INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM) PASHAN, PUNE-411 008

Tender No. IITM/CE/WORKS/2014-15/07

e-TENDER NOTICE

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders for following work (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Industrial Experienced contractors and any other government departments inappropriate class for following work:

Name of work: Chain link fencing at IITM, Pashan, Pune.

Tender documents can be down loaded from the institute website http://www.tropmet.res.in or e – procurement web site http://eprocure.gov.in and can also be obtained from the civil wing of the institute.

The tender document fee: Rs 500-/, (Rs Five hundred only) [Non Refundable] by demand

draft drawn in the favour of Director, IITM Pune.

Date of issue of tender documents

: 22/01/2015

Pre - Bid Meeting

: 28/01/2015 (1100rs)

Venue of Pre-Bid meeting

 $\hbox{: Indian Institute of Tropical Meteorology},$

Dr. Homi Bhabha Road, Pashan - Pune 411 008

Last date of receipt of Tender at IITM, Pune :

11/02/2015 (12 30hrs)

Opening of Tenders (Technical Bids only)

11/02/2015 (15 00hrs)

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

Civil Engineer For Director IITM, PUNE

TENDER FOR CHAIN LINK FENCING WORK AT IITM, PASHAN, PUNE.

VOLUME-I

(TECHNICAL BID)

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

TENDER FOR

CHAIN LINK FENCING AT IITM, PASHAN, PUNE.

Tender No.

: IITM/CE/WORKS/2014-15/07

Name of work

: Chain link fencing at IITM, Pashan, Pune.

Tender document fee: Rs 500/-, (Rs Five hundred only) [Non Refundable] by

Demand draft drawn in the favour of Director, IITM

Pune-411008.

Date of issue of tender documents from: 22/01/2015

Pre - Bid Meeting

: 28/01/2015 at 1100 hrs.

Venue of Pre-Bid meeting

: Indian Institute of Tropical, Meteorology,

Dr. Homi Bhaba Road Pashan,

Pune-411008

Last date of receipt of Tender at IITM, Pune: 11/02/2015 at 12 30 hrs.

Opening of Tenders (Technical Bids only) :11/02/2015 at 15 00 hrs.

Estimated Cost

: **Rs. 12 Lakhs**

COMPLETION PERIOD

: **45 days** from the date of handing over of site to contractor by the Institute to commence the work

Ernest Money Deposit (EMD): **Rs.24,000/- (Rs. Twenty four thousand only)** by demand draft (DD) or Bank Guarantee (BG) from Nationalize/Schedule Bank in favor of The Director IITM, Pashan, Pune-411008.

NOTICE INVITING TENDER FOR CHAIN LINK FENCING AT IITM, PASHAN, PUNE. IN COMMON TO THE PROPERTY OF THE PROPERTY

FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

TWO COVER SYSTEM

Tender Notice No. IITM/CE/WORKS/2014-15/07

Director, Indian Institute of Tropical Meteorology, Pune, Invites bid for the said work under the **Two Cover System** from the contractors who meet the following criteria.

- 1. Contractor shall produce definite proof of valid contractor license /enlistment certificate with the CPWD/State PWD/MES Railways issued by the respective enlistment authority of the concerned department for the amount not less than estimated amount of the work.
- 2. For Civil work, Fabrication and Plumbing works of similar nature
 - i) Average annual financial turnover for similar works during the last 3 years ending 31st March 2014 of the previous should be at least 30% of the estimated cost.
 - ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:-

The BIDDER should have three similar completed works costing not less than the amount equal to 40% of the estimated cost.

Or

Two similar completed works costing not less than the amount equal to 50% of the estimated cost.

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One similar completed work costing not less than the amount equal to 80% of the estimated cost.

- 4. A sum of Rs. 500/- (Non Refundable) for the cost of tender documents DD drawn in favour of Director, IITM.
- 5. This tender is not transferable.
- 6. The rates for BOQ items total cost of work should be mentioned clearly in the Commercial Offer (Part-II) as per commercial bid format only.
- 7. Tenders received through Fax / E-mail / Telegraphic / Telex will not be considered.
- 8. Tenders addressed to the Director, Indian Institute of Tropical Meteorology, Pune 411008 are to be submitted under two bids system. Super scribed with Tender

Notice No., name of work, due date and time and it should submitted before due date and time.

