TENDER DOCUMENT

TENDER No: EPI/NERO/MMD/457/A/38  Dated: 12.08.2013

FOR

CONSTRUCTION OF SINGLE ROW FENCE ALONG INDO-BANGLADESH BORDER IN THE STATE OF TRIPURA.

( Length 516 M from BP NO. 2183 to 2183-4S in Hrishyamukh, (South Tripura).

VOLUME – II

NOTICE INVITING TENDER & ADDITIONAL CONDITIONS OF CONTRACT & DRAWINGS & LIST OF VENDORS
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NIT NO. : EPI/NERO/MMD/457/A/38 Dated: 12.08.2013

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NOTICE INVITING TENDER

1.0 Tender for Construction of Single Row Fence along Indo-Bangladesh Border in the State of Tripura. (Length 516M from BP NO. 2183 to 2183-4S in Hrishyamukh, South Tripura.

Engineering Projects (India) Ltd. invites the sealed percentage rate tenders on behalf of Ministry of Home Affairs, Govt. of India as per the brief particulars of scope mentioned hereafter for Construction of Single Row Fence along Indo-Bangladesh Border in the State of Tripura. *in two bids (Techno commercial –Envelope 1 and Price bid- Envelope-2, Both the envelopes shall be kept in Third envelope) from the eligible and interested bidders who are well equipped, experience, financially sound Contractors / eligible Firms for the following works :-*

<table>
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<th>Sr. No.</th>
<th>NAME OF WORK</th>
<th>ESTIMATED COST (Rs)</th>
<th>TIME OF COMPLETION</th>
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<td>1</td>
<td>Construction of Single Row Fence along Indo-Bangladesh Border in the State of Tripura.</td>
<td>Rs.2,22,46,055/- (Rupees Two Crore Twenty Two Lakh Forty Six Thousand Fifty Five only)</td>
<td>06 (Six Months)</td>
<td>Rs.2,22,461/- (Rupees Two Lakh Twenty Two Thousand Four Hundred Sixty One only)</td>
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The detailed scope of work is given in the tender documents.

**Time schedule of Tender activities:**

(i) **Last Date & Time for sale of tender documents:** 26.08.2013 during office hours (10.00 HRS to 17.00 HRS IST) except Public Holidays.

(ii) **Last Date & Time of submission of Tenders:** 27.08.2013 at 15.00 HRS IST.

(iii) **Date & Time of opening tender (Techno-Commercial Bid):** 27.08.2013 at 15.30 HRS IST.

   a) **Contractors who fulfill the following requirements shall be eligible to apply. The Joint Ventures are not accepted.**

   i) Should have completed during last 7 (Seven) years following “Similar works” out of which at least one work should be with Central / State Govt. Organization / Autonomous Body/ PSU (i.e. completed after 31.03.2007).

      Three similar works, each costing not less than the amount equal to 30% of estimated cost put to tender.  
      **OR**  
      Two similar works, costing each not less than the amount equal to 40% of estimated cost put to tender  
      **OR**  
      One similar work of aggregate cost not less than the amount equal to 70% of estimated cost.

   ii) The ‘similar works’ shall mean “construction of Civil and Electrical Works of any one or any combination of the following Townships, Housing Complex, commercial/ public buildings roads, Industrial/ Infrastructural/ Utility projects, flood lighting, Street Lighting, Area Lighting works etc.”.

   iii) For evaluation purpose, the completion cost of works mentioned in the Completion Certificate shall be enhanced by 10% per annum till the end of month prior to date of NIT.

   iv) The cost of free issue materials shall not be included in the completion cost of works.

   b) Should have average annual financial turnover on works amounting at least 30% of the estimated cost of the work during the last three consecutive financial years ending on 31.03.2013 duly certified by a Chartered Accountant.

   c) Should not have incurred any loss in more than two years during the immediate last five consecutive financial years, ending 31.03.2013, Copies of balance sheet/ certificate from Chartered Accountant to be submitted.
d) Should have a solvency of 40% of estimated cost issued by his bankers. The Solvency certificate should not have been issued earlier than one year of last date of submission of tender.

e) Should have valid PAN (Permanent Account Number of Income Tax). Copies of PAN card to be submitted.

f) It is desirable that the bidder should have valid PF Registration No. In case, the bidders do not have PF Registration No, the same shall be obtained by successful bidder within one month from the date of LOI or before release of First RA Bill.

g) Bidder should have Valid Sale Tax/VAT Registration certificate and Service Tax Registration certificates. Copies of documentary evidence to be submitted.

h) Bidding Capacity = \[A \times N \times 2\] – B

Where,

\[A = \text{Maximum value of construction works executed in any one year during the last five years taking into account the}
\text{Completed as well as works in progress ending last day of the month previous to the one in which applications}
\text{invited:}
\]

\[N = \text{Number of years prescribed for completion of work for which bids have been invited}
\]

\[B = \text{Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids}
\text{have been invited. The Tenderers is requested to furnish the existing commitments on works under}
\text{execution along with stipulated period for completion of remaining for each of the work should be furnished in an}
\text{affidavit on non-judicial stamp paper of value of Rs. 100/- duly certified that the particulars}
\text{furnished are correct as per the Performa in Annexure –A}
\]

Details to be provided in the enclosed formats.

Even though an applicant may satisfy the eligibility criteria, EPI reserves the right for not issuing the tender document if the applicant’s has record of poor performance such as abandoning work, not properly completing the work, delay in completion of work, poor quality of work, financial failure / weakness etc.

2.0 Unit Rates shown in the BOQ’s are calculated on the basis as mentioned Memorandum Sl. No. X. Tenderers are required to quote on % (percentage) basis accordingly. The rates must be quoted above/ at par/ below the estimated costs (including all taxes and duties, work contract tax, cess, labour cess, octroi etc.)

