TENDER DOCUMENT

TENDER No: NERO/CON/563/276 dated: 21.11.2017

FOR

TENDER CONSTRUCTION OF 05 NOS PLAYFIELD AT JAWAHAR NAVODAYA VIDYALAYA, DHING, NAGAON, ASSAM

VOLUME–II

NOTICE INVITING TENDER

ADDITIONAL CONDITIONS OF CONTRACT

TECHNICAL SPECIFICATIONS

DRAWINGS
NOTICE INVITING e-TENDER

TENDER FOR CONSTRUCTION OF 05 NOS PLAYFIELDS AT JAWAHARLAL NAVODAYA VIDYALAYA, DHING, NAGAON, ASSAM

Engineering Projects (India) Ltd., on behalf of Navodaya Vidyalaya Samiti invites item rate open e-Tenders through e-tendering from the eligible contractors/firms who fulfill the eligibility criteria as per the brief particulars of scope for Construction Of 05 Nos Playfields at Jawaharlal Navodaya Vidyalaya Dhing, Nagaon, Assam in single stage Two Envelope system (Technical bid & Price bid) for the following works:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>NAME OF WORK</th>
<th>ESTIMATED COST (Rs.)</th>
<th>TIME OF COMPLETION</th>
<th>EMD DEPOSIT (Rs.)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of 05 Nos Playfield at Jawaharlal Navodaya Vidyalaya, Dhing, Nagaon, Assam.</td>
<td>40,50,000.00 (Rupees Forty Lakhs Fifty Thousand Only)</td>
<td>02 (Two) Months</td>
<td>40,500.00 (Forty thousand five hundred only)</td>
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</table>

The brief scope of work included in this tender shall include providing all labour, materials, tools and plant, transportation to site, storage and safe custody of the materials, earthwork in excavation, earthwork in filling, supplying and filling of sand, murrum, earth from borrow pit, PCC, felling trees, preparation and consolidation of sub-grade etc. as required in Construction of 05 Nos Playfield at Jawaharlal Navodaya Vidyalaya, Dhing, Nagaon, Assam on item rate basis as per bill of quantities and tender conditions. Apart from above, any other service but required as per direction of EPI/DGAR for completion of works are deemed to be included in the scope of work.

The detailed scope of work is given in tender document.

Time schedule of Tender activities:
(i) Start of Date & Time of availability of documents: from 08.00 pm 21.11.2017
(ii) Last Date & Time for Downloading of tender documents: up to 06.12.2017 (12:00 PM)
(iii) Last Date & Time of online submission of Tenders: on or before 06.12.2017 up to 02:00 PM
(iv) Date & Time of online opening of tenders (Techno-Commercial Bid): 06.12.2017 at 03:00 PM
(v) Pre-bid meeting at 4th Floor, Hindustan Tower Block-A, Jawahar Nagar, N.H.37, Guwahati-781022 Assam on 27.11.2017 at 4.00 PM.

(vi) Date & Time of submission of documents in physical form: 06.12.2017 (upto 02:30PM)

1.0 Contractors who fulfill the following basic qualifying requirements are eligible to Participate in this tender.

The tenderers shall submit his query for the pre-bid meeting on or before 27.11.2017 by 14.00 hours to nerocontracts@gmail.com or by post to the address given at sl.no 15 below.

Contractors who fulfill the following requirements are eligible to participate in this tender. The joint ventures/Consortium are not accepted.

a) The bidder must have experience of having satisfactorily completed following “similar works” during the last 7(seven) years ending last day of month previous to the one in which applications are invited.

i. Three similar works each of costing minimum 40% of the estimated cost of this work.

   OR

ii. Two similar works each of costing minimum 50% of the estimated cost of this work.

   OR

iii. One similar work costing minimum 80% of the estimated cost of this work.

a. The “similar works” shall mean “General civil works such as earthwork in excavation and backfilling, etc. in the North East Region.

The tenderer having worked or working with EPI for similar nature of works shall have the option of not submitting any completion certificate and instead mention the work order/LOI no and date for “similar works” carried out by him.

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

c. For evaluation purpose, the completion cost of works mentioned in the completion certificate shall be enhanced by 7% per annum till the end of month prior to date of NIT.

d. The experience certificates issued by Government Organizations/Semi Government Organizations/State Government / Public Works Department / Central Government/Public Sector Undertakings/ Autonomous Bodies/Municipal Bodies/Public Limited Companies listed on BSE/NSE shall only be accepted for assessing the eligibility of the tenderer. However, the certificates issued by Public Limited Company can be considered only if they are supported by TDS certificates in support of value of work done by the
tenderer. TDS certificate for full contract value as mentioned in the work order must match failing which the same shall not be considered.

b) Should have had average annual financial turnover of at least 30% of the estimated cost put to tender during the immediate last three consecutive financial years ending on 31.03.2017 duly supported by annual financial report (i.e. audited copies of balance sheet and profit and loss statement) or certified by Chartered Accountant along with Income Tax return for last financial year (2015-16/2016-17). Turnover means income from construction works only.

c) Should not have incurred any loss in more than two years during the immediate last five consecutive financial years, ending 31.03.2017, Copies of balance sheet/Certificate from Chartered Accountant duly self attested by the tenderer shall be submitted.

d) Should have a Solvency of 40% of the estimated cost issued by a Bank. The Solvency Certificate should have been issued not earlier than one year of last date of submission of the tender.

e) Should have valid Permanent Account Number of Income Tax and GST registration.

f) Should have valid PF Registration number. In case the bidder does not have this registration number, he shall remain bound to obtain them within one month from the date of LOI or before release of 1st R/A bill whichever is earlier.