- 9. The tenders must be clearly written or typed without any cancellations / corrections or overwriting.
 - a) Tenders, which are submitted without following the Two-Bid Offer System, will summarily be rejected.
 - b) Unsigned Tenders will also be rejected.
 - c) Part and incomplete tenders are liable to be rejected.
- 10. The tenders will be received in the Institute till 11/02/2015 up to 12 30 hrs and shall be opened on 11/02/2015 at 15:00 hrs (Technical Bids only) in presence of the tenderers or their authorized person who wish to be present.
- 11. IITM will not be responsible:
 - a) For delayed / late quotations submitted / sent by Post / Courier etc.
 - b) For submission / delivery of quotations at wrong places other than the Office of Director, IITM, Pune,
- 12. The tender / quotation / offer submitted by the firm should be valid for a minimum period of One hundred twenty days (120) days from the date of opening the tender.
- 13. If required technical evaluation committee of IITM will visit to bidder's completed site and submit the report to IITM Pune. Based on IITM Committee report bidders will be qualified/disqualified.
- 14 The commercial bids of only technically qualified bidders will be opened by the Institute.
- 15 Delivery Period As the time is the essence of the contract, period of completion of work should be strictly adhered to.
- The Tenderer is required to furnish the documentary proof of Permanent Account Number (PAN) and Service Tax no. if any allotted by the Income Tax Department. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration etc. should also be provided in Technical Bid.
- 17 A copy of latest Income Tax Clearance Certificate from Income Tax Department (INDIA) for in Technical Bid.
- 18 The bidders are requested to submit their bank details required for RTGS Payment

19) **PAYMENT**:

- a) No advance can be paid.
- b) Running payment will total bill limit two. RA bills not less than 6.00 lakhs each.
- 20) **Performance security** 5% of order value in the form of DD/BG drawn on Nationalized Bank/Scheduled bank in favor of Director IITM, Pune payable at Pune.

- 21) Retention money: 5% security deposit will be recovered & retained from each running bill which will be refunded after defect liability period of 12 months from the date of handing over the clear site
- 22) **Non tendered items**: The Rate for non-tendered items will be arrived as per following material cost at site + labour cost + taxes + 10% overhead & profit. Non tendered items will be executed only with prior approval of Institute's authority.
- 23) **DEVIATION:** Additional work/any deviation beyond work order quantities requires prior approval of the IITM authorities before execution of such work. The permissible overall deviation from the work order value is 10% and such deviation should not be executed at site without prior approval of Institute's authority.
- 24) **DEFECT LIABILITY PERIOD**: Defect liability period of the work will be 12 months from the date of actual completion of work and clear handing over of the site by the contractor to the Institute.
- 25) The successful bidder will be responsible for all activities on the site as per safety norms and building code
- 26) Government/labour Act- The successful bidder will follow all the government labour acts which are in force at present and introduce from time to time.
- 27) The prices quoted should be firm and irrevocable and not subject to any change whatsoever, even due to increase in cost of raw material components and fluctuation in the foreign exchange rates and excise duty.
- 28) IITM will not provide any accommodation / 'transportation for the Engineers/Representatives.
- 29) No sub-contracting will be allowed for installation or maintaining system/ equipment/ instrument during or after warranty period.
- 30) Discount if any offered should be mentioned clearly in the commercial bid only.
- 31) The Earnest Money Deposit of Rs. 24,000/- (Rs. Twenty four thousand only) must be paid / sent along with your technical bid in the form of a Demand Draft, or Bank Guarantee drawn on Nationalized Bank drawn in favour of The Director, Indian Institute of Tropical Meteorology, Pune payable at Pune, otherwise your technical & financial bids will not be considered at all.
- 32) The Earnest Money of the unsuccessful bidder whose technical bid has not been found suitable will be returned within 30 days after award of work to successful bidder.
- 33) Tenders not accompanied with Demand Draft / Bank Guarantee towards "Earnest Money Deposit" and tender fee will summarily be rejected.
- 34) **PENALTY:** If the Contractor fails to carry out the work as per specifications mentioned in the BOQ within the due date, the contractor is liable to pay liquidated

damages of one percent, per every week delay subject to a maximum of 10% of work clay subject to a maximum of 10% of wo

