

#### INSTITUTE OF PHYSICS

BHUBANESWAR-751 005

(An Autonomous research institute of Dept. of Atomic Energy, Govt.of India)

Tender No. NIT/IOP/18/2015-16

CONSTRUCTION OF NEW BORE WELL AND PUMP HOUSE INCLUDING GROUND WATER SURVEY

# PART-I TECHNICAL BID



#### INSTITUTE OF PHYSICS BHUBANESWAR-751005, INDIA

(An Autonomous research institute of Dept. of Atomic Energy, Govt. of India)

No\_\_\_\_/IP,

Date\_\_\_\_\_

#### NOTICE INVITING TENDERS

Institute of Physics, Bhubaneswar is an Autonomous Research Institute of the Department of Atomic Energy, Government of India

Sealed tenders in TWO Parts are invited by the Director, Institute of Physics, Bhubaneswar- 751 005 from reputed contractors for the following work. Contractor who fulfill the following requirement shall be eligible to apply.

- (a) Should have satisfactorily completed minimum one /two/three similar works each of single value amounting to 80% / 50% / 40% of the estimated cost respectively or above during last seven years ending 30<sup>th</sup> September 2015and
- (b) Should have carried out one work of any nature either above or a separate one costing not less than Rs. 4.5 lakhs with some Central/ State Government Department/ central Autonomous Body/ central Public Sector Undertaking.Govt. / Semi-govt. organization, need apply with proof (Completion Certificate along with detailed work order) of fulfilling the above conditions need apply only :
- (c) Similar work means repair/ renovation of any building works.
- (d) Should have had average annual financial turnover Rs. 7.0 lakhs on during last three years ending 30<sup>th</sup> September 2015.

Tenderer have to submit the proof of above eligibility criteria i.e. (a) completion certificate along with detailed work order,(b) list of similar work carried out during last 7 year showing duration of work, value of work done, date of work order etc.. (c) Proof of work carried out in Govt. Department as above, (d) copy of Annual turnover during last three years.(e) Copy of valid license(f) VAT clearance certificate(g) Copy of PAN

Name of the Work	:Construction of New bore well and Pump house including Ground water survey
Estimated Cost	: Rs.6,20,480/-
Earnest Money Deposit Rs.	: Rs.12,410/-
Cost of Tender Document	: Rs.500/-(Rupees Five Hundred only)
Duration of work	: 02 months from the date of commencement
Security Deposit	: 5 % of Tender Value
Performance Guarantee	: 5% of Tender Value
Last date for receipt of Tenders	: 1500 hours 14.10.2015
Time of Opening Tender Part-I	: 1530 hours14.10.2015

2. Tender documents are in two parts viz. Part-I (Technical Bid) and Part-II (Financial Bid). Part-I (Technical Bid) consists of Notice Inviting Tender with terms and conditions. Part-II (Financial Bid) contains of Schedule of quantities.

3. Tender Documents can be had from the Accounts Officer, IOP,Bhubaneswar-751 005 on written request in the official letterhead of the Tenderer duly recommended by the Officer on Special Duty, IOP or his authorized representative on any working day from 29.09.2015 to 14.10.2015 between 1100 hours & 1300 hours and 1400 hours & 1600 hours on payment of the cost of the tender document in person by cash. The cost paid towards Tender Document is not refundable.

4. Tenderers are required to submit in separate sealed and super scribed envelopes containing and indicating the following:

Ι	First Envelope	Earnest Money Deposit ( EMD)*
II	Second Envelope	PART-I ( Technical Bid) and the
		documents in support of eligibility
		conditions
III	Third Envelope	PART-II ( Financial Bid)

All the three sealed envelopes shall then be placed in another envelope super scribing the Tender No. sealed and submitted to the tender inviting authority.

Note -1: EMD shall be submitted by way of Deposit at call Receipt or Bankers cheque or Demand Draft or Pay order from any nationalized bank in favour of the Director, Institute of Physics, Bhubaneswar-751005 or Fixed Deposit Receipt (FDR) of a Scheduled Bank.

Note -2: Cash, Cheques and Bank Guarantee for EMD shall not be accepted.

Note-3: tenders not accompanied by the Earnest Money Deposit shall be summarily rejected.

Note-4: EMD in respect of unsuccessful tenderers shall be returned within 90 days from the date of issue of the Letter of Intent to the Successful Tenderer.

5. Tenders shall be received up to 1500 hours on 14.10.2015 (or the next working day if the tender receiving date happens to be holiday) by the Officer on Special Duty, IOP or his authorized representative at IOP, Bhubaneswar- 751 005.