g) Bid Capacity: The bidding capacity of the tenderer should be equal to or more than the estimated cost of the work put to Tender.
   The Bidding capacity shall be worked out by the following formula:
   \[
   \text{Bidding Capacity} = [A \times N \times 2] - B
   \]
   Where,
   \[
   A = \text{Maximum value of construction works executed in any one year during the last five years taking into account the Completed as well as works in progress ending last day of the month previous to the one in which applications invited.}
   \]
   \[
   N = \text{Number of years prescribed for completion of work for which bids have been invited}
   \]
   \[
   B = \text{Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited. The Tenderer is requested to furnish the existing commitments of works under execution along with stipulated period for completion of remaining for each of the work should be furnished in an affidavit on non-judicial stamp paper of value of Rs. 100/- duly certified that the particulars furnished are correct as per the Performa in Annexure –A.}
   \]

h) Bidders who intend to get exemption from submission of Tender fee and EMD shall submit confirmation letter whether they are registered under MSME Act or not and if yes, then relevant copies of the registration letter (Registered under single point registration scheme of NSIC, Govt. of India, Ministry of MSME, New Delhi) vide
Gazette Notification dated 26.03.2012 along with the form of Memorandum-2 (with the concerned DIC) certificate in the appropriate category and limit as applicable under the present tender to be enclosed in Technical Bid and a request letter for exemption from submission of Tender fee and EMD.

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

j) The experience certificates issued by Government Organizations / Semi Government Organizations/ State Government / Public Works Department / Central Government /Public Sector Undertakings/ Autonomous Bodies/Municipal Bodies/Public Limited Companies listed on BSE/NSE shall only be accepted for assessing the eligibility of the tenderer. However, the certificates issued by Public Limited Company and Private Party can be considered only if they are supported by TDS certificates/Turnover Certificate from Chartered Accountant in support of value of work done by the tenderer.

k) Completion certificates from the client shall be in the name of the company who is submitting the tender. The contractor has to produce original documents for their verification as and when demanded by EPI. The tender of any tenderer shall be rejected if on 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 on the tenderer.

l) Relevant experience certificates and other documents as mentioned above fulfilling the qualifying criteria duly self-attested by the tenderer shall be enclosed in Envelope-1. Completion Certificates from clients shall be in the name of the Company who is submitting the tender. The bidder has to produce original documents for verification at the time of opening of tender or as and when demanded. The Tender of any tenderer shall be rejected if on detailed scrutiny, documents submitted along with the tender are found to be unsatisfactory. The decision of EPI in this regard shall be final and binding on the tenderer.

m) Site visit for the subject tender is mandatory. The bidders shall visit the site to Study/assess the tendered work and also acquaint themselves of the prevailing local conditions before submitting their bid. Bidder has to enclose a certificate counter signed by EPI official or furnish undertaking for having visited the site.

n) The tenderers may note that they are liable to be disqualified and not considered for the opening of Price Bid if;
   a) Representation in the forms, statements and attachments submitted in the pre-qualification document are proved to be incorrect, false and misleading.
b) They have record of poor performance during the past 10 (ten) years such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the contractor, inordinate delay in completion, consistent history of litigation / arbitration awarded against the contractor or any of its constituents or financial failures due to bankruptcy etc. in their ongoing / past projects.

c) They have submitted incompletely filled in formats without attaching certified supporting documents and credentials to establish their eligibility to participate in the Tender.

d) If the tenderers attempt to influence any member of the selection committee.

EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the contractor in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Tenderers.

The credentials of the Bidders shall be verified and inspection of the works, if required, to be carried out by EPI. If not found satisfactory, their bid will be considered non-responsive.

2.0 Tender documents comprising of the following are available on the website of EPI: www.epi.gov.in, CPP-Portal: www.eprocure.gov.in and as well as on TCIL portal http://www.tcil-india-electronic-tender.com.

Volume I: Instructions to Tenderers, Addendum to Instructions to Tenderers, Special Instructions to Bidders for e-Tendering & General Conditions of Contract (ITT&GCC) of EPI

Volume II: a) Notice inviting Tender
   b) Additional Conditions of Contract
   c) Technical Specification (Civil, Sanitary Plumbing and Drainage, Electrical)
   d) Tender Drawings (as mentioned in the list)

Volume III: Price bid/bill of quantity

3.0 In order to participate, the bidder should have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities.

4.0 Interested bidders have to necessarily register themselves on the portal https://www.tcil-india-electronic-tender.com through M/s Telecommunications Consultants India Limited, New Delhi to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get them registered at the aforesaid portal for which they are required to contact M/s Telecommunications Consultants India Limited, New Delhi at following address to complete the registration formalities:
   M/s Telecommunications Consultants India Limited,
   6th Floor, TCIL Bhawan, Greater Kailash – 1, New Delhi 110 048
   Contact No.: 011-26241790, 98683 93717/75/92
   Email-ID: ets_support@tcil-india.com

They may obtain further information regarding this tender from ED (Contracts) at the
address given at Clause No.14.0 below from 10:00 hours to 17:00 hours on all working days till the last date of online submission of Bidding Documents.

For proper uploading of the bids on the portal namely https://www.tcil-india-electronic-tender.com (hereinafter referred to as the “portal”), it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed at the portal as well as by contacting M/s Telecommunications Consultants India Limited, New Delhi directly, as and when required, for which contact details are mentioned above. The EPI in no case shall be responsible for any issues related to timely or properly uploading/submission of the bid in accordance with the relevant provisions of Section: Instruction to Bidders of the Bidding Documents.

5.0 Bidders can download the bid document from the portal without paying document fees in advance, any time from 20:00 Hrs on 21.11.2017; however interested bidders have to pay tender fees for participating in the tendering and submitting the bid. For this purpose the interested bidders shall be required to pay ₹ 5,000/- (Rupees Five Thousand only) inclusive of GST as non-refundable document fees in the form of Demand Draft in favour of “Engineering Projects (India) Ltd.” payable at Guwahati. GSTIN of EPI for Assam is 18AAACE0061C1ZC. The fees to be paid to TCIL is separate.

