 2.1</b>	The name of the Project is: <b>“Construction of Additional Spillway with Hydro-Mechanical Works”</b> on left of Gandhi Hillock at Hirakud Dam – <u>Odisha</u> –India, under Dam Rehabilitation and Improvement Project, (DRIP).
<b>ITB 4.1</b>	Maximum number of members in the JV shall be: [4] four/ one along with specialized three agencies.
<b>ITB 4.4</b>	A list of debarred firms and individuals is available on the Bank’s external website: <a href="http://www.worldbank.org/debarr">http://www.worldbank.org/debarr</a> .
<b>ITB 4.8 &amp; ITB11.1(f)</b>	This Bidding Process is subject to Post-qualification. : Yes

<b>B. Bidding Documents</b>	
<b>ITB 7.1</b>	<p>For <u>clarification purposes</u>, the Employer's address is:</p> <p>Attention: Chief Engineer &amp; Basin Manager, Upper Mahanadi Basin, D.O.W.R, Govt. of Odisha, India</p> <p>City: Burla, Distt. Sambalpur, Odisha , ZIP / Pin Code:768017</p> <p>Country: India</p> <p>Telephone: ++ 0663-2430866</p> <p>Facsimile number: nil</p> <p>Email address: <a href="mailto:cebmumburla@rediffmail.com">cebmumburla@rediffmail.com</a></p>
<b>ITB 7.1</b>	<p>Web page: <a href="http://www.odisha.gov.in">www.odisha.gov.in</a> ; <a href="http://www.dowrorissa.gov.in">www.dowrorissa.gov.in</a></p>
<b>ITB 7.4</b>	<p>A <u>pre-bid meeting</u> shall take place at the following date, time and place.</p> <p><u>Date: 01.11.2017</u> days at 11:30 Hrs <u>Place: Office of the Chief Engineer &amp; Basin Manager, Upper Mahanadi Basin, Burla, Dist Sambalpur, Odisha , Burla-768017, Odisha, India</u></p> <p><u>Site visit</u> – Burla Distt. Sambalpur ,/Hirakud Dam-Gandhi hillock-Borrow area : The Bidders are encouraged to visit the site and find out / observe ground condition, borrow areas and quarries etc., and satisfy themselves about the suitability and sufficiency of the quantities etc.</p> <p>A site visit will be conducted/organized by the C E ( Burla) / Executive Engineer for desirous bidders who come to pre-bid meeting on two consecutive days <b>30.10.2017</b> and <b>31.10.2017</b></p>

<b>C. Preparation of Bids</b>	
<b>ITB 10.1</b>	<p>The language of the bid is: <b>ENGLISH</b></p> <p>All correspondence exchange shall be in ENGLISH language.</p> <p>Language for translation of supporting documents and printed literature is ENGLISH</p>
<b>ITB 11.1(a); (b); (c); (e) &amp; (f)</b>	<p>Documents comprising the Bid</p> <p>Bid submitted by the Bidder shall be in One (1) part: submission of documents</p> <p><b>i)</b> Letter of Bid as per format given</p> <p><b>ii)</b> Bid Security (Demand Guarantee in original as per cl-19.1 of ITB ;</p> <p><b>iii)</b> Original demand draft / pay order / transaction ID towards the cost of bid document as per ITB 20.2</p> <p><b>iv)</b> Power of Attorney in original for signing the document in the case of firm in partnership/limited company, corporation or Joint Venture.</p> <p><b>v)</b> Authorized address and contact details of the Bidder having the following information:</p> <p style="padding-left: 20px;">Name of Firm and / or J.V. :</p> <p style="padding-left: 20px;">Address for Communication :</p> <p style="padding-left: 20px;">Telephone No.(s): Office:</p> <p style="padding-left: 20px;">Mobile No.:</p> <p style="padding-left: 20px;">Facsimile (FAX) No.:</p> <p style="padding-left: 20px;">Electronic Mail Identification (E-mail ID):</p> <p><b>vi)</b> Qualification Information, supporting documents, and undertaking as specified and filled up in relevant schedule as per 11.1(f) &amp; (g) .</p> <p style="padding-left: 20px;">a) Bid information : Certificates showing details of Qualification works completed &amp; similar nature of works, works in hand, and</p> <p style="padding-left: 20px;">b) Professional Civil Construction Engineers &amp; Site organization</p> <p style="padding-left: 20px;">c) Method statement</p> <p style="padding-left: 20px;">d) Mobilization schedule</p> <p style="padding-left: 20px;">e) Construction schedule</p> <p style="padding-left: 20px;">f) Methodology of preparation of Construction Drawings</p> <p style="padding-left: 20px;">g) Hydro Mechanical portion : Technical Declarations in Data Sheets &amp; method statement</p> <p style="padding-left: 20px;">h) Equipment: machineries owned, or new possessed, proposed on hire or lease,</p> <p style="padding-left: 20px;">i) Personnel: professionals for Preparation of Construction Drawings, bought-outs, manufacture, erection, commissioning of</p>



	<p>H.M. / Electrical items ,</p> <p>j) Letter of undertaking from specialized firms</p> <p>k) List with names &amp; data of Sub-contractor</p> <p>l) Financial: Annual financial turn-over, availability of liquid assests / over draft &amp; credit limits ;and other relevant documents</p> <p>m) Joint Venture details.</p> <p><b>vii)</b> Registration certificate, if any, for bidders/PSU's from India&amp; for International bidders: Appropriate proof of registration, if any.</p> <p><b>viii)</b> Undertaking that the bid shall remain valid for the period (of 120 days ) specified in Clause 18.1 of ITB.</p> <p><b>ix)</b> An Affidavit affirming that information furnished in the bid is correct to the best of knowledge and belief of the bidder and</p> <p><b>x)</b> Any other information /documents of Bidder / JV / Sub-contractors, required to be completed and submitted by bidder,</p> <p><b>xi)</b> Declaration regarding excise/custom duty exemption, if any, as per law</p> <p><b>xii)</b> Adjustment data : Table A ;B C</p> <p><b>xiii)</b> Bill of Quantities , duly filled –in</p>
<p><b>ITB 11.1 (h)</b></p>	<p>The Bidder shall submit with its bid the following additional documents:</p> <ol style="list-style-type: none"> <li>1. Various Technical Documents</li> <li>2. Specialized item(s)&amp; bought-out item(s)</li> <li>3. Documents as mentioned elsewhere&amp; any other document in support of Bidder's proposal and qualification criteria.</li> </ol> <p>Further ,the Bidder shall submit the following additional documents in its Bid for ESHS and MSIP:</p> <p><b>Code of Conduct (ESHS)</b></p> <p>The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-clause 1.1.2.7 of the GC), to ensure compliance with its Environmental, Social, Health and Safety (ESHS) obligations under the contract. <i>[Note: Complete and include the risks to be addressed by the Code in accordance with Section VII-Works' Requirements, e.g. risks associated with: labour influx, spread of communicable diseases, sexual harassment, gender based violence, illicit behaviour and crime, and maintaining a safe environment etc.]</i></p> <p>In addition, the Bidder shall detail how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/ engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches.</p> <p>The Contractor shall be required to implement the agreed Code of Conduct.</p> <p><b>Management Strategies and Implementation Plans (MSIP) to manage the (ESHS) risks</b></p> <p>The Bidder shall submit Management Strategies and Implementation Plans (MSIP)</p>

	<p>to manage the following key Environmental, Social, Health and Safety (ESHS) risks.</p> <p><i>[Note: insert name of plan and specific risk/s];</i></p> <ul style="list-style-type: none"> <li>• <i>[e.g. Traffic Management Plan to ensure safety of local communities from construction traffic];</i></li> <li>• <i>[e.g. Water Resource Protection Plan to prevent contamination of drinking water];</i></li> <li>• <i>[e.g. Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts];</i></li> <li>• <i>[e.g. Strategy for obtaining Consents/Permits prior to the start of relevant works such as opening a quarry or borrow pit].</i></li> </ul> <p>The Contractor shall be required to submit for approval, and subsequently implement, the Contractor’s Environment and Social Management Plan (C-ESMP), in accordance with the Particular Conditions of Contract Sub-Clause 4.1, that includes the agreed Management Strategies and Implementation Plans described here.</p> <p><i>[Note: The extent and scope of these requirements should reflect the significant ESHS risks or requirements set out in Section VII as advised by Environmental/Social specialist/s. The key risks to be addressed by the Bidder should be identified by Environmental/Social specialist/s, for example, from the Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), Resettlement Action Plan (RAP)(RAP will be taken up by the Employer), and/or Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project), up to a maximum of four. The risks may arise during mobilization or construction phases, and may include construction traffic impacts on the community, pollution of drinking water, depositing on private land and impacts on rare species etc. The management strategies and/or implementation plans to address these could include, as appropriate: mobilization strategy, strategy for obtaining consents/permits, traffic management plan, water resource protection plan, bio-diversity protection plan and a strategy for marking and respecting work site boundaries etc.]</i></p>
<p><b>ITB 13.1 &amp; ITB 11.1 (d)</b></p>	<p>Alternative bids shall not be permitted.</p>
<p><b>ITB 13.2</b></p>	<p>Alternative times for completion shall not be permitted.</p>
<p><b>ITB 14.7</b></p> <p><b>Note-1</b></p>	<p>Please insert the following “note-1” in 14.7. :</p> <p><i>Note: “Bidders may like to ascertain availability of excise/custom duty exemption benefits, if any as per law, available in India to the contracts financed under World Bank loan/credits. They are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the employer will not compensate the bidder (contractor). Where the bidder has quoted taking into account such benefits, he must give all information required for issue of certificates in terms of such notifications as per form attached to the Qualification Information in the bid. To the extent the employer determines the quantity indicated therein are reasonable keeping in view the -- Bill of Quantities , construction program and methodology, the certificates will be issued within 60 [sixty] days of signing of contract and no subsequent changes will be permitted.</i></p> <p><i>No certificate will be issued for items where no quantity/capacity of equipment is indicated in the statement. The bids which do not conform to the above provisions will be treated as non-responsive and rejected. Any delay in</i></p>

	<i>procurement of the construction equipment /machinery/goods as a result of the above shall not be a cause for granting any extension of time.”</i>
<b>ITB 14.7</b> <b>Note -2</b>	<p>Please insert the following “Note-2” in 14.7</p> <p>(i) <b>“The ‘Goods and Service Tax’ (GST), (including Integrated Goods and Services Tax and GST Compensation cess ) as applicable, being current tax system has been notified w.e.f. 01-07-2017 and thus its provisions shall be applicable”</b></p> <p>The Bidder to take advice from a tax consultant or GTS Practitioner or refer to web sites of Govt. of Odisha and /or Govt. of India</p> <p><b>(refer for more information : <a href="http://www.cbse.gov.in">www.cbse.gov.in</a>; <a href="http://www.cbse-gst.gov.in">www.cbse-gst.gov.in</a>; <a href="http://www.icegate.gov.in">www.icegate.gov.in</a> ; <a href="http://www.gst.gov.in">www.gst.gov.in</a> ; <a href="http://www.gst.gov.in">www.gst.gov.in</a>;and <a href="https://odishatax.gov.in">https://odishatax.gov.in</a>;) )</b></p> <p>(ii) The bidder shall take into account the effect in the proposal.</p>
<b>ITB 15.1</b>	<p>The currency (ies) of the bid and the payment currency (ies) shall be in accordance with Alternative as described below:</p> <p><i>Alternative A (Bidders to quote entirely in local currency):</i></p> <p>A(a) The prices shall be quoted by the Bidder in the “Bill of Quantities”entirely in Indian Rupees (INR),( the name of the currency of the Employer’s country, and further referred to as “the local currency”). A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer’s country (referred to as “the foreign currency requirements”) shall indicate in the Appendix to Bid - Table C (Summary of Payment Currencies) the percentage(s) of the Bid Price (excluding Provisional Sums), needed by the Bidder for the payment of such foreign currency requirements, limited to no more than three foreign currencies.</p> <p>The rates of exchange to be used by the Bidder in arriving at the local currency equivalent and the percentage(s) mentioned in (a) above shall be specified by the Bidder in the Appendix to Bid - Table C, and shall apply for all payments under the Contract so that no exchange risk will be borne by the successful Bidder.</p>
<b>ITB 18.1</b>	The bid validity period shall be 120 days.
<b>ITB18.3(a)</b>	NOT APPLICABLE
<b>ITB 19.1</b>	<p>A <i>Bid Security</i> shall be required.</p> <p>The amount and currency of the bid security shall be <b>INR 7.70 Crore</b> (Rupees Seven crore and Seventy lakhs) or freely convertible currencies equivalent to USD 1.25 million .</p>
<b>ITB 19.3 (d)</b>	<p>Other types of acceptable securities –</p> <ul style="list-style-type: none"> <li>- Receipted challan from the treasury of Govt. of Odisha,</li> <li>- Fixed Deposit, Demand Draft on any scheduled commercial bank in Odisha/State Bank of India</li> </ul>

	<p>- Indian : National Defence Certificates, National Savings Certificate, Postal Savings Passbook, Post office Time Deposit account, Kisan Vikas Patra</p> <p><b><i>Valid for twenty-eight (28) days beyond the bid validity period</i></b> and pledged in favor of:</p> <p>The Executive Engineer Main Dam Division, Burla Dist: Sambalpur, Odisha – 768017, India</p> <p>No interest shall be paid by Employer at any stage of contract on performance security.</p> <p>‘The performance security of a joint venture shall be in the name of joint venture’.</p>
<b>ITB 20.0 ; 20.1; 20.2</b>	<p><u>Three Scanned Copies of the Originals of all documents shall be submitted, in hard paper ,along with the bid marked as “Copies”.</u></p> <p><u>Further, for easy of operations, softcopies shall be in C D ‘s as well (i) Three (3) C.D.’s in PDF format and (ii) another three C D’s will be in MS Word / Excel format and shall be attached to original envelope.</u></p> <p><u>In case is of discrepancy between hard copy original and CD’s , the Hard Copy Original would prevail .</u></p>
<b>D. Submission and Opening of Bids</b>	
<b>ITB 22.1</b>	<p>Electronic Submission of Bids : Bidders shall not have option of submitting their bids electronically</p> <p>The original Hard paper documents as indicated in ITB 11.1.2 shall be submitted in sealed envelope to the following address by <b>16.11.2017</b> at <b>11:30 Hrs</b> (Indian Standard Time) :-</p> <p><u>The Chief Engineer &amp; Basin Manager, Upper Mahanadi Basin, Burla, Dist Sambalpur, Odisha , <u>Burla-768017, Odisha, India</u></u></p> <p><u>Place of submission : Office of the Chief Engineer &amp; Basin Manager, Upper Mahanadi Basin, Burla, Dist Sambalpur, Odisha , <u>Burla-768017, Odisha, India</u></u></p> <p><u>The envelope should be marked:</u> Bid name of work: “Construction of Additional Spillway with Hydro-Mechanical Works” and Bid No. ICB-1 / ODISHA/ASW_HIRA / 2017-18</p>
<b>ITB 25.1</b>	<p><b>BID OPENING</b> :The bid opening shall take place at: <b>16.11.2017 at 12:00Hrs</b> ( IST) onwards</p> <p>In the event of the specified date of Bid due date and bid opening being declared a holiday for the Employer, the Bid due date and bid opening will be at the appointed time and location on the next working day.</p>

<b>ITB 25.3</b>	<p>The Letter of Bid and Bill of Quantities shall be initialled by representatives of the Employer attending Bid opening. If initialization is required, it shall be conducted as follows:</p> <p>(a) The amount in figures as well as words shall be circled and shall be initialled</p> <p>(b) In case there are corrections in the amounts, either by over writing or striking, the same shall be specifically recorded and initialled</p>
<b>ITB 32.1</b>	<p>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is INDIAN RUPEES</p> <p>The source of exchange rate shall be State Bank Of India Bhubaneswar Main Branch, B.C. selling exchange rate.</p> <p>The date for the exchange rate shall be: Twenty Eight (28) days prior to deadline for submission of Bids</p> <p>The currency (ies) of the Bid shall be converted into a single currency in accordance with the procedure under Alternative A or B that follows:</p> <p>Alternative A: Bidders quote entirely in local currency</p> <p>For comparison of bids, the Bid Price, corrected pursuant to Clause 31, shall first be broken down into the respective amounts payable in various currencies by using the exchange rates specified by the bidder in accordance with Sub-Clause 15.1.</p> <p>In the second step, the Employer will convert the amounts in various currencies in which the Bid Price is payable to the single currency identified above at the selling rates established for similar transactions by the authority specified and on the date stipulated above.</p>
<b>ITB 33.1</b>	Domestic preference is not applicable
<b>ITB 34.1</b>	<p>Employer does not have identified sub-contractors, in advance. Works of specialized in nature can be executed through sub-contractor based on total value of the work as stipulated in Cl 34.4. The bidder should mention the three or four name(s) of such sub-contractors at the time of bidding, stating about their earlier work experience&amp; quantum, previous clients. The specific sub-contractors can't be engaged in the work unless approved by the employer. One of the specialized nature of work permissible for engagement of sub-contractors may be :1) Hydro mechanical works, 2) Electrical works,</p> <p>3) Instrumentation and Dam Control system and Architectural &amp; Land scaping work</p>
<b>ITB 34.2</b>	NOT APPLICABLE
<b>ITB 34.4</b>	<i>Option 1:</i>

	<p><i>a) In the case of Prequalification: NOT APPLICABLE &amp; DELETED</i></p> <p><b>Option 2: cl 34.4 of I T B</b></p> <p><b><i>a)In the case of Post-qualification:</i></b></p> <p><i>The IDENTIFIED volume of SPECIALISED work stated in Section III shall be considered for qualification and experience to meet the minimum criteria for relevant work</i></p> <p><i>However , Contractor’s proposed subcontracting: Maximum percentage of subcontracting permitted is : 20% of the total contract amount</i></p> <p>b) Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the works to be subcontracted along with complete details of the sub-contractors and their qualification and experience. The qualification and experience of the sub-contractors must meet the minimum criteria for the relevant work to be sub-contracted failing which such sub-contractors will not be permitted to participate.</p> <p>c) <u>Sub-contractors’ qualification and experience will not be considered for evaluation of the Bidder.</u> The Bidder on its own (without taking into account the qualification and experience of the sub-contractor) should meet the qualification criteria.</p>
<p><b>ITB 42.1</b></p>	<p>The successful Bidder shall submit two Performance Security. First the Performance Security @ 9% of accepted contract value and second the Performance Security @ 1% of accepted contract value towards an Environmental, Social, Health and Safety (ESHS).</p>

**PART - I**  
**Section III**  
**Evaluation and Qualification**  
**Criteria**

## **Section III. Evaluation and Qualification Criteria (Without Prequalification)**

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 35 and ITB 37, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- For construction turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- Value of single contract - Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 32.1. Any error in determining the exchange rates in the Bid may be corrected by the Employer.

