

Memo No. 230

Date- 06.03.2020

# Reference No- WBIW/SE/KC-I/REOI-1/2019-20 Date- 06.03.2020

# **REQUEST FOR EXPRESSION OF INTEREST (REOI)**

Notice Inviting "EXPRESSION OF INTEREST" from reputed construction firm to execute the following work in EPC mode.

Assignment Title:-

"Rehabilitation of the distressed Right Bank Main Canal Head Regulator Structure of Kangsabati Dam at Mukutmanipur, Khatra in District Bankura, West Bengal including sealing of leakage by suitable concreting / underwater grouting along with strengthening of downstream floor by concreting, resetting of apron and ancillary repairing work."

# (REOI No. : WBIW/SE/KC-I/REOI-1/2019-20) REOI No. WBIW/SE/KC-I/REOI-1/2019-20 Date- 06.03.2020

# SECTION-1: Invitation to EOI

- The Superintending Engineer, Kangsabati Circle-I, Kenduadihi, Bankura (Irrigation & waterways Directorate-West Bengal), hereby, invites expression of interest proposals from experienced and reputed Agency to provide Methodology, specification, quantification and subsequent construction Services for the following work:-
- 2) Name of work/ Assignment :- Rehabilitation of the distressed Right Bank Main Canal Head Regulator Structure of Kangsabati Dam at Mukutmanipur, Khatra in District Bankura, West Bengal including sealing of leakage by suitable concreting / underwater grouting along with strengthening of downstream floor by concreting, resetting of apron and ancillary repairing work.
- 3) Project background: The Irrigation & Waterways Department in Government of West Bengal has identified the following observation and problems in the Right Bank Canal Head Regulator structure of Kangsabati Reservoir Project in the districts of Bankura which need refurbish since they had been constructed almost 40-50 years back and not in good condition.

# A. PROBLEM:

A significant amount of water leakage is present since long through the head regulator structure of the Right Bank Main Canal of Kangsabati-Kumari Dam. Apart from waste of reservoir water in this draught prone zone it also promotes the growth of aquatic plants & weeds due to constant presence of water throughout the canal bed, which gradually decreases the discharge carrying capacity of the RBMC.

To find the root of the problem, a video inspection had been carried out in each of the six barrels of the head regulator mostly in underwater condition & it is found that, besides heavy leakage of water through the gates due to non-closing of the gates properly. It is also found the presence of leakage in the gate supporting structures such as piers, breast wall etc.. Major & minor honeycombs, cracks, eroded reinforcement, damage in concrete surface, erosion through construction joints are also found during inspection. Damages & dislocation of the embedded parts also happened due to the erosion.

Technical committee members under the DRIP (Phase-II) & WAPCOS have visited the RBHR structure several times & recommended to examine the gated portion and to repair the leakages and dislocation of the embedded parts if any within the concrete body by careful consideration & expertise repair methodology. Apart from that, it is also recommended to check & refurbish the mechanical systems and structure of all gates of the Right Bank Head Regulator separately.

Since strengthening of distressed portion, sealing of leakages and Crack, honeycomb & damage repair are required to be done underwater in the majority of the proposed work, adopting a suitable construction methodology is of immense importance. Such work is to be carried out keeping the water level at upstream near to its pond level to ensure Irrigation, and Municipal supplies.

# **B. RELATED SITE DATA**

- i) TYPE OF GATE:
- ii) NO. OF GATES:
- iii) SIZE OF GATES:
- iv) DISCHARGING CAPACITY:

VERTICAL GATE (ROPE & DRUM SYSTEM) 6 NOS. 5'6" X 10'6" 2500 CUSECS (At Full Reservoir Level)

- 4) Period of execution: 6(Six) calendar months including monsoon.
- 5) EOI documents: The EOI comprise of Notice inviting "Expression of Interest", project Background broad scope of work, time schedule, instruction to Bidders and drawing. All the EOI documents can be downloaded from the departmental web portal i.e. <u>www.wbiwd.gov.in</u>.