6. Part-I of the tenders shall be opened on 14.10.2015 in Director's Conference Hall or, Library Conference Hall, IOP, Bhubaneswar-751 005 in the presence of attending Tenderers.

7. The Envelope containing EMD shall be opened first. The Part-I of the Tender shall be opened only if the EMD is found to be in order.

8. Time and date of opening of the Part-II (Financial Bid) shall be intimated later, only to the Tenderers who are considered qualified after evaluation of PART-I and documents submitted by the tenderer in support of eligibility conditions.

9. The Part-II (Financial Bid) of the tender shall be valid for a minimum period of 180 days from the date of opening of PART-I

10. The Tenderer shall ensure that the FDR is valid for a period of nine months or more after last date of receipt of tenders and that it is to be pledged in favour of Director, Institute of Physics, Bhubaneswar-751 005.

11. In case of successful tenderer, the Tenderer shall deposit an amount equal to 5% (five percent) of the tendered/accepted value of the work as irrevocable performance guarantee in one of the following forms within a period of 15 days from the date of issue of letter of intent:

- (a) Fixed Deposit Receipt (FDR) of scheduled Bank OR
- (b) An irrevocable Bank Guarantee (BG) in the form prescribed by the Government from a Scheduled Bank.

The FDR/ BG shall be valid for the period of contract plus a further claim period of 6 months beyond the contract period.

The performance guarantee shall be refunded to the contractor soon after the completion of the work and recording of the completion certificate.

12. The work order shall be issued only after the said performance guarantee in any one of the prescribed from is received and accepted, failing which the Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Earnest Money absolutely.

13. Director, Institute of Physics does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all of the tenders or to allot parts of the works to different agencies without assigning any reasons therefore. All tenders, in which any of the prescribed conditioned is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected

#### DIRECTOR

#### INSTITUTE OF PHYSICS BHUBANESWAR GENERAL CONDITIONS

### Name of the Work:- Construction of New Bore Well and Pump house including Ground Water Survey

The estimated cost of the above work is Rs.6,20,480/- (Rupees Six Lakh Twenty Thousand Four Hundred Eighty only).

- Tenderers are advised to visit the work spot and understand the scope of the work clearly before submitting the tender. No claim of any kind shall be entertained on account of ignorance in this respect.
- 2) The contractors should have adequate and effective organization for communications with the Engineer-in-charge, Institute of Physics, Bhubaneswar.
- 3) Tender should be signed by persons duly authorized to do so and if required such authority (Power of attorney etc) shall be furnished to the Director.
- 4) Neither the security deposit nor the retention money shall bear any interest.
- 5) The tenders must be filled in ink and in a legible way. Over writing should be avoided. All corrections must be attested by the tenderer with his initials before submission of the tender.
- 6) Tenders proposing any alterations in the work or specifications or in the form of tender or in any other conditions shall be summarily rejected.
- 7) This is an item rate tender. Payment will be made to the Contractor as per actual measurement.
- 8) The rate should be filled in figure and in words. The amount and the totals should also be drawn.
- 9) If the rate in figure differs from the rate in words then the rate corresponding to the calculated amount shall be taken as correct. If the calculated amount does not tally with any of the two rates then the lower of the two rates shall be accepted and the amount shall be corrected.

- 10) Sales Tax, Octroi or any other tax on materials in respect of this contract shall be payable by the contractor.
- 11) In addition to performance guarantee, 5 % of the work order value shall be deposited as security deposit in the form of Demand Draft drawn in favour of Director, Institute of Physics payble at Bhubaneswar on award of contract or shall be deducted @ 10% of the Bill amount from the RA bills for the said amount. EMD submitted along with the tender shall be adjusted in security deposit, This shall be refunded back after 6 months of successful completion of the work.
- 12) Payment will be made as per actual measurement submitted by the contractor you after checking the measurement physically by the Engineer-in-charge and payment of the bills will be made within 10 days of the checking of the bills by the Engineerin-charge.
- 13) The total time allowed for the completion of the work is strictly for 2 months from the date of commencement of the work.
- 14) Income tax, work contract tax other statutory taxes as may be applicable will be deducted at source on all the payments to be released to you for onward deposit with appropriate authority.
- 15) The rates quoted by you will remain firm throughout the currency of contract.
- 16) On the recommendation of the Engineer-in-charge based on the workmanship, quantity and quality of work done the bill will be passed for payment.
- 17) The acceptance of tender is at the discretion of the Director, Institute of Physics, Bhubaneswar. The Director does not bind himself to accept the lowest tender and reserve the authority to reject any or all the tenders without assigning any reason and reserve the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable for rejection.