3.0 Tenderers have to confirm whether they are registered under MSME Act or not, if so, relevant copy of the registración letter is to be attached in Envelope-1
4.0 Tender documents comprising of the following are available on the website of EPI: www.epi.gov.in

i) Notice Inviting Tender

ii) Instruction to Tenderers & General Conditions of Contract, Addendum to Instruction to Tenderers, Addendum to General Conditions of Contract, Memorandum – (Vol-I)

iii) Additional Conditions of Contract, Technical Specifications and Drawings – (Vol-II)

iv) Price Bid / Bill of Quantity and Summery of Cost - (Vol-III)

5.0 The complete tender documents are available on the website and the same can be downloaded by the intending bidders directly from website www.epi.gov.in fees of Rs. 5,000.00 (Rupees Five Thousand only) (Non-Refundable) by the crossed Demand Draft favoring ‘Engineering Projects (India) Limited’ at Guwahati, and shall be submitted by the bidder along with their bid in Envelope-1. Relevant experience certificates and other documents as mentioned above CI 1.0(a) to 1.0 (h) duly attested by the Gazetted Officer not below the rank of Executive Engineer or equivalent or Notary Public fulfilling the qualifying criteria shall be enclosed in Envelope-1. Completion certificates from the clients shall be in the name of the company who is submitting the tender. The Contractor has to produce original documents for the verification as and when demanded. The tender of any tenderer shall be rejected if in the detailed scrutiny, documents submitted along with the tender are found to be unsatisfactory / forged. The decision of EPI in this regard shall be final and the binding the tenderer.

6.0 Alternatively tender documents can also be purchased from the Office of Additional General Manager (MMD), Engineering Projects (India) Limited, North Eastern Regional Office, Vastava Complex, Shivam Apartment, 1st Floor, Tripura Road, Jaya Nagar, Beltola, Guwahati – 781028, Assam from 10.00 AM to 05.00 PM on all Working days (Monday to Friday) except public holidays, on request of letter along with the tender fees of Rs.5,000.00 (Rupees Five Thousand only) (Non-Refundable) by crossed Demand Draft favoring ‘Engineering Projects (India) Limited’ at Guwahati, and relevant experience certificates and other documents duly attested. The Contractor has to produce original documents for the verification at the time of purchase of Tender Documents. Issuance of Tender Documents to any tenderer shall, however, not construe that the tenderer is considered to be qualified for the tender work and the same may be rejected if on detailed scrutiny, the documents submitted along with the tender are found to be unsatisfactory/forged.

7.0 All tenders shall be accompanied by the Earnest Money Deposit (EMD) of Rs.2,22,461/- in the form of Bank Guarantee of any Nationalized Bank/Scheduled Banks, in accordance with the prescribed Perforam, favoring “Engineering Projects (India) Limited” at Guwahati. The EMD shall be valid for minimum period of 150 days (one hundred fifty) from the last day of submission of tender. Tenders submitted without EMD or within adequate amount of EMD shall be rejected.
8.0 The Terms & Conditions contained in this NIT and tender documents shall be applicable. In case of any unscheduled holiday taken place on the last day of issue of tender/submission of tender, the next working day will be treated as scheduled day and time for issue/submission of Tender.

9.0 EPI reserves the right to accept any tender or reject any or all tenders or annul this tendering process without assigning any reason and liability whatsoever and to re-invite the tender at its sole discretion.

10.0 The corrigendum or addendum, extension, cancellation of this NIT, if any, shall be hosted on the EPI's & CPP portal. The bidders are required to check EPI’s website & CPP Portal regularly for this purpose, to take into account before submission of tender. All Corrigendum and addendum are to be submitted duly signed & stamped. All bidders are advised to check especially website www.epi.gov.in regularly.

11.0 The price bid of those bidders whose bid has been technically accepted on the basis of documents submitted shall be opened with prior intimation to them. However, it is made clear that the offer of the L-1 bidders shall be accepted subject to the confirmation of authenticity of the PQ documents/BG from the concerned department/bank.

12.0 The tender documents shall be issued by and submitted to:
Additional General Manager (MMD)
Engineering Projects (India) Limited
North Eastern Regional Office
Vastava Complex, Shivam Apartment
1st Floor, Tripura Road, Jaya Nagar, Beltola, Guwahati – 781028, Assam.
Tel : 0361- 2229982
Fax : 0361-2229983
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### ADDITIONAL CONDITION OF CONTRACT

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**ADDITIONAL CONDITIONS OF CONTRACT**  
(IBB SINGLE ROW FENCING IN TRIPURA: PKG-VIII)

1.0 **INTRODUCTION**

1.1 Construction of Single Row Fencing along Indo-Bangladesh Border (IBB) in Tripura Sector is a Project of Govt. of India, Ministry of Home Affairs, and Engineering Projects (India) Ltd. (A Govt. of India Enterprise) has been nominated as Executing Agency for the project. EPI’s portion begins at BP No. 2183 to 2183-4S under South Tripura District respectively, covering approximately a length of 0.516 Kms. The total stretch is located in Tripura State.

2.0 **APPROACH TO SITE**

2.1 The present package is between BP 2183 and BP 2183-4S (Hrishyamukh) which is covering approximately a length of 0.516 kms and is accessible from Belonia, District Head Quarter of South Tripura. The place Hrishyamukh is connected by all weather motorable Road from Agartala, Capital Of Tripura. Hrishyamukh is also connected by all weather Motorable road from Silchar (Assam) – Agartala Road.

2.2 The Hrishyamukh Police Station is on the Indo-Bangladesh Border and is also coming across approaching site. The approved single row fencing will pass just behind the police station. The location is easily accessed from Hrishyamukh market.

2.3 Before tendering, the tender is advised to visit site as per the stipulation at clause 2.0 for “site visit and collecting local information” of General Condition of Contract.

3.0 **SCOPE OF WORK**

3.1 The scope of work shall be complete construction of Single Row fencing along Indo-Bangladesh Border between Border Pillar 2183 and BP 2183-4S (Hrishyamukh) (approximate length 0.516 Km) using copper enriched Mild steel angle, M.s. flats, barbed wire, concertina coil, cement concrete, earthwork, stone aggregate, bitumen, pipe culverts retaining walls using hard stone, steel gates etc as per design, drawing and description of items mentioned in enclosed Bill of Quantities.