# 6) Last date of submission of expression of interest:

Expression of interest with the accompanying information must be delivered in the written form in sealed envelope physically by **25th March-2020**, in between 10:30 hrs (IST) to 17:30 hrs (IST) on working days:

- 7) **<u>Receipt of proposal</u>** : All sealed proposals should be submitted in any one of the following two offices.
  - Office of the Superintending Engineer, Kangsabati Circle-I, Irrigation & Waterways Directorate, Government of West Bengal, Kenduadihi, P.O. District- Bankura, Pin-722102, West Bengal Telephone & Fax: 03242-250322, Email: se1.kc.iwd@gmail.com
  - Office of the Superintending Engineer, Investigation & Planning Circle-I Irrigation & Waterways Directorate, Government of West Bengal 3rd Floor, Jalasampad Bhavan, Salt Lake, Kolkata-700091 Telephone & Fax: 033-2334-0411, Email: seipc12015@gmail.com
- 8) For any queries and clarification, interested contenders may visit the site and may contact the Superintending Engineer, Kangsabati Circle-I, Irrigation & Waterways Directorate-West Bengal at the address mentioned at para below.
- 9) Address for Communication: Superintending Engineer, Kangsabati Circle-I, Irrigation & Waterways Directorate, West Bengal, Kenduadihi, Bankura, PIN-722102.
- 10) Interested bidders may consult the Departmental web portal mentioned above regularly to see Corrigenda/Addenda which may be issued by Notice Inviting Authority from time to time prior to submission of the proposal as given in para 8.
- 11) Accepting authority reserves the right to accept/reject any or all proposals without assigning any reason thereof.

Sd/-Superintending Engineer Kangsabati Circle-I, I&WD-WB

### SECTION 2: INSTRUCTION TO BIDDER

# A. GENERAL

# 1. Scope of Bid

The scope of work under this assignment can be broadly classified as-

- I. Preparation of effective design and drawing
- II. Undertaking site visits to identify the best suitable methodology
- III. The execution of work: The assignment/ project comprises of the followings but not limited to:-

# A. Underwater - Crack, honeycomb & damage repair

- i. Crack Groove Cutting: Cleaning of surface and cutting of Groove shall be cut using under water concrete cutting machine of size of 25 mm wide and 50 mm deep on each side of the crack to form as "V" groove all along the crack.
- ii. Crack sealing with epoxy putty with all materials and complete in all respect.
- iii. Surface preparation of damage and honeycomb areas by chipping, cleaning of loose concrete, cleaning of reinforcement complete in all respect.
- iv. Providing & fixing of reinforcement of various diameter.
- v. Fixing of nozzles in regular interval with epoxy putty.
- vi. Injection of low viscosity epoxy material through nozzles into the structure.
- vii. Providing leak proof sacrificial MS shuttering.
- viii. Filling of honeycomb areas with epoxy concrete.
- ix. Filling of damage areas with micro-concrete.
- x. Providing and fixing of 6 mm ms plate with 12mm diameter anchor fasteners.
- xi. Underwater- cutting of steel plates, structural steel part, bolts etc.

# B. Protection of structure with screed mortar above water

- Crack Groove Cutting: Groove shall be cut using under water concrete cutting machine of size of 25 mm wide and 50 mm deep on each side of the crack to form as "V" groove all along the crack
- ii. Crack sealing with epoxy putty with all materials and complete in all respect.
- iii. Providing UV resistant, nontoxic, high strength, non-shrink, polymer based cementitious screed mortar such as Poly Ironite Ceramic Cementitious Coating (PICC) which is a two component mortar provides low porosity, high compressive strength, high abrasion resistance and excellent bond with any surface like concrete, stone, steel, PVC, etc. for resurfacing of dam surfaces to a thickness up to 10 to 15mm.