- 18) The Director does not undertake any responsibility regarding any instructions issued verbally in respect of this tender. All questions relating to the tender shall be referred to the Director in writing.
- 19) The amounts to be calculated against various items shall be in terms of whole rupees, less than fifty paise being ignored and fifty paise and above being rounded to the next rupees.

#### Institute of Physics Bhubaneswar

- 1) **General:** The Contractor shall forthwith in a good substantial and workman like manner, to the satisfaction of the Institute, build and complete the work at Bhubaneswar.
- 2) Date of completion: The Contractor shall actively prosecute the execution of completion of the work to the satisfaction of the Director. The work specified above shall be completed in all respects within 2 months from the date of commencement of work.
- 3) Materials: The Contractor shall provide at his own cost all materials specified in the bills of quantities (with exception of those otherwise mentioned in the specifications) and all labour, tools and plants scaffolding and other implements of every description necessary for execution and completion of the work. All materials to be supplied by the contractor shall be the best of their respective kinds and subject to approval by the Director.
- 4) **Sub-Contractor**: The Contractor shall not assign or sublet the contract for the work or any part thereof.
- 5) **Removal of equipment**: The Contractor shall, at his own expenses, within one week from the completion date, remove all tools, plants, scaffoldings, implements and unused materials from the site and leave the same in a clean and proper state, to the satisfaction of the Director.
- 6) **Inspection of works**: The Contractor shall allow the Engineer-in-charge to inspect and supervise the work during its progress.
- 7) Defective work & rejections: The Contractor shall within 24 hours of notice so to do forth with pull down and rebuild any part of the work which has not been erected, build or completed to the satisfaction of the Director or which is in the opinion of the Director, defective or not in accordance with the specification or the plans.
- 8) **Alteration or Deviations**: The Institute may at any time during the progress of the work by order in writing make any alteration in the original specifications or plans by

way of addition, omission or other deviation whereupon the Contractors shall execute the work according to such alterations to the satisfaction of the Director.

- 9) Additions & Deductions: All additions and deductions to be made to or from amount of the contract price in respect of any such alteration in the specifications or plans shall be ascertained according to the rates specified in the bill of quantities (provided that if appropriate rates are therein specified, they shall be fixed by mutual agreement between the parties) and the difference of expenses occasioned by any such alteration shall be added to or deducted from the contract price. No payment or allowance whatsoever shall be made to the Contractor for any work done or materials used without a previous order, in writing from the Director.
- 10) Measurement of work: The work as it proceeds will be measured net exposed measurements. The Contractors or his representative will accompany the Engineer-in-charge in order that they agree on the measurements. The measurement book can also be examined at the office of the Director before payment is made.
- 11) **Precautions against accident**: The contractor shall, at all times, take due and proper precautions against accidents or injury to the work or any person or property, and shall indemnify the company for all motions suits or any damage or compensation payable in consequence of any accident or injury sustained by any workman or other person whether in the employment of the Contractor or not.
- 12) Failure to execute the work: If the Contractor fails to execute and complete the work otherwise fail to comply with any of the terms and conditions of this order, then the Institute shall be at liberty without avoiding this order forthwith, to require the Contractor to remove his workmen from the site and to take the work out of the hands of the Contractor and to employ any other person to execute and use all materials, tools, scaffolding, plants, implements and things on or about the work, and thereafter neither the Contractor nor his workman shall have any power to intervene with any person employed by the Institute.

All expenses and damages to property incurred by the Institute, consequent on the employment and certified by Director and shall be paid to the Institute by the

Contractor or deducted by the Institute from any money due to or to become due to the Contractor.

- 13) **Serving Notices**: Any notice to the Contractor under this order may be served personally or by registered post addressed to the Contractor last known place of address.
- 14) **Discrepancies:** Should there be any discrepancies between the plans, specifications and bills of quantities the same shall be immediately referred to the Director who shall decide what shall be followed.
- 15) The work will be taken up in hands within seven days of the award of the work and shall be completed in all respect within 3 months from the date of commencement of work.
- 16) Extension of time for completion may be allowed if the Director consider that the reasons for the delay in completion of the work is beyond the control of the Contractor.
- 17) Liquidity damages: 0.5% per week subject to maximum of 10%.
- 18) The tender should accompany with the following documents at the time of submission.
  - a) Proof of registration with Govt./Semi Govt. organizations like CPWD, State

PWD/Railway etc. in appropriate class, PAN card, VAT Clearance certificates etc.