3.2 Stone quarry of sufficient capacity as required shall also be arranged by the Contractor. Developing stone quarry for quarrying the stone of desired quality and quantity shall be in the scope of the contractor. The cost of this shall be deemed to be included in his quoted rates and nothing extra shall be payable to the contractor on this account.

4.0 **DEVELOPING STONE QUARRY BY BLASTING**

4.1 In case the developing of stone quarry requires blasting and is approved by Engineer-In-Charge of EPI, the contractor shall obtain the license from the District Authorities for undertaking blasting operations as well as for obtaining and storing the explosive as per Explosives Rules corrected upto date. He shall purchase explosives fuses, detonators etc. from a licensed dealer. He shall be responsible for safe custody and proper accounting of explosive materials. Engineer-In-Charge shall have an access to check the Contractor’s store of explosives and his accounts.
4.2 The Contractor shall also intimate the Engineer-In-Charge before actual blasting is undertaken.

4.3 In case where explosives are required to be transported and stored at site, relevant clause of explosives rules shall apply.

4.4 Contractor shall be responsible for any accident to workmen, public property damage due to blasting operation.

5.0 HANDING OVER OF SITE

5.1 The Single Row Fencing route / alignment is passing along with border road, over hills and through agriculture land and crossing over some tilas (earth mounds, earth dunes) enroute. The 35 feet wide strip of land/ tilas/ hillock is under process of acquisition by the district administration Govt. of Tripura and handing over of the entire stretch from the beginning to the end may not be possible in one go. Therefore, the site may be handed over in parts progressively to the contractor. The contractor shall take up the construction activities on such released fronts in parts without any reservation whatsoever. However, in case of any delay in handing over of the site to the contractor, Owner/ EPI shall only consider suitable extension of time for the execution of the work. It should be clearly understood that the Owner/ EPI shall not consider any other compensation whatsoever towards idleness of contractor’s labour, equipments etc.

5.2 The contractor shall make his own arrangement for approach to work site including borrow/ disposal area and for movement of men, materials, machineries, other equipment etc. required for carrying out the work under this contract.

5.3 The access roads/ path near to the work site may not be available at all places and at all time. The contractor shall plan his works as per the availability of access roads / path at site. All drainage of works area and all weather truckable/ haulage roads as required by the contractor shall be constructed and maintained during the construction period by the contractor at his own cost.

6.0 MOBILIZATION OF MEN, MATERIAL & MACHINERY

6.1 Further to Clause No. 11.0 for “Mobilization of Men, Material & Machinery” of General Conditions of Contract, it shall be contractor’s responsibility to arrange, operate & maintain the total station instrument and its accessories at his own cost to carry out levels (including initial & final levels of earth work), dimensions and alignment of all parts of the works.

Contractor shall provide Bench Marks and other reference points for the proper execution work and these shall be preserved till the end of work.

7.0 COMPLETION TIME

7.1 The entire scope of the work covered under this contract shall be completed within 06 (six) months from the date of issue of Letter of Intent (LOI) award letter. The completion time of 06 (six) months includes monsoon/ rainy season coming during the currency of the contract. The work shall be performed in time and to achieve the targets, the contractor shall have to plan adequate mobilization of all resources. Immediately on award of the work, the contractor shall submit a bar Chart clearly indication major key events /milestones to be achieved in line with the completion time for the approval of Engineer-in-charge. The contractor shall also furnish along with Bar Chart, the methodology of construction (job procedures), details of all equipment required, the period by which the equipment will be available at the site of work etc. All the activities shall be performed and completed strictly in accordance with approved work schedule.
The Engineer-in-charge, shall however, have the right to review the progress and modify the work schedule suiting the site conditions and the contractor shall be required to complete the work in accordance thereof without any extra cost to the Owner/EPI.

8.0 **SITE LABORATORY**

8.1 As part of the contract the contractor shall provide and maintain a site laboratory for the testing of construction material under the direction and general supervision of Engineer-in-charge. The laboratory room shall be constructed and installed with the appropriate facilities. Temperature and humidity controls shall be made available wherever necessary during the testing of samples.

All equipments shall be provided by the contractor so as to be compatible with the testing requirements specified. The contractor shall maintain the equipment in good working conditions for the duration of the contract.

The contractor shall provide approved qualified personnel to run the laboratory for the duration of the contract. The number of staff and equipment available must at all times be sufficient to keep pace with sampling and testing programme as required by Engineer-in-charge.

The contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning including all transport needed to move equipment and samples to and from sampling points on the site etc.

The contractor shall re-calibrate all measuring devices whenever so required by the Engineer-in-charge and shall submit the results of such measurements without delay.

9.0 **ANTI MALARIA MEASURES**

9.1 The contractor shall at his own expenses makes necessary arrangement for undertaking anti-malaria measures as prescribed by Local health Authorities or as directed by Engineer-in-charge.

10.0 **FACILITIES**

The sub-clause 28.3 of the Clause No. 28 of General Conditions of Contract (GCC) for Furnished Office Accommodation & Mobility & communication to be provided by the contractor to EPI shall be replaced and read as under:

10.1 Immediately on award of the work contractor at his cost will provide furnished office accommodation having approx. 2000 sq.ft. covered area and other facilities to the Engineer-in-charge and his staff who will supervise the work. The office accommodation shall be of the semi-permanent category type of building with drinking water and electricity supply arrangement. The office accommodation shall have minimum two toilets with water born flushing system and septic tank and soak pit arrangement. Contractor shall provide and maintain properly all electrical/sanitary fittings fans, heaters, coolers, as required by Engineer-in-charge including payment of supply of water & electricity bill till defect liability period is over.

10.2 All consumable like registers and stationeries required entering data and test results shall be provided by the contractor at his own cost as advised by Engineer-in-charge.

