

**Volume-II**

**NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE (NABI)**

(Department of Biotechnology,  
Ministry of Science and Technology, Govt. of India)  
Knowledge City, Sector-81, SAS Nagar, Mohali, Punjab

**FINANCIAL BID DOCUMENT**



**Provision of wire mesh door in hostel, shed cover on buildings and other works at Main Campus, NABI, Knowledge City, Sector-81, Mohali.**

# **TECHNICAL SPECIFICATIONS**

## **1.0 STANDARD SPECIFICATIONS TO BE FOLLOWED**

The work should be executed as per following CPWD specification and also the specification laid in tender document. In case, above specifications are not available for certain item, then the material should conform to ISI and BIS standards.

### **1.1 Civil Engineering Works**

CPWD Specification 2009 Vol. I & II along with latest correction slips. These Specifications have replaced CPWD Specifications 1996 along with Correction Slips issued on them. These Specifications cover all types of Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF Format in CPWD website.

### **1.2 Electrical Engineering Works**

- (A) CPWD General Specifications for Electrical Works Part I Internal - 2013.
- (B) CPWD General Specifications for Electrical Works Part II External - 1994.
- (C) CPWD General Specifications for Electrical Works Part IV Sub Stations – 2013.

The above specifications shall be read with upto date correction slips (if any).

## **(A) CIVIL WORKS**

### **WORKMANSHIP FOR THE ENTIRE PLUMBING WORK.**

The workmanship shall be best of its kind and shall conform to the specifications, as below or Indian Standard Specifications in every respect or latest trade practices and shall be subject to approval of the Engineer-in- Charge. All materials and/or Workmanship which in the opinion of the Engineer-in- Charge is defective or unsuitable shall be removed immediately from the site and shall be substituted with proper materials and/or workmanship forthwith.

## **WARRANTY AND HANDOVER**

The Contractor shall warrant that all plant, materials and equipment supplied and all workmanship performed by him to be free from defects of whatsoever nature before handover to the Engineer-in-Charge. All the Guarantee/Warranty certificates of all the items shall be in the name of Institute i.e., National Agri-Food Biotechnology Institute (NABI), Mohali.

## **HANDING OVER OF DOCUMENTS**

All testing and commissioning shall be done by the Contractor to the entire satisfaction of the Engineer-in- Charge and all testing and commissioning documents shall be handed over to the Engineer-in-Charge.

**NOTE: In case of any contradiction between the specifications, the contractor shall take the prior approval of the Engineer- In - Charge before executing the same at site.**

### **LIST OF MAKES TO BE ADOPTED**

S.No	Item	Make
1.	Cement	J K Lakshmi/ ACC/ Ultratech/ Ambuja
2.	Steel Reinforcement (TMT bars)	Tata/JSW Jindal/ Sail/Vizag
3.	Stainless Steel	Tata/Jindal/Apollo Tubes Ltd
4.	Mild steel tubular/section work	Jindal/Apollo/Tata/SAIL
5.	Stainless Steel door fittings	Doorset/Godrej/Suzu Steel
6.	Enamel Paint	Asian Paint/ Berger/ICI
7.	Duco Paint	Dulux/Akzonobel/Nerolac/ Jenson & Nicholson India Ltd
8.	Rain water pipes, fittings	Diplast/Supreme/Finolex
9.	Aluminium Composite Panel	Alstrong India, Aludecor/Alex/ Alstone
10.	Galvanized sheet	Tata/Jindal/Sail
11.	Door closer	Doorset/Godrej/Harrison
12	Structural glazing acp sheet sealant	Dow corning/Alstone/Henkel

**Note:-** Any other material make not mentioned above shall be ISI marked & got approved from Engg-in-charge

**NAME OF WORK:** - PROVISION OF WIRE MESH DOOR IN HOSTEL, SHED COVER IN ELECTRIC SUB-STATION-2, ED/CEO RESIDENCE PORCH FIRST FLOOR & VERMI-COMPOST PIT FOR COMPOST OF WASTE