- b) Experience having successfully carried out minimum one /two/three similar works in Govt. / Semi-govt. organization, each of single value amounting to 80% / 50% / 40% of the estimated cost respectively or above during last five years need apply with proof ( Completion Certificate along with detailed work order) of fulfilling the above conditions.
- c) EMD amounting to Rs,12,410/- (Rupees Twelve Thousand Four Hundred Ten only) in shape of demand draft or Bankers Cheque, drawn in favour of the Director, Institute of Physics, Bhubaneswar.
- d) EMD of the successful tenderer will be retained and will be adjusted in Security Deposit.

In case of absence of any of the documents listed above the tender papers will not be entertained.

#### Signature of the tenderer with seal

#### Institute of Physics Bhubaneswar

- 1 Defects Liability
- 2. Period of final measurement and valuation
- 3. Date of commencement
- 4. Agreed liquidated damages
- 5. Minimum value of work for interim payment.
- 6. Performance guarantee & Security deposit or Retention money

- 7. Payment
- 8. Completion Period

- = 6 months
- = Within 10days of submission of the bill by the contractor.
- Within 7 days from the date of issue of the work order.
- = 0.5% per week subject to maximum of 10%.
- = The minimum value of work done should not be less than Rs.5,00,000/-. 5% of the value of work order should be deposited as performance guarantee upon award of the contract and in addition 5% of work order value shall be deposited as security deposit or will be deducted against the Running accounts bill. Security Deposit will be refunded after successful completion of period of 6 months.
- Within 10 days of the checking of bill by E-I\_C
- Within 02 months from the date of commencement of work.

Signature of the tenderer with seal

#### INSTITUTE OF PHYSICS BHUBANESWAR-751 005 (An Autonomous research institute of Dept. of Atomic Energy, Govt.of India)

#### Tender No. NIT/IOP/18/2015-16

#### CONSTRUCTION OF NEW BORE WELL AND PUMP HOUSE INCLUDING GROUND WATER SURVEY

## PART-II FINANCIAL BID

#### SCHEDULE OF QUANTITIES

#### NAME OF THE WORK: (A) CONSTRUCTION OF BORE WELL PUMP HOUSE.

SL				UNIT R	ATE (RS)	AMOUNT
No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	(Rs.)
140.				FIGURE	WORDS	(13.)
	SUB -STRUCTURE.					
	Note: All the items of sub-structure					
	include the coast of de-watering wherever					
	necessary during the progress of work, till					
	its completion without any extra cost to					
	the Department. Tenderers are advice to					
	visit the site of work to acquaint					
	themselves, about the level of sub soil					
	water, drainage facility for de-watering,					
	accessibility to the site etc., and quote the					
	rates accordingly.					
	Earth work excavation in foundation pits,					
	trenches Plinth / tie beams etc. in all soils					
	other than soft and hard rock up to					
	depths mentioned below including shoring &					
	de watering if necessary, dressing the					
	sides, trimming, ramming and preparing the					
	bed for foundation and refilling around					
	the foundation and in plinth with selected					
	excavated earth, in layers not exceeding					
	150mm thick, watering, consolidation and					
	disposing of the surplus 150mm thick,					
	watering consolidation and disposing of the					
	surplus earth within a distance of 150M.					
	etc. complete as per specification drawings					
1	& as directed by the Engineer-in-Charge.					
	Depth not exceeding 1.5m from ground					
	level					
۵)		20.00	CUM.			
b)	Depth exceeding 1.5m to 3.0 m	7.00	CUM.			

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
10.				FIGURE	WORDS	(KS.)
	Filling in plinth with selected earth					
	excavated from borrow area, within a lead					
	of 1.0km by mechanical transport including					
	all loads, lifts, loading unloading, stacking					
	levelling , spreading in layers not exceeding					
	150mm. thick, breaking clods, watering,					
	consolidation to obtain 90% proctor					
	density etc. complete as per specification					
	& drawings as directed by Engineer-in-					
	Charge.					
2		7.00	CUM.			
	Cement concrete for the following works					
	of specified mix using graded stone					
	aggregate of 20mm. maximum size					
	including necessary form work, machine					
	mixing, transporting, placing in position					
	consolidation, finishing, curing etc.					
	complete as per specification drawings					
	and as directed by the Enginner-in-Charge.					
	Note: Nominal reinforcement if provided					
_	shall be measured and paid under relevant					
3	item.					
a)	C.C. 1:4:8 in foundation	1.50	CUM.			
u)	C.C. 1:2:4 in Subbase floor & coping	1.50	COM.			
b)		2.40	CUM.			
	C.C. 1:3:6 in plinth protection					
c)		2.30	CUM.			
	REINFORCED CEMENT CONCRETE					
	The rates for RCC works shall be exclusive					
	of cost of reinforcement and form work					
	unless otherwise mentioned.					
a)	All coords accreate to be 20mm					
	All coarse aggregate to be 20mm.					
	maximum size and uniformly graded unless					
b)	otherwise mentioned.					
, 	For all RCC items, the rates quoted shall					
	include the following without any extra					
	cost to the Department.					
c)						