10.3 One portable RO water (Drinking water) equipment/ Machine or any other gadget of equivalent facility as decided by EPI, shall be provided by contractor at his own cost.
10.4 Computer (Pentium-Intel Core i3 processor, windows8 office edition) with minimum 500 GB HDD, UPS, One printer, latest version of software’s like MS Project, Windows, MS office etc. along with one small portable generator set of sufficient capacity to run the computer & lighting arrangement shall be provided by contractor at his own cost.

10.5 The furniture to be provided by the contractor at Engineer-in-charge’s site office shall be as under:
   i) Senior Executive steel table of size 72” x 36” x 30” one side three draws other side cabinet, back closed laminated wooden top and of reputed manufacture of equivalent as approved by Engineer-in-charge – 1 No.
   ii) Senior Executive steel table of size 60” x 36” x 30” one side three draws other side cabinet, back closed laminated wooden top and of reputed manufacture of equivalent as approved by Engineer-in-charge – 1 No.
   iii) Low back revolving tilting chair with foam rubber cushion of reputed manufacturer or equivalent as approved by Engineer-in-charge – 03 Nos.
   iv) Steel “S” type chairs – 5 Nos.
   v) Steel cupboard 78” x 36” x 19” four partition five compartments – 1 No.

10.6 Contractor shall provide to Engineer-in-charge immediately on award of work Brand New four wheel drive Scorpio DX vehicle or equivalent with driver and accessories valuing Rs.30,000/- each vehicle. The operational and maintenance cost of this vehicle shall be born by contractor. In case of breakdown, contractor shall make alternate arrangements immediately failing which Engineer-in-charge will hire a vehicle and debit the cost to contractor’s account.

10.7 The contractor will also provide full time one tea boy and one office boy in the office of Engineer-in-charge.

10.8 The contractor will provide one landline telephone connection or mobile exclusively for Engineer-in-charge site office. The cost of installation and monthly bills shall also be born by the contractor.

10.9 The contractor shall also provide and maintain a reasonably furnished two bed room transit accommodation near the site during contract period.

10.10 All above, facilities are temporary in nature and shall be the property of the contractor. The above facilities will be maintained by contractor till defect liability period. Engineer-in-charge shall return to contractor when he (Engineer-in-charge) does not require these facilities further.

11.0 PAYMENT ON ACCOUNT

Further to Clause No.37.00 General Conditions of Contract, the payments shall be released, out of the funds received from Govt. of India on deposit works basis for the project.

12.0 VALUE ADDED TAXES (VAT) / WORK CONTRACT TAX

The Clause No.13.6 of General Conditions of Contract in respect of VAT/ WCT applicable on execution of work is modified to the extent given below.
Value added Tax / Work Contract Tax shall be reimbursed as per actual on submission of documentary evidence for payment of VAT/ WCT. For other 15.0 Taxes the Clause No. 13.6 of GCC shall be application.

13.0 SECURITY & SAFETY

13.1 The site is located near Indo-Bangladesh Border (IBB) wherein the movement of personal is limited and regulated by Security agencies. The contractor has to work as per the permission given by these Security agencies from time to time and contractor must check before quoting for this job, the working hours, restriction in working and safety of their manpower, plant & equipment. The contractor shall mobilize and organize his resources accordingly to complete the work within stipulated time. The contractor shall have no claim on MHA/EPI or any other agency/department for any loss of man hours/ machinery due to these restrictions/ regulations.

13.2 A general Security cover shall be provided by BSF/ State Police and payment of Security charges, if any demanded by BSF/State Police authorities shall be borne by MHA/EPI. However, the contractor shall make his own arrangements for Security and safety of his manpower, plant & equipment, materials etc. Nothing extra shall be admissible on account of this and no compensation shall be paid by MHA/EPI in case the contractor’s personal suffer body injury, loss of life or any damages caused to the plant and machinery of the contractor.

14.0 THE LAND AQUISITION AND FOREST PROTECTION

14.1 The contractor should note that the Single Row Fencing alignment falls in agriculture land area/ forest area. The contractor shall be responsible for obtaining necessary approvals for acquisition of land and clearance from Department of Forest. The Ministry of Home Affairs has got one time permission from Ministry of Environment and Forest, Govt. of India for construction of Border Fencing and Border Roads. For this purpose a strip of 8-10 feet for Fencing and 10-12 feet width for patrolling road is allowed subject to the following conditions:

i) That the project has been specifically approved by High Level Empowered Committee set up for sanctioning such project in the MHA and intimation of the same has already been sent to the Ministry of Environment and Forest.

ii) That the State Forest department will establish forest check posts along the roads wherever required in order to prevent illegal movements of forest produce along with international border.

iii) The forest staff shall be included in the joint patrolling programme by the BSF and other such agencies manning border in order to protect the forest beyond the fencing point up to international border. For this purpose, a committee should be constituted at the level of Territorial division Forest Office to plan and monitor the forest protection activities. The contractor shall restrict its working, movement of vehicles, manpower etc. within the allowed strip and shall not damage forest/ trees etc.

14.2 Compensation for acquisition of agriculture land payable to the land holders shall be paid by Ministry of Home Affairs / EPI. However, any delay in land acquisition shall not relieve contractor from his responsibilities of liaisoning with the concerned agencies and contract shall not entitled for any increase in contract prices of any compensation, whatsoever, towards idling of resources.
15.0 COMPENSATION FOR DELAY

15.1 The contractor shall ensure adequate progress during the execution of work according to the bar-chart/ work schedule. The contractor shall also maintain monthly progress strictly in accordance with bar chart/ detailed work schedule that will be worked out and mutually agreed upon. If the contractor fails to maintain the above progress or fails to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy of EPI on account of such breach, pay compensation at the rate of 2.00% (Two percent) of the balance value of work for each month of delay subject to maximum of 10% (Ten percent) of the balance value of work.

In additional to above, the Contractor shall also compensate EPI to the tune of Rs.50,000/- (Rupees Fifty Thousand only) per month towards extra expenditure on establishment of EPI for extended period of the job, if the delay is due to reasons solely attributable to the Contractor.