6.0 E-Bids must be submitted/uploaded along with scanned copies of relevant documents as mentioned at clause no 2 of “Addendum to Instructions to Tenderers” under Single Stage Two Envelope Bidding Procedure on the TCIL portal on or before last date& time of online bid submission. Late bids will not be accepted. Under the above procedure, only first envelope (Technical Part) shall be opened in the presence of the bidders’ representatives who choose to attend in person at the address given below on scheduled date & time of bid opening or may be viewed by the bidders by logging in to the portal as per features available to them. Second envelope i.e. Price part shall be opened of technically qualified bidders.

7.0 The bid must be accompanied by an Earnest Money Deposit (EMD) of ₹ 40,500.00 (Rupees Forty Thousand Five Hundred only). This can be either in the form of Crossed Demand Draft or Pay Order (in CTS form) of any Nationalized Bank/Scheduled Bank for the full amount of EMD payable favouring “Engineering Projects (India) Ltd.”, payable at Guwahati. The EMD shall be valid for minimum period of 150 days (one hundred fifty days) from the last day of submission of tender. Tenders submitted without EMD or inadequate amount of EMD shall be rejected. The bid shall be valid for 90 days from date of opening of Price Bid.

8.0 Tender fee, EMD (In original), Power of Attorney, NSIC/MSME (Registered under single point registration scheme of NSIC, Govt. of India, Ministry of MSME, New Delhi vide Gazette Notification dated 26.03.2012 along with the form of Memorandum-2 with the concerned DIC) certificate as per Clause No.1 (j) if bidder is claiming EMD/Tender fee exemption and Pass Phrase (Both for technical and financial bid in separate envelope) to decrypt the bid must be submitted in physical form at the address given at Clause No. 15.0 below as stipulated at sl. no iv of iv under Time Schedule of Tender Activities. If the above documents are not received in time then their offer shall not be considered and EPI shall not be responsible for any postal delay in respect of submission of hard copy part of the bids.
9.0 The Terms & Conditions contained in the NIT and tender document shall be applicable.

10.0 The tenderers should note that the credentials such as value and volume of works completed, as submitted by the tenderers along with their offers shall be forwarded by EPI to Client for his opinion. The offer of tenderers against whom client does not give satisfactory remarks shall be rejected by EPI.

11.0 The corrigendum or addendum, extension, cancellation of this NIT, if any, shall be hosted on the EPI's website/CPP portal as well as on TCIL portal http://www.tcil-india-electronic tenders.com the bidders are required to check these websites regularly for this purpose, to take into account before uploading/submission of tender. All Corrigendum and addendum are to be uploaded duly signed & stamped with tender documents as bid Annexure.

12.0 The Price Bid of those bidders who are found to be prima-facie techno-commercially acceptable based on the documents submitted at the time of bid submission and also against fulfillment of conditions at sl. no. 10 above shall be opened with prior intimation to them. Hence the intending bidders must furnish their e-mail id along with the techno-commercial part. However, it is made clear that the offer of the bidders shall be accepted subject to the confirmation of authenticity of the PQ documents/ EMD /Tender fee from the concerned department/ bank. In case the PQ documents such as work experience certificate, bank solvency certificate etc. submitted by a bidder is found to be fake the EMD submitted by him shall be forfeited by EPI without making any reference to him. Further such a tenderer shall be at a risk of losing his right to participate in any tender called by EPI for a minimum period of one year.

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

14.0 In case of tie-tender, where two firms are bidding lowest, EPI reserves the right to split the work among these bidders and / or EPI will reserve the right to award the tender to any one of such bidder.

15.0 Tender documents shall be issued by and submitted to:

    Dy General Manager (Contracts)  
    Engineering Projects (India) Ltd.  
    North Eastern Regional Office  
    4th Floor, Hindustan Tower,  
    Jawahar Nagar, National Highway No.37,  
    Guwahati (Assam) -781022 (e-mail id:nerocontracts@gmail.com)

16.0 Contact details for site related quarries:
Shri A Das, Sr Manager (Mobile No.-9435747734)

Dy General Manager (Contracts)
**BID CAPACITY**

<table>
<thead>
<tr>
<th><strong>Name of the Work:</strong></th>
<th>Construction of 05 Nos Playfield at Jawahar Navodaya Vidyalaya, Dhing, Nagaon, Assam.</th>
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<tr>
<td><strong>NIT No:</strong></td>
<td>NERO/CON/563/276</td>
</tr>
<tr>
<td><strong>ESTIMATED COST PUT TO TENDER:</strong></td>
<td>Rs. 40,50,000.00</td>
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Bid Capacity: The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to Tender. The bidding capacity shall be worked out by the following formula:

\[ \text{Bidding Capacity} = \frac{A \times N \times 2}{2} - B \]

Where,

- \( A \) = Maximum value of construction works executed in any one year during the last five years taking into account the completed as well as works in progress
- \( N \) = Number of years prescribed for completion of work for which bids have been invited
- \( B \) = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited (Format enclosed)

**BID CAPACITY CALCULATION BY BIDDER**

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<tr>
<td>SIGN &amp; STAMP OF BIDDER</td>
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ANNEXURE-A

AFFIDAVIT
(To be typed on Rs. 100/- non-judicial stamp paper)

I/We .......................................aged ..............years son of .......................................do hereby solemnly affirm and declare as follows for and on behalf of the Firm:

LIST OF EXISTING COMMITMENT AND ONGOING WORKS

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Works</th>
<th>Client Name &amp; Address</th>
<th>Work Order Value (in Rs)</th>
<th>Work Executed till Date (Rs)</th>
<th>Balance Amount of work to be completed (Rs)</th>
<th>Balance period to complete the works (Total months)</th>
<th>Work to be completed in 02 months (Rs)</th>
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Balance Commitments during 02 months as per NIT Rs

It is certified that the above particulars furnished are true and correct. If any information given is found to be concealed at a later date, the Contract will be terminated forthwith without prejudice to the rights thereon consequent on termination and the bidder will be blacklisted. I/We agree for debarring tendering for one year if any facts are suppressed.