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
190.				FIGURE	WORDS	(NS.)
	Spacers to maintain clear cover for					
i)	reinforcement.					
	Fixing at correct level and in proper					
	alignment the inserts, pipe sleeves, pipe					
	bends, hooks other pipe specials etc.					
ii)	supplied by/through the Department.					
	Reinforced Cement Concrete of grade M-					
	25 in foundation and plinth at all levels and					
	locations for all structural elements like					
	stub column, beam, Raft, Wall etc.,					
	conforming to I.S. 456-2000 using graded					
	stone aggregate of 20mm. maximum size					
	down graded including machine mixing					
	conveying, placing in positions, drawings					
4	and as directed by the Engineer-in-Charge.	4.20	CUM.			
	Providing. Erecting, fixing in position					
	striking/removing and cleaning					
	steel/timber shuttering & centering for					
	form work in foundation & plinth and all					
	structural elements etc, at all locations					
	for all shapes including chamfers, splays,					
	keys, wedges, props, rails, bracing,					
	brackets, cutting holes for pipes etc.,					
	providing and applying approved from oil on					
	all surfaces of form work coming in					
	contact with concrete including close					
	hacking of all exposed concrete work after					
	removal of form work, all materials, laboiur					
	etc. complete as per specifications,					
	drawings and as directed by the Engineer-					
	in-Charge (Area of form work in contact					
	with concrete shall only be measured for					
5	payment.	40.000	SQM.			

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN FIGURE	IN WORDS	AMOUNT (Rs.)
6	Supply and fixing steel reinforcement for reinforced cement concrete in sub structure including transporting, de- coiling, straightening, cutting, de-rusting, bending, placing in position at all levels and locations, and binding with 18 to 20 gauge soft drawn annealed steel binding wire including carrying out various tests as required etc. all as per specifications and drawings and as directed by Engineer-in- Charge.					
	Note:- Cost of binding wire shall be borne by the contractor and binding wire shall not be measured for payment.					
	For all structural members.					
	a) High Yield Strength deformed bars / tor steel (Fe-415) conforming to latest revision of IS 1786-1985.	340.00	KG			
7	Providing and construction of Brick masonry 250mm thick using well burnt bricks of approved class designation 7.5 [classification as per IS 1077-1992 and minimum average compression strength not less than 7.50 N/mm2] of approved manufacturer C.M 1:5 in foundation and plinth including trench etc. to correct line, level and plumb including raking out joints/ simultaneous flush pointing with cement mortar 1:5, curing etc. all complete as per specifications and drawings and as directed by the Engineer-in-Charge.		CUM.			

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
10.				FIGURE	WORDS	(KS.)
	Providing 75mm thick flat brick Soling					
	with burnt brick of approved manufacturer					
	at all location of sub base to floor & in					
	plinth protection, and below foundation,					
	laid flat to required level, slope etc., as					
	shown including binding the interstices					
	with locally available sand, incliuding					
	watering and pointing with cement mortar					
	1:6 finishing curing etc. complete as per					
	specificaions & drawings and as directed					
8	by the EIC.	16.000	SQM.			
0	Supplying and spreading pesticides	10.000	JQ/W.			
	CHLORPYRIPHOS or other chemical					
	approved by central insecticides Board as					
	directed by the manufacturer and spraying					
	the mixture uniformly by sprayer as pre-					
	construction anti-termite treatment at the					
	rate of 7.5 liters (or as directed by the					
	manufacturer) per Sqm. On vertical and 5					
	liters per Sqm. On horizontal surfaces of					
	the sub-structure, within the trenches,					
	50% of the emulsion to be filled in the					
	holes made in trenches at 150mm. centre					
	to centre etc. complete as per IS 6313					
	Part-II & as directed by the Engineer-in-					
	Charge (The payment will be made on the					
	basis of plinth area measurement only at					
	ground floor/stilt area for all stages of					
	operation and vertical faces will not be					
	measured for payment). Complete as per					
	specifications, drawing and as directed by					
	the Enginner-in-Charge.					
9		18.00	SQM.			
	Note:The contractor shall have to					
	furnished ten years guarantee in the					
	prescribe Performa to maintain the anti-					
	termite treated area / structure free					
	from termite.					