After evaluation of the rates/ price analysis, EPI may require that amount of performance guarantee be increased at the expense of the contractor to a level sufficient to protect Owner/ EPI against financial loss in the event of default by the contractor.

16.0 MODIFICATIONS OF CLAUSE NO. 76.0 OF GENERAL CONDITIONS OF CONTRACT (GCC)

16.1 CLAUSE NO.76.1 OF GCC: DELETED

16.2 CLAUSE NO. 76.2: ARBITRATION BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES INTER SE/GOVERNMENT OF INDIA DEPARTMENTS/ MINISTRIES

i) In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration as per the instructions Office Memorandum/ Circulars) issued by Govt. of India from time to time with regard to arbitration between one Government Department and another, one Government and a Public Sector Enterprise and Public Sector Enterprise inter se.

ii) Subject to any amendment that may be carried out by the Government of India from time to time, the procedure to be followed in the arbitration shall be as is contained in D.O. No.DPE/4 (10/2001-PMA-GL-1 dated 22.01.2004 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard.

17.0 CLAUSE NO.76.3 JURISDICTION

The Courts in Guwahati alone will have jurisdiction to deal with matters arising from the Contract, to the exclusion of all other courts.
1. The work shall be executed as per the description of item given in the ‘Schedule of Quantities’, General Conditions, Special Conditions, Particulars Specifications and CPWD Specifications 1996 Vol.I to Vol.VI with up to date correction slips upto last date of issue of tenders.

2. The contractor shall provide necessary labour, tools & plants required for making the alignment of fencing on ground as & when the site/ land shall be made available as and when the possession of the same is handed over to the EPI by the state Government.

3. Nothing extra shall be payable for bailing out pumping out sub-soil water, if any and for laying concrete in or under water.

4. Bottom most row of the horizontal barbed wire shall be 75 mm to 150 mm above the ground level. To meet this requirement, surface dressing and jungle clearance may have to be done up to a distance of 3 meters on either side of each row of the security fencing. Nothing extra whatsoever, shall be paid on this account.

5. All steel fabrication work shall be done in a workshop well equipped for the required operations. Holes for bolts shall be properly matched and copper enriched M.S. fabricated posts & struts, M.S flats with M.S. spikes duly welded shall be got approved in the workshop itself before taking the fabricated material to the site of work & nothing extra whatsoever, shall be payable on this account.

6. (i) Copper enriched M.S. angle sections shall be procured form the rested lots of copper enriched M.S. angles manufactured by either Steel Authority of India Limited (SAIL) or Indian Iron & Steel Company (IISCO) or Tata Iron & Steel Company (TISCO) or Rastriya Ispat Nigam Limited (RINL). Contractor shall have to produce all the original documents e.g. supply orders, bills, proof of payments, delivery challan, gate passes manufactures test certificate etc. relating to the procurement of each consignment of copper enriched M.S. angle sections & it shall be the responsibility of the contractor to conclusively establish that all the consignments of angle sections brought for use in the work have been procured from the tested lots conforming to I.S 2062 – equivalent 1992 fo SAIL, IISCO, TISCO, RINL. Contractor shall commence the fabrication only after the Engineer-in-charge is satisfied that angle sections conforming to the aforesaid specifications have been procured by the contractor from tested lots of SAIL, IISCO, TISCO or RINL.

(ii) Coefficient and tolerance of angle iron in weight and section shall be as per I.S. 1852 – 1985.

(iii) If directed by the Engineer-in-charge, the contractor shall at his own cost make all arrangement for conducting test of the supplied copper enriched M.S. angles, M.S. angles, M.S. flats according to norms/ direction indicated in the EPI/CPWD/relevant I.S specification from the approved testing laboratory.

7. The ends of copper enriched M.S. angle posts and struts to be embedded in cement concrete blocks shall be fish-tailed by cutting along the corner of the angles upto minimum length of 60 mm and nothing extra shall be paid on this account.

8. In case of struts, foundation pits shall be excavated to suit the inclination of strut so that it is surrounded by concrete by not less than 200mm at any point. Cost of extra excavation that may be required to provide the struts in the inclined position including back filling & disposal of surplus earth is deemed to the included in the rates against item No.4 & 5 of BOQ and nothing extra whatsoever shall be paid on this account.
9. 2.5mm dia G.I. staple / clip for fixing barbed wire with angle Iron posts shall be as per the drawing.

10. (i) The intermediate copper enriched M.S. angle posts between two adjacent strutted posts shall be serially numbered so as to achieve the arrangement of fixing of tightening bolts shown in the drawings attached with the documents relating bolts shown in the drawings attached with the documents relating to this contract. At the time of commencement of the work, the Contractor shall erect 30 meters length of fencing & get it approved by the Engineer-in-Charge before large-scale work is carried out.

(ii) Posts and struts shall be fabricated from single piece of copper enriched M.S angles. However, butt-welding will be permitted for not more than one of four posts/ struts and only two pieces (smaller pieces to be note less than 600 mm) of copper enriched M.S angles shall be used to form any such posts/ struts. Welded joints in the posts/ struts shall neither be at the bends nor within a distance of 400 mm from the bend. No welded joints shall be permitted in the slanting portion of the posts. Wherever welding is restored as per the condition of the contract, only visual inspection of welding shall be done as per I.S. code 822 and the decision of the Engineer-in-Charge for acceptance of the weld or otherwise shall be final. For butt welding, the edges of the metal pieces shall be beveled to the required slope and the weld shall be continuous & cover the full cross-section of copper enriched M.S. angles. The welding work will be carried out as per sample approved by Engineer-in-Charge before large scale work is carried out.

11. The diagonals of barbed wire shall be continuous & stretched between adjacent posts from top horizontal row of barbed wire of one of post to the bottom horizontal row of the second post. For fixing diagonals of barbed wire, separate holes shall be drilled in the posts.

12. On Bangladesh side, every diagonal barbed wire of Security fencing shall be adequately tied with minimum six turns of G.I. wire of 16 gauge at least at seven intersections with horizontal rows of barbed wire above the height of seven rows of fencing from ground level in the vertical portion and at least at three places in the slanting portion.