- 35) Decision of Director, IITM in regard of interpretation of the terms and conditions shall be final and binding on the vendor.
- 36) Corrupt or Fraudulent Practices.
 - A) IITM requires that the bidders/contractors under this tender observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, IITM:
 - i) Defines for the purposes of this provision, the terms set forth as follows:
 - a) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution; and
 - b)"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or a execution of a contract to the detriment of IITM, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive IITM of the benefits of the free and open competition;
 - ii) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt of fraudulent practices in competing for the contract in question;
 - B) IITM will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.
- 37) Conditional Offers will not be considered.
- 38) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Pune, India only.
- 39) The Director, Indian Institute of Tropical Meteorology, Pune 411 008, India reserves the right to accept any tender in full or in part or to reject the lowest or any or all tenders without assigning any reason.
- 40) The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the Vendor.

- *Only one set of document will be issued. Contractors have to take additional copies.
- 41) Water for the work will be supplied at one point for execution to five the supplied at one point for ex
- 42) The Electricity for the execution of the work will be provided on chargeable basis. Submeter will be prand required cable to be arranged by successful bidder.
- 43) While filing the commercial bids the contractors should consider all the taxes and Cost mentioned in commercial bids inclusive of all Taxes.

44) BID SUBMISSION

Technical Bid-I along with forwarding application on their company letter head, complete tender documents, blank BOQ, related documents duly signed and stamped on each page in sealed ENVELOPE superscribe with TECHNICAL BID and Part - II Commercial Bid duly filled and signed in separate sealed ENVELOPE superscribed with COMMERCIAL BID and Both the sealed bids should be sent in another sealed envelope superscripted with Tender notice no., due date and time addressed to the Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, IITM Post, Pashan, Pune – 411 008, INDIA so as to reach on or before 11/02/2015 (12 30hrs). The technical bids will be opened on the same day at 15 00 hrs.

[Note: Late received bids will not be considered for tender opening and further evaluation]

45) The Director, Indian Institute of Tropical Meteorology, reserves the right to accept/reject Anyone / all the tenders without assigning any reason thereof.

CIVIL ENGINEER
FOR DIRECTOR,
INDIAN INSTITUTE OF TROPICAL
METEOROLOGY, DR. HOMI BHABHA
ROAD, NCL POST, PASHAN
PUNE – 411008.INDIA

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-AGREEMENT-



This agreement, made the day of ,2014 between Indian Institute of Tropical Meteorology, Homi Bhabha road, Pashan, Pune (hereinafter called _ the Employer) II of the one part and M/s. ------ II of the part

Whereas the Employer is desirous that the Contractor execute -----at Indian Institute of Tropical Meteorology, Pashan, Pune (hereinafter called _ the Works II) and the Employer has accepted the Bid by the Contractor for the execution

And completion of such works and the remedying of any defects therein, at a Contract Rs. ------

THIS AGREEMENT WIRNESSETH as follows:

- 1. In this Agreement, words and expression shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
- 2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works and remedy any defects therein conformity in all aspects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works and the remedying the defects wherein the contract Price or such other sum as may become payable under the provisions of the Contractor at the times and in the manner prescribed by the contract.
- 4. The contractor shall not be responsible for any delays due to changes in drawings, specifications, scope of work or any other reasons attributable to the client, his representatives and other contractors. The contractor shall also not be responsible for any delays occurring due to force majeure situations during the execution of the work.
- 5. **PENALTY CLAUSE:** If the Contractor fails to carry out the work as per specifications mentioned in the BOQ within the due date, the contractor is liable to pay liquidated damages of one percent, per every week delay subject to a maximum of 10% of work order value and such money will be deducted from any money due or which may become due to the supplier. Completion period will be calculated from the date of handing the site to contractor for execution of work.

- 6. Other terms and conditions will be applicable as per Tender document and issued LOI dated on-----
- 7. The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the Vendor. Decision of Director, IITM in regard of interpretation of the terms and conditions shall be final and binding on the vendor.

In witness whereof the parties thereto have caused this Agreement to be executed the day and Year first before written.