Signature of Notary Public

SIGN AND STAMP OF BIDDER
ADDITIONAL CONDITIONS OF CONTRACT (ACC)

1.0 The following Additional Conditions of Contract shall be read in conjunction with General Conditions of Contract (GCC) of EPI and other conditions of the tender documents. If there are any provisions in these Additional Conditions of Contract, which are at variance with the provisions of GCC and other conditions of the tender documents, the provisions in these Additional Conditions of Contract shall take precedence.

2.0 Navodaya Vidyalaya Samiti(NVS), the Owner, has selected Engineering Projects (India) Limited (EPI) as the “PMC” for “Construction of 05 nos. playfield at Jawahar Navodaya Vidyalaya, Dhing, Nagaon, Assam”. The works intended to be executed under the instant contract shall include (but not limited to) providing labour, tools and plants, machineries, transport and all other components including materials (except those which are specifically excluded from scope/present tender as spelt out elsewhere in the tender documents) required for completion of the works. The works are to be executed at Jawahar Navodaya Vidyalaya, Dhing, Nagaon, Assam.

3.0 Clause no 3.0 of GCC shall stand amended as below:
The items of work given in the tender documents are for general guidance of the contractors and the works shall be carried out by the contractor on item rate basis in conformity with the detailed drawing, scope of work, technical specifications, additional conditions of contract (including any addition/modification/ alteration/deletion made from time to time therein found essential for completion of works). The contractor shall be deemed to have satisfied himself before tendering as to the sufficiency and correctness of his tender for the works and of the rates and prices quoted in the brief specifications, drawings, scope of work and payment (billing) schedule, which rates and prices shall, except as otherwise provided, cover all obligations under the contract and all matters and things found necessary for proper completion and maintenance of the works. It shall be responsibility of the contractor to incorporate the changes that may be in the scope of work envisaged at the time of tendering and as actually required to be executed. The contractor has quoted his rates after clearly studying the scope of work given in Tender Documents availed by him by downloading from the website at the tendering stage itself and getting fully satisfied with the various items and technical intricacies involved in the work under his scope of work as envisaged in the tender. EPI shall not entertain any claim of the contractor on account of error or omission by him in this respect except what is admitted by the client.

4.0 No mobilisation advance shall be paid and hence clause no. 8 of GCC shall stand deleted.
5.0 Safety Code:

General
Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with safety rules as stated forth herein for information and guidance:

First Aid and Industrial Injuries
(1) Contractor shall maintain first aid facilities for his employee and labours.

(2) Contractor shall make outside agreements for ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to the EIC prior to start of construction and their telephone numbers shall be prominently posted in Contractor's field office.

(3) All critical industrial injuries shall be reported promptly to the EIC, and a copy of Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to the EIC.

General Rules
Smoking within the battery area, tank farm or dock limits is strictly prohibited. Violators of the no smoking rules shall be discharged immediately.

Contractors Barricades
(1) Contractor shall erect and maintain barricades required in connection with his Operation to guard or protect.
   (a) Excavations.
   (b) Hoisting areas.
   (c) Areas adjudged hazardous Contractor's or Owner's inspectors.
   (d) Owner's existing property subject to damage by Contractor's operations.
   (e) Rail road unloading spots.

(2) Contractors employee and these of his sub-contractors shall become acquainted with owner's barricading practices and shall respect the provisions thereof.

(3) Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

Scaffolding:
(i) Suitable scaffolding should be provided for workmen for all works that safety be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided.
on the ladder shall be given an inclination not steeper more than 1 in 4 (1 horizontal and 4 vertical)

(ii) Scaffolding or staging than 4 meters above the ground or floor, swing suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise rewarded at least 3 ft.

High above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as maybe necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

(iii) Every opening the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 metre.

(iv) Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform of the gangway or the stairway is more than 4 metres above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in above.

(v) Safe means of access shall be provided to all working platforms and other working places, every ladder should be securely fixed. No portable single ladder shall be over 9 metres in length while the width between side rails in rung ladder shall in no case be less than 30cms for ladder up to and including 3 metres in length. For longer ladder this width should be increased at least 5 mm for each additional foot of length. Uniform steps spacing shall not exceed 30 cms. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the site of work shall be so stacked or placed to caused anger or inconvenience to any person or public. The Contractor shall also provide all necessary fencing and light to protect the workers and staff from accidents, and shall be bound to bear the expenses of defense of every suit, action or other proceedings of law that may be brought by any person for injury sustained owing to neglect of the above precautions and pay any damages and costs which may be awarded in any such suit or action or proceedings to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.

Excavation and Trenching
All trenches 1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 50 metres length or fraction thereof.

Ladder shall be extended from bottom of the trench to at least 1 metre above the surface of the ground. The sides of the trenches which are 1.5 metres in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be placed within 1.5 metres of the edge of the trench or half of the trench width whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

Demolition:
(i) Before any demolition work is commenced and also during the progress of the work.
(a) All road and open areas adjacent to the work site shall either be closed or suitably protected

(b) No electric cable or apparatus which is liable to be a source of danger shall remain electrically charged.

(c) All practical cares shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so over-loaded with debris or materials as to render it unsafe.

(ii) All necessary personal safety equipment as considered adequate by the Engineer-in-charge (i.e. EIC) should be kept available for the use of the persons employed on the site and maintained in condition suitable for immediate use, and the Contractor shall take adequate steps to ensure proper use of equipment by those concerned.

(a) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves.

(b) Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.

(c) Those engaged in welding and cutting works shall be provided with protective face and eye shields, hand gloves etc.

(d) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
(e) When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to gate in to the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or board to prevent accident to the public.

(f) The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken,

1. No paint containing lead or lead product shall be used except in the form of paste or ready-made paint.

2. Suitable face masks should be supplied for use by the workers when paints are applied in the form of spray or a surface having lead paint dry rubbed and scrapped.

3. Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash them during and on cessation of.

(iii) When the work is done near any place where there is a risk of drowning, all necessary safety equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

(iv) Use of hoisting machines and tackles including their attachments, anchorage and supports shall conform to the following standards or conditions:

(a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good working order.

(b) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.

(c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 12 years should be in charge of any hoisting machine including any scaffolding, which or give signals to the operator.
(d) In case of every hoisting machine and of every chain ring hook, shackle, swivel, and pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gears referred to above shall be plainly marked with the safe working load of the conditions under which it is applicable which shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

(e) In case of departmental machine, the safe working load shall be notified by the Engineer-in-charge. As regards Contractor's machines, the Contractor shall notify the safe working load of the machine to the Engineer-in-charge whenever he brings any machinery to site of work and get it verified by the Engineers concerned.

(v) Motors, gearing transmission, electric wiring and other dangerous part of hoisting appliances should be provided with such means as to reduce to the minimum the accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part or any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves, and boots as may be necessary should be provided. The workers shall not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

(vi) All Scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

(vii) These safety provisions should be brought to the notice of all concerned by the displaying on a notice board at a prominent place at the work-spot. The person responsible for compliance of the safety code shall be named therein by the Contractor.

(viii) To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Welfare Officer, Engineer-in-Charge or safety Engineer of the administration or their representatives.

(ix) Notwithstanding the above clauses there is nothing in these to exempt the contractor from the operations of any other Act or rules in force in the Republic of India. The works throughout including any temporary works shall be carried out in such a manner as not to interfere in any way whatsoever
with the traffic on any roads or footpaths at the site or in the vicinity thereto or any exiting works whether the property of the Administration or of a third party. In addition to the above, the Contractor shall abide by the safety code provision as per C.P.W.D. Safety Code and Indian standard Safety Code framed from time to time.

(x) The contractor shall keep one earmarked vehicle such as EECO or MAGIC or equivalent with driver, fuel & lubricant for meeting any emergent condition at site till the works under the instant contract are completed and taken over by the Owner.

(xi) The contractor shall also construct a suitable office accommodation at site at his cost to ensure safe and proper custody of all drawings, documents, appliances including easy access to them and relief to the staff and other personnel in case of any exigency. The office should be fully equipped with basic facilities such as telephone, internet, regular electric and water supply, computer/typing with printing facilities, storage of documents and data like almirahs or file cabinets etc.

6.0 The clause no. 10.0 of GCC shall stand amended as below:
An amount @5% (Five percent) of the gross value of the running bill shall be deducted from each running bill by way of retention money. In case the EMD has been deposited by the contractor in the form of demand draft, the said amount of EMD shall be adjusted first towards the retention money and further recovery of retention money shall commence when the upto date amount of retention money exceeds the amount of EMD deposited in the form of demand draft. The retention money shall become refundable to the contractor at the end of the defects liability period free of any interest provided always that the contractor has rectified all the defects arising during the defect liability period pertaining to his scope of work, EPI did not have to incur any expenditure in setting right the defects, if any, pertaining to the contractor’s scope of work, the contractor has demolished and removed all structures including foundations and withdrawn fully from the worksite and EPI has received the clearance certificate from the concerned Labour Enforcement Officer/RLC pertaining to the labour etc. deployed by him at the worksite or there is nothing on record against him in the local market affecting functions of EPI. In case EPI has been required to make any expenditure on any of these accounts EPI will keep the retention money till the time all these matters are settled in full including recovery of the expenses, if any, made by EPI from the retention money. Further the contractor has to furnish a ‘No Claim’ certificate to EPI in confirmation of his having no claim on getting refunded the retention money to EPI at the time of claiming refund of retention money.

Further retention money deducted in such manner shall be released against furnishing of Bank Guarantee of equivalent amount as per EPI’s prescribed format valid for 08 (Eight) years from completion of the work.
7.0 Setting out works
The Engineer-in-Charge shall furnish the Contractor with only the four corners of the work site and a level bench mark and the Contractor shall set out the works and shall provide and efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.

The Contractor shall provide, fix and be responsible for the maintenance of all stakes, templates, level marks, profiles and other similar things and shall take necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The Contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the Contractor. The work shall be set out to the satisfaction of the Owner. The approval thereof or joining with the Contractor by the Owner in setting out the work, shall not relieve the Contractor or any of his responsibilities. Before beginning the works, the Contractor shall at his own cost, provide all necessary reference and level posts, pegs, bamboo, flags, ranging rods, strings and other materials for proper layout of the work in accordance with the scheme for bearing marks acceptable to the Owner. The Centre, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct marks at the centre to enable a theodolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-in-Charge in writing but such approval shall not relieve the Contractor of any of his responsibility. The Contractor shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction. Pillars bearing geodetic marks located at the sites of units of works under construction should be protected and fenced by the Contractor. On completion of works, the Contractor must submit the geodetic documents according to which the work was carried out.

8.0 Responsibility for level and alignment
The Contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify effectually any errors or imperfections therein. Such rectifications shall be carried out by the Contractor, at his own cost, when instructions are issued to that effect by the Engineer-in-Charge. It is highly possible that there shall be more than one agency working at the same time at the site. The contractor shall at all times remain bound to co-ordinate with the agencies, deployed by EPI for the above works, including providing free access and making required provisions for them in execution of works pertaining to their portion of works. He shall also remain bound to ensure uninterrupted progress of work by these agencies in a peaceful and smooth manner. He shall also remain bound to make the required changes/
additions/alterations in the works done by him to accommodate the items under the scope of work of such other agencies deployed by EPI or the client. The contractor is deemed to have made the estimated allowances in this respect while quoting his rates at the tendering stage.

Even though EPI has taken all care to attach all the drawings as vetted by the client it shall be the responsibility of the contractor to interpret the drawings for completion of the works under this contract.

The list of minimum tools, plant and machinery to be provided by the contractor within the period mentioned against the respective item is given at Annexure-A.