**ABSTRACT SHEET**

<b>S.NO</b>	<b>PARTICULARS</b>	<b>AMOUNT (In INR)</b>
1	ESTIMATED VALUE OF WORK (INCLUSIVE OF TAXES, LABOUR CESS ETC)	Rs 14,63,962/-
2	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN FIGURES)	
3	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN WORDS)	
4	NET AMOUNT AFTER UN-CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN FIGURES)	
5	NET AMOUNT AFTER UN-CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN WORDS)	

Stamp & Signatures of bidder

**Provision of wire mesh door in hostel, shed cover in electric sub-station-2, ED/CEO residence porch first floor & vermi-compost pit for compost of waste.**

<b>S. No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
1	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws . The cost should be inclusive of cost of polishing and beading etc required as per design finalized and to the satisfaction of Engg-in-charge: With ISI marked stainless steel butt hinges of required size				
	35 mm thick shutters				
	Kiln seasoned and chemically treated hollock wood	sqmtr	155.40	2577.35	400520.19
2	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	each	74.00	388.4	28741.6
3	Providing and fixing of stainless steel tower bolts including the cost of screws, drilling etc complete as per site requirement and to the satisfaction of Engineer-in-charge				
a	10" tower bolt	each	74.00	145.211	10745.58
b	4" tower bolt	each	74.00	87.1263	6447.35
4	Providing and fixing bright /matt finished Stainless Steel handles 125 mm of approved quality & make with necessary screws etc all complete.	each	148.00	89.7	13275.6
5	Providing and fixing stainless steel door aldrop including the cost of screws, crown, drilling, bolts etc complete in all aspects.	each	74.00	281.52	20832.48

6	Providing, fabricating and supplying and fixing panels of exterior grade aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, structural glazing silicone sealant, backer rods etc.	sqmtr	239.684	1886.0	452044.052
7	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, mechanically sprayed duco paint including welding and bolted with special shaped washers etc. complete.				
	Hot finished welded type tubes	kg	1240.0	90.25	111910.00
8	Providing and fixing stainless steel ( Grade 304) curtain rods made of Hollow tubes etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing with necessary accessories , SS end profile plugs on both ends & stainless steel dash fasteners , stainless steel bolts etc., of required size, with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	185.00	472.40	87394.0

9	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil	cum	100.00	125.95	12595.0
10	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	1:5:10 (1 cement : 5 coarse sand (zone-III): 10 graded stone aggregate 40 mm nominal size).	cum	2.50	4209.05	10522.625
11	Construction of vermi- compost pit with brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth up to height of 1.2 mtrs above NGL in: along with cost of vermi compost insects, worms, soil layer of 200 mm in complete pit etc all complete.				
	Cement mortar 1:4 (1 cement : 4 coarse sand)				
		cum	30.15	4970.3	149854.545
12	12 mm cement plaster finished with a floating coat of neat cement of mix :				
	1:3 (1 cement: 3 fine sand)	sqm	150.00	226.8	34020
		sqm	50.00	226.8	11340
13	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	cum	3.75	6215.35	23307.5625
14	Centering and shuttering including strutting, propping etc. and removal of form for all heights :				
	Suspended floors, roofs, landings, balconies and access platform	sqm	25.00	422.3	10557.5



15	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	300.00	56.6	16980.0
16	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	40 mm thick with 20 mm nominal size stone aggregate	sqm	42.00	362.6	15229.2
17	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, enamel paint etc all complete.	sqm	74.00	58.45	4325.3
18	Providing and fixing 15 cm wide, 45 cm overall semi-circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete.				
	0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	rmt	41.00	564.7	23152.7
19	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes including fittings such as coupler, bend,etc and dismantling, finishes of walls etc				
	110 mm diameter	rmt	24.00	236.35	5672.4
	Sub- Total Amount				<b>1449467.678</b>
	Add Labour cess @1%				14494.67678
	Amount				<b>1463962.355</b>

**NOTE: - Payment shall be released item wise based on actual measurement examined at site by Engineer- In- Charge. Rate quoted shall be deemed to be inclusive of GST/other taxes.**

Signature/Stamp of Bidder