Signed and delivered for and on behalf of Signed and delivered for and on behalf of M/s. ----- Indian Institute of tropical Meteorology, Pashan

1) Signature

Name:

1) Signature

Name:

Address:

2) Signature

Name:

2) Signature

Name:

REFERENCE BOQ TO BE SUBMITTED BLANK DULY SIGNED AND STAMPED

ALONG WITH TECHNICAL BID:

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Sr. No.	Description	Quantity	Unit	Basic Rate Rs.	Tax Rs.	Total Rate (Basic + tax) Rs.	Amount
1	Excavation for foundation in earth, soil of all types, including removing excavated soil within 1km beyond working area and stacking and sprading as directed dewatering, preparing the bed for foundation and necessary back filling, ramming, watering including shoring and strutting etc. (Lift upto 1.5m) (Location: Substation yard and Road work)	110	cum				
2	Providing and laying in position cement concrete of specified grade including necessary centering and shuttering - All work up to plinth level 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), below foundation work and similar work all as directed (Location: sub-station yard)	8	cum				
3	Providing and laying cement concrete 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) in coping and for fixing MS Angle etc. including necessary shuttering all as directed (Location: sub-station yard)	20	cum				

4	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge Made of G.I. wire of dia 4 mm (height 2.1m at electrical sub-station & 1.2m at chiller yard) (Location: sub-station yard and chiller yard)	i '	sqiming oquired galgain	i wicim	n r	28 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -	3.25 (1) (2) (3) (4) (4)
5	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand) (Location: sub-station yard)	23	cum				
6	Filling in plinth and floors with contractors murum in 300mm layers including watering and compaction with 10-12 tonn power roller maintaining optimum moisture and compacting upto 95% of standard proctor density etc. complete. (Location: For approach road to HSD tank at sub-station yard)	27.6	M3				
7	Providing and laying Garded sub Base (GSB) thickness of 300mm including watering, ramming with heavy rollers, leveling the surface with murum/gret spreading etc. complete(The rate shall be for compacted thickness) (Location: For approach road to HSD tank at sub-station yard)	16.45	M3				

