

Volume-II

CENTER OF INNOVATIVE & APPLIED

BIOPROCESSING

DEPARTMENT OF BIOTECHNOLOGY

(Govt. of India)

Knowledge City, Sector-81, Mohali

FINANCIAL BID DOCUMENT



**Miscellaneous Civil Work in Low Lying Area at Main Campus,
CIAB, 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., CENTER OF INNOVATIVE & APPLIED BIOPROCESSING (CIAB), 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	GI pipes	Tata/ Jindal/ Swastic
4	Paint	Asian Paint/ Berger/ICI
5	Ball Valve	Zoloto/L&T/Kirloskar Brothers Ltd
6	Pre- painted corrugated sheet	Tata/Jindal/Sail
7	Mild steel tubular/section work	Jindal/Apollo/Tata/SAIL

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

NAME OF WORK: - MISCELLANEOUS CIVIL WORK IN LOW LYING AREA AT MAIN CAMPUS OF CIAB

ABSTRACT SHEET

S.NO	PARTICULARS	AMOUNT (In INR)
1	ESTIMATED VALUE OF WORK (INCLUSIVE OF TAXES, LABOUR CESS ETC)	Rs 8,07,035/-
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

BOQ FOR MISCELLANEOUS CIVIL WORK IN LOW LYING AREA AT MAIN CAMPUS CIAB

S. no	Description of Item	Unit	Qty	Rate	Amount
1	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. 25 mm dia nominal bore	meter	180	205.85	37053
2	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: 25 to 40 mm nominal bore	nos	1	394.15	394.15
3	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work 25 mm diameter pipe	metre	180	15.5	2790
4	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work): 25 mm nominal bore	nos	5	205.8	1029
5	Excavating trenches of required width for pipes, cables, etc. including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m All kinds of soil Pipes, cables etc., not exceeding 80 mm dia.	metre	180	138.05	24849
6	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 up to 50 m and lift up to 1.5 m, as directed by Engineer-in-charge.	Cumec	162.061	125.95	20411.52
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	Cumec	162.061	125.75	20379.11

8	Dismantling of road and interlocking tile and relaying tile again for laying pipe line and re concerting on dismantled area including in all aspects as per direction of Engineer-In charge	LS	1	3000	3000
9	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level				
	1:3:6 (1 Cement: 3 coarse sand (zone-III): 6 graded stone aggregate 40 mm nominal size).				
		Cumec	7.97	4814.6	38354.40
10	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, including welding and bolted with special shaped washers etc. complete.				
	Hot finished seamless type tubes				
		Kg	1058.58	93.9	99400.559
11	Providing pre-painted corrugated G.S. sheetroofing of minimum thickness 0.6 mm including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required				
		Sqm	51.02	700.55	35748.991
12	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required color over a priming coat of approved steel primer on new work.				
	100 mm diameter Pipe	metre	83.34	40.55	3379.50
13	15 mm cement plaster on the rough side of single or half brick wall of mix				
	1:4 (1 cement: 4 fine sand)	Sqm	40	200.25	8010.00
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)				
		Sqm	36	255.55	9199.80

15	Providing and laying factory made chamfered edge Cement Concrete paver blocks In foot path, park & lawns driveway or light & traffic parking etc. of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of course sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications excavation, backfilling & disposal of residual soil & direction of Engineer in Charge				
	80mm thick Cement concrete paver block of M-30 grade with approved colour, design & pattern.				
		Sqm	204.75	638.95	130825.01
16	Supplying, stacking and Spreading 6 mm thick red bajri, watering and rolling complete including preparation of the surface and rolling	Sqm	204.75	15.55	3183.86
17	Providing and laying in position cement concrete of specified grade including the cost of centering and shuttering - All work up to plinth level 1:4:8 (1 Cement: 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)		20.475	4650	95208.75
18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:				
	25 mm nominal bore	Each	3	449.45	1348.35
19	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)	Cum	16.82	4592.9	77295.15
20	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement: 4 coarse sand)				
		Cum	19.24	5640.3	108522.81
21	12 mm cement plaster of mix:				
	1:4 (1 cement: 4 fine sand)	Sqm	167.31	172.95	28936.46
22	White washing with lime to give an even shade: New work (three or more coats)	Sqm	167.31	17.25	2886.12
22	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 & Floor Level Beam				

	1:1.5:3 (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	3.29	6215.4	20465.18
23	Centering and shuttering including strutting, propping etc. and removal of form for all heights				
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	43.90	342.9	15054.15
24	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level.				
	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	200	56.6	11320.00
					799044.85
	Add 1 % labour cess				7990.45
	TOTAL AMOUNT				807035.30

NOTE: - Payment shall be released item wise based on actual measurement examined at site by Engineer- In- Charge. Rates quoted by bidder shall be deemed to be inclusive of all taxes, GST, profits, labour etc.

Signature/Stamp of Bidder