### **1. Domestic Preference : NOT APPLICABLE**

A margin of preference of 7.5% (seven and one-half percent) shall be granted to domestic contractors, in accordance with, and subject to, the following provisions:

- (a) Contractors applying for such preference shall provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Borrower and accepted by the Bank, a particular contractor or group of contractors qualifies for a domestic preference. The bidding documents shall clearly indicate the preference and the method that will be followed in the evaluation and comparison of bids to give effect to such preference.
- (b) After bids have been received and reviewed by the Borrower, responsive bids shall be classified into the following groups:
  - (i) Group A: bids offered by domestic contractors eligible for the preference.
  - (ii) Group B: bids offered by other contractors.

All evaluated bids in each group shall, as a first evaluation step, be compared to determine the lowest bid, and the lowest evaluated bids in each group shall be further compared with each other. If, as a result of this comparison, a bid from Group A is the lowest, it shall be selected for the award. If a bid from Group B is the lowest, as a second evaluation step, all bids from Group B shall then be further compared with the lowest evaluated bid from Group A. For the purpose of this further comparison only, an amount equal to 7.5% (seven and one-half percent) of the respective bid price corrected for arithmetical errors, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each bid from Group B. If the bid from Group A is the lowest, it shall be selected for award. If not, the lowest evaluated bid from Group B based on the first evaluation step shall be selected.

### **2. Evaluation**

In addition to the criteria listed in ITB 35.2 (a) – (e) the following criteria shall apply:

#### **2.1 Assessment of adequacy of Technical Proposal with Requirements**

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and



fully in accordance with the requirements stipulated in Form TP (Technical proposal) of Appendix to bid as well as Section VI (Works Requirements). Adequacy of the technical proposal will be considered as a condition of responsiveness in accordance with ITB 29.3 and Key Qualification Criteria stated herein

**2.2 Multiple Contracts**, if permitted under ITB 35.4, will be evaluated as follows: **NOT APPLICABLE**

**Award Criteria for Multiple Contracts [ITB 35.4:**

**Lots**

Bidders have the option to Bid for any one or more lots. Bids will be evaluated lot-wise, taking into account discounts offered, if any, for combined lots. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined lots, subject to the selected Bidder(s) meeting the required qualification criteria for lot or combination of lots as the case may be.

**Packages**

Bidders have the option to Bid for any one or more packages and for any one or more lots within a package. Bids will be evaluated package-wise, taking into account discounts offered, if any, for combined packages and/or lots within a package. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined packages, subject to the selected Bidder(s) meeting the required qualification criteria for combination of packages and or lots as the case may be.

**Qualification Criteria for Multiple Contracts:**

Section III describes criteria for qualification for each lot (contract) for multiple lots (contracts). The criteria for qualification is aggregate minimum requirement for respective lots as specified under items 3.1, 3.2, 4.2(a) and 4.2(b). However, with respect to the specific experience under item 4.2 (a) of Section III, the Employer will select any one or more of the options as identified below:

N is the minimum number of contracts

V is the minimum value of a single contract

**(a) For one Contract:**

**Option 1:**

(i) N contracts, each of minimum value V;

Or

**Option 2:**

(i) N contracts, each of minimum value V; or

(ii) Less than or equal to N contracts, each of minimum value V, but with total value of all contracts equal or more than N x V.

**(b) For multiple Contracts: NOT APPLICABLE**

**Option 1:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the bidder has submitted bids as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc.

or

**Option 2:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the bidder has submitted bids as follows, and N1,N2,N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc, **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than  $N1 \times V1$ .

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than  $N2 \times V2$ .

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than  $N3 \times V3$ .

----etc.

Or

**Option 3:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has bid for as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc, **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than  $N1 \times V1$ .

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than  $N2 \times V2$ .

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than  $N3 \times V3$ .

----etc, **or**

(iii) Subject to compliance as per (ii) above with respect to minimum value of single contract for each lot, total number of contracts is equal or less than  $N1 + N2 + N3$  --but the total value of all such contracts is equal or more than  $N1 \times V1 + N2 \times V2 + N3 \times V3$  ----.

Section III - Evaluation and Qualification Criteria

**2.3 Alternative Completion Times**, if permitted under ITB 13.2, will be evaluated as follows: **NOT APPLICABLE** .....

**2.4 Technical alternatives** , if permitted under ITB 13.4, will be evaluated as follows: **NOT APPLICABLE** .....

**2.5 Specialized Subcontractors**

Only the specific experience of sub-contractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the specialized sub-contractors shall not be added to those of the Bidder for purposes of qualification of the Bidder.

**E- 3.0 Qualification**

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>Q-1. Eligibility</b>							
Q 1.1	<b>Nationality</b>	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
Q.1. 2	<b>Conflict of Interest</b>	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.3	<b>Bank Eligibility</b>	Not having been declared ineligible by the Bank, as described in ITB 4.4, 4.5, 4.6 and 4.7	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.4	<b>Government Owned Entity of the Borrower country</b>	Meets conditions of ITB 4.5	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.5	<b>United Nations resolution or Borrower’s country law</b>	Not having been excluded as a result of prohibition in the Borrower’s country laws or official regulations against commercial relations with the Bidder’s country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.7 and Section V.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>Q-2. Historical Contract Non-Performance</b>							
Q-2.1	<b>History of Non-Performing Contracts</b>	Non-performance of a contract <sup>1</sup> did not occur as a result of contractor default since <b>last five years</b>	Must meet requirement <sup>12</sup>	Must meet requirements	Must meet requirement <sup>2</sup>	N/A	Form CON-2
2.2	<b>Suspension Based on Execution of Bid Securing Declaration by the Employer or withdrawal of the Bid within Bid validity</b>	Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.6 or withdrawal of the Bid pursuant ITB 19.9.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
2.3	<b>Pending Litigation</b>	Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2
2.4	<b>Litigation</b>	No consistent history of court/arbitral award decisions against the Bidder <sup>3</sup>	Must meet	Must meet	Must meet	N/A	Form CON – 2

<sup>1</sup> Non performance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

<sup>2</sup> This requirement also applies to contracts executed by the Bidder as JV member.

<sup>3</sup>The Bidder shall provide accurate information on the letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
	<b>History</b>	since <b>last five years</b>	requirement	requirement	requirement		
2.5	<b>Declaration: Environmental, Social, Health, and Safety (ESHS) past performance</b>	Declare any civil work contracts that have been suspended or terminated and/or performance security called by an employer for reasons related to the non-compliance of any environmental, or social, or health or safety requirements or safeguard in the past five years <sup>4</sup> .	Must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	N/A	Each must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	N/A	Form CON-3 ESHS Performance Declaration

the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

<sup>4</sup> The Employer may use this information to seek further information or clarifications in carrying out its due diligence.

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>Q-3. Financial Situation and Performance</b>							
3.1	<b>Financial Capabilities</b>	<p>(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as <b>INR 76 Crore</b> for the subject contract(s) net of the Bidders other commitments.</p> <p>(ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>(iii) The audited balance sheets other financial statements acceptable to the Employer, for the last <b>Five years</b> shall be submitted and must</p>	<p>Must meet requirement 100%</p> <p>Must meet requirement 100%</p> <p>Must meet requirement</p>	<p>Must meet requirement 100%</p> <p>Must meet requirement 100%</p> <p>-Do-</p>	<p>Lead (i)partner meet At-least 50 % of requirement and (ii) other partners at-least 25% of requirement</p> <p>-do-</p>	<p>N/A</p> <p>-do-</p>	<p>Form FIN – 3.1, with attachments</p>

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.					
3.2	<b>Annual Construction Turnover</b>	At least two financial years annual construction turnover of <b>INR 377 Crores</b> calculated as total certified payments received for contracts in progress and/or completed within the last <i>Five</i> years,	Must meet requirement 100%	Must meet requirement 100%	Must meet- Lead (i) partner meet  At-least 50 % of requirement and (ii) other partners at-least 25% of requirement	-do- At-least 25% of requirement	Form FIN – 3.2
<b>Q-4.0 Experience</b>							
4.1 (a)	<b>General Construction Experience</b>	Experience under construction contracts in the role of prime contractor, JV member, sub-contractors, or management contractor for at least the <b>last Five years</b> ,	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP – 4.1
Q-4.2	<b>Specific Construction</b>	(i) A minimum one (1) number of similar <sup>5</sup> contracts specified	Must meet	Must meet	N/A	N/A	Form EXP

<sup>5</sup>The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VII, Work's Requirements. Summation



Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
(a)	<b>&amp; Contract Management Experience</b>	<p>below that have been satisfactorily and substantially<sup>6</sup> completed as a prime contractor, joint venture member<sup>7</sup>, or sub-contractors between <b>last five years</b> and application submission deadline:</p> <p><i>'Participation as contractor, management contractor, or sub-contractor, in at least one similar contract within the last five years with a value of at least <b>INR 346 crores</b> or equivalent amount in foreign currency that has been successfully or substantially completed (not less than 90% of contract value) and that are similar to proposed works @</i></p>	requirement	requirement <sup>8</sup>			4.2(a)

of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

<sup>6</sup> Substantial completion shall be based on 80% or more works completed under the contract.

<sup>7</sup> For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

<sup>8</sup> In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		<p>at 2016-17 price level.</p> <p>*** <i>Similar Work means: works in past to include the type of the “Proposed Works” described in “Requirements / Technical Specifications” i.e., earth work (with excavation &amp; consolidation activities) for Dam or Irrigation Project / Hydro-electric Project /Power Plant with earth work, Reinforced Concrete for Spillway or dam with or without, Hydro-mechanical works viz. radial gates, gantry crane. ]</i></p>					
		<p>“(ii) For the following specialized works, the Employer permits Joint Venture member / specialized sub-contractors as per ITB 34.3”:</p> <p>(iii) The contractor organization shall by themselves and / or deploy associate firm for Preparation of Civil Construction Drawings who should have successfully</p>	<p>“Must meet requirement for one contract (Requirement can be met through a Specialized Sub-contractor)”</p>	<p>Must meet requirement</p>	<p>N/A</p>	<p>“Must meet requirement (Requirement can be met through a Specialized Sub-contractor)”</p>	

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		<p>executed three (3) projects of detail Civil Construction Drawings of Dam”, of not less than 50 meters height, other related structure drawings and having relevant specialists with experience of more than 15 years. Also the firm or his joint venture associate should have conducted fabrication &amp; construction / erection drawings of hydro-mechanical works &amp; the electrical works.</p> <p>(iv) The contractor or his proposed associate identified specialized firm should have, conducted review of prepared shop / manufacture drawings, fabrication &amp; construction / erection drawings, erected , commissioned, of at least one (1) Hydro-mechanical works consisting of radial gates , gantry crane , not less than INR 35 Crore @ 2016-17 price level, during last ten years.</p>					
4.2		For the above and any other	Must meet	Must meet	N/A	Must meet	Form EXP –

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
(b)		<p>contracts completed and under implementation as prime contractor, joint venture member, or sub-contractor<sup>9</sup> on or after the first day of the calendar year during the period stipulated in 4.2 (a) above, a minimum construction experience in the following key activities successfully completed<sup>10</sup>: [list activities indicating volume, number or rate of production as applicable]<sup>11</sup></p> <p>(1)The contractor organization by them self or his associate specialized firm / Joint Venture should have executed during last ten years , the following minimum quantities in any similar works :</p> <p>(1a)Earth work for dyke / embankment construction for minimum volume of 7.8 lakh cubic meters average 65,000 cubic</p>	requirements	requirements		the following requirements for the key activities listed below <sup>12</sup> <i>[list key activities and the corresponding minimum requirements]</i>	4.2 (b)

<sup>9</sup>For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder’s share shall be counted to meet this requirement.

<sup>10</sup> Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period. The rate of production shall be the annual production rate for the key construction activity (or activities).

<sup>11</sup> The minimum experience requirement for multiple contracts will be the sum of the minimum requirements for respective individual contracts.

<sup>12</sup> Requirement can be met through a Specialized Sub-contractor

Section III - Evaluation and Qualification Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		<p>meters in a month</p> <p>(1b) Earth work and rock excavation _ for minimum volume of 15.6 lakh cubic meters average 1,30,000 cubic meters in a month</p> <p>(1c) Concrete works for minimum volume of 1,65,000 cubic meters</p> <p>(1d-i) H.M. – Radial Gates min. weighing 80 M.T. at least one.</p> <p>(1d-ii)H.M. – Gantry Crane min. 50 M.T. capacity, at least one</p> <p>(1 e ) The contactor or his identified Sub-contractor should possess required valid electrical license for executing the electrification works and should have executed one similar electrical works totaling INR 2 Crores @ 2016-17 price level during the last three years.</p> <p>@) at 2016-17 price level. Financial turnover and cost of completed works of previous years shall be given weight-age of 5% per year based on rupee value to bring them to 2016-17 price level.</p>					

**E-5.0 Personnel**

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

[Specify requirements for each lot as applicable]

{please refer Section –VII-B :Preparation of Construction Drawings}

**E-5.1 Preparation of Construction Drawings**

S. No.	Position / Level / job area for preparation of construction drawings	Minimum Nos.	Total work experience Required	In Similar work experience Required
			(Years)	(Years)
(a)	(b)	(c)	(d)	(e)
D1	Head : (a) one Senior for Project Management at H Q  (b) Site Representation on monthly meeting, also as & when required for clarifications on Drawings / Engineering aspects by him or concerned specialist of Drawing	1	25	20
D2	Dam and Hydraulic Structures Specialist	2	15	10
D3	Structural Specialist	2	15	10
D4	Geologist (Part Time)	1	15	10
D5	Geotechnical Specialist	1	15	10
D6	Civil Specialist	5	15	10
D7	Electrical Engineer (Part Time)	2	15	10
D8	Mechanical Engineer, Specializing in Hydro Mechanical Equipment (Part Time)	3	15	10
D9	Senior Project Manager: construction, preparation of construction drawings coordination & Monitoring, at Construction Site	1	20	15

S. No.	Position / Level / job area for preparation of construction drawings	Minimum Nos.	Total work experience Required (Years)	In Similar work experience Required (Years)
			(d)	(e)
(a)	(b)	(c)	(d)	(e)
D10	Draft Men (Civil/Elect./Mech./H.M.) (4+1+1+1)	7	15	10
D11	Support Staff (IT / Steno / Data Punch)	3	10	5
D12	MIS	2	7	5

#### E-5.2 Construction Personnel

S. No.	Construction Personnel (Minimum required)	Minimum Nos.	Total work experience Required (Years)	In Similar work experience Required (Years)
(a)	(b)	(c)	(d)	(e)
C1	Overall Project Manager	1	20	15
C2 (a)	Safety Manager	1	10	6
C2 (b)	<i>Supervisor Safety -1</i>	1	5	3
C2(c)	<i>Supervisor Safety -2</i>	1	5	3
C3(a)	Environmental Manager	1	15	10
C3(b)	Sociologist Cum community liaison Specialist	1	10	5
C4	GEOLOGIST/Geotechnical / Survey / soil Engineer (part time )	1	15	10
C5	Quality Assurance Manager with Q C and site lab-in-charge(s) (civil- full time & Mechanical – electrical – part time) (1 no plus )	1	15	10
C6	Dam Site Construction Manager	1	20	15
C7	SPILL-WAY Site Manager	2	20	15
C8	Dyke (One at each location)	3	20	15
C9	Site Manager, Survey, measurement & billing , execution & supervision,	2	20	15

S. No.	Construction Personnel (Minimum required)	Minimum Nos.	Total work experience Required (Years)	In Similar work experience Required (Years)
(a)	(b)	(c)	(d)	(e)
C10	Planning & Monitoring & Material Purchase Manager	1	15	10
C11	Construction Equipment Manager	2	15	10
C-12	Site Engineer Degree/Diploma in Civil Eng./ Mech. Eng.	4	12	7
C-13	Work Supervisor / ITI Trained / Dip in Civil Engg.	3		
C-14	Laboratory Assistant's (2nos) ITI Trained/ Dip in Civil Engg.	2	15	5
	Hydro-Mechanical Works			
HM-1	Works Manager (with related staff at )	1	15	12
	Hydro-Mechanical –site erection	2		
HM-2	Erection Engr.	2	10	8
HM-3	other staff , storage,	3		
E-1	Electrical Engineer- Installation	2	7	5

Note: (i) The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV : Bidding Forms

### E-6.0 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter: [Specify requirements for each lot as applicable]

Sl. No.	Details of Equipment	Capacity	Maximum age as on date of submission of bid (in years)	Minimum Number Required
1	Hydraulic Excavator	1.0m <sup>3</sup> -1.5m <sup>3</sup>	5	10
2	Concrete Vibrators (electrical)	20 mm -60 mm (Needle)	5	25
3	(a) Tipper (b) Truck	7.5- 10T 7.5 – 10 T	5 5	60 10
4	Water Tank Lorry	5000-10000 Lit.	5	5
5	Pneumatic Vibrator	20 mm -60 mm (Needle)	5	10
6	Transit mixer	4 Cum	5	8
7	Air Compressor (Diesel)	500 cfm	5	6



Section III - Evaluation and Qualification Criteria

Sl. No.	Details of Equipment	Capacity	Maximum age as on date of submission of bid (in years)	Minimum Number Required
8	Air Compressor (Elect.)	750 cfm	5	3
9	Air Compressor (Tyre mounted)	350 cfm	5	10
10	Air-track drills	of reputed Manufacturer	5	10
11	Wagon drills	of reputed Manufacturer	5	10
12	Water Pumps	5 HP to 25 HP	5	30
13	Generator	250 KVA	5	8
14	Welding Machine	Single Phase, Input 5KVA, Output-20 to 160Amp.	5	20
15	Concrete Batching Plant	120 m <sup>3</sup> /hr.	5	1
15A	Mobile Self Loading, Weigh-Batching & Mixing & Transporting Mixtures	6.0 m <sup>3</sup>	2	4
16	Road Roller	i) 10 T ii) 10 T Vibratory	5 5	2 3
17	Shuttering & centring steel plates	1000 Sqm. (0.60x1.20)m	1year	1000 Sqm.
18	Aggregate Processing Plant	300 TPH	4	1
19	Shotcrete Machines (standard make) for SFRS	Dry & Wet	4 4	2 2
20	Truck-mounted Hydraulic Concrete Pumps	25 – 30 m <sup>3</sup> /hr	3	3
21	Grout Equipment - Complete	Set	5	8
22	Cranes:- Hydra/ Groove	25T & 50T	5	6
23	Tower Cranes	10T, 25-30m radius	5	3
24.	D.G. sets	adequate	3	3
25.	Chilling Plant	adequate	1	1

Section III - Evaluation and Qualification Criteria

<b>Sl. No.</b>	<b>Details of Equipment</b>	<b>Capacity</b>	<b>Maximum age as on date of submission of bid (in years)</b>	<b>Minimum Number Required</b>
26.	Workshop & Spares	As per plan	Set-up Mostly New As required	As per plan
27.	QC Lab – Soil & Concrete	As per specifications	Mostly new equipment As per specification	As per approval of Engineer
28	(a) Jack Hammers	Ordinary Pneumatic	3	10
	(b) Secondary Drilling	As required	3	10
29	Non-Nuclear Density Testers	As required	2	2

Note: Based on the studies carried out by the Engineer, the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the above Table.