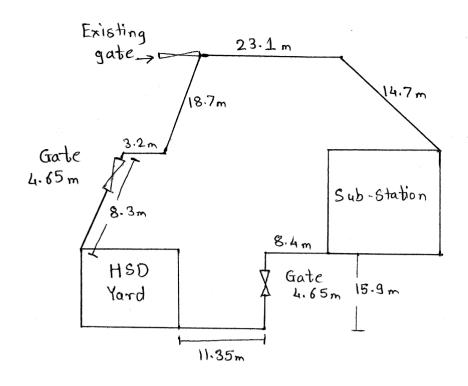
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Sam	8	Providing and laying design mix cement	~11.19	M3/		n jeja	acavani	Mar (all all
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		tracks/ runways, using cement content as		7 33			lontant as	
		per design mix, using coarse sand and			ļ.	11:	1.00	
		graded stone aggregate of 40 mm					N. C.	
		nominal size in appropriate proportions as						
		per approved & specified design						
		criteria, providing dowel bars with sleeve/						
		tie bars wherever required, laying at site,						
		spreading and compacting mechanically						
		by using needle and surface vibrators,						
		levelling to required slope/ camber,						
		finishing with required texture, including						
		steel form work with sturdy M.S. channel						
		sections, curing, making provision for						
		contraction/expansion, construction &						
		longitudinal joints (10 mm wide x 50 mm						
		deep) by groove cutting machine,						
		providing and filling joints with approved						
		joint filler and sealants, complete all as per						
		, ,						
		direction of Engineer-in-charge (Item of						
		joint fillers, sealants, dowel bars with sleeve/						
		tie bars are included).						
		Cement concrete manufactured in						
		automatic batching plant (RMC plant) i/c						
		transportation to site in transit mixer						
		(Location: For approach road to HSD tank						
		at sub-station yard)						
	9	Supplying fabrication and placing in	1100	Kg				
-		position ribbed TOR steel Fe500 for all						
		reinforced cement concrete works as per						
		design given including cost of steel,						
		binding wire etc. complete complying with						
		standard specification.					,	
		(Location: For approach road to HSD tank						
		at sub-station yard)						
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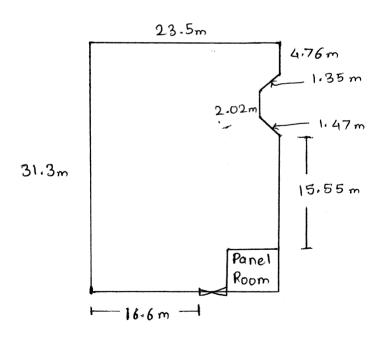
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<i>∆</i> .‡ 1.0	Providing and casting in situ cement	ovia l ng o	1		J.	*	
	concrete M-25 /1:2:4 of trap/	oncrete A		l i			1.1
	granite/quartzite/gneiss metal for RCC	contejour		neir. "	* ** <u>*</u>	* * *	27 E 27 GO
	kerb walls of 450mm height and 75mm	P. V.	45000				
	thickness and approved shape /profile as	C.					
	approved by engineer including centering						
	form work compacting, finishing the						
	formed surface with CM 1:3 of sufficient			-			
	minimum thickness to give smooth and even surface or roughening the surface if						
	special finish is to be provided and curing	7 ,					
	etc. complete.						
	(Location: For approach road to HSD tank	*					
	at sub-station yard)						
	,,						
11	Providing , fabricating ,fixing and installing	2100	Kg				
	using MS angle (45mm x45 mm x 5mm), I	2100	ı Ng				
	section, nut-bolts, fastners, plates, angles,						
	channels, flats etc. including cutting,						
	bending, drilling holes, welding, placing at						
	required position, embeded in						
	concrete, every 15th post, last but one end						
	post and corner post shall be strutted on						
	both sides and end post on one side only						
	providing red oxide and two coats of						
	enamel paint etc. for fencing work and MS gates complete in all respect as directed.						
	(Location: For approach road to HSD tank						
	at sub-station yard and chiller yard)						
- /							
			,				
12	Cement concrete pavement of average	45	cum				
	75 mm with 1:2:4 (1 cement : 2 coarse sand						
	: 4 graded stone aggregate 20 mm	(,	**************************************				
	nominal size), including finishing complete.						
	(Location: chiller yard)		-63				
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13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors. 40 mm wide and 4 mm thick (Location: chiller yard)	or 2300 erro (1997)	∍ chaïtr ins Yesent ox * 9 w *	0 (100218) 1 (100218) 1 (100218) 1 (100218)	tios i	ioints of I	2
14	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand) (Location: sub-station yard)	115	Sqm.		ac.		
15	Wall painting with acrylic emulsion Apex paint on exterior surfaces of approved brand and manufacture to give an even shade: Two or more coats on new work (Location: sub-station yard)	115	Sq.m.				
16	Supplying, filling, spreading & leveling gravels of size range 5 mm to 25 mm, over the existing layer of soil, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge. (Location: sub-station yard)	22.5	cum		,		
17	Brick edging 7cm wide, 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement: 4 fine sand). (Location: sub-station yard)	80	mtr		-		

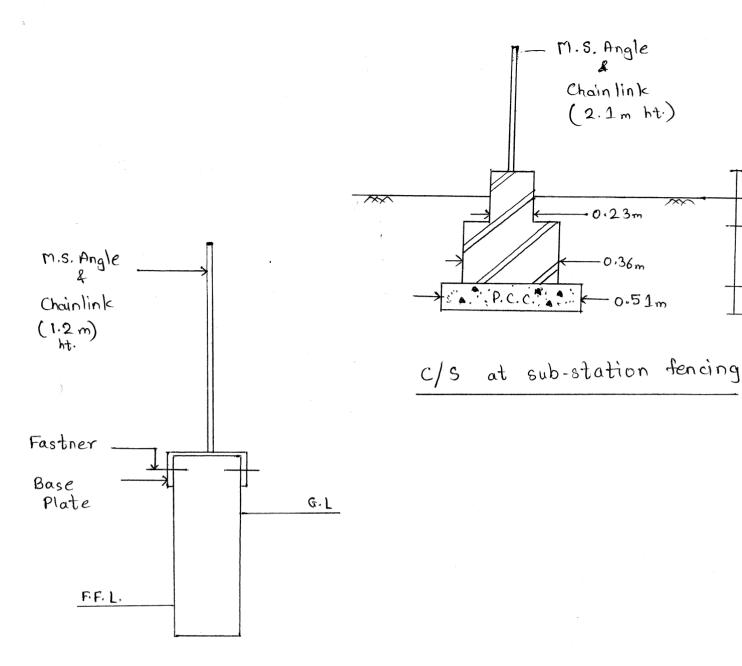
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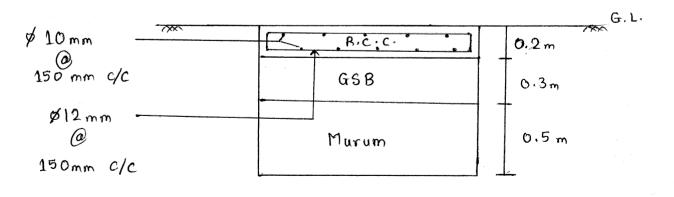
Plan for sub-station fencing