13. On India side, every diagonal barbed wire of security fencing shall be adequately tied with minimum six turns of G.I. wire of 16 gauge at lease at five intersections with horizontal rows of barbed wire.

14. G.I. barbed wire at ends and at joints shall be given eight turns & either tied with G.I. wire of not less than 16 gauge at three places with at least six wraps at each place or clamped with two U-Bolts and nothing extra shall be paid on this account.

15. Wherever nuts & bolts are used for the assembly of steel sections, two G.I. washers of 3mm thickness and of appropriate size shall be used with each set of nut & bolt and nothing extra shall be paid on this account.

16. Concertina coil shall be laid only after stretching, tightening & fixing all the barbed wires in all the rows of security fencing and after applying final coat of paint on copper enriched M.S. angle posts & struts, M.S. flats & M.S. spikes etc.

17. The coat of anticorrosive paint over punched tape concertina coil, as specified, shall be applied before stretching the coil to its required length as per the conditions given in this tender document.

18. ‘Goose-neck’ wherever mentioned in the documents relating to the contract shall mean slanting portion of copper enriched M.S. angle posts of size 90 x 90 x 6mm.
19. Mixing of concrete shall be done in mechanical mixers only and under no circumstances hand mixing shall be permitted. For shuttering of concrete work steel shuttering in adequate number of sets are required to be arranged by the contractor.

20. G.I. barbed wire shall conform to IS 278: 1978

21. (i) Before fixing the G.I. barbed wire to copper enriched M.S. angle iron posts for all two rows the rolls of wire shall be duly painted by dipping it in paint twice in four operations (a) Dipping in paint for 12 hours (b) dried for 36 hours & (c) dipping in paint again for 12 hours (d) dried for 36 hours. It shall be ensured that all the surface of the wire is covered by black paint, if not, Engineer-in-charge may at his discretion allow the contractor to brush paint small area which are not painted by dipping to the entire satisfaction of engineer-in-charge with anti-corrosive bitumastic paint IS-158 of approved brand in black shade. Similarly the punched tape concertina coil shall be painted by dipping it in anticorrosive bitumastic paint conforming to IS-158. In four operations (a) dipping in paint for 2 hours, (b) dried for minimum 8 hours, (c) dipping in paint again for 2 hours and (d) drying for 24 hours.

(ii) For theoretical consumption of bitumastic paint for Barbed wire & concertina coil, the following co-efficient to be adopted.
   (a) Barbed wire (2 coats) @ 0.60 lit/ 100 metre length.
   (b) Concertina coil (2 coats) @ 1.5 lit per coil.

22. Application of following primer / paint in the sequence mentioned below shall be made to the M.S./copper enriched steel angle iron posts/struts except portion embedded in cement concrete which shall have one coat of Alkyd zinc phosphate primer. The same treatment shall be given to all the accessories of tightening bolts, U-bolts, nuts, clips, hooks, washer & spike plates etc. by dipping them in the following primer and paint. All primer/ paint shall be approved brand & manufacture.

   (a) First coat of alkyd zinc phosphate primer
   (b) Second coat of red oxide zinc chrome primer.
   (c) Third coat of synthetic enamel gray paint.
   (d) Fourth & fifth coat of synthetic enamel black paint.

23. The fencing work shall be executed in the following sequence.
   (i) Alignment of fencing and earth work in embankment.
   (ii) Excavation of foundation holes.
   (iii) Fabrication, applying priming coat and erection of angle iron posts/struts and casting of foundation.
   (iv) Laying C.C. pavement.
   (v) Priming/painting of angle iron
   (vi) Fixing of barbed wire, tightening / straightening bolts.
   (vii) Stretching of barbed wire.
   (viii) Laying of concertina coil.
   (ix) Fabrication & fixing of gate posts & gates.
   (x) Laying of barbed wire inside concertina coil.

24. **ALIGNMENT OF FENCING AND EARTH WORK IN EMBANKMENT :**

   Alignment of fencing is to be fixed by consulting the representatives of B.S.F., District Administration and EPI jointly after observing pros and cons of various problems/points.
25. **EXCAVATION OF FOUNDATION:**

The foundation of the required dimensions is dug with the help of augers, spatula and jumpers at 3.3 meters center. The foundation shall be dug in such a manner that angle iron posts of all the two rows comes in line perpendicular to the line of fencing. Wherever the depth of earth filling is more than 60cm, extra depth of C.C. block for encasing there of shall be done.

26. **FABRICATION AND ERECTION OF ANGLE IRON POSTS:**

The angle iron post/ struts are to be fabricated in contractor’s work-shop in nearby town areas and are to be got approved by the Engineer-in-charge in the workshop itself before these are carted to site for erection.

Initially cement concrete 1:3:6 is poured to fill-up 550 mm depth of excavated holes as per drawing and left till it attains enough strength for resting of angle iron post without sinking in it. After this foundation concrete gets hardened (in 3 hours or more) the angle iron post is erected vertically in the foundation holes with help of ballies etc. and rest of cement concrete 1:3:6 is poured. These ballies can be removed after three hours or more when the concrete gains enough strength to hold the iron post.

The foundation concrete for struts shall be poured after bolting the struts to the already fixed vertical post so that there is no fixing problem afterwards due to mis-matching of holes.

27. **PRIMING/ PAINTING OF ANGLE IRON POSTS**

Priming the angle iron post/ struts is to be carried out in the work shop after the fabrication is duly inspected & approved by the Engineer-in-charge, however other coats of painting shall be applied, 5/ 6 days after fixing the posts/ struts and laying of C.C. pavement.

28. **FIXING OF TIGHTENING BOLTS/ M.S. HOOKS :**

After the posts are primed and painted (one coat) the tightening bolts are properly fixed to the vertical posts of outer rows of fencing in such a way that the vertical distance between two tightening bolts on any post is not less than 1350 mm except the end/ corner posts. The steel hooks are fixed to the starting/ end and corner posts with the help of nuts and bolts.