9.0 The following shall also be read with clause number 13 of the GCC:

a) The bidder/contractor must be registered with GST and should have valid GSTIN.
b) The bidder/contractor must submit as a compliance under GST Act, the invoices in GST complaint format failing which the GST amount shall be recovered/adjusted without any prior notice from the next invoices or available dues with EPI.
c) The bidder/contractor are required to update/upload the GST/Taxes data periodically so as to avail ITC credit by EPI failing which it shall be recovered/adjusted by EPI without any prior

The rates quoted by the contractor shall be deemed to be include all taxes and duties except GST which shall be reimbursed to him subject to raising of tax invoice and filing of return and payment of tax as per GST law, failing which EPI shall not be able to honour his claims for any payment. The contractor has quoted his rates knowing fully well that submission of return and display of the same on GSTN portal is mandatory.

However, any variation in taxes and duties after submission of due date of submission of tender shall be to the owner’s account i.e. in case of any decrease in the taxes and duties shall be passed on to the owner and any increase in taxes and duties shall be borne by the Owner. Similarly, the imposition of any fresh taxes and duties shall also be borne by the Owner.

All the above reimbursements shall be admitted to the extent these are admitted by the Owner.

10.0 The following shall stand added to the clause no 20 of GCC:

The contractor shall keep EPI indemnified against all claims, damages, compensation and expenses payable, if any, in consequence of any accident, or injury sustained by any workman or any other person employed by the contractor.
12.0 The following shall stand added to the clause no 27.0 including its sub clauses of GCC of EPI:
The contractor, within 10 days of issuance of LOI (Letter of Intent) to him shall depute at least one graduate civil engineer with 5 years of post-qualification experience and one person having diploma in civil engineering with 10 years of post-qualification experience. Should the contractor fail to provide them within such period or as directed by the Engineer-in-charge, EPI shall be at liberty to recover an amount @30,000.00 per month person from any amount including the retention money due to the contractor.

13.0 The clause no 28.3 of the GCC shall stand deleted.

14.0 No secured advance shall be paid to the contractor and hence clause no. 35.0 of GCC shall stand deleted.

15.0 The clause no. 43.2 shall stand amended as below:
The contractor shall execute the works so as to complete the works within the stipulated completion time. He shall remain bound to submit a programme of completion of items.

16.0 The following shall stand added to clause no 45.0 of the GCC:
The contractor shall at all-time remain bound to provide the samples in quantity and manner as instructed by EPI to be analysed or tested in an outside laboratory or in the field laboratory at site. The cost of testing charges is included in the prices of the contractor. EPI shall, however, be at liberty to get the materials tested independent of the contractor and the contractor shall remain bound to render all assistance to EPI in conductance of such tests including making available the materials in sufficient quantity and in time and payment of the testing charges. EPI/client shall at all times have full access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery. The contractor shall afford every facility and assistance and cost in obtaining the right and visit to such access.

EPI shall have full powers to require the removal from the premises of all materials which in their opinion are not in accordance with the specifications and in case of default, EPI shall be at liberty to employ at the expense of the contractor, other persons to remove such materials without being answerable or accountable for any loss or damage that may happen or arise to such materials. EPI shall also have full powers to require other proper materials to be substituted thereof and in case of default by the contractor, may cause the same to be supplied and all costs which may require such removal and substitution shall be to the contractor’s account.
17.0 The following shall be added to clause no 52.6 of GCC:
The field testing laboratory to be established by the contractor at his cost shall be equipped with the minimum number of testing equipment as instructed by EIC from time to time. In case the contractor fails to provide them EPI shall get them installed and debit the cost to the contractor.

18.0 The following provisions shall supersede that of clause no 69 of GCC wherever applicable:
No claim on account of extra / substituted / variation of items etc. pertaining to the contractor’s portion of work save and except what is admitted and paid by Owner, shall be entertained or admitted by EPI. Any claim by the contractor, if not paid by the Owner, whatsoever be the reason shall not be admitted by EPI. But under no circumstances contractor shall suspend the work on the non-settlement of rates under this clause.

19.0 In case the project execution is delayed beyond the contractual scheduled completion period due to reasons attributable to the contractor, the staff and site expenses of EPI for extended period shall be paid by him to EPI at the rate of Rs. 10,000/- per month. This shall be in addition to the other recoveries, if applicable as per clause no 72 (including its sub clauses) of GCC and Penalties etc. if any, levied by Owner for the works pertaining to the contractor’s scope of work. The decision of EPI in this regard shall be final & binding on the contractor.

20.0 The work executed by the contractor shall be subject to audit and quality control checks from Quality Control Division & Technical Audit of EPI, Client, and Inspecting Agency of the Client and Chief Technical Examiner of Central Vigilance Commission, Govt. of India. In the eventuality of any defect/ substandard works as brought out in the report or noticed otherwise at any time during execution, maintenance period etc., the same shall be made good by the contractor without any cost to EPI. In case the contractor fails to rectify the defect/sub-standard work within the time period stipulated by EPI, EPI shall get it rectified at the risk and cost of the contractor and shall recover the amount from the dues of the contractor.
Further all works Executed by the contractor shall be subject to third party testing to be deployed by EPI for which the expenses shall be borne by the contractor within his quoted rates.

21. Execution of Work. Once the contract is awarded a work order will be issued to the contractor and site handed over and in no case this will be issued on back date. Time for completion will commence from the date of issue of work order. Engineer in charge will be nominated by name and communicated to all concerned and during his absence relief will be given by name. Following procedures to be ensured: -
(a) A Testing Laboratory will be established by the Agency or suitable tie up done with approved testing laboratory or consultancy for quality check.
(b) Following registers/documents will be maintained and produced when asked for:
   i. Hindrance recording register.
   ii. Stage passing register.
   iii. Site order book.
   iv. Inspection register.
   v. Materials testing register.
   vi. Contractor ledger.
   vii. Labour license.