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
140.				FIGURE	WORDS	(13.)
	Disposing off surplus excavated materials					
	by mechanical transport to outside of IOP					
	campus at low laying areas as identified by					
	the concerned Municipal authorities					
	beyond initial lead of 150Mtrs. Including					
	loading, unloading, stacking, spreading,					
10	leveling	4.00	CUM.			
	Note: Voids 20% for soils and 50% for					
	SR/HR shall be deducted from					
	stack/truck measurements to arrivals at					
	the net quantity for payment in case if					
	direct measurement is not possible.					
	SUPER STRUCTURE(STRUCTURAL)					
	Super structure items included in this					
	schedule pertains to all the works above					
	plinth level up to roof including parapets,					
	water tanks, terrace level works etc.					
	unlace enacified athenwise					
	REINFORECED CEMENT CONCRETE.					
	All RCC Shall be controlled concrete unless					
	otherwise specified and shall be carried					
	out strictly in accordance with the					
	drawings and specifications and directed					
a)	by the Engineer-in-Charge.					
	The rates for RCC works shall be exclusive					
	of cost of reinforcement and form work					
	unless otherwise mentioned.					
b)						
	All coarse aggregate to be 20mm.					
	maximum size and uniformly graded unless					
c)	otherwise mentioned.					
	For all RCC items, the rates quoted shall					
	include the following without any extra					
4	cost to the Dept.					
d)	Spacene to maintain alarm source for					
i)	Spacers to maintain clear cover for					
.,	reinforcement. Drip moulds.					
ii)						

SL				UNIT R	ATE (RS)	AMOUNT
No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	(Rs.)
				FIGURE	WORDS	(13.)
	Fixing at correct level and in proper					
	alignment the inserts, pipe sleeves, pipe					
	bends, fan hooks, other pipe specials etc.					
iii)	supplied by the Department.					
)	Cutouts in slabs, construction joints etc.					
iv)						
	Test for concrete shall be done as per IS					
	456-2000 and the cost of the same shall					
v)	be borne by the Contractor.					
	RCC of grade M-25 conforming to I.S. 456					
	2000 at all floors and levels using graded					
	stones aggregate of 20mm. maximum size					
	including machine mixing, conveying, placing					
	in position mechanical consolidation,					
	finishing curing, scaffolding etc. complete					
	as per specification & drawings for all					
	types of structural members like, columns					
	of all shapes, pillars, posts and mullions,					
	beams, lintels, brackets, bed blocks, all					
	slab including staircase waist slab, chajjas,					
	facias, fins, walls, cills, nitches, roof					
	guters canopies parapets, staircase pardi					
	wall, staircase steps, waist slabs, landing					
	slab etc. but excluding te cost of form					
	work and steel etc., all as per direction for					
	the EIC.					
11		4.50	CUM.			
	FORM WORK					

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
140.				FIGURE	WORDS	(5.)
	Providing, erecting, fixing in position,					
	position, striking / removing & cleaning					
	steel/timber shuttering and					
	centering/form work all structural					
	members in super structure at all levels and locations for all shapes with chamfers,					
	splays, keys, wedges, props, rails bracings,					
	brackets, cutting holes for					
	placing/embedding pipes, fan hook for RCC					
	work like columns of all shapes, beams,					
	lintels, brackets, slabs including staircase					
	landing slab, roof slab, loftslabs, chajjas,					
	facias, walls, cills,niches, roof gus, cans					
	mullions, parapets, RCC stepping at terrace					
	roof parapet, staircase pardi, staircase					
	steps, waist slab etc. complete including					
	providing and applying approved form oil on					
	all surfaces of form workcoming in contact					
	with conrete including close hacking for al;l					
	exposed concrete work after removal of					
	form work, all materials, labour etc.					
12	complete as per specifications, drawings	75.00	SQM.			
12	and as directed by EIC. Note: 1. Area of formwork in contact with		3Q/M.			
	concrete shall only be measured for					
	payment.					
	2. Stop boards for construction joints will					
	not be measured for payments.					
	REINFORCEMENT		ļ			
	Reinforcement of RCC work including					
	supplying steel bars of various diameters					
	as required at site of work including					
	loading, unloading, transporting, de-coiling,					
	straightening, cutting, bending, placing in					
	position and binding with 18-20 gauge, soft					
	drawn annealed steel binding wire including					
	carrying out various tests as required etc.,					
13	all as per specifications and drawings.					