29. **STRETCHING OF BARBED WIRE :**

The barbed wire reels / rolls are placed on a wooden stand is such a fashion that the reels can revolve on a rod placed through the reel axis by just pulling one end of barbed wire. These stands are placed on one end of the panel on which barbed wire to be stretched. The end of barbed wire is pulled to 30 m of the next strutted post and cut to proper size. The Separation is repeated for each row in that panel. For all rows of fencing alternate rows of barbed wire are firstly tied middle of the two strutted posts of the panel to minimize the sagging. All the alternate rows are then stretched with the help of the tightening bolts. The tightening should be preferably done from bottom row to the top where as the stretching should commence to be bottom.

After all the alternate barbed wire rows are sufficiently tight the same are tied up with other intermediate vertical posts with the help of U-pins. After this the diagonals (two on the goose neck and two on the vertical) between each vertical posts are stretched over the already tightened alternate horizontal rows with the help of crowbars and tied with the help of U-pins.

When the diagonal in the panels are complete the remaining alternate rows of horizontal barbed wire are stretched/ tightened over the cross in exactly the similar fashion as already done for the previous alternate rows of horizontal barbed wire.
30. **CONCERTINA COILS**:

   Brief specifications are given in Bill of Quantities. This shall be punched tape concertina coil-1A specification – IND/Engg/ PROV/1245B (weight not less than 15.2 Kg per coil). Details of the specifications are available with Directorate General of supply and disposal, Govt. of India.

   The concertina coil is to be laid only when all the barbed wires are stretched on all the two rows of fencing. Before laying the concertina coils it is to be ensured that a final coat of paint is applied on the angle iron posts.

31. **LAYING OF BARBED WIRE INSIDE CONCERTINA COIL**:

   Barbed wire is to be placed inside all three concertina coils in inclined diagonal pattern and stretched and tied with the barbed wires of fencing. There shall be two rows of barbed wires one between India side & middle row and the other between Bangladesh side and middle row, each row of barbed wire consisting of 2 layer (top and bottom layer) of barbed wire.

   For the purpose of measurement of barbed wire inside concertina coils as per item no.5 of schedule of quantity, both top and bottom layers of barbed wire inside one row shall constitute one unit and the total length of barbed wire in one row shall be taken equal to the horizontal length of fencing.

32. Unless otherwise specified, nothing extra shall be payable for executing the work as per the aforesaid conditions & specifications.

33. **RETAINING WALL AND EARTH WORK IN EMBANKMENT**:

   (i) The contractor shall prepare a Bar Chart in consultation with Engineer-in-charge before taking up the construction of retaining wall in low lying areas in descending order of height of retaining wall. i.e from higher section to lower section.

   (ii) Immediately after construction of retaining wall earthwork in embankment in low-lying areas will be taken up as per item No. of the schedule of quantity, duly compacted and left for maximum available time for further consolidation. The erection of fencing in low-lying section to higher section.

   (iii) Earth work in embankment in non low lying areas shall also be taken up simultaneously with the construction of retaining walls in low lying area as per item no. of the schedule of quantity, duly compacted/ consolidated for erecting of fencing.

34. Properly designed filter media shall be provided as per the direction of the Engineer-in-charge at weep hole locations. Separate payment shall be made wherever such media are provided.

35. **Longitudinal Drains**

   A Trapezoidal longitudinal drain shall be constructed out of random rubble masonry along IBB road on hill side. The construction details are shown in enclosed EPI drawing no. CL-496/C/171.

36. **LIST OF IS CODES**

   1. M.S. / copper enriched steel - Relevant I.S
   2. Specification for ready mix paint, brushing, bituminous, black lead free acid, alkali and heat resisting - IS:158-1981
Terms & Conditions

The terms & conditions governing the order shall inter alia include the following:

1) **SCOPE OF WORK**

The scope of work includes Construction of Single Row Fence of Length 516 meter from BP NO. 2183 to 2183-4S in Hrishyamukh (South Tripura), Tripura State using copper enriched mild steel angles, MS flats, barbed wire, concertina coil, cement concrete, earthwork, pipe culvert, slab culvert, retaining walls using bricks, etc as per specifications, design and drawing, terms & conditions of EPI's tender enquiry, subsequent amendment and clarifications.

2) **SECURITY DEPOSIT**

Within 15 days from the date of issue of Letter of Intent (LOI)/ work order, Contractor shall submit to EPI a Security Deposit Bank Guarantee equivalent to 5% (five percent) of the contract value for due and proper execution of the contract. The Bank Guarantee shall be from a Nationized / Scheduled Bank on EPI's enclosed proforma, valid for 12 months. The Bank Guarantee shall be released after satisfactory completion of the work.

3) **COMPLETION PERIOD**

06 (Six) months from the date of issue of Letter of Intent (LOI) / Work order. The completion time of 06 months includes monsoon/ rainy season coming during the currency of the contract. The work shall be performed in time and as per schedule given in the NIT to achieve the Targets. The Contractor shall have to plan adequate mobilization of all resources. Immediately on award of the work, Contractor shall submit a Bar Chart clearly indicating major key events/ milestones to be achieved in line with the completion time for the approval of Engineer-in-Charge. The contractor shall also furnish along with the Bar Chart, the methodology of construction, details of all equipment required, the period by which the equipment will be available at the site of works etc. All the activities shall be performed and completed strictly in accordance with approved work schedule.

The Engineer-in-Charge, shall however, have the right to review the progress and modify the work schedule suit the site conditions and the Contractor shall be required to complete the work in accordance thereof without any extra cost to the Owner/ EPI.

4) **TAXES & DUTIES**

The Contractor shall be responsible for payment of any tax levied on the transfer of property in goods involved in the work contract under the Tripura State Govt. Sales Tax Act and rules made there under including amendments, if any. This liability shall be to Contractor’s account and it shall not be reimbursed by owner/ EPI. Tax deduction at source shall be made as per rules prevailing in the State/ County.