The Bidders should, however, undertake their own studies and furnish with their Bid a detailed construction planning and methodology supported with the layout and necessary drawings and calculations (detailed) to allow the employer to review their proposals. The numbers, types and capacities of each plant / equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

The Bidder shall provide further details of proposed No. of equipment using Form EQU in Section IV, Bidding Forms.

## **Section IV. Bidding Forms**

## Section IV. Bidding Forms

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## Letter of Bid

Date: \_\_\_\_\_

ICB No.: \_\_\_\_\_

Invitation for Bid No.: \_\_\_\_\_

Alternative 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 8)\_\_\_\_\_;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid Securing Declaration in the Employer's country in accordance with ITB 4.6.
- (d) We offer to execute in conformity with the Bidding Documents the following Works: \_\_\_\_
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is:  
In case of only one lot, total price of the Bid\_\_\_\_\_
- (f) The discounts offered and the methodology for their application are:
  - (i) The discounts offered are:
  - (ii) The exact method of calculations to determine the net price after application of discounts is shown below::
- (g) Our bid shall be valid for a period of **120 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;
- (h) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- (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 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (j) We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by a member of the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's country laws or official regulations or pursuant to a decision of the United Nations Security Council;

Section IV - Bidding Forms

- (k) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB 4.5;<sup>13</sup>
- (l) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

- (m) 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; and
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption.

Name of the Bidder\* \_\_\_\_\_  
 Name of the person duly authorized to sign the Bid on behalf of the Bidder\*\* \_\_\_\_\_

Title of the person signing the Bid \_\_\_\_\_

Signature of the person named above \_\_\_\_\_

Date signed \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

- \*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder
- \*\* : Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

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<sup>13</sup>Bidder to use as appropriate



**Form - Declaration regarding customs / excise duty exemption for goods / construction equipment bought for the work, (if applicable, as per current law ) (Refer Clause 14.7.1 of ITB)**

(Bidder’s Name and Address)

To:.....  
(Name of the Employer)  
Name of the Project.....

Dear Sir/ Madam,

Re: [Name of Work].....

Certificate for Import/ Procurement of Goods/ Construction Equipment

1. We confirm that we are solely responsible for obtaining customs/ excise duty waivers which we have considered in our bid and in case of failure to receive such waivers for reasons whatsoever, the Employer will not compensate us.
2. We are furnishing below the information required by the Employer for issue of the necessary certificates in terms of the Government of India Central Excise Notification No. 108/95 and Custom Notification No. 85/99.
3. The goods / construction equipment for which certificates are required are as under:

Items	Make / Brand Name	Capacity [where applicable]	Quantity	Value	State whether it will be procured locally or in imported [if so from which country]	Remarks regarding justification for the quantity and their usage in works.
Goods						
[a]						
[b]						
Construction equipment						
[a]						
[b]						

4. We agree that no modification to the above list is permitted after bids are opened.

Section IV - Bidding Forms

5. We agree that the certificate will be issued only to the extent considered reasonable by the employer for the above, based on the ---- Bill of Quantities and the construction programme and methodology as furnished by us along with the bid.
6. We confirm that the above goods will be exclusively used for the construction of the above work and construction equipment will not be sold or otherwise disposed off in any manner for a period of five years from the date of acquisition.
7. We also confirm that we shall abide by the rules / regulations of the Custom and Excise Act as may be applicable on the goods / equipment on which exemptions from payment custom and excise duty have been /will be availed.

Date: \_\_\_\_\_

(Signature): \_\_\_\_\_

Place: \_\_\_\_\_

(Printed Name): \_\_\_\_\_

(Designation): \_\_\_\_\_

(Common Seal): \_\_\_\_\_

This certificate will be issued within 60 days of signing of contract and no subsequent changes will be permitted.

# **SECTION -IV**

## **Appendix to Bid**

## Appendix to Bid

### Schedule of Adjustment Data

**Local Currency** In table A, B & C, below the bidder shall (a) indicate its amount of local currency payment, (b) indicate its proposed source and base values of indices for the different foreign currency elements of cost, (c) derive its proposed weightings for local and foreign currency payment and (d) list the exchange rates used in the currency conversion.

### TABLE A: Local Currency

1. For Cost of Civil Works , electrical works , other works,(other than H M portion):

$$P_n = a + b \frac{L_n}{L_0} + c \frac{E_n}{E_0} + d \frac{M_n}{M_0} + \dots$$

Index code	Index description	Source of index	Base value & date (refer explanation)		Bidder's related currency amount	Pre - determined Weighting
			Min.	Max		
A	Non-adjustable	-	a: 0.15	a:0.15	-	
L	Labour	the average consumer price index for industrial workers for ANGUL-TALCHER centre for the month preceding the date of opening of Bids as published by Labour Bureau, ministry of Labour, Government of India.	b: 0.20	b:0.20		
E	Cement	The all India average whole sale price index for cement for the month preceding	c: 0.22	c :0. 25		

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Index code	Index description	Source of index	Base value & date (refer explanation)		Bidder's related currency amount	Pre - determined Weighting
			Min.	Max		
		the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi				
M	Miscellaneous & other items	The all India average whole sale price index (all commodities) (other than cement, steel, bitumen and POL),. For the month preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.	d : 0.13	d:0.10		
S	Reinforcement Steel & Structural Steel , Products, electrodes	The all India average wholesale price index for steel (Bars and Rods) for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi <i>Note: For the application of this clause, index</i>	s: 0.10	s:0.12		

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Index code	Index description	Source of index	Base value & date (refer explanation)		Bidder's related currency amount	Pre - determined Weighting
			Min.	Max		
		<i>of Bars and Rods has been chosen to represent steel group.</i>				
EM	Equipment & Machinery	The all India average whole sale price index (all commodities) (other than cement, steel, bitumen and POL), For the month preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.	em : 0.14	em:0.10		
F	Fuel: P. O. L. (all types of consumables)	The average official retail price of High Speed Diesel (HSD) at the existing nearest consumer pump of IOC  <i>Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group</i>	f: 0.06	f:0.08		
Total			1.00	1.00		

**Note :** The bidder has to indicate the weightage within the range as proposed by the Employer such that the total weight=1.00 in the above table

## 2. For Cost of Hydro-Mechanical Works :

$$P_n = a + b L_n/L_0 + c E_n/E_0 + d M_n/M_0 + \dots\dots\dots$$

Index code	Index description	Source of index	Base value & date (refer explanation)		Bidder's related currency amount	Pre - determined Weighting
			Min.	Max.		
A	Non-adjustable	-	a: 0.15	a: 0.15	-	
L	Labour	the average consumer price index for industrial workers for ANGUL-TALCHER centre for the month preceding the date of opening of Bids as published by Labour Bureau, ministry of Labour, Government of India.	b: 0.20	b: 20		
S	Structural Steel & Steel Products, Electrodes	The all India average wholesale price index for steel (Bars and Rods) for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi <i>Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.</i>	s: 0.40	s : 0.45		
EM	Equipment & Machinery	The all India average whole sale price index (all commodities) (other than cement, steel, bitumen and POL), For the month preceding the date of	em: 0.15	em: 0.10		

## Section IV - Bidding Forms

Index code	Index description	Source of index	Base value & date (refer explanation)		Bidder's related currency amount	Pre - determined Weighting
			Min.	Max.		
		opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.				
<b>M</b>	<b>Miscellaneous &amp; other items</b>	India The all India average whole sale price index (all commodities) (other than cement, steel, bitumen and POL), For the month preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.	<b>d : 0.02</b>	<b>d:0.00</b>		
<b>F</b>	<b>Fuel: P. O. L. (all types of consumables)</b>	The average official retail price of High Speed Diesel (HSD) at the existing nearest consumer pump of IOC  <i>Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group</i>	<b>f : 0.08</b>	<b>f: 0.10</b>		
<b>Total</b>			<b>1.00</b>	<b>1.00</b>		

**Note :** The bidder has to indicate the weightage within the range as proposed by the Employer such that the total weight=1.00 in the above table



## TABLE C: Summary of Payment Currencies

**Table: Alternative A**

For .....[insert name of Section of the Works]

Name of payment currency	Amount of currency	Rate of exchange (local currency per unit of foreign)	Local currency equivalent	Percentage of Total Bid Price (TBP)
	A	B	C=AxB	D=100xC
Local currency INR		1.00		
<b>Foreign</b>				
Currency # 1				
<b>Foreign</b>				
Currency #2				
Currency#3				
Total Bid Price				100.00
<b>TOTAL BID PRICE</b> (including _ if any)				

**(Table “B&D” not applicable)**

# **SECTION –IV**

## **Bill of Quantities (ITEM RATE)**

## **BILL OF QUANTITIES**

### **PREAMBLE - A**

#### **A1 SCOPE**

This preamble to Bill of Quantities describes the rates / costs / quantities that the Bidders shall include with the price for each item.

A1.1 Present B O Q is with quantity based on drawings for tender/ bidding purpose,

The actual site works shall be carried out by Contractor based on detailed construction drawings prepared by Contractor / his “Specialist for preparation of Drawing” and as approved by Engineer

#### **A2 Unit Prices**

##### **A2.1 (a)**

The schedules of Bill of Quantities shall mention quantities of each item thereto. The Contractor has to quote his “item unit rate” in figures in the prescribed format appended to the Bidding document. The total price shall be the price of all items as quoted in the bill of quantity, by the bidder.

The bidder has to enter the amount in figures and in words and the total amount.

##### **A2.1 (b)**

The Bidder / Contractor will write item unit rate up to two decimal point only. If he writes the item unit rate upto more decimal point, the first two decimal point shall only be considered without rounding off.

##### **A2.2 The ‘Goods and Service Tax’ (GST), ( including Integrated Goods and Services Tax and GST Compensation cess ) as applicable , being current indirect tax system , has been notified w.e.f. 01-07-2017 and thus its provisions shall be applicable”**

(refer for more information : [www.cbse.gov.in](http://www.cbse.gov.in); [www.cbse-gst.gov.in](http://www.cbse-gst.gov.in); [www.icegate.gov.in](http://www.icegate.gov.in) ; [www.gst.gov.in](http://www.gst.gov.in) ; [www.incometaxindia.gov.in](http://www.incometaxindia.gov.in) ; )

**PREAMBLE-B**  
**CONDITIONS TO BE TAKEN CARE FOR**  
**RATES QUOTED IN B.O.Q.**

- B1. The work shall be carried out as per Work Requirement / Technical Specifications of this bid document.

In case of extra item during construction period, the Contractor and the Engineer in charge should refer to CWC Guidelines for Preparation of Project Estimate for River Valley Projects-1997 and / or Odisha-WRD or P.W.D specifications / specification mentioned in Schedule of Rates of State Govt.

- B2. During execution of work, samples of materials and other special items may be referred for laboratory testing by Engineer or his representative and bill thus raised by concerned laboratory shall be recovered from contractor's bill, as the tests performed are re-confirmatory tests especially when the contractors site laboratory does not have such facility.

**SECTION – IV**  
**BILL OF QUANTITIES**  
**FOR**

1. Schedule - A - Civil Works for New Spillway, NOF blocks, Stilling Basin & Spill Channel up to confluence with river Mahanadi, fall structure and earthen embankments d/s of fall along spill channel
2. Schedule - B - Civil Works for Earthen Dam
3. Schedule – HM - Hydro-Mechanical Works
4. Schedule – ELE - Electrical Works
5. Schedule – ESHS - Environment, Social, Health & Safety ,

## GRAND SUMMARY

**Contract Name : “CONSTRUCTION OF ADDITIONAL SPILLWAY WITH HYDRO-MECHANICAL WORKS” ON LEFT OF GANDHI HILLOCK AT HIRAKUD DAM – ODISHA, INDIA .**

**Contract Number: ICB-1/ODISHA/ASW\_HIRA/2017-18**

**W.B : Project I D –India- P089985-IN**

Sl. No.	Price Schedule	Short Description of Price Schedule	Sub –Total (brought forward) (Rs in Lakhs in figures)	Sub-Total (Rs, in Lakhs in words)
1(i)	A	Civil Works for New Spillway, NOF blocks, Stilling Basin & Spill Channel up to confluence with river Mahanadi, fall structure and earthen embankments d/s of fall along spill channel		
1(ii)	B	Civil Works for Earthen Dam		
1 (iii)		Sub Total –CIVIL WORKS: (A + B)		
2(i)	H.M.(i)	Equipment - Gates & Hoists-Fabrication, Supply and Delivery		
2(ii)	H.M.(ii)	H.M. Equipment - Gates & Hoists - Erection Portion		
2(iii)	H.M.(iii)	Supply of Mandatory / Recommended Spares & Tools		
2(iv)		Sub Total = =H.M.(i) +(ii)+(iii)		
3	El works	Electrical Works		
4	ESHS	Environment, Social, Health & Safety ,		
5 (a)		Grand Total= 1(iii )+2(iv)+3 +4=		
5 (b)	(Rs.....only )			

**BILL OF QUANTITIES ( BOQ) - (1 of 2)**

**NAME OF WORK: CONSTRUCTION OF ADDITIONAL SPILLWAY ON LEFT OF GANDHI HILLOCK AT HIRAKUD DAM - ODISHA INDIA. - Civil Works (NOF blocks, Stilling Basin & Spill channel up to confluence with river Mahanadi, fall structure and earthen embankments d/s of fall along spill channel)**

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
1	<b>A1</b>		<b>Clearing of Site</b>				
	A1.1	3.2, 3.3	Jungle/ Woody vegetation removal	m <sup>2</sup>	360000		
	A1.2	3.2, 3.3	Boulder removal	m <sup>3</sup>	600		
2	<b>A2</b>		<b>Dewatering During Construction</b>				
	A2.1	4.3.2, 4.4.1	Dewatering of Surface Construction Sites including supply, installation and removal of pumping equipment from the Site	KWh	300000		
3	<b>A3</b>		<b>Surface Excavation</b>				
	A3.1	5.5, 5.6, 5.7	Excavation in all soils incl. disposal up to 2kms	m <sup>3</sup>	14,16,690		
	A3.2		Rock excavation incl. disposal with all leads, lifts and de-lifts.				
	A3.2.1	5.6, 5.7	(i) DI rock	m <sup>3</sup>	7,00,510		
	A3.2.2	5.6, 5.7	(ii) Hard rock	m <sup>3</sup>	12,37,850		
	A3.3	5.6.1(c), 5.7	Rock excavation with Line drilling incl. Lead up to 2 kms.	m	2150		
	A3.4	5.6.1 (d), 5.7	Dental excavation incl. Lead up to 2 kms.	m <sup>3</sup>	2100		
4	<b>A4</b>		<b>Rock Support</b>				
	A4.1		<b>Grouted Rock Anchors (in Hill cut slopes)</b>				
	A4.1.1		<b>25 mm dia.</b>				
	A4.1.1.1	8.4, 8.9.2.3	- Length up to 4.0 m	m	1300		
	A4.1.1.2	8.4, 8.9.2.3	- Length 4.0 m to 6.0 m	m	6130		
	A4.2		<b>Grouted Rock Anchors in Training walls of spillway, Stilling basin &amp; Transition</b>				
	A4.2.1	8.4, 8.9.2.4	Grouted anchor bars (for concrete) 25 mm dia.	m	4800		