				UNIT R	ATE (RS)	
SL	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	
No.				FIGURE	WORDS	(Rs.)
	a) High Yield Strength deformed bars or					
	tor steel (Fe-415) conforming to latest					
	revision of IS 1786	520.00	KG.			
	Note: Cost of binding wire shall be born by					
	the contractor and binding wire shall not					
	be measured for payment.					
	MASONRY WORK					
	Note:The contractor shall get approved					
	the samples of bricks from the Engineer-in					
	Charge before procurement on large scale					
	and shall maintain the same for the entire					
	work					
	Necessary Openings/ nitches /cutout,					
	wherever required as per drawing and					
	asked for by the Engineer-in-Charge, shall					
L L	be provided by the contractor without any					
	avtes cost The mate shall include cost of molting the					
	The rate shall include cost of making the					
	brick masonary to all gemotrical shapes					
c)	and sizes without any cost to the					
	Department Providing and construction Brick masonry					
	250mm thick in super structure and fins,					
	mullions, columns etc. at all floors and					
	locations using well burnt bricks of					
	5					
	, i i i i i i i i i i i i i i i i i i i					
	[classifications as per IS 1077-1992 and					
	minimum average compression strength					
	notless than 7.50N/nm2) of approved					
	manufacturer in C.M 1:6 correct line, level					
	and plump including scaffolding, curing					
	racking output joints etc. complete as per					
	specifications and drawings and as					
14	directed by the Engineer-in-Charge	14.00	CUM.			
	PLASTERING:					
	Note:					

SL				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
190.				FIGURE	WORDS	(KS.)
	Before commencement of plastering, the					
	area shall be cleaned, wetted and shall be					
	marked with 'Thiyyas' or 'Tapanis' and shall					
	be got approved by the Engineer-in-					
a)	Charge.					
	Whenever the electrical					
	contractor/agency has to fix up switch					
	boxes in wall, necessary 'Thi-yyas or					
	'Dhadas' shall be arranged prior to					
	plastering so that the electrical boxes are					
b)	fixed properly in line with the finished					
	Finishing around the junction boxes shall					
	be done at all floor levels and position to					
	the line, level and right angles as required					
c)	while carrying out plastering work.					
	No extra claim/cement consumption shall					
	be entertained by the Department for the					
	plastering done more than the specified					
	thickness shown in the schedule of					
	quantities, to bring the plastered surface					
d)	to perfect line, level and plumb with					
	Cement Plaster in single coat with cement					
	mortar 1:4 [1 cement:4 coarse sand] at all					
	floors heights, slopes on plane or other					
	surfaces including and locations, finished					
	smooth with Neeru to correct line, level,					
	plane and plumb including preparing the					
	surface, scaffolding, curing etc. complete					
	for the following as per specifications and					
15	drawings.					

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
INO.				FIGURE	WORDS	(KS.)
	a) 6 mm thick plaster for ceiling, exposed					
	concrete surfaces etc. including providing					
	and ading bonding agent of Dr. FIXIT					
	PIDICRETE MPB or other approved					
	equivalent manufactures including applying					
	a slurry coat of cement and Dr.FIXIT					
	PIDICRETE MPB ( 1:1 volume mix) with a					
	brush before plaster is applied internal					
	brick/ concrete surface.					
		12.00	SQM.			
	b) 15mm. Thick plaster for internal					
	brick/concrete surfaces.	7.00	SQM.			
	C) 20mm. Thick in two coats for	1.00	JUNN.			
	brick/concrete surfaces					
	(external/internal) (back coat and finishing					
	coat of 10mm. thick each) including					
	providing & adding approved water					
	proofing agent @ 2% by weight of cement	100.00	604			
	or as per manufactures instructions.	100.00	SQM.			
	Providing and fixing in position GI chicken					
	(Hexogonal Shape) wire mesh of 150mm					
	width <sup>3</sup> / <sub>4</sub> " x24 gauge with necessary U-					
	bolts, clips or nails at all floors and levels,					
	at the intersection of two non					
	homogeneous (dissimilar) surface as base					
	preparation for plaster wherever required					
	to prevent development of cracks between					
	brick/work conc rete surfaces as per					
	specifications, drawings and as directed bt					
	the Engineer-in-Charge. ( only area of					
	chicken wire mesh provided shall be					
16	measured for payment.)	6.00	SQM.			
	Providing horizontal vertical grooves of					
	size not exceeding 25mm×20mm deep in					
	external plastering, including trimming					
	finishing in straight lines to Plumb level					
	etc. and finishing the grooves as directed.					
17		30.00	RMT.			