(c) Monthly progress will be monitored and forwarded to all concerned.

(d) Time extension if required must be processed well in advance before existing completion date supported by documents like newspaper cutting, letter from user etc.

(e) If any willful delay from contractor is noticed suitable action taken as per contract condition and work to be completed by due date by resorting to alternate means specified in contract conditions.

(f) Quality checks to be carried out at each level to be laid down percentage wise during the process of execution.

(g) If any unforeseen delay occurs the same must be resolved by coordinating with all stakeholders.

22. Work carried out by the contractor should be jointly measured and entered in to the measurement book. Any mistakes in the MB will be scored and initialed.

23. Completion and Handing over of Assets to User. Once the work is completed certificate will be obtained from user and work officer of the sector and then the same will be intimated to Owner to verify and take over assets. All construction materials and tools lying in the site will be removed and assets will be kept ready for handing over to user. A performance report of the contractor will be forwarded to the Engineers branch and all warranty will be documented and handed over to the works officer of the sector.

24.0 There shall be no Arbitration Clause for this Contract except between Central Public Sector Undertakings inter se / Government of India Departments / Ministries as mentioned and Clause Nos. 76.1 & 76.2 of General Conditions of Contract (GCC) shall stand amended as below:

24.1 Clause no 76.1 of GCC shall stand deleted.

24.2 Clause no 76.2 shall stand amended as below:

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 Department 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. F.No.4(1)/2013-DPE (PMA)/FTS-1835 dated 11.04.2017 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Govt. of India or any modification issued in this regard.

25.0 EPI has awarded this contract on behalf of Navodaya Vidyalaya Samiti, Owner. In case EPI ceases to or exits from the project the right and responsibility etc. of EPI in the contract shall get transferred to Navodaya Vidyalaya Samiti or his nominated agency(ies).

26.0 Completion and taking over:
As soon as the works are completed the contractor shall inform EPI and EPI in turn shall inform Navodaya Vidyalaya Samiti who will nominate a board of officers for checking/verification of completed work as per the contract for final taking over of the project.

A final certificate of rectification of all defects pointed out during handing/taking over by the nominated board of Navodaya Vidyalaya Samiti and/or during defect liability period shall be obtain from the Owner prior to release of security deposit.

a) Completion certificate issued by the Engineer-in-charge specifying the handing over of the work including list of inventories (fitting & fixtures).
b) No claim certificate by the Contractor.
c) No claim certificate from the sub-agencies/vendors engaged by the Contractor.
d) Detail required for preparing as built drawings.
e) Periodical services and measurement books.
ANNEXURE-A

LIST OF MINIMUM TOOLS, PLANT AND MACHINERY

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Minimum numbers required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Auto level &amp; staff</td>
<td>One</td>
</tr>
<tr>
<td>3.</td>
<td>8/10 Mechanical Roller</td>
<td>One</td>
</tr>
<tr>
<td>3.</td>
<td>JCB</td>
<td>One</td>
</tr>
<tr>
<td>4.</td>
<td>Tripper</td>
<td>Two</td>
</tr>
<tr>
<td>5.</td>
<td>10/7 Mixer Machine</td>
<td>One</td>
</tr>
<tr>
<td>6.</td>
<td>DG Set (10 KVA)</td>
<td>One</td>
</tr>
<tr>
<td>7.</td>
<td>Diesel Pump (5 HP)</td>
<td>One</td>
</tr>
<tr>
<td>8.</td>
<td>IS Cube Moulds for CC (150x150x150mm)</td>
<td>One Set of six Nos.</td>
</tr>
</tbody>
</table>

Notes:

1) The period mentioned above shall be reckoned from the date of start of commencement of work as mentioned under this contract.

2) The quantities and list of equipment indicated are tentative and can be increased/amended as per the requirement of work OR as per the direction of Engineer-in-Charge. The above equipment list is indicative and not complete. The contractor has to deploy all the required equipment to complete all the works within stipulated specifications & time period as contract documents.

3) The contractor will not be allowed to take out equipment from the site without the written permission of Engineer-in-Charge.

(Signature and seal of the Tenderer)
Two small play fields

The size of two play fields should be 40x30 mtrs. (each). These shall be used for Kho-Kho, Gymnastics or Badminton as and when required.

Two basket ball fields

The size of basket ball field shall be 30mx40m mtrs. (each) and basket ball court of size 15m x 28m.

To accommodate playground for football, hockey, jumping height, disc & hammer throwing etc. along with 400 metre running track, an area of 190 metre x 110 metre shall be developed. Where enough area of land is not available or cost of development of 400 metre track is very high due to hilly/rocky undulated terrain, then 200 metre track shall be developed.

1. (a) 400 metre running track/200 metre running track.

(i) The 400 metre running track shall be made for the dimensions as shown in the Fig.1 given below. Where sufficient land is not available then 200 m track can be constructed as shown in Fig.2.

(ii) The track should have a minimum width of $7.32 \text{ m}$ in order to provide atleast 6 lanes, each 1.22 m to 1.25m wide. It is advisable to provide kerb/edge along the track (both side) with bricks or suitable material however stone/RCC be avoided. The kerb line should be 5cm thick and projected not more than 5cm above the ground level. Proper arrangement should be made to drain out rain water of play fields. The measurement shall be taken 0.3m outward from the kerb (or where no kerb exists 0.2mtr from the) line marking the inside of the track. For the accuracy in measurement of the track length, two independent measurements must be made which may not differ from each other by more than $0.003 \times L + .01 \text{ mtr.}$, where $L$ is length of the track in Mtr.
The direction of the running track shall be left hand inside. The lane shall be numbered with left hand side Line No.2.
The maximum slope permitted in the track is 1:100 laterally and 1:1000 in running direction lengthwise along the track.

\[\text{ATHLETICS TRACK (200 M)}\]

\textbf{Figure 2}

(v) The extension of one side of the track shall be done (as shown in Fig.1 & 2) to get straight length of 100 metre to be used for hurdle race etc.