It will be incumbent upon Contractor to obtain registration certificates as a dealer under the local Sales Tax Act and the Central Sales Tax etc and necessary evidence to this effect shall be furnished by Contractor to EPI. Sales Tax on the transaction between Contractor and his sub Contractors/ vendors shall not be reimbursed by owner/ EPI.

The Contractor shall also be responsible for payment of Excise Duty, Royalty, WCT, TOT, Octroi or any other Tax, Duty etc. as levied by Central Govt./ State Govt./ Municipal Bodies/ Panchyats etc. and the same shall deemed to be included in the contract price.
5) **INSURANCE OF WORK ETC.**

The Contractor shall arrange at his own expenses various Insurance Policies as per Clause no. 36 of “General Conditions Contract”. EPI shall not arrange CAR (Contractor’s All Risk) Policy for the Project and the workmen’s compensation policy under workmen compensation act 1923 and or any modification thereof or any other law relating thereto, the same shall be the responsibility of Contractor. The Insurance Policies to be taken by Contractor shall be in the joint name of Owner/ EPI and the Contractor.

6) **PAYMENT OF ACCOUNT**

Monthly running account bills shall be submitted by the Contractor on or before the date fixed by the Engineer-in-Charge for the work executed in the preceding month. The Engineer-in-Charge shall then certify and verify the bill by taking or causing to be taken where necessary, the requisite measurements of the work. The payment of the bill shall be released to the Contractor from EPI’s North Eastern Regional Office, Guwahati by any account payee cheque within a reasonable time not exceeding one month for the date of submission of correctly drawn bills.

Payment on account for amount admissible shall be made on the Engineer-In-Charge certifying the sum to which the Contractor is considered entitled by way of interim payment of the following:

a) All work executed after deducting there from the amounts already paid, the retention money if any and such other amounts as may be deductible or by recoverable in terms of the contract.

b) 75% of the cost, as assessed by the Engineer-in-Charge or 75% of the material component of the item rate or 75% of the item rate which even is lowest for any material which are in the opinion of Engineer-in-Charge reasonably required in accordance of the contact and have been brought to site for incorporation in the works and are safe guarded against loss due to any cause whatsoever to the satisfaction of the Engineer-in-Charge, but have not been so incorporated, provided Contractor provides and insurance cover for the full cost of materials.

The above payments shall be released out of the funds received from Govt. of India on deposited works basis for the Project.

7) **PERFORMANCE/ RETENTION MONEY**

Performance/ Retention money shall be retained by EPI/ Owner at the rate of 5% from the running account bills. The money so deducted shall be released after the expiry of Defect Liability Period and all the Contractor’s obligations under the contact have been performed, all the claims, questions, disputes & differences have been finally settled and decided upon.

8) **MOBILIZATION ADVANCE**

Interest Bearing Mobilization Advance not exceeding 10% (Ten percent) of the contract value as awarded shall be paid to Contractor in three installments as under:

i) 5% (five percent) shall be paid on placement of Work Order and on meeting the following conditions:
   a. Unconditional acceptance of letter of Award by the Contractor.
   b. Submission of an irrevocable Bank Guarantee for equivalent amount.
   c. Submission of Security Deposit Bank Guarantee as per Clause no.2 given above.
d. Acceptance and finalization of detailed work schedule/ bar chart and finalization of equipment mobilization schedule.

e. Finalization of Quantity Assurance Programme (QAP).

ii) 2.5% (two point five percent) shall be paid after submission of Bank Guarantee for equivalent amount and setting of site office, providing facilities to Engineer-in-Charge’s office and completion of enabling works required for taking up the construction. These includes construction of stores, labour hutments etc.

iii) Balance 2.5% (two point five percent) shall be paid after submission of Bank Guarantee for equivalent amount and on mobilization of manpower, plant & equipment etc. to the satisfaction of Engineer-in-Charge.

The rate of interest of Mobilization Advance shall be 12% (twelve percent) per annum. The Bank Guarantees shall be from a Nationalized/ Scheduled Bank on EPI’s enclosed proforma. The Bank Guarantee shall be sent by EPI to the issuing bank for verification and advance shall be released only after the Bank Guarantee are duly verified by the issuing bank.

9) **RECOVERY OF MOBILISATION ADVANCE**

Mobilization advance along with accrued interest shall be recovered on pro-rata basis from each RA bills and in such a way that entire mobilization advance along with interest stands recovered when works of 80% value are completed.

10) **COMPENSATION FOR DELAY**

The Contractor shall ensure adequate progress during the excavation of work according to the Bar Chart/ Work Schedule. The Contractor shall also maintain monthly progress strictly in accordance with Bar Chart/ detailed work schedule that will be worked out and mutually agreed upon. If the Contractor fails to maintain the above progress or fails to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy of EPI on account of such breach, pay compensation at the rate of one half of one percent (0.50%) of contract value per week of delay or part thereof subject to a maximum of 5% (five percent) of the contract value.

In addition to above, Contractor shall also compensate EPI to the tune of ` 50,000/- (Rupees Fifty Thousand only) per month towards extra expenditure on establishment of EPI for extended period of the job, if the delay is due to reasons not attributable to EPI.

11) **DEFECT LIABILITY PERIOD**

The defect liability period shall be 12 months from the date of completion of work duly certified by EPI.

12) **PRICE ESCALATION**

The rates shall remain firm during the contract period. The rate shall also remain firm even during the extended period of completion. Price escalation under any circumstances and on any account shall not be admissible.
EMBANKMENT & RETAINING WALL
CROSS SECTION OF SINGLE ROW FENCING WITH

BANGLADESH SIDE

WIRE ROWS
G.1. BARBED WIRE WOVEN WITH G.1. BARBED
(2) NO. HORIZONTAL ROWS OF BARBED WIRE
PITCH

STRUCTURAL DESIGN
ANGLE 60X90X90 MM AS PER
WIRE @ 150/C
7 NO. HORIZONTAL ROWS OF BARBED

INDIA SIDE

(18) NO. HORIZONTAL ROWS OF BARBED WIRE @ 180/C INTERVAL