Section IV - Bidding Forms (Bill of Quantities)

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
	A4.2.2	8.4.6, 8.9.2.6	Extensions for embedding into concrete	m	2200		
	A4.3		<b>Mesh reinforcement</b>				
	A4.3.1	8.5.1, 8.9.3.1	Chain link fabric	m <sup>2</sup>	500		
	A4.3.2	8.5.2, 8.9.3.2	Wire mesh	m <sup>2</sup>	1000		
	A4.4		<b>Grouted Rock Anchors in Spillway glacis and Stilling Basin floor</b>				
	A4.4.1	8.4, 8.9.2.4	Grouted rock anchors (for concrete) 32 mm dia	m	12,400		
5	<b>A5</b>		<b>Shotcrete &amp; Steel Fibre reinforced shotcrete</b>				
	A5.1		<b>Shotcrete</b>				
	A5.1.1	9.5.1, 9.6 to 9.12, 9.15	Shotcrete in surface excavations	m <sup>3</sup>	200		
	A5.2		<b>Steel fibre reinforced shotcrete (SFRS)</b>				
	A5.2.1	9.5.2, 9.6 to 9.12, 9.15	SFRS in surface works	m <sup>3</sup>	1110		
6	<b>A6</b>		<b>Backfill</b>				
	A6.1	15.4, 15.5	Compacted earth backfill	m <sup>3</sup>	45,150		
7	<b>A7</b>		<b>Drilling and Grouting</b>				
	A7.1	10.8.2.1, 10.9.2.1	Drilling for grout curtain in dam foundation - Drilling of curtain grout holes 48 mm in rock	m	1290		
	A7.1.1	10.8.4.1, 10.9.3.3	Grouting Operations	m	1290		
	A7.2	10.8.2.2, 10.9.2.2	Drilling for consolidation grouting in dam foundation - Drilling of grout holes 38 mm dia.	m	8200		
	A7.2.1	10.8.4.3, 10.9.3.2	Grouting Operations	m	8200		
	A7.3		<b>Drilling of drainage holes</b>				
	A7.3.1	10.8.2.1, 10.9.2.3	- Drilling of 76 mm dia. drainage Holes from Foundation gallery floor	m	970		
	A7.3.2	10.8.2.1, 10.9.2.3	- Drilling of 76mm dia. Drainage holes on hill cut slopes	m	6230		
	A7.4		<b>Drilling of exploratory holes, check holes, and holes for instrumentation</b>				
	A7.4.1	10.8.2.2, 10.9.2.4	- Drilling of 150 mm dia. Holes	m	100		
	A7.4.2	10.8.2.2, 10.9.2.4	- Drilling of 100 mm dia. Holes	m	400		
	A7.4.3	10.8.2.2, 10.9.2.4	- Drilling of 75 mm dia. Holes	m	200		
	A7.4.4	10.8.2.2, 10.9.2.4	- Extra for core recovery	m	200		
	A7.5		<b>Grouting materials</b>				



Section IV - Bidding Forms (Bill of Quantities)

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
	A7.5.1	10.8.4.1, 10.6, 10.7, 10.9.4.1	-Cement	MT	1350		
	A7.5.1.1	10.8.4.1, 10.6, 10.7, 10.9.4.4	Micro fine cement	MT	10		
	A7.5.2	10.8.4.1, 10.6, 10.7, 10.9.4.2	- Sand	MT	150		
	A7.5.3	10.8.4.1, 10.6, 10.7, 10.9.4.2	- Bentonite	MT	100		
	A7.5.4	10.8.4.1, 10.6, 10.7, 10.9.4.3	- Admixtures	Kg	200		
	A7.6	10.4.3, 10.8.3, 10.9.2.7	Water pressure Testing – simple water tests	Nos.	1500		
	A7.7	10.4.4, 10.9.2.8	Embedded pipes & fittings for grouting left permanently in place.	Kg	500		
8	<b>A8</b>		<b>Concrete works for main dam &amp; Fall structure</b>				
	A8.1	12.5 to 12.10, 12.12 to 12.20	-M15/A80 mass concrete in hearting of Over Flow & Non-Over Flow section- <b>C1</b>	m <sup>3</sup>	1,78,740		
	A8.2	12.5 to 12.10, 12.12 to 12.20	M20/A20 Miscellaneous minor concrete work in foundation (1 <sup>st</sup> pour concrete)- <b>C2</b>	m <sup>3</sup>	1190		
	A8.3	12.5 to 12.10, 12.12 to 12.20	-M20/A40 in Dam & Spillway mantle, glacis, training wall and stilling basin- <b>C3</b>	m <sup>3</sup>	83,900		
	A8.4	12.5 to 12.10, 12.12 to 12.20	M25 /A40 in Piers and spill channel lining- <b>C4</b>	m <sup>3</sup>	90,450		
	A8.5	12.5 to 12.10, 12.12 to 12.20	-M25 /A20 in Trunion Beam, Spillway Bridge, control & D.G set building, lift well- <b>C5</b>	m <sup>3</sup>	750		
	A8.6	12.5 to 12.10, 12.12 to 12.20	-M30 /A20 in Block-out Concrete- <b>C6</b>	m <sup>3</sup>	910		
	A8.7	12.5 to 12.10, 12.12 to 12.20	-M60/A20 500mm thick surface layer on glacis, stilling basin and spillway crest- <b>C7</b>	m <sup>3</sup>	6810		
	A8.8	12.5 to 12.10, 12.12 to 12.20	M10 porous concrete	m <sup>3</sup>	50		
	A8.9		<b>Bridge ancillaries</b>				

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Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
	A8.9.1		- Elastomeric bearing pads as per IRC: 83, Section IX- Bearings.	Nos.	30		
	A8.9.2		- Drain boxes as per IRC Code.	Nos.	30		
	A8.10	12.5 to 12.10, 12.12 to 12.20	M20 A40 Concrete for dental treatment in surface works	m <sup>3</sup>	2000		
	A8.11	12.5 to 12.10, 12.12 to 12.20	M15 concrete for retaining walls for road construction	m <sup>3</sup>	100		
	A8.12	12.5 to 12.10, 12.12 to 12.20	Concrete Blocks d/s of stilling basin of Fall structure	m <sup>3</sup>	1220		
9	<b>A9</b>		<b>Formwork</b>				
	A9.1	12.12.,12.15,14.3 to 14.8, 14.10, 14.11	Class F1	m <sup>2</sup>	300		
	A9.2	12.12,12.15,14.3 to 14.8, 14.10, 14.12	Class F2	m <sup>2</sup>	2100		
	A9.3	12.12,12.15,14.3 to 14.8, 14.10, 14.13	Class F1C	m <sup>2</sup>	200		
	A9.4	12.12,12.15,14.3 to 14.8, 14.10, 14.14	Class F2C	m <sup>2</sup>	1000		
	A9.5	12.12,12.15,14.3 to 14.8, 14.10, 14.15	Class F3	m <sup>2</sup>	25,350		
	A9.6	12.12,12.15,14.3 to 14.8, 14.10, 14.16	Class F3C	m <sup>2</sup>	1200		
10	<b>A10</b>		<b>Reinforcing Steel</b>				
	A10.1	11.4 to 11.9, 11.10	Deformed reinforcing bars	MT	2790		
	A10.2		<b>Couplers</b>				

Section IV - Bidding Forms (Bill of Quantities)

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
	A10.2.1	11.7(7), 11.10	25 mm Dia.	Nos	1000		
11	<b>A11</b>		<b>Water-Stops &amp; Joints in concrete structures</b>				
	A11.1		<b>PVC Water Stop</b>				
	A11.1.1	13.2, 13.5	-230 mm wide	m	100		
	A11.1.2	13.2, 13.5	-300 mm wide	m	2150		
	A11.2	13.5.4, 13.6, 13.7	- Bituminous Coating	m <sup>2</sup>	200		
	A11.3	13.5.3, 13.6, 13.7	Joint sealing compound	m	100		
	A11.4	13.5.2, 13.6, 13.7	Joint filler	m <sup>2</sup>	150		
12	<b>A12</b>		<b>Earthen embankments along both sides of spill channel d/s of Fall Structure</b>				
	A12.1	16.3 to 16.13, 16.23, 16.24	Homogeneous material - placement and compaction	m <sup>3</sup>	8,73,320		
	A12.2	16.26, 16.28	Fine filter material - placement in layers	m <sup>3</sup>	17,060		
	A12.3	16.26, 16.29, 16.30	Coarse filter material - placement in layers	m <sup>3</sup>	17,060		
	A12.4	16.4, 16.31, 16.32	Stone pitching - Hand-placed as per drawings	m <sup>3</sup>	1,03,230		
13	<b>A13</b>		<b>Metal works</b>				
	A13.1	20.7.1, 20.7.6, 20.9.5	Railing	Kg	2500		
	A13.2	20.7.1, 20.7.5, 20.9.5	Steel pipe handrail	Kg	1600		
	A13.3	20.7.1, 20.7.7, 20.9.6	Ladders	Kg	300		
	A13.4	20.7.1, 20.7.4, 20.9.4	Gratings	kg	22,284		
	A13.5	20.7.1, 20.7.2, 20.9.2	Steel / Cast iron pipe	Kg	700		
	A13.6	20.7.1, 20.7.3, 20.9.3	Miscellaneous steel sections as edge protection, frames , bearing plates , brackets , etc. of various dimensions , including bolts , screws , anchors and other accessories for interior and exterior purpose	kg	900		

Section IV - Bidding Forms (Bill of Quantities)

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
	A13.7	20.7.1,20.7.4, 20.9.4	Water tight covers and frames	kg	700		
	A13.8	20.7.1,20.8, 20.9.10	Installation of metal works supplied by others	kg	1400		
14	<b>A14</b>		<b>Instrumentation</b>				
	A14.1	17.1 to 17.5, 17.7	Providing & installing Uplift(UP) pressure pipes in dam body incl. cabling etc. up to junction box/ Control room	No.	6		
	A14.2	17.1 to 17.5, 17.7	Providing & installing Piezometers in main dam body incl. cabling etc. up to junction box/ Control room	No.	8		
	A14.3	17.1 to 17.5, 17.7	Providing & Installing Temperature meters in dam body incl. cabling etc. up to junction box/ Control room	No.	29		
	A14.4	17.1 to 17.5, 17.7	Providing & installing Survey Targets as required	Nos.	40		
	A14.5	17.1 to 17.5, 17.7	Providing & Installing Direct Plumb-Line in NOF section of the main dam	Nos.	1		
15	<b>A 15</b>		<b>Additional tests</b>				
	A15.1	2.1, 2.2, 2.5	Topographical surveys	m <sup>2</sup>	80,000		
	A15.2	2.5,	Geological explorations (Bore holes including permeability & Laboratory testing for compressive strength and shear strength in Soil / rock as per IS Codes)	m	200		
	A 15.3.1	2.5,	Modulus of Deformation for rock	Nos.	2		
	A 15.3.2	2.5,	Shear parameters between Rock to rock	Set	1		
	A 15.3.3	2.5,	Shear parameters between rock to concrete	Set	1		
	A 15.3.4	2.5,	Bore hole for field permeability tests for Earthen Dyke	m	150		
16	<b>A16.1</b>	16.9, 19.7	Construction of Cofferdam for new earthen dyke connection with existing dyke on right bank	m <sup>3</sup>	95,000		
	A16.2	16.9, 19.7, 20.10, 20.10.1 to 20.10.6	Providing and Driving of Z type steel sheet piles as per IS codes to retain earth / seepage, during construction of additional spillway, at junction of new & old dyke up-stream slope at required position including all cost, carriage,	m <sup>2</sup>	1000		

Section IV - Bidding Forms (Bill of Quantities)

Sl. No.	ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	Total Quantity	Rate (Rs.)	Amount (Rs. in lakhs)
			taxes & driving sheet piles to the required depth etc. incidental to the work complete as per drawing and technical specification.				
17	<b>A17</b>		<b>Removal of U/S existing dyke (about 500 m long)</b>				
	A17.1	5.6.1, 16.31, 16.32	Removal of stones from Toe drain, Rock Toe, Chute drains and rip-rap, to be reused or dumped within 2 kms.	m <sup>3</sup>	25,000		
	A17.2	5.6.3, 5.7	Extra for haulage of stones beyond 2 kms.	m <sup>3</sup>	10,000		
	A17.3	5.6.1(a), 5.6.3, 5.7	Removal of earth / soil from the existing dyke and depositing in dump yard / any other location within 2 kms.	m <sup>3</sup>	4,00,000		
	A17.4	5.6.3, 5.7	Extra for haulage of earth / soil beyond 2 kms .	m <sup>3</sup>	1,50,000		
18	<b>A18</b>		<b>Land scape developmental works</b>				
	A18.1	15.4, 15.5	Providing & compacting earth in for development benches for landscape works on left and right side of spill channel.	m <sup>3</sup>	3,17,730		
	A18.1.2	12.5 to 12.10, 12.12 to 12.20	Construction of concrete walls (M15) for supporting the earth fill benches and stair steps etc. in newly developed land scape areas	m <sup>3</sup>	1960		
	A18.2		<b>Cafeteria and parking area.</b>				
	A18.2.1	5.5, 5.6, 5.7	Development of benches for cafeteria on right side and parking area on left side of spill channel on d/s slopes of the hillock	m <sup>3</sup>	2,6140		
	A18.2.2	12.5 to 12.10, 12.12 to 12.20	Providing 200mm thick concrete flooring (M20)in cafeteria and parking areas	m <sup>3</sup>	11,630		
			<b>Total</b>				

**BILL OF QUANTITIES (2 of 2)****NAME OF WORK : CONSTRUCTION OF ADDITIONAL SPILLWAY ON LEFT OF GANDHI HILLOCK AT HIRAKUD  
DAM - ODISHA INDIA. - Civil Works of Earthen dam**

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTI TY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
<b>B1</b>		<b>Surface Excavation</b>					
B1.1	5.5, 5.6, 5.7	Excavation in all soils incl. disposal up to 2 kms.	m <sup>3</sup>	15,000			
B1.2	5.5, 5.6, 5.7	Rock excavation incl. disposal up to 2 kms.	m <sup>3</sup>	12,200			
<b>B2</b>		<b>Embankment Construction</b>					
B2.1.1	16.3 to 16.13, 16.23, 16.24,19	Zone-1, Impervious material	m <sup>3</sup>	3,25,570			
B2.1.2	16.3 to 16.13, 16.23, 16.24,19	Zone-2, Semi-pervious material	m <sup>3</sup>	6,50,400			
B2.1.3	16.26, 16.28,19	Zone 3A, Fine Filter material	m <sup>3</sup>	40,080			
B2.1.4	16.26, 16.29, 16.30 ,19	Zone 3B, Coarse-Filter material	m <sup>3</sup>	31,960			
B2.1.5	16.4, 16.31, 16.32 ,19	Riprap	m <sup>3</sup>	31,590			
B2.1.6	16.4, 16.31, 16.32,19	Rock Toe	m <sup>3</sup>	17,800			
B2.1.7	5.6.3, 5.7	Extra for transportation of embankment Zone-1 material beyond 2.0 kms.	m <sup>3</sup>	3,25,000			
<b>B3</b>		<b>Concrete for Parapet walls</b>					
B3.1	12.5 to 12.18, 12.20	concrete (M15)	m <sup>3</sup>	1270			
B3.2	12.5 to 12.18, 12.20	Concrete (M20)	m <sup>3</sup>	4850			
<b>B4</b>		<b>Form Works</b>					

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTI	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In	In	
B4.1	14.3 to 14.8, 14.10, 14.11	F1	m <sup>2</sup>	2500			
B4.2	14.3 to 14.8, 14.10, 14.11	F2	m <sup>2</sup>	650			
<b>B5</b>		<b>Horizontal &amp; Chute drains</b>					
B5.1	16.27	Excavation / cutting	m <sup>3</sup>	50			
B5.2	12.5 to 12.19, 12.20	Concrete work for drains	m <sup>3</sup>	30			
B5.3	15.4, 15.5	Backfill	m <sup>3</sup>	100			
<b>B6</b>		<b>Dam Top Road</b>					
B6.1	18.1, 18.4 to 18.8	Base Course	m <sup>3</sup>	3900			
B6.2	18.1, 18.4 to 18.8	Wearing Course	m <sup>3</sup>	590			
<b>B7</b>		<b>Curtain Grout</b>					
B7.1	10.8.2.1, 10.9.2.1	Drilling of 48mm holes	m	3060			
B7.2	10.8.4.1, 10.9.3.3	Grouting operation	m	3060			
B7.3		<b>Grout materials</b>					
B7.3.1	10.8.4.1, 10.6, 10.7,10.9.4.1	Cement	MT	620			
B7.3.2	10.6,10.7,10.8.4.1, 10.9.4.2	Sand	MT	100			
B7.3.3	10.6,10.710.8.4.1, 10.9.4.2	Bentonite	MT	50			
B7.3.4	10.6,10.710.8.4.1, 10.9.4.3	Admixtures	Kg	100			
<b>B8</b>		Providing turfing on the downstream slope of earth dam with approved quality of compact dub grass.	m <sup>2</sup>	48,400			
<b>B9</b>		<b>Instrumentation</b>					
<b>B9.1</b>	17.1 to 17.5, 17.7	Providing & installing V-wire Piezometers in Earthen	Nos.	20			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTI	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In	In	
		Dyke					
<b>B9.2</b>	17.1 to 17.5, 17.7	Read-out units for piezometers including room	Nos.	2			
<b>B9.3</b>	17.1 to 17.5, 17.7	Providing & Installing Porous Tube Piezometers	Nos.	10			
						<b>TOTAL</b>	