Plan for chiller yard fencing



c/s at chiller yard fencing



MM

c/s at road

Not to Scale

T0.45 ,

0.3

0.15 m

0.15m

Details at gate

VOLUME-II

COMMERCIAL BID

BOQ for chain link fencing

Sr. No.	Description	Quantity	Unit	Basic Rate Rs.	Tax Rs.	Total Rate (Basic + tax) Rs.	Amount
1	Excavation for foundation in earth, soil of all types, including removing excavated soil within 1km beyond working area and stacking and sprading as directed dewatering, preparing the bed for foundation and necessary back filling, ramming, watering including shoring and strutting etc.(Lift upto 1.5m)(Location: Substation yard and Road work)	110	cum				
2	Providing and laying in position cement concrete of specified grade including necessary centering and shuttering - All work up to plinth level 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), below foundation work and similar work all as directed (Location: sub-station yard)	8	cum				
3	Providing and laying cement concrete 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) in coping and for fixing MS Angle etc. including necessary shuttering all as directed (Location: sub-station yard)	20	cum				

4	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge Made of G.I. wire of dia 4 mm (height 2.1m at electrical sub-station & 1.2m at chiller yard) (Location: sub-station yard and chiller yard)	325	sq.m.		
5	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand) (Location: sub-station yard)	23	cum		
6	Filling in plinth and floors with contractors murum in 300mm layers including watering and compaction with 10-12 tonn power roller maintaining optimum moisture and compacting upto 95% of standard proctor density etc. complete. (Location: For approach road to HSD tank at sub-station yard)	27.6	M3		
7	Providing and laying Garded sub Base (GSB) thickness of 300mm including watering, ramming with heavy rollers, leveling the surface with murum/gret spreading etc. complete (The rate shall be for compacted thickness) (Location: For approach road to HSD tank at sub-station yard)	16.45	M3		

8	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars are included). Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer (Location: For approach road to HSD tank at sub-station yard)	11.19	M3		
9	Supplying fabrication and placing in position ribbed TOR steel Fe500 for all reinforced cement concrete works as per design given including cost of steel, binding wire etc. complete complying with standard specification. (Location: For approach road to HSD tank at sub-station yard)	1100	Kg		

10	Providing and casting in situ cement concrete M-25 /1:2:4 of trap/ granite/quartzite/gneiss metal for RCC kerb walls of 450mm height and 75mm thickness and approved shape /profile as approved by engineer including centering form work compacting, finishing the formed surface with CM 1:3 of sufficient minimum thickness to give smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Location: For approach road to HSD tank at sub-station yard)	1	cum		
11	Providing, fabricating, fixing and installing using MS angle (45mm x45 mm x 5mm), I section, nut-bolts, fastners, plates, angles, channels, flats etc. including cutting, bending, drilling holes, welding, placing at required position, embeded in concrete, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only providing red oxide and two coats of enamel paint etc. for fencing work and MS gates complete in all respect as directed. (Location: For approach road to HSD tank at sub-station yard and chiller yard)	2100	Kg		
12	Cement concrete pavement of average 75 mm with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete. (Location: chiller yard)	45	cum		

13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors. 40 mm wide and 4 mm thick (Location: chiller yard)	2300	mtr		
14	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand) (Location: sub-station yard)	115	Sqm.		
15	Wall painting with acrylic emulsion Apex paint on exterior surfaces of approved brand and manufacture to give an even shade: Two or more coats on new work (Location: sub-station yard)	115	Sq.m.		
16	Supplying, filling, spreading & leveling gravels of size range 5 mm to 25 mm, over the existing layer of soil, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge. (Location: sub-station yard)	22.5	cum		
17	Brick edging 7cm wide, 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand). (Location: sub-station yard)	80	mtr		

Total