# 2. Qualification of the Bidder

Only the renowned construction firms fulfilling the following requirement may apply:-

- a. The firm should have **at least five years'** experience in the business and of providing consultancy service of similar nature at the **national level.** (Provide a brief description of the organization including ownership details, date and place of incorporation of the firm, objectives of the firm, details of similar assignments undertaken in last five English financial years.)
- b. The firm should have Satisfactorily completed at least one similar nature of project in the last 5 (five) financial years as a prime contractor or as joint venture of value not less than amount of Rs. 1.50 Crores for Central/State Government projects or in Public sector at National level, having the any of the following items in the <u>scope of work</u> (Provide letter of Award of contract from the employer and documentary evidence of completion in last five English financial years.)
  - i. Concrete in Jetty, Berth, Barrage, and Bridge may be in under water.
  - ii. Rotary Drilling Works.
  - iii. Under water grouting with rehabilitation Works.
- c. The firm should have achieved a average annual turnover of **Rs.150.00 Lakh** in the last five completed financial years or achieved minimum **Rs.150.00 Lakh** in any one of the last five completed financial years. (Provide Audited Financial reports of last five completed years.)

### 3. Documents to be submitted

- (a) Completion certificates duly signed by client stating there in the broad scope of work, tendered amount, separately for the requirement as stated under 2. (b) .
- (b) The firm shall submit audited balance sheet, profit & loss account and statement of turnover duly certified by the Charted Accountant for the last 5 (Five) years ending on 31.03.2019.
- 4. Tender Inviting Authority reserves the right to consider acceptance of qualifying criteria of the proposal having minor deficiency from the prescribed limits if the situations so demands.

5. No bid fees or security is required during submission of EOI by the intending firm however the bidder will prepare their EOI at their own cost.

# 6. Schedule of bidding

(a) Last date of submission of EOI and Submission of proposal consisting of methodology and specification: - 25.03.2020.

- (b) Meeting with Departmental officers:-27.03.2020
- (c) Site Visit: Any convenient date before 25.03.2020.

Sd/-Soumen Misra Superintending Engineer Kangsabati Circle-I, I&WD-WB Kenduadihi, Bankura

#### Memo No.: 230/1(19)

#### Dated :06.03.2020.

### Copy forwarded for information to :

- 1. The Sabhadhipati, Bankura Zilla Parishad.
- 2. The District Magistrate, Bankura.
- 3. The Karmadhakshya, Krishi-o-Sech, Bankura Zilla Parishad, Bankura
- 4. The Secretary to the Government of West Bengal, Irrigation & Waterways Department, Jalsampad Bhawan, Salt Lake, Kolkata-700091
- 5. The Joint Secretary to the Government of West Bengal, Irrigation & Waterways Department, Jalsampad Bhawan, Salt Lake, Kolkata-700091
- 6. The Deputy Secretary (Works)-I to the Government of West Bengal, Irrigation & Waterways Department, Jalsampad Bhawan, Salt Lake, Kolkata-700091.
- 7. The Assistant Financial Advisor, Irrigation & Waterways Department, Jalsampad Bhawan, Salt Lake, Kolkata-700091.
- 8. The Chief Engineer-South West, I. & W. Dte , Khasjungle, Abash, Medinipur, Paschim Medinipur.
- 9. The Superintending Engineer Investigation & Planning Circle-I, Irrigation & Waterways Directorate, Jalasampad Bhavan, Salt Lake, Kolkata-700091
- 10. The Superintending Engineer, Kangsabati Circle-II, Khasjungle, Abas, Midnapore, Paschim Medinipur.
- 11-14. The Executive Engineer, Bankura Irrigation Division/ Kangsabati Canals Division No.II, Khatra / Kangsabati Canals Division No.III, Bishnupur/ E.E & T.A to S.E./K.C.-I, Bankura.
- 15. The Director of Information & Cultural Affairs, Department of Information & Culture, 3<sup>rd</sup> Floor, Nabanna, Howrah.
- 16. The Executive Engineer, D.V.C. Study Cell, I&W.Dte. Jalsampad Bhawan, Kol-91. The REOI documents Notice may please be uploaded in the REOI link of Departmental Website.
- 17. The District Information & Cultural Officer, Bankura.
- 18. The Divisional Accounts Officer of Kangsabati Canals Division No.II, Khatra, Bankura.
- 19. Notice Board of the office of Superintending Engineer, Kangsabati Circle-I, Bankura.

Superintending Engineer Kangsabati Circle-I Irrigation & Waterways Directorate Government of West Bengal