**BILL OF QUANTITIES****PRICE SCHEDULE HM (i) : H.M. Equipment - Gates & Hoists- Fabrication and Delivery Portion**

*Price Schedule : Design, Procurement, Fabrication, Corrosion Protection, Transportation and Delivery at Project Site, Local transportation at Project Site, Erection, Testing & Commissioning of Gates & Hoists in accordance with the agreed time & price schedule (complying with the accepted General/ Particular Technical Specifications & other provisions of the Bid Document SECTION-VI-D)*

<b>ITEM</b>	<b>Reference to Tech. Specs.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>Rate</b> <b>(Rs.)</b>	<b>Rate</b> <b>(Rs.)</b>	<b>Amount</b> <b>(Rs.)</b>
					<b>In</b> <b>Figures</b>	<b>In</b> <b>Words</b>	
<b>1</b>		<b>SPILLWAY CREST RADIAL GATE WITH HYDRAULIC HOISTS</b>					
1.1	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Crest radial gate for a clear opening size of 15.00 m (w) x 16.557 m (h) with structural steel skin plate, horizontal girders, vertical stiffeners, inclined arms, bracings, trunnion assemblies, guide rollers,neoprene rubber seal (bottom, sides) assemblies, lifting brackets, anchors, trunion brackets, dogging arrangement, etc. complete in all respects as per the technical specifications and drawing number	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		<i>HDNS-S-151 sh 1 of 1..</i>					
1.2	<i>Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.</i>	<i>First stage embedded parts (anchors) in the primary concrete to facilitate erection of second stage embedded parts of gate and hoist supporting structure.</i>	<i>set</i>	<i>5</i>			
1.3	<i>Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions</i>	<i>Second stage embedded parts such as sill beam, wall plates,yoke girders with tie flats, anchor bolts, nuts &amp; washers and anchors for trunnion brackets &amp; thrust pads, anchors for steel support beam for hoist, etc.( including providing additional bracings after final alignment of 2nd stage E parts and prior to second stage concreting) complete in all respects as per the technical specification and drawings.</i>	<i>set</i>	<i>5</i>			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
1.4	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Hydraulic cylinder (single acting-twin cylinders) of adequate stroke/capacity including all the accessories such as cylinder support steel beam with bracket/ cardenic connection and stainless steel connecting pin, gate position measuring system and transmitter/limit switches for operation of radial gates complete in all respects as per the technical specification and drawings.	set	5			
1.5	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Independent hydraulic power pack assembly including oil tank, hydraulic oil, seamless piping between power pack and cylinders and pipe fittings/ supports and other accessories like flexible high pressure hoses, pipe connectors, ball valves, heavy duty pipe clamps, etc. complete in all respects for operation of above hoists as per the technical specifications.  Note: 1. Main powerpack should not be used for flushing and oil filling of cylinders. A separate oil filtering cum	set	5			

Section IV - Bidding Forms (Bill of Quantities)

<b>ITEM</b>	<b>Reference to Tech. Specs.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>Rate (Rs.)</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs.)</b>
					<b>In Figures</b>	<b>In Words</b>	
		<i>flushing unit shall be used.</i>					
		<i>Note: 2. Interconnection of two sets of adjacent gate controls (HPUs and LCPs)</i>					
1.6	<i>Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.</i>	<i>Local electrical control panel for each hoist including all components, instruments, enclosure, ducts, cabling between LCP &amp; HPP, etc. complete in all respects for operation of HPP as per the specification and including "Provision for transferring signal from local panel to Dam control".</i>	<i>set</i>	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
1.7	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.	Trolley mounted (mobile) petrol driven engine capable of lifting of one radial gate at 25% of the normal speed when water is stored up to FRL during emergency along with petrol tank, 12 v battery, starter, exhaust pipe, preset internal system protection pressure relief valve, suction/discharge hose pipes cum couplings to connect with main power pack assembly including trial run, testing and commissioning.	no	1			
1.8	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.	One number of oil purifier unit (to purify hydraulic oil and to remove water and dissolved gases) complete in all respects including oil filters, hoses of sufficient length and size and hose connectors to power pack including trial run, testing and commissioning..	no	1			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
1.9	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.	Access ladders, safety cage, platform (for cylinder inspection) and hand railing over the arms of the radial gates for inspection and maintenance of the spillway radial gates,one Foot bridge with hand railings for layout of hydraulic piping & cables at top of pier & other at trunnion level for use during erection, approach & inspection & maintenance of trunnions & its attachments.	set	5			
		<b>Sub-total of 1</b>					
2		<b>SPILLWAY STOPLOGS WITH GANTRY CRANE &amp; LIFTING BEAM</b>					

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
2.1	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.	Stop log units (Vertical lift, Slide type) for a clear opening size of 15.00 m (w) x 2,4 m(h) (six interchangeable units & one non-interchangeable bottom unit) with downstream skin plate, stiffeners, horizontal girders, end vertical girders, rubber seal (bottom, sides) assemblies, sliding pads, guide rollers, lifting & latching arrangement, etc. complete in all respects as per technical specifications and drawing number HDNS-S-152.	set	1			
2.2	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: part.conditions.	First stage embedded parts (anchors) in the primary concrete to facilitate erection of second stage embedded parts of gate and storage pit and LT track.	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
2.3	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	(a)Second stage embedded parts such as sill beam, slide tracks & side seal seats, side guides, anchor bolts, nuts & washers, support angles, latching and storage arrangement over the piers ( including providing additional bracings after final alignment and prior to second stage concreting) and,	set	5			
		(b) embedded parts such as sill beam covering entire bottom and side guide in the storage pits (with steel gratings & attachment in civilwork scope) as per specification and drawings.	set	2			
2.4	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Lifting beam of adequate capacity with automatic engaging / disengaging device complete with frame, guides, pulleys, bearings, counterweight and other accessories, etc. complete in all respects as per specifications.	no	1			



Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
2.5	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Travelling outdoor gantry crane with cross-travel arrangement, pendent operated of adequate capacity( but not less than 50T capacity) along with necessary structural, mechanical and electrical control equipments including gantry track rails (extended up to parking/storage pit)/embedded parts/end stoppers, counter weight and other accessories complete in all respects in accordance with the technical specifications and drawings for safe operation of spillway stoplogs along with lifting beam.	no	1			
		<b>Sub-total of 2</b>					
3		<b>Instrumentation &amp; Dam Control System</b>					

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specs.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
3.1	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part- (ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part- 3,section IX: particular conditions.	Centralised Dam control sysytem complete with all accessories to operate,control and monitor individual spillway radial gates located in Dam Control Room.	set	1			
3.2	-do-	Reservoir water level measuring instrument and indication/alarm at two locations.	set	2			
3.3	-do-	Water level measuring and indication equipment for balancing water head for spillway stoplog gate.	set	5			
3.4	-do-	Uninterruptible power source (Battery back-up) for a minimum of 30 minutes to Dam control system (Dam).	set	1			
		<b>Sub-total of 3</b>					
		<b>TOTAL PRICE (Item 1 to 3)</b>					

**BILL OF QUANTITIES****PRICE SCHEDULE H.M (ii) : H.M. Equipment - Gates & Hoists - Erection Portion**

Price Schedule : Local transportation at Project Site, Erection, Testing & Commissioning of Gates & Hoists as specified in the Part-2B (Particular Technical Specifications)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
<b>1</b>		<b>SPILLWAY CREST RADIAL GATE WITH HYDRAULIC HOISTS</b>					
1.1	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)- B, part-3, part –(iv), PART-2 section- VII B(iv), 2- D,Section VIII-4.0.0, Part- 3,section IX: particular conditions .	Crest radial gate for a clear opening size of 15.00 m (w) x16.557 m (h) with structural steel skin plate, horizontal girders, vertical stiffeners, inclined arms, bracings, trunnion assemblies, guide rollers, rubber seal (bottom, sides) assemblies, lifting brackets, anchors, trunion brackets, dogging arrangement, etc. complete in all respects as per the technical specifications and drawing number <b>HDNS-S-151.</b>	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
1.2	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-3,section IX: particular conditions	First stage embedded parts (anchors) in the primary concrete to facilitate erection of second stage embedded parts of gate and hoist supporting structure.	set	5			
1.3	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-3,section IX: particular conditions .	Second stage embedded parts such as sill beam, wall plates, yoke girders with tie flats, anchor bolts, nuts & washers and anchors for trunnion brackets & thrust pads, anchors for steel support beam for hoist, etc.( including providing additional bracings after final alignment of 2nd stage E parts and prior to second stage concreting) complete in all respects as per the technical specification and drawings.	set	5			
1.4	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-	Hydraulic cylinder (single acting-twin cylinders) of adequate stroke/capacity including all the accessories such as cylinder support steel	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
	3,section IX: particular conditions.	beam with bracket/ cardenic connection and stainless steel connecting pin, gate position measuring system and transmitter/limit switches for operation of radial gates complete in all respects as per the technical specification and drawings.					
1.5	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-3,section IX: particular conditions.	Independent hydraulic power pack assembly including oil tank, hydraulic oil, seamless piping between power pack and cylinders and pipe fittings/ supports and other accessories like flexible high pressure hoses, pipe connectors, ball valves, heavy duty pipe clamps, etc. complete in all respects for operation of above hoists as per the technical specifications.  Note: 1. Main power pack should not be used for flushing and oil filling of cylinders. A separate oil filtering cum flushing unit shall be used.	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		Note: 2. Interconnection of two sets of adjacent gate controls (HPU's and LCP's)					
1.6	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-3,section IX: particular conditions.	Local electrical control panel for each hoist including all components, instruments, enclosure, ducts, cabling between LCP & HPP, etc. complete in all respects for operation of HPP as per the specification and including "Provision for transferring signal from local panel to Dam control".	set	5			
1.7	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Trolley mounted (mobile) petrol driven engine capable of lifting of one radial gate at 25% of the normal speed when water is stored up to FRL during emergency along with petrol tank, 12 v battery, starter, exhaust pipe, preset internal system protection pressure relief valve, suction/discharge hose pipes cum couplings to connect with main power pack assembly including trial run,	set	-			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		testing and commissioning. <b>(Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion )</b>					
1.8	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)- B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part- 3,section IX: particular conditions.	One number of oil purifier unit (to purify hydraulic oil and to remove water and dissolved gases) complete in all respects including oil filters, hoses of sufficient length and size and hose connectors to power pack including trial run, testing and commissioning <b>(Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion )</b> .	no	-			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
1.9	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.0, Part-3,section IX: particular conditions.	Access ladders, safety cage, platform (for cylinder inspection) and hand railing over the arms of the radial gates for inspection and maintenance of the spillway radial gates, one Foot bridge with hand railings for layout of hydraulic piping & cables at top of pier & other at trunnion level for use during erection, approach & inspection & maintenance of trunnions & its attachments.	set	5			
		<b>Sub-total of 1</b>					<b>0</b>
<b>2</b>		<b>SPILLWAY STOPLOGS WITH GANTRY CRANE &amp; LIFTING BEAM</b>					
2.1	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D,Section VIII-4.0.0, Part-3,section IX: particular conditions.	Stop log units (Vertical lift, Slide type) for a clear opening size of 15.00 m (w) x 2,4 m(h) (six interchangeable units & one non-interchangeable bottom unit) with downstream skin plate, stiffeners, horizontal girders, end vertical girders, rubber seal (bottom, sides) assemblies, sliding pads, guide	set	1			0



Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		rollers, lifting & latching arrangement, etc. complete in all respects as per technical specifications and drawing number HDNS-S-152.					
2.2	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv)	First stage embedded parts (anchors) in the primary concrete to facilitate erection of second stage embedded parts of gate and storage pit and LT track.	set	5			
2.3	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv)	(a)Second stage embedded parts such as sill beam, slide tracks & side seal seats, side guides, anchor bolts, nuts & washers, support angles, latching and storage arrangement over the piers ( including providing additional bracings after final alignment and prior to second stage concreting) and,	set	5			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		(b) embedded parts such as sill beam covering entire bottom and side guide in the storage pits (with steel gratings--in civilwork scope) as per specification and drawings.		2			
2.4	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv)	Lifting beam of adequate capacity with automatic engaging / disengaging device complete with frame, guides, pulleys, bearings, counterweight and other accessories, etc. complete in all respects as per specifications.	no	1			
2.5	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv)	Travelling outdoor gantry crane with cross-travel arrangement, pendent operated of adequate capacity along with necessary structural, mechanical and electrical control equipments including gantry track rails (extended up to parking/ storage pit)/embedded parts/ end stoppers, counter weight and other accessories complete in all respects in accordance with the technical specifications and drawings for safe operation	no	1			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
		of spillway stoplogs along with lifting beam.					
		<b>Sub-total of 2</b>					
<b>3</b>		<b>Instrumentation &amp; Dam Control System</b>					
3.1	Part-2 section-VII B(iii)- Part-( i), part-(ii) A, Part-(ii)- B, part-3, part -(iv), PART-2 section- VII B(iv)	Centralised control system complete with all accessories to operate, control and monitor individual spillway radial gates located in Dam Control Room( <b>Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion</b> ).	set	-			
3.2	-do-	Reservoir water level measuring instrument and indication/alarm at two locations ( <b>Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion</b> ).	set	-			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
3.3	-do-	Water level measuring and indication equipment for balancing water head for spillway stoplog gate <b>(Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion).</b>	set	-			
3.4	-do-	Uninterruptible power source (Battery back-up) for a minimum of 30 minutes to Dam control system (Dam) <b>(Included in PRICE SCHEDULE HM (i) : H.M. Equipment - Gates &amp; Hoists- Fabrication and Delivery Portion).</b>	set	-			
		<b>Sub-total of 3</b>					
		<b>TOTAL PRICE (Item 1 to 3)</b>					

**BILL OF QUANTITIES****PRICE SCHEDULE HM (iii): H.M. Equipment - Gates & Hoists - Supply of Mandatory Spares & Tools**

Price Schedule 3: Supply of Mandatory Spares and Tools at site for hydraulic gates as specified in the Part-2B (Particular Technical Specifications)

ITEM	Reference to Tech. Specification.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
<b>A</b>		<b>SPARES PARTS &amp; TOOLS</b>					
<b>1</b>		<b>Crest Spillway Radial Gates</b>					
a	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv)	Neoprene seals for one gate	set	2			
b	-do-	Seal fasteners for one gate	set	2			
c	-do-	Guide roller assemblies for one gate	set	1			
d	-do-	Complete seal kit for hydraulic cylinder	set	2			
e	-do-	Bearing for cylinder eye end (both ends)	set	2			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
f	-do-	Filter elements (pressure line & return line)	set	PL-4 RL-4			
g	-do-	Pressure relief valve	nos	2			
h	-do-	Pressure gauge	nos	4			
i	-do-	Limit switches for one hydraulic hoist	set	2			
		Sub-total of 1					
2		<b>Spillway Stoplogs</b>					
a	Part-2 section-VII B(iii)-Part-( i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv)	Rubber seals set for stoplog units	sets	Noninterchang able Bottom unit -1 Interchangable unit - 2			
b	-do-	Seal fasteners for 3 stoplog units	sets	3			
c	-do-	Guide roller assemblies	nos	4			
		Sub-total of 2					
3		<b>Gantry Crane for spillway stoplogs</b>					
a	-do-	Wire rope	no	1			
b	-do-	Brake liner	set	1			
c	-do-	Brake coil	set	1			

Section IV - Bidding Forms (Bill of Quantities)

ITEM	Reference to Tech. Specification.	DESCRIPTION	UNIT	QUANTITY	Rate (Rs.)	Rate (Rs.)	Amount (Rs.)
					In Figures	In Words	
d	-do-	Hoist motor	no	1			
e	-do-	Limit switches	set	1			
		Sub-total of 9					
		<b>GRAND TOTAL (1 to 3)</b>					
<b>B</b>		<b>Special tools , tackcles and additional recommended spares</b>					
<b>a</b>	Part-2 section-VII B(iii)-Part-(i)_Clause_1.8.2	Specials tools & tackles (bidders to listout)	Set	1			
<b>b</b>	-do-	Additional recommended spares (bidder to listout)	Set	1			
		<b>Sub-Total of HM(i) +(ii)+(iii)=</b>					
		<b>Total Price of H M (in Words)</b>					

**Note:** All the spares (except Neoprene seals for Radial gates & rubber seals for stop-logs ) shall be supplied along with main equipment. Rubber seals (bottom, sides, top and corners) shall be supplied prior to commissioning of the individual equipment. Spares supplied shall be interchangeable with main equipment part and from the same manufacturer.