(vi) **Bottom layer of the running track:**

The bottom layer (sub-base) of the running track shall be constructed by maintaining the proper slope in lateral direction (1:100). The portions of the track where part of the running track falling in low lying area, the filling of earth or suitable material should be compacted properly in layers to act as a sub-base for the top layer/surface course. The portions where track is to be passed through the hard surface the cushion of earth atleast 30cm with protective edges should be provided. The necessary arrangement for drainage during rains be made to avoid damage to the running track.

(vii) **Top layer/surface course:**

The surface of the track should be skid proof, soft and not too hard. The top layer also known as the wearing course or surface course must withstand the stresses induced by the runners. The maximum size of the particle on moorum/soil in the wearing course should not exceed 4mm. This course should be in between 7 cm to 10cm in thickness.
(b) Playfields:

This area is the space enclosed by the track and should preferably have a grassy surface if possible and be used for (a) Hockey (Fig.3) (b) Football (Fig.3) (c) Jumping height (d) Hammer & disc throwing.

![Diagram of Football and Hockey Fields](image)

**Figure 3**

The necessary installations for jumping, throwing, football and hockey field should be located in it. The dimensions of the hockey and football field given above in Fig.3 which are easily accommodable in the space enclosed by the running track. This field should be made with proper cutting, filling including ramming and consolidation of the earth. The proper attention should be paid for the drainage of rain water. The drainage should be well planned so to avoid erosion/cutting of surface of fields as well as of running track during rains.
Basket Ball

(a) The play court shall be hard rectangular surface (Fig. 4) free from obstacles and shall have dimensions of 28m in length & 15m measured from inside edge of the boundary line. The height of the basket & poles shall be as per standard norms as shown in Fig. 5 below.

The hard surface shall be matt finished on top with 50mm thickness in C.C 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate) laid over 75mm thick layer of C.C 1:5:10 (1 cement : 5 coarse sand : 10 stone aggregate).

(b) Court Marking: The court shall be marked by well defined boundary lines with the consultation of game teacher & Principal of the school. The distance between the external lines of court and the sitting arrangement for spectators, if any, shall be more than 2 metre. The marking shall be done with the approved quality of paint. The lines shall be not more than 5 cm in width & with clear visibility.
Each of the backboards shall be made of 2 - 3 cm thick or a suitable transparent material, preferably acrylic sheet or fiber glass which should have the same degree of rigidity as those of wood. Backboard shall be in one piece of dimension having 1.8m horizontally and 1.2 m vertically. The surface shall be marked with suitable paint as per standard norms with consultation of game teacher/principal. The backboard shall be rigidly mounted in a position at each end of the court at right angles and parallel to the floor, keeping their lower edges 2.75 m above the floor level or as per advise of game teacher/principal. The baskets shall be nets of white cord, suspended from solid iron rings 45cm in inside diameter, painted orange. The procurement of the basket shall be done in consultation with game teacher/principal of the concerned JNV school and should be fixed with their consultation.

**Kho-Kho Ground**

The size of Kho-Kho play field shall be 29.0m x16.0m and two nos. of wooden posts shall be fixed at the distance shown in Fig.7. The posts shall be 120 cm to 125 cm above and perpendicular to the ground and their diameter shall be uniform from 10 to 11 cms. Top of posts shall be flat and free sharp edges and it shall not be taper but be smooth all over.

The ground of size 40m x 30m should be made with proper cutting, filling including ramming and consolidation of earth. The proper attention should be paid for the drawings of rain water. The drainage should be well planned so as to avoid erosion/cutting of surfaces during rains. This ground also to be used for activities such as gymnasium, badminton courts in addition to Kho-Kho play field. The sketches showing details for Kho-Kho field is as under:

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**Figure 7**

**********
## List of Drawings

NIT No.: NERO/CON/563/276  
Dated: 21.11.2017  
Tender for: Construction of 05 Nos Playfield at Jawahar Navodaya Vidyalaya, Dhing, Nagaon, Assam.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Title of Drawing</th>
<th>Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Typical Section of Badminton Court</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Section of Basketball Court</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Football Ground with 400 m running Track</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The enclosed drawings are for tender purpose and for general guidance only. The works shall be executed as per the construction drawings to be issued during course of work and as per instructions of the Engineer-in-charge.

(Signature and seal of the Tenderer)
PROJECT
JAWAHAR NAVODAYA VIDYALAYA
at
DHING, NAGAON, ASSAM

CLIENT
NAVODAYA VIDYALAYA SAMITI

EXECUTING AGENCY:
工程局 (工程) 有限公司
ENGINEERING PROJECTS (INDIA) LTD.

CONSULTANTS
SKEMATIC CONSULTANTS
AE: 221, SALT LAKE CITY, KOLKATA 700064,
DIAL: TELEFAX -(033)2334 4611.
email: skimatic_consultants@yahoo.co.in
FOOTBALL GROUND
90000X60000

PROJECT
JAWAHAR NAVODAYA VIDYALAYA
at
DHING, NAGAON, ASSAM

CLIENT
NAVODAYA VIDYALAYA SAMITI

EXECUTING AGENCY:
ENGINEERING PROJECTS (INDIA) LTD.
(A GOVT. OF INDIA ENTERPRISE)

CONSULTANTS
SKEMATIC CONSULTANTS
AE: 221, SALT LAKE CITY, KOLKATA-700064,
DIAL: TELEFAX -(033)2334 4611,
email:- skematic_consultants@yahoo.co.in

FOOTBALL GROUND WITH 400M RUNNING TRACK

SECTION THROUGH A - A

100MM THK. MOORUM
COMPACT EARTH (WITH POWER ROLLER)
75 THK. GOOD EARTH
(MIXED WITH 5% SABLE & MANURE)

100MM THK. MOORUM
COMPACT EARTH (WITH POWER ROLLER)