**BILL OF QUANTITIES****PRICE SCHEDULE: Electrical Works**

<b>SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works</b>								
<b>ITEM</b>	<b>Reference to Tech. Specs.</b>		<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>Rate (Rs.) In Figures</b>	<b>Rate (Rs.) In Words</b>	<b>Amount (Rs.)</b>
<b>1.0</b>			<b>Electrical Works</b>					
1.1	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Extension of 11 KV overhead power supply line for the existing supply point of Odisha State Electricity Board (OSEB) located near the left side of dam, up to the transformer yard located near generator room, complete in all respects as per specs. Including supply, erection/installation & commissioning	Km.	2.0			
1.2	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Step down transformer 11 KV/440 V of capacity not lower than 250 KVA suitable for simultaneous operation of gate motors, Gantry Motors, welding transformer and lighting etc. Including supply, erection/installation & commissioning.	Set	1			
1.3	Part-2 section-VII B(iii)-Part-(i), part-		250 kVA, 415V, 0.80 P.F. 50Hz, 3 phase diesel generator set with					



Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
<u>ITEM</u>	<u>Reference to Tech. Specs.</u>		<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>Rate (Rs.) In Figures</u>	<u>Rate (Rs.) In Words</u>	<u>Amount (Rs.)</u>
	(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		class F insulated windings, to be housed in dam top control room as per statutory norms of the pollution & Environmental control board complete with fuel oil tank, fuel piping, excitation system, wiring cabling etc. as per technical specifications. DG set shall also include following equipment, complete in all aspects as per specifications Including supply, erection/installation & commissioning : i) Air intake system for the DG set as per technical specification. ii) AMF panel with all the protection for alternator and engine and suitably housed in an enclosure fitted with all the necessary metering and monitoring instruments as per technical specifications iii) 24V DC system along with 300 AH rating battery and Battery charger for push	Set Set Set	1 1 1			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
<u>ITEM</u>	<u>Reference to Tech. Specs.</u>		<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>Rate (Rs.) In Figures</u>	<u>Rate (Rs.) In Words</u>	<u>Amount (Rs.)</u>
			button starting; Piping work complete with bends, elbows, bellow etc. for taking away exhaust for the DG set to atmosphere along with insulating materials required for the same, complete in all aspects as per specifications.					
1.4	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Portable diesel Generator system mounted on two – wheel trolley to meet a working load of 82.5 kVA, in case of exigencies, complete in all aspects as per specifications. Including supply, erection/installation & commissioning.	Nos.	1			
1.5	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Control panel at transformer yard complete in all aspects as per specifications. Including supply, erection/installation & commissioning.	Set	1			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
ITEM	Reference to Tech. Specs.		DESCRIPTION	UNIT	QUANTITY	Rate (Rs.) In Figures	Rate (Rs.) In Words	Amount (Rs.)
1.6	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Main distribution panel with required meters, switches, fuses, bus bars etc. control switches for supplying power to sub-distribution panels for motors spillway and for lighting system of Barrage, complete in all aspects as per specifications. Including supply, erection/installation & commissioning.	Set	2			
1.7	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Sub-distribution panels with fuses, control switches etc. located at - (i) Additional Dam spillway, (ii) Main distribution panel for lighting system of Dam complex, complete in all aspects as per specifications. Including supply, erection/installation & commissioning.	No.	8			
1.8	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular		PVC armored aluminum cable of suitable size for connecting transformer to control panel, distribution panel, sub distribution panel & lighting system. Including supply, erection/installation & commissioning.	m	-			
			(i) 150 sq.mm.	m	200			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
ITEM	Reference to Tech. Specs.		DESCRIPTION	UNIT	QUANTITY	Rate (Rs.) In Figures	Rate (Rs.) In Words	Amount (Rs.)
	conditions		(ii) 100 sq.mm.	m	200			
			(iii)35 sq.mm.	m	10000			
			(iv)16 sq.mm.	m	3000			
1.9	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Local control panels with MCCB direct on line starter, single phase preventor, power capacitor, voltmeter, Ammeter with selectors switches, indicator lamps, connectors, lugs, etc, complete in all aspects as per specifications, including supply, erection/installation & commissioning.		-			
			i) For each gate motors of spillway	No.	6			
			ii) For each feeder for lighting system of Barrage	No.	2			
1.10	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3,		Cable rack over Hoist bridges of spillway and on walkway bridge and cable trench, complete in all aspects as per specifications, including supply, erection/installation & commissioning	m	150			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
ITEM	Reference to Tech. Specs.		DESCRIPTION	UNIT	QUANTITY	Rate (Rs.) In Figures	Rate (Rs.) In Words	Amount (Rs.)
	Section IX: Particular conditions							
1.11	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Stepped pipe poles complete in all aspects as per specifications including supply, erection/installation & commissioning		-			
			i) Twin bracket arms for lighting hoist bridges and carriageway located at the center of each span.	No.	6			
			ii) Light bracket arm for walkway bridge	No.	6			
			iii) Street light bracket arm for lighting earthen dyke on left flank and road way on right & left flanks on u/s of spillway and on d/s approach to foundation gallery.	No.	210			
1.12	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part –(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3,		250 watt sodium vapour lamp fitting with bulb, with connecting wire from junction box of cable and fuse unit for each pole on hoist bridges for lighting hoist and spillway and also for walkway bridge. Including supply,	No.	18			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
<u>ITEM</u>	<u>Reference to Tech. Specs.</u>		<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>Rate (Rs.) In Figures</u>	<u>Rate (Rs.) In Words</u>	<u>Amount (Rs.)</u>
	Section IX: Particular conditions		erection/installation & commissioning.					
1.13	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		125 Watt high pressure mercury vapour lamp fitting with bulb with connecting wire from junction box of cable and fuse unit for each pole on earth bund on left side and road way on right for lighting. Including supply, erection/installation & commissioning.	No.	200			
1.14	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		400 watt high pressure mercury vapour lamp with connecting wire from junction boxes of cable and fuse unit for flood lighting the water way. Including supply, erection/installation & commissioning.	No.	10			
1.15	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3,		Three phase power sockets with earthing pin suitable for operation of gantry cranes and for welding machines. Including supply, erection/installation & commissioning.	No.	15			

Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ELE – Hirakud dam – Additional Spillway on Left Bank – Electrical Works								
<u>ITEM</u>	<u>Reference to Tech. Specs.</u>		<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>Rate (Rs.) In Figures</u>	<u>Rate (Rs.) In Words</u>	<u>Amount (Rs.)</u>
	Section IX: Particular conditions							
1.16	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Earthing of all equipment and lighting protection, complete in all aspects as per specifications. Including supply, erection/installation & commissioning.	Set	4			
1.17	Part-2 section-VII B(iii)-Part-(i), part-(ii) A, Part-(ii)-B, part-3, part -(iv), PART-2 section- VII B(iv), 2-D, Section VIII-4.0.o, Part-3, Section IX: Particular conditions		Main distribution board and feeder for all HM equipment at Dam complex with necessary auxiliaries, complete in all respects as per specifications. Including supply, erection/installation & commissioning.	No	5			
			<b>TOTAL</b>					

*Note:-Please see preamble-A & B above*

**Sub Total of ELE =Rs.**

**PRICE SCHEDULE: ESHS : *Environment, Social, Health & Safety* :**

SCHEDULE – ESHS – Hirakud dam – Additional Spillway on Left Bank – Environmental & Social Safeguards Measures								
ITEM	Reference to Tech. Specs.		DESCRIPTION	UNIT	QUANTITY	Rate (Rs.) In Figures	Rate (Rs.) In Words	Amount (Rs.)
<b>ESS 1.0</b>	Section 1.4.1 Environmental Monitoring Plan of EMP as Appendix-ENV A under PART-2 SECTION-VII-E (ii)		<b>Monitoring of Environmental Attributes during construction period of 36 months with test results and dated coloured digital photographic records certified by the Engineer</b>					
		3.1	<i>Continuous Ambient Air Quality Monitoring through Computerised automatic Continuous Ambient Air Quality Monitoring System and compilation of daily reports</i>	monthly	36			
		3.2	<i>Noise quality monitoring</i>	No. Of Sample	144			
		3.3	<i>Surface water quality</i>	No. Of Sample	18			
		3.4	<i>Ground Water quality</i>	No. Of Sample	18			
		3.5	<i>Soil Quality</i>	No. Of Sample	12			
<b>ESS.2.0</b>	Clause B.11.5. HIV/AIDS Awareness Programmes (Table No.1-4) and Section 1.4.1 Environmental Monitoring Plan of EMP as Appendix-ENV A under		Conducting quarterly HIV/AIDS Awareness Programme and testing on site , on quarterly basis , for not less than 90% of all workers including migrant and local labours as well as willing persons from surroundings through approved specialised agency with approval from Engineer-In-Charge, Provide and maintain condom dispenser at base camp and labour camp, Provide and maintain HIV/AIDS awareness posters, etc, inclusive of direct and indirect costs.	No. Of Training camps including Diagnostic tests	12			



Section IV - Bidding Forms (Bill of Quantities)

SCHEDULE – ESHS – Hirakud dam – Additional Spillway on Left Bank – Environmental & Social Safeguards Measures								
ITEM	Reference to Tech. Specs.		DESCRIPTION	UNIT	QUANTITY	Rate (Rs.) In Figures	Rate (Rs.) In Words	Amount (Rs.)
	PART-2 SECTION-VII-E (ii) and Section-VII F							
<b>ESS-3.0</b>	B.11 Camp Site		<b>Sanitation Facilities at Workers camp &amp; work site:</b>	No.				
	Management of EMP Table 1-4 of EMP (Table No.1-4) EMP as Appendix-ENV A under PART-2 SECTION-VII-E (ii)	<b>5.1</b>	5.1.1 Construction and provision of Toilets and bathroom units with septic tanks and soakpit for male and female workers separately in the camp site as per specification of Swachh Bharat Abhiyaan/CPWD with proper water supply, drainage system, electric supply and proper access.	No.	10			
			5.1.2 The units shall be maintained by daily cleaning twice a day	Month	36			
		5.1.3 white wash/colouring every six months.	Six monthly	6				
		<b>5.2</b>	5.2.1 Mobile toilets on wheel (5 units each Toilet and Bathroom) with proper water supply and drainage system, electric supply and safe access at work site locations.	No	10			
			5.2.2 To ensure daily cleaning of toilet units twice a day till operation of the unit.	month	36			
			5.2.3 Painting at every six months	Six monthly	6			
<b>ESS. 4.0</b>	Clause No. B.1 of Table No.1-4 under EMP as Appendix-ENV		Redevelopment of Borrow area identified within dam area by levelling the ground matching with the surrounding slope as per Environmental Management Plan and direction of the Engineer-In-	Sq m	100000			

Section IV - Bidding Forms (Bill of Quantities)

<b>SCHEDULE – ESHS – Hirakud dam – Additional Spillway on Left Bank – Environmental &amp; Social Safeguards Measures</b>								
<b>ITEM</b>	<b>Reference to Tech. Specs.</b>		<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>Rate (Rs.) In Figures</b>	<b>Rate (Rs.) In Words</b>	<b>Amount (Rs.)</b>
	A under PART-2 SECTION-VII-E (ii)		Charge					
<b>ESS-5.0</b>	Clause No. B.10 of Table No.1-4 under EMP as Appendix-ENV A under PART-2 SECTION-VII-E (ii)		Hard barricading with suitably painted with retro-reflective paints and safety slogans single row of about 1 m wide G.I. Sheets nailed or bolted with wooden poles spaced 2 to 3 metre apart and each pole 1.6 m to 2 m long 8 cm. to 10 cm. dia. The poles will be embedded suitably framed below the ground for giving stable support as per direction of the Engineer including watch and ward, maintenance, repair/replacement of damaged boards & parts.	Running m	4000			
<b>ESS-6.0</b>	<b>As Section 1.3.1 of EMP as Appendix-ENV A under PART-2 SECTION-VII-E (ii)</b>		As environmental enhancement measures development of 10 numbers of earthen fishery ponds of half acre area (4047 Sq m) each within Dam area in consultation and expert guidance of Fishery Department at locations identified by the Dam Authority and as per drawing approved by the Engineer-In-Charge/Dam Authority & Fishery Department	No.	10			
			<b>Sub –Total of ESHS = INR</b>					

- Note1:** The payment for ESHS requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items.  
**Note2:** However, few items as stated above have been identified in BOQ for which payment shall be made upon execution. The rate quoted shall be applicable for quantities required for EMP implementation irrespective of their variation in quantity. Therefore the clause in variation in quantities shall not be applicable for ESHS requirements.  
**Note3 :** Payment terms are stated in Section-IX – Particular Conditions (PC) – 4. in Volume : Part 3  
**Note 4 :** The issue of Interim Payment Certificates shall be as per provision stated at sub- Clause 14.6 (c ) Section IX –(PC) Part-B : Specific Provisions (III-Page 155 & 156) in Volume Part 3

# **TECHNICAL QUALIFICATION PROPOSAL**

**[ To Be Filled as Declaration by Bidder ]**

## **FORM : TECHNICAL PROPOSAL**

The bidder shall submit as part of the bid a Technical Proposal (defined in general below and in detail in the Works Requirement / Technical Specification) that fully defines the scope of both the preparation of Drawings for Construction and the construction techniques.

The Technical Proposal shall include the following section and relevant forms as described in the ITB:

- Management Structure and Systems
- Scheme for preparation of Construction Drawing
- Construction Method Statement
- Construction Schedule
- Equipment Schedule
- Personnel Deployment Schedule

### **MANAGEMENT STRUCTURE AND SYSTEMS**

The bidder shall provide details of systems that the bidder / contractor will utilize to successfully deliver this project, including, but not limited to:

- Organizational Structure (at HQ and site)
- Quality Assurance
- Health and Safety , Environment Management
- Internal and external communication
- Formal reporting (organization chart)
- Cost and time management
- Planning & Monitoring, M.I.S.
- Risk Management

### **SCHEME : Preparation of Construction Drawings**

The bidder shall provide details of successfully deliver this project, including, but not limited to:

- Overall Performance
- Philosophy of Preparation of Detail Construction Drawings
- Standards and Codes

## Section IV - Bidding Forms

- Specifications
- Schedule of release of Construction Drawings
- Approvals with & from Engineering-in-charge
- The capability to meet the requirements for detail construction drawings with the help of latest software
- List of software

### **CONSTRUCTION METHOD STATEMENT**

A detailed Construction Method Statement shall be developed for both the Project as a Whole and the individual components of it. This statement shall include (as a minimum) addressing the following areas:

- Project Management, including interaction with the client and interface interaction with H.M. and E&M vendors
- Health and Safety provisions, particularly emergency situations
- Environmental Management Plan, incorporating EIA requirements
- Liaison with the local communities and legal authorities
- Construction and Operation of the Contractors Camp and his other facilities etc.
- Construction of Earthen dam, spill channel with concrete training walls
- Concrete production
- Dam construction
- Preparation of Fabrication drawings & procurement , fabrication installation of hydro mechanical equipment
- Excavation, support system, Key equipment resources, including requirements for hoisting, excavation, blasting, and concrete batching
- Maintenance of the Access Roads
- Stabilization and treatment of slopes in dam & basin area etc.
- General Statement

### **BASELINE PROGRAMME / CONSTRUCTION SCHEDULE**

The Bidder shall provide a **Baseline Programme** with the bid.

The Baseline Programme shall detail the full scope of the works taking into account the complex nature and different phases and aspects of the Contract, and shall be accompanied by detailed supporting information sufficient to demonstrate through the sequence and duration of activities that the plans are achievable and realistic and that the works to be undertaken can meet the requirements of the Project as detailed in **Part – 2 Section VI – A -**

**2 Interfaces and Schedules.** The Employer has prepared his “**own schedule**” to provide a basis for specifying completion times for the works, and identifying main interfaces between contractors. This schedule is included in the bid documents for information only and shall not form part of the contract documents. The Bidder shall prepare his own schedule taking into account the resources he plans to commit to the project and his own estimates of progress of the various activities.

This Baseline Programme shall include details of resources required across the duration of the project, and shall clearly identify the interfaces with other Contractors as indicated in the Contract Documents.

The Baseline Programme shall be used for monitoring and evaluating all facets of Contractor performance including, but not limited to, progress, payment schedules, variations, claims and delays.

Programmes shall be organized in a logical work breakdown structure including work stages or phases and each activity shall be coded to indicate, as a minimum, the work group or entity responsible for the activity, the area, facility or location.

The Baseline Programme activities shall be discrete items of work, which when combined produce definable elements, components, stages, or Sections of the Works. Activity descriptions shall clearly illustrate the nature and scope of the Contract.

The programming method used shall be Critical Path Method (CPM) format using time scaled precedence diagramming methods and shall be time-scaled on monthly basis from the Commencement Date to show a continuous flow of information from left to right.

### **Detail Construction Drawings**

The Bidder shall submit full calculations and detail construction drawings for all structure which shall take into account all external loads and all loads imposed by the geometry and operation. Full details of assembling devices and water proofing/sealing measures specialized item use, shall also be provided by the Bidder.

### **Construction Method Statement**

Bidder shall provide full details of functioning of equipment’s (including operation and maintenance) and backup facilities. Bidder shall also submit arrangements for power supply for operation which shall not be arranged by the Employer.

Bidder shall also provide full details about the manufacture, storage and transport of manufactured items & bought-outs until the erection stage, including H.M. components.

### **Construction Schedule**

The Bidder shall provide the construction schedule based on advance rates for the various operations presented in his Method Statement. The advance rates for equipment’s & their operations shall at least conform to the minimum requirements set out in the technical specifications and he shall demonstrate the ability to achieve such advance rates based on the machine design and prior experience with similar equipment under comparable conditions.

Schedule should also allow for contingencies in the event of adverse conditions.

## **Site Organization**

**(with H.Q. / Corp. Center organization , with inter linkage also)**

## **Method Statement**

**(Bidder to consolidate it , apart from attaching the method(s), of his proposed associate identified specialized firm or each member of J V )**



## **Mobilization Schedule**

**(CONSTRUCTION & H.M., Electrical, ESHS Portions) (OWNER's proposed Construction Schedule attached as reference document with bidding purpose Drawings)**

## **Construction Schedule (Base line)**

**Including H.M. (*Fabrication / manufacture & erection*) *Electrical and ESHS Works***

## ESHS Management Strategies and Implementation Plans

### (ESHS-MSIP)

*[Note to Employer: modify the text in italics in the numbered points below, to name the appropriate documents.]*

The Bidder shall submit comprehensive and concise Environmental, Social, Health and Safety Management Strategies and Implementation Plans (ESHS-MSIP) as required by ITB 11.1 (h) of the Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ESHS provisions of the contract including those as may be more fully described in the following:

1. *[the Works Requirements described in Section VII];*
1. *[Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA)];*
2. *[Environmental Management Plan (EMP)];*
3. *[Resettlement Action Plan] (Compliance with RAP will be the responsibility of Employer)*
4. *[Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project)]; No consent has been taken by the Employer. Forest clearance and permission for tree felling have been taken up by the Employer and are in progress. The statutory Consent, permits/ licenses shall be the responsibility of the Contractor and the conditions stipulated under such statutory permissions/clearance will be binding on the Contractor. and*
5. *[specify any other relevant document/s]*

**Code of Conduct:  
Environmental, Social, Health and Safety (ESHS)**

*[Note to Employer: modify the text in italics in the numbered points below, to name the appropriate documents.]*

The Bidder shall submit the Code of Conduct that will apply to the Contractor's employees and subcontractors as required by ITB 11.1 (h) of the Bid Data Sheet. The Code of Conduct shall ensure compliance with the ESHS provisions of the contract, including those as may be more fully described in the following:

2. *[the Works Requirements described in Section VII];*
3. *[Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA)];*
4. *[Environmental Management Plan (EMP)];*
5. *[Consent Conditions (regulatory authority conditions attached to any permits or approvals for the project)]; and No consent has been taken by the Employer. Forest clearance and permission for tree felling have been taken up by the Employer and are in progress. The statutory Consent, permits/ licenses shall be the responsibility of the Contractor and the conditions stipulated under such statutory permissions / clearance will be binding on the Contractor.*
6. *[specify any other relevant document/s]*

In addition, the Bidder shall submit an outline of how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches.

## FORM EQU: Equipment Declaration

The bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment. A separate Form shall be prepared for each item of equipment or for alternative equipment proposed by the bidder.

(Bidder or his proposed associate identified specialized firm or each member of JV)

( also state main & two alternate for each equipment )

Sl. No	Details of Equipment	Capacity	Maximum age as on date of submission of bid (years)	Minimum Number Required	No. Proposed & owned	No. to be hired	No. new purchase	Remarks & details At
1	Hydraulic Excavator	1.0-1.5 Cum	5	10				
2	Concrete Vibrators (Electrical)	20 to 60 mm dia. needle	5	25				
3	(a) Tipper	7.5-10 T	5	60				
	(b) Truck	7.5-10 T	5	10				
4	Water Tank Lorry	5000-10000 Lit	5	5				
5	Pneumatic Vibrator	20 to 60 mm dia needle	5	10				
6	Transit mixer	4 cum	5	8				
7	Air Compressor (Diesel)	500 CFM	5	6				
8	Air Compressor (Elect.)	750 CFM	5	3				
9	Air Compressor (Tyre mounted)	350 CFM	5	10				
10	Air-track drills	of reputed Manufacturer	5	10				
11	Wagon drills	of reputed Manufacturer	5	10				
12	Water Pumps	5 HP to 25 HP	5	30				

## Section IV - Bidding Forms

Sl. No	Details of Equipment	Capacity	Maximum age as on date of submission of bid (years)	Minimum Number Required	No. Proposed & owned	No. to be hired	No. new purchase	Remarks & details At
13	Generator	250 KVA	5	8				
14	Welding Machine	Single Phase, Input 5KVA, Output-20 to 160Amp.	5	20				
15	Concrete Batching Plant	i) 120 m <sup>3</sup> /hr.	5	1				
15A	Mobile Self Loading, Weigh-Batching & Mixing & transporting Mixtures	6 m <sup>3</sup>	2	4				
16	Road Roller	i) 10 T ii) 10 T (Vibratory)	5 5	2 3				
17	Shuttering & centering steel plates	1000 Sqm. (0.60x1.20) m	1year	1000 Sqm.				
18	Aggregate Processing Plant	300 TPH	4	1				
19	Shotcrete Machines (CIFA) for SFRS	Dry & Wet	4 4	2 2				
20	Truck-mounted Hydraulic Concrete Pumps	25-30 m <sup>3</sup> /hr	3	3				
21	Grout Equipment-Complete	Set as per specification	5	8				

Section IV - Bidding Forms

Sl. No	Details of Equipment	Capacity	Maximum age as on date of submission of bid (years)	Minimum Number Required	No. Proposed & owned	No. to be hired	No. new purchase	Remarks & details At
22	Cranes:- Hydra/ Groove	25T & 50T	5	6				
23	Tower Cranes	10T, 25-30m radius	5	3				
24	D.G.Set	Adequate capacity	3	3				
25	Workshop & spares	As per plan						
26	Q C Lab –soil & concrete	As per Specifications						
27	Chilling Plant	Adequate	1	1				
28	Jack Hammers	Ordinary pneumatic	3	10				
29	Non-Nuclear Density Testers	of reputed Manufacturer	2	2				

## SAMPLE FORMAT FOR DETAILING OUT EACH EQUIPMENT

<b>Item of equipment</b>		
<b>Equipment information</b>	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
<b>Current status</b>	Current location	
	Details of current commitments	
<b>Source</b>	Indicate source of equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Lease <input type="checkbox"/> Specially manufactured <input type="checkbox"/> To be purchased  ** Deployed at other site & its Time of "Free for Deployment" duly certified by present Employer	

Omit the following information for equipment owned by the bidder.

<b>Owner</b>	Name of owner:	
	Address of owner:	
	Telephone	Contact name & title
	Fax	Telex
<b>Agreement</b>	Details of rental / lease / manufacture/ purchase agreements specific to the project:	



## PERSONNEL

### FORM PER-1: Proposed Personnel

Bidder should provide the names of suitably qualified personnel to meet the specified requirements stated in Section III. The data on their experience should be supplied using the Form below for each candidate.

(Bidder or his proposed associate identified specialized firm or each member of J V )

(also state main & two alternate names for each position )

#### Construction Personnel

Sl No	Designation of personnel position)	Minimum qualification	Minimum years of experience	Minimum experience in similar work	No.	No. of foreign Engr available / hired	no. of Indian Engr available / hired	Name & C V FILL At appendix-
		Degree						
C1	<b>Overall Project Manager</b>	Civil	20	15	1			
C 2(a)	<b>Safety Manager</b>	Degree/PG Diploma in Safety Management/ Industrial Safety	10	6	1			
C 2(b)	<b>Supervisor Safety -1</b>	Diploma/PG diploma in Safety Management	5	3	1			
C 2(c )	<b>Supervisor Safety -2</b>	Diploma/PG diploma in Safety Management	5	3	1			
C3(a)	<b>Environmental Manager</b>	PG in Environmental Sciences/ Engineering or equivalent	15	10	1			
C3(b)	<b>Social Cum Community Liaison Specialist</b>	PG in Sociology/ Social Science or equivalent	10	5	1			

Section IV - Bidding Forms

Sl No	Designation of personnel position)	Minimum qualification Degree	Minimum years of experience	Minimum experience in similar work	No.	No. of foreign Engr available / hired	no. of Indian Engr available / hired	Name & C V FILL At appendix-
C4	<b>GEOLOGIST / Geotechnical / Survey / soil Engineer</b>	Civil / Geotechnical	15	10	1 (part-time)			
C5	<b>Quality Assurance Manager with Q C and site lab –in-charge(s) (civil- ful time &amp; Mechanical – electrical – part time)</b>	Civil and Mechanical	15	10	1+			
C6	<b>Dam Site Manager</b>	Civil	20	15	1			
C7	<b>SPILL-WAY Site Manager</b>	Civil	20	15	2			
C8	<b>Dyke</b>	Civil	20	15	One at each location			
C9	<b>Site Manager, Survey , measurement &amp; billing , execution &amp; supervision,</b>	Civil	20	15	3			
C10	<b>Planning &amp; Monitoring &amp; Material Purchase Manager</b>	Civil	15	10	1			
C11	<b>Construction Equipment Manager</b>	Civil / Mechanical	15	10	2			
C-12	<b>Site Engineers</b>	Degree / Diploma in Civil Eng./ Mech. Eng.	12	7	4			
C-13	<b>Work Supervisors</b>	Matriculation / ITI Trained	15	5	3			
	<b>Hydro-Mechanical Works</b>							

Section IV - Bidding Forms

Sl No	Designation of personnel position)	Minimum qualification Degree	Minimum years of experience	Minimum experience in similar work	No.	No.of foreign Engr available / hired	no. of Indian Engr available / hired	Name & C V FILL At appendix-
HM-1	Works Manager & factory engineers , workers team	Mechanical	15	12	1			
	Hydro-Mechanical –site							
HM-2	Erection Engr, & specialised work erection team	Mechanical	10	8	3			
E-1	Electrical Installation Engineer	Electrical	7	5	01			

1.	Title of position *	
	Name	
2	Title of position *	
	Name	
3	Title of position *	
	Name	
4	Title of position *	
	Name	

\* As listed in Section III

## FORM PER-2: Resume of Proposed Personnel

(Bidder or his proposed associate identified specialized firm or each member of J V)

( also state main & two alternate names for each position )

<b>Name of bidder:</b>
------------------------

<b>Position</b>		
<b>Personnel Information</b>	Name:	Date of birth:
	Professional qualifications:	
<b>Present employment</b>	Name of employer:	
	Address of employer:	
	Telephone:	Contact (Manager / Personnel Officer)
	Fax:	e-mail:
	Job title:	Year with present employer:

Summarize professional experience over the last 25/20/15 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company / Project / Position / Relevant technical & managerial experience	Similar work experience as proposed

## FORM PER-2 (Cont.): Details of Manpower to be Deployed

### Preparation of Construction Drawing Services for Hirakud Dam – Additional Spillway Complex on Left Bank of Mahanadi River

We hereby declare that the following are the “**details of manpower to be deployed**” for carrying out the Construction Drawing for Hirakud Dam – Additional Spillway Complex on Left Bank of Mahanadi river in accordance with clause 6.7 of Technical Specification.

No.	Position / Level / job area for preparation of construction drawings	Total works experience Required (Years)	In Similar works experience Required (Years)	In Similar works experience Available (Years)	
Personnel					FILL At appendix-
D1	(a) Head Senior for Project Management at HQ (b) Site Representation on monthly meeting & as & when required for clarifications on Engineering aspects	20 15	15 10		
D2	Dam and Hydraulic Structures	15	10		
D3	Structural Drawing	15	10		
D4	Geologist (Part Time)	15	10		
D5	Geotechnical Engineer / Geologist	15	10		
D6	Civil Specialist	15	10		
D7	Electrical Engineer (partly)	15	10		
D8	Mechanical Engineer, Specializing in Hydro Mechanical Equipment (partly)	15	10		
D9	Senior Manager Coordination & Monitoring	15	12		

Category I – Specialist / Engg. Expert having experience more than 15 years.

Category II – Specialist / Engg. Expert having experience between 8 -15 years.

## **FORM PER-2(Cont.) : Qualified and Experienced Engineers**

### **Preparation of Construction Drawing for Hirakud Dam – Additional Spillway Complex on Left Bank of Mahanadi River**

We hereby declare that we have adequate organisation for “**Preparation of Detail Construction Drawing Capabilities**” and necessary qualified and experienced engineers to perform the work properly and substantiate the same with the following details:

<b>S. No.</b>	<b>Description of Engineering capabilities of Experts</b>	<b>Document enclosed in support of statement</b>

## BIDDERS QUALIFICATION

### WITHOUT PREQUALIFICATION Form ELI -1.1: Bidder Information Form

Date: \_\_\_\_\_  
ICB No. and title: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_ pages

Bidder's name
In case of Joint Venture (JV), name of each member:
Bidder's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Bidder's actual or intended year of incorporation:
Bidder's legal address [in country of registration]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of Government-owned enterprise or institution, in accordance with ITB 4.5 documents establishing: <ul style="list-style-type: none"><li>• Legal and financial autonomy</li><li>• Operation under commercial law</li><li>• Establishing that the Bidder is not dependent agency of the Employer</li></ul>
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

## Form ELI -1.2: Bidder's JV Information Form

(to be completed for each member of Bidder's JV)

Date: \_\_\_\_\_  
ICB No. and title: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_ pages

Bidder's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status, in accordance with ITB 4.5.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.



## Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

(Bidder’s proposed associate identified specialized firm or each member of J V)

Bidder’s Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 JV Member’s Name \_\_\_\_\_  
 ICB No. and title: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_ pages

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> Contract non-performance did not occur since <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.			
<input type="checkbox"/> Contract(s) not performed since <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (INR current value), (exchange rate INR60 = USD-1 or equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i>  Name of Employer: <i>[insert full name]</i>  Address of Employer: <i>[insert street/city/country]</i>  Reason(s) for non performance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Qualification Criteria and Requirements			
<input type="checkbox"/> No pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3.			
<input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			

Section IV - Bidding Forms

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (INR currency), USD [Exchange rate INR 60 = USD 1 or equivalent]
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: _____  Status of dispute: _____	
<input type="checkbox"/> No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3. <input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (INR currency)
		Contract Identification : Name of Employer : Address of Employer : Matter in dispute : Party who initiated the dispute: Status of dispute :	

**Form CON – 3**

**Environmental, Social, Health, and Safety**

**Performance Declaration**

*[The following table shall be filled in for the Bidder, each member of a Joint Venture and each Specialized Subcontractor]*

**Bidder’s Name:** *[insert full name]*

**Date:** *[insert day, month, year]*

**Joint Venture Member’s or Specialized Subcontractor’s Name:** *[insert full name]*

**ICB No. and title:** *[insert ICB number and title]*

**Page** *[insert page number]* **of** *[insert total number]* **pages**

Environmental, Social, Health, and Safety Performance Declaration in accordance with Section III, Qualification Criteria, and Requirements

- No suspension or termination of contract:** An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental, Social, Health, or Safety (ESHS) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5.
- Declaration of suspension or termination of contract:** The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental, Social, Health, or Safety (ESHS) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5. Details are described below:

<b>Year</b>	<b>Suspended or terminated portion of contract</b>	<b>Contract Identification</b>	<b>Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)</b>
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i>	<i>[insert amount]</i>

Section IV - Bidding Forms

		Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	
...	...	<i>[list all applicable contracts]</i>	...
<b>Performance Security called by an employer(s) for reasons related to ESHS performance</b>			
Year	Contract Identification		Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s)]</i>		<i>[insert amount]</i>

**Form FIN – 3.1: Financial Situation and Performance**  
**(Bidder 's proposed associate identified specialized firm or each member of J V)**

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

JV Member's Name \_\_\_\_\_

ICB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

**1. Financial data**

**All figure in INR**

Type of Financial information in (currency)	Historic information for previous _____ years, _____				
	(amount in INR currency)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

\* exchange rate INR 60 = USD-1 or equivalent currency

**2. Sources of Finance**

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount in INR
		( INR 60 = USD-1)
1		
2		
3		

**3. Financial documents**

The Bidder and its parties shall provide copies of financial statements for Five years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member , and not an affiliated entity (such as parent company or group member).
  - (b) be independently audited or certified in accordance with local legislation.
  - (c) be complete, including all notes to the financial statements.
  - (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements<sup>14</sup> for the  FIVE  years required above; and complying with the requirements

<sup>14</sup> If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

## Form FIN – 3.2: Average Annual Construction Turnover

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

JV Member's Name \_\_\_\_\_

ICB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

		Annual turnover data (construction only)	
Year	Amount Currency	Exchange rate (INR 60 = 1 USD)	USD equivalent
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
Average Annual Construction Turnover *			

\* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

## Form FIN – 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III (Evaluation and Qualification Criteria)

<b>Financial Resources</b>		
<b>No.</b>	<b>Source of financing</b>	<b>Amount in INR (INR 60 = 1 USD or equivalent)</b>
1		
2		
3		



## Form FIN – 3.4: Current Contract Commitments / Works in Progress

Bidder and each partner to a **JV and / or his proposed associate** identified specialized firm should provide information on their current commitments on all contract that have been awarded or for which a letter of intent or acceptance has been received or for contracts approaching completion, but for which an unqualified full completion certificate has yet to be issued.

Name of contract	Employer, contact address / telephone / fax	Value of outstanding work (Current INR in Cr. (INR 60 = 1 USD or equivalent currency)	Estimated completion date	Average monthly invoicing over last six months (Rs. in Crores) (INR 60 = 1 USD or equivalent currency)	Remarks
1					
2					
3					
4					
5					
		<b>Total</b>			

## FORM FIN – 3.5: Financial Stability

### Additional Spillway Complex on Left Bank of Mahanadi River

We hereby confirm that we have adequate financial stability and status to meet the financial obligation pursuant to the scope of work .The details of our profit and loss account and balance sheet (of last five years ) are also enclosed as annexure to this schedule.

S. No.	Description		
<b>A.</b>	<b>Orders in hand :</b>		
	Total value of contracts Cumulative work completed out of above value INR up to March 2017.		
<b>B.</b>	<b>Gross Turnover of company during</b>		
		<b>Gross</b>	<b>Construction work in INR</b>
	March 2012		
	March 2013		
	March 2014		
	March 2015		
	March 2016		
	March 2017		
<b>C.</b>	Balance sheet and profit and loss account duly certified by a chartered account for the last 5 years is to be submitted		
<b>D.</b>	Declaration by Bankers or the chartered accountant regarding: Bank guarantee limits – Enclosed at..... Overdraft limits/ cash credits limits - Enclosed at..... Deferred payments limits - Enclosed at..... Fixed deposits - Enclosed at..... Movable property hypothecation ..... (please state the present utilization status also) Liquid Assets (last five years)		

## Form EXP - 4.1: General Construction Experience

Bidder's Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 JV Member's Name \_\_\_\_\_  
 ICB No. and title: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_ pages

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	

## Form EXP - 4.2 (a): Specific Construction and Contract Management Experience

(Bidder or his proposed associate identified specialized firm or each member of J V)

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

JV Member's Name \_\_\_\_\_

ICB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount				US\$1 = INR 60
If member in a JV or sub-contractor, specify participation in total Contract amount				
Employer's Name:				
Address:				
Telephone/fax number				
E-mail:				

**Form EXP - 4.2(a) (cont.)**

**Specific Construction and Contract Management Experience (cont.)**

<b>Similar Contract No.</b>	<b>Information</b>
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
Amount	
Physical size of required works items	
Complexity	
Methods/Technology	
Construction rate for key activities	
Other Characteristics	

**Form EXP - 4.2 (a) (Cont.)**

Work performed as prime contractor (in the same name) /..... / .....

on works of a **SIMILAR WORKS/ QUALIFICATION CRETERIA (civil & H.M. works)** over the last five years

()

S. No.	Project	Name	Description of works	Contract	Value of	Date of issue	Stipulated period of completion	Actual date of completion*	Amount Completed Rs in Cr	Remarks :
	Name	of the Employer* with contact details : email / phone / Mob/ Address		No.	contract (Rs. in Crore))	of Acceptance Letter / work order/			& Percentage completed	(a) MEETING QR : YES / NO  (b) Explaining reasons for delay and work completed
1.										
2.										
3.										
4.										
5.										

\*Attach : certificate(s) from the Engineer(s)-in-Charge or self certified

@ The item of work for which data is requested should tally with that specified in Section – III E-1.1 above.

β Attach certificate from Chartered Accountant or self certified

## Form EXP - 4.2(b): Construction Experience in Key Activities

(Bidder or his proposed associate identified specialized firm or each member of J V)

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Bidder's JV Member Name: \_\_\_\_\_

Sub-contractor's Name<sup>15</sup> (as per ITB 34.2 and 34.3): \_\_\_\_\_

ICB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

All Sub-contractors for key activities must complete the information in this form as per ITB 34.2 and 34.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: \_\_\_\_\_

<b>Information</b>				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount			US\$ 1 = INR 60	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)	Actual Quantity Performed (i) x (ii)	
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				

<sup>15</sup> If applicable

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	<b>Information</b>
Employer's Name:	
Address: Telephone/fax number E-mail:	

2. Activity No. Two

3. ....

	<b>Information</b>
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:	





## **Form EXP - 4.2(b) (Cont.): Successful Performance**

**Services for Hirakud Dam –**

**Additional Spillway Complex on Left Bank of Mahanadi River**

We hereby furnish relevant documentary evidence from the clients for “**successful performance**” of the system engineered by us

<b>S. No.</b>	<b>Name and capacity of Dam or Irrigation Project, Hydro power Project engineered by preparing the Construction Drawings</b>	<b>Supporting documents attached as annexure</b>

## Form EXP - 4.2(b) (Cont.): Preparation of Construction Drawing

### Detail Construction Drawing Services for Hirakud Dam – Additional Spillway Complex on Left of Gandhi Hillock

We here by confirm that we have carried out the “preparation of Construction Drawing” for projects of specified magnitude in the following areas along with the supporting documents to establish the same are also meeting requirements with related specification .

S. No.	Activity	Name of project with date of commissioning	Clients name and contact address with telephone / Fax number	Supporting documents / ----- Meeting Q R : Yes / No
	Detailed construction drawing for at least three Concrete gravity dams of 50m height with over-flow or deep under-sluices.  (i).....(ii).....(iii).....			
	Detailed construction drawing for at least three embankment dam of 50m height.(i) ; (ii) ; (iii)			
	Detail construction drawing for at least three spillway With a discharge capacity of 9200 m3/sec involving a drop of not less than 50 m. .(i) ; (ii) ; (iii)....			
	Detail construction drawing of at least Three 50 m high concrete gravity training / retaining wall for spill channel capable of carrying flood discharge of about 9200 m3/sec. .(i) ; (ii) ; (iii).....			
	Detail construction drawing and engineering of at least three Projects having Spillway radial gates and stop logs with hoisting arrangement with opening size of around 15 m x 15 m.			

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<b>S. No.</b>	<b>Activity</b>	<b>Name of project with date of commissioning</b>	<b>Clients name and contact address with telephone / Fax number</b>	<b>Supporting documents /</b> <hr/> <b>Meeting</b> <b>Q R : Yes / No</b>
	Experience of having carried out geotechnical and studies for at least one project located			

## Form EXP - 4.2(b) (Cont.): Technical Knowledge

### Hirakud Dam –Additional Spillway Complex on Left Bank of Mahanadi River

We hereby furnish following details to substantiate that we meet as a firm who regularly “**undertakes Preparation of Construction Drawing work of the types specified**” in Technical Specifications and has adequate technical knowledge and practical experience in the field.

S. No.	Description of consultancy assignments	Name of client	Approximate value of the contract	Period of execution of assignment	Brief scope	Supporting document from client attached

## Form EXP - 4.2(b) (Cont.): Quality Assurance and Inspection

### QA & QC Services for Hirakud Dam –

#### Additional Spillway Complex on Left Bank of Mahanadi River

[Note: In similar format, the construction contractor as well as his JV members and sub-vendor need to furnish their data]

We hereby furnish details as given below to indicate our past experience in carrying out “quality assurance and inspection” & “quality control” programme at (a) Construction at project site (b) manufacturer’s works, (c) H.M works and (d) Electrical work at project site:

S. No.	Projects	Type of involvement at manufacturers works and at project site*	Types of involvement at construction works at project site*	Supporting documents and format of Field Quality Assurance Plan

\*State (i) whether involvement in QA or inspection or both and furnish details separately. (ii) Attach sample formats for (a) QA & I (b) QC

## Form H.M. – Technical Data Declaration/

### Responsiveness Matrix

#### **TECHNICAL DATA SHEETS / Responsiveness Matrix/**

Technical data sheets represent technical questionnaire to be furnished in filled up form duly signed with the bid. The data under sub-head “**Guaranteed technical particulars**” will form an integral part of the contract and will be reviewed for evaluation and it is confirmation of the bidder having agreed to abide by this data during execution of work.

The data under sub-head “**Tentative technical particulars**” will not form an integral part of the contract but will be only informative in nature and may be used by the Owner to see that it meets in general the requirements of the specifications and shall be purely tentative to be finalized during the preparation of the detailed construction drawings by the successful bidder.

The Bidder is, therefore, requested to read these data sheets with care and to complete the most conscientiously and with every necessary detail.

The Bidder shall to provide break-up of weight particulars for 1<sup>st</sup> stage embedded parts, 2<sup>nd</sup> stage embedded parts, Gate parts and Hoist supporting structure and hoist in the data sheet along with substantiating supporting documents.

**Special Notes:** Don’t fill in the shaded portion and fill all blank portions in the data sheets.

#### **Item Number : 1**

#### **Description : SPILLWAY RADIAL GATE WITH HYDRAULIC HOISTS**

#### **A. GATE**

#### **1. Technical Particulars**

- a. Gate size (width x height) :
- b. Hydraulic head (FRL-Sill) :
- c. Type of gate : Crest Radial gate
- d. Number of gates :
- e. Particulars :

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Name of the manufacturer and address		

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
ii	Reference IS codes	IS 4623, 6934	
iii	Radius of skin plate		
iv	Type of trunnion anchorages		
v	Permissible stresses & Conditions	As per Annex-B of IS 4623	
vi	Type of dogging arrangement & location		

## 2. Specification of Material/ Grade

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Skin plate Material/ Thickness  Bottom 5M Radial portion  Next 5M Radial portion  Next 5M Radial portion.		
ii	Trunnion hub	Cast steel	
iii	Trunnion bush (self-lubricating)	Lubrite/Devaglide/INA/GGB	
iv	Trunnion pin	Corrosion resistant stainless steel	
v	Neoprene side seals	Moulded and homogeneous section as per IS 11855  Moulded and	



Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
	Rubber seals (Teflon cladded/ uncladed)	homogeneous section as per BS-2752	
vi	Painting system (Primer, Finish paint) & Make	Berger/Shalimar/Asian paints/ J & N	

### 3. Transportation

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Heaviest Part  Name of the part/ weight		
ii	Longest Part  Name of the part/ dimensions  (l x w x d)		
iii	Maximum width (m)		

### 4. Weight Particulars

Sl.No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data (in MT)
i	1 <sup>st</sup> stage Embedded Parts		
ii	2 <sup>nd</sup> stage Embedded Parts		
iii	Gate Parts		
iv	Hoist supporting structure & hoist		

**B. HYDRAULIC HOIST****1. Technical Particulars**

- a. Hoist capacity :
- b. Type of hoist : Single acting
- c. Imported or Indigenous :
- d. Number of hoist :
- d. Reference codes : DIN 10704, IS 10210
- e. Particulars

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
<u>B 1.1</u>	<b>Hydraulic Cylinder</b>		
i	Name of the manufacturer and address		
ii	Stroke (working) in mm		
iii	Reserve stroke Piston end (in mm) Stem rod end (in mm)		
iv	Design pressure	20 MPa	
B 1.2	<b>Hoist Cylinder mounting &amp; connecting arrangement</b>		
B 1.3	<b>Hydraulic Power pack assembly</b>		
i	Name of manufacturer		
ii	Type of the oil pump		
iii	Maximum working pressure at pump	22.5 MPa	

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Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
iv	Type of motor and make		
B 1.4	<b>Electrical controls</b>		
i	Name of the manufacturer		
ii	Type of gate position indicator		
iii	Transmitter & Limit switches Type Make		

**2. Specification of Material/ Grade**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
<u>i</u>	Oil tank	Stainless steel AISI 304	
ii	Hydraulic oil (viscosity)	As recommended by cylinder manufacturer	
iii	Piping & fittings	Stainless steel	
iv	Painting system (Primer, Finish paint) & Make		

**3. Transportation**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
<u>i</u>	Heaviest Part		

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
	Name of the part/ weight		
ii	Longest Part Name of the part/ dimensions (l x w x d)		
iii	Width (m)		

**C. LOCAL ELECTRICAL CONTROL PANEL:**

• **Brief Description & Details:**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Name of the manufacturer and address of local control panel		
ii	Description of indications		
iii	Protection devices		
iv	Main distribution board		
v	Cables details		
vi	Earthing details		

**D. Instrumentation & Dam Control System:**

- **Brief Description of Radar type Instruments (Water level measurement system & its hardware) :**
- **Brief Description of Radar type Instruments (Balance head measurement system & its hardware):**
- **Brief Description of Dam control system:**
- **Controls:**
- **Indications:**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Name of the manufacturer and address of Water level measurement system		
ii	Name of the manufacturer and address of Balance head measurement system		
iii	Name of the manufacturer and address of Dam control system		
iv	Description of indications		
v	Description of Protection devices		
vi	Over riding system		

**Item Number : 2****Description : SPILLWAY STOPLOGS (SLIDE TYPE) AND GANTRY CRANE WITH LB****A. GATE****1. Technical Particulars**

- a. Gate size (width x height) :
- b. Number of units :
- c. Hydraulic head (MWL-Sill) :
- d. Skin plate (u/s or d/s) : Downstream
- e. Type of side sealing (u/s or d/s) : Downstream
- f. Operating condition : Balanced water head on u/s & d/s except for the top unit, which will be lifted under unbalanced head.

## g. Particulars

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Name of the manufacturer and address		
ii	Reference IS codes	IS 9349, IS 13591	
iii	Permissible Stresses and Conditions	As per Annexure-C of IS 9349	
iv	Type of latching arrangement & location		
v	Storage pit (if required) & location		

**2. Specification of Material/ Grade**

<b>Sl. No</b>	<b>Description</b>	<b>Guaranteed Data (Integral part of Contract during execution)</b>	<b>Tentative Data</b>
i	Skin plate		
ii	Rubber seals.	Moulded and homogeneous section as per IS 11855	
iii	Painting system (Primer, Finish paint) & Make	IS 14177 Berger/Shalimar/Asian paints/ J & N	

**3. Transportation**

<b>Sl. No</b>	<b>Description</b>	<b>Guaranteed Data (Integral part of Contract during execution)</b>	<b>Tentative Data</b>
i	Heaviest Part Name of the part/ weight		
ii	Longest Part Name of the part/ dimensions (l x w x d)		
iii	Width (m)		

**4. Weight Particulars**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data (in MT)
i	1 <sup>st</sup> stage Embedded Parts		
ii	2 <sup>nd</sup> stage Embedded Parts		
iii	Gate Parts		
iv	Gantry Crane		

**B. GANTRY CRANE****1. Technical Particulars**

- a. Rated capacity :
- b. Reference code : IS 807 (class II) & IS 3177 (M5)
- c. C/C distance between rails :
- d. Minimum headroom over the deck :

## c. Particulars

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Name of the manufacturer and address		
ii	Total lift from sill (in m)		
iii	Speed		



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	LT travel Hoisting		
iv	Type of electric controls		
v	Type of cable reeling drum		

**2. Specification of Material/ Grade**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Rope drum	Cast steel	
ii	Gear wheels	Cast steel	
iii	Shafts	Forging	
iv	Pulleys	Cast steel	
v	Type of motor & make		
vi	Type of Brake & make		
vii	Type of limit switches & make		
viii	Wire rope (6x36, 6x 37)	IS 2266	
ix	Painting system (Primer, Finish paint) & Make	Berger/Shalimar/Asian paints/ J & N	

**3. Transportation**

Sl. No	Description	Guaranteed Data (Integral part of Contract during execution)	Tentative Data
i	Heaviest Part Name of the part/ weight		
ii	Longest Part Name of the part/ dimensions (l x w x d)		
iii	Width (m)		

**FORM : Letter of Undertaking  
from his proposed associate identified specialized firm**

(BASED ON WHICH THE BIDDER will seek post -QUALIFICATION FOR relevant  
EXPERIENCE FOR HYDRO MECHANICAL EXPERIENCE / CONSTRUCTION  
DRAWING EXPERIENCE / GROUTING WORKS)

*(This undertaking is to be furnished with the bid separately for each of the applicable \_ for  
Hydro Mechanical Experience / Detail Construction Drawing preparation Experience /  
Grouting Experience)*

No.....

Date.....

To,

The

Dear Sir,

We, M/s ..... (name of the sub-contractor) having registered office at  
.....do hereby undertake that M/s .....(name of the bidder), has associated  
us as the proposed sub-contractor for the work of .....(brief scope of the sub-  
contract) for the contract for Civil Works and Hydro Mechanical Equipment's works.

We confirm that in the event of award of contract for Civil Works and Hydro Mechanical  
Equipment's works to M/s. ....(Name of the bidder), we shall work as the sub-  
contractor to M/s. ....(Name of the bidder) and shall be responsible for successful  
completion of work of. ....(Brief scope of the sub-contract).

Yours faithfully

For & on behalf of M/s .....

(Name & Address of the Sub-Contractor)

Date:

(Office Seal)

Place:

Note: This letter of authorization should be on the letterhead of the proposed Sub-Contractor  
and should be signed by a person competent and having the Power of Attorney to bind the  
Sub-Contractor. Power of Attorney in favour of this person to do so may be enclosed with  
this undertaking.

## FORM : SUBCONTRACTORS LIST

List hereunder the principal Subcontractors and other persons and organizations that the Bidder intends to employ, if awarded the Contracts, including those who are to furnish the principal items of material and equipment, and the Work to be done by them. As a minimum, the list should include all Subcontractors with proposed financial participation of 3% or greater of the Bid Price.(Include work Bidder intends to subcontract, even if a Subcontractor has not yet been selected).

	<u>Description of Work</u>	<u>Name of Subcontractor</u>	<u>Address e-mail ; Mob</u>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

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	<u>Description of Work</u>	<u>Name of Subcontractor</u>	<u>Address e-mail ; Mob</u>
12.			
13.			
14.			
15.			
16.			
17.			

## **Form of Bid Security** (Demand Guarantee)

**Beneficiary:** \_\_\_\_\_

**Invitation for Bids No:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**BID GUARANTEE No.:** \_\_\_\_\_

**Guarantor:** \_\_\_\_\_

We have been informed that \_\_\_\_\_ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of \_\_\_\_\_ under Invitation for Bids No. \_\_\_\_\_ ("the IFB").

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of \_\_\_\_\_ (\_\_\_\_\_) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid during the period of bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the performance security,, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the successful bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

\_\_\_\_\_  
*[signature(s)]*

## Form of Bid-Securing Declaration [NOT APPLICABLE ]

Date: \_\_\_\_\_

Bid No.: \_\_\_\_\_

Alternative No.: \_\_\_\_\_

To:

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the entity that invited Bids for the period of time of \_\_\_\_\_ starting on \_\_\_\_\_, if we are in breach of our obligation(s) under the bid conditions, because we:

- (a) have withdrawn our Bid during the period of bid validity specified in the Letter of Bid;  
or
- (b) having been notified of the acceptance of our Bid by the Employer during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Name of the Bidder\* \_\_\_\_\_

Name of the person duly authorized to sign the Bid on behalf of the Bidder\*\* \_\_\_\_\_

Title of the person signing the Bid \_\_\_\_\_

Signature of the person named above \_\_\_\_\_ at  
signed \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

\*\* : Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

*[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the bid.]*

## **Section V: Eligible Countries**

### **Eligibility for the Provision of Goods, Works and Non Consulting Services in Bank-Financed Procurement**

1. In reference to ITB 4.7 and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this bidding process:

Under ITB 4.7(a) and 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"]*

Under ITB 4.7(b) and 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"]*



## Section VI. Bank Policy – Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011.

### “Fraud and Corruption:

1.16 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.<sup>16</sup> In pursuance of this policy, the Bank:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (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;<sup>17</sup>;
  - (ii) “fraudulent practice” 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;<sup>18</sup>
  - (iii) “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;<sup>19</sup>
  - (iv) “coercive practice” is 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;<sup>20</sup>
  - (v) "obstructive practice" is
    - (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 Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it

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<sup>16</sup> In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

<sup>17</sup> For the purpose of this sub-paragraph, “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

<sup>18</sup> For the purpose of this sub-paragraph, “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

<sup>19</sup> For the purpose of this sub-paragraph, “parties” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

<sup>20</sup> For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.

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 Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare mis-procurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,<sup>21</sup> including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated<sup>22</sup>;
- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.”

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<sup>21</sup> A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

<sup>22</sup> A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.