SL				UNIT R	ATE (RS)	AMOUNT
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	
INO.				FIGURE	WORDS	(Rs.)
	WATERPROOFING WORKS:					
	Before commencement of plastering, the					
	area shall be cleaned, wetted and shall be					
	marked with 'Thiyyas' or 'Tapanis' and shall					
	be got approved by the Engineer-in-					
a)	Charge.					
	Whenever the electrical contractor/					
	agency has to fix up switch boxes in walls,					
	necessary 'Thiyyas' or 'Dhadas' shall be					
	arranged prior to plastering so that the					
	electrical boxes are fixed properly in line					
b)	with the finished plastered surfaces.					
	Lime used for preparation of neeru for					
	plaster shall be of good quality of 'C' class					
	conforming to IS 712-1973. Every					
	consignment of lime shall be got tested by					
	the contractor in an approved testing					
	laboratory for chemical analysis for					
c)	suitability of lime					
	No extra claim/cement consumption shall					
	be entertained by the Department for the					
	plastering done more than the specified					
	thickness shown in the schedule of					
	quantities, to bring the plastered surface					
	to perfect line, level and plumb with					
d)	adjoining columns					

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	
10.				FIGURE	WORDS	(Rs.)
	Providing cement based waterproofing					
	treatment of M/s. India Waterproofing					
	Co. or other approved equivalent cement					
	based waterproofing treatment over RCC					
	roof slab including roof gutter. Water					
	proofing treatment shall be of an average					
	115mm thick (with minimum thickness of					
	65mm. at the out lets) consisting of					
	providing and laying brick bat and brick					
	bat coba and cement concrete (1:2:4)					
	20mm. thick with 10mm. size graded grit					
	or plaster tapping 20mm thick with cement					
	mortar 1:3, finished smooth with false					
	lines at 300×300 mm. or nearer convenient					
	intervcals as approved all as per water					
	proofing agency's specifications, laid to					
	the required slope,level,line including					
	making vatas (coves) at junctions of					
	walls/parapets, outlets, curing etc.					
	complete, testing the water proofing					
	treatment for water tightness and					
	rectification of defects, if any, to render					
10	the surface bone dry etc. complete as per	17.00	<b>60</b> 11			
18	specificationss and drawings FLOORING	17.00	SQM.			
	52 mm thick cement concrete flooring with					
	concrete hardener topping,under layer 40					
	mm thick cement concrete 1:2:4 (1 cement					
	: 2 coarses and : 4 graded stone aggregate					
	20 mm nominal size) and top layer 12 mm					
	thick cement hardener consisting of mix					
	1:2 (1 cement hardener mix : 2 graded					
	stone aggregate 6 mm nominal size) by					
	volume, hardening					
	compound mixed @ 2 litre per 50 kg of					
	cement or as per manufacturer's					
	specifications. This includes cost of					
	cement slurry, but excluding the cost	47.00				
19	of nosing of steps etc. complete	17.00	SQM.			
	DOOR AND WINDOW.					

				UNIT R	ATE (RS)	
SL No.	DESCRIPTION OF ITEM	QTY.	UNIT	IN	IN	AMOUNT (Rs.)
1.00.				FIGURE	WORDS	(N3.)
	Providing and fixing 1mm thick M.S. sheet door					
	with frame of 40×40×6					
	mm angle iron and 3 mm M.S. gusset plates at					
	the junctions and corners,all necessary fittings					
20	complete, including applying a priming coat of					
- 20	approved steel primer (a)Using M.S. angels 40x40x6 mm for diagonal					
	braces	6	SQM.			
	PAINTING WORK.		``			
	External surface					
	Finishing walls with water proofing cement					
21	paint of required shade :					
	New work (Two or more coats applied @ 3.84					
	kg/10 sqm)	70.00	SQM.			
	Internal suface					
	White washing with lime to give an even shade :					
22						
	New work (three or more coats)	62.00	SQM.			
				TOTAL A		
(B) C	ONSTRUCTION OF NEW BORE WELL INC	CLUDIN	g grou	ND WATE	R SURVEY	
	Providing and constructing bore well of					
	165mm dia & 90 meter depth including					
	providing and fixing PVC casting pipes of					
	approved quality 165mm internal dia					
	including accessories, labour tools and					
	required equipment etc. complete					
23	Identifying the point for drilling the bore					
	Providing fixing 160mm dia PVC casting					
	pipes confirming to IS in bore well to a					
23.1	required depth etc. complete	90	RMT.			
24	Testing of water samples, as directed by en	1	No.			
	Supplying and fixing heavy duty clamp of					
	size 900 mm $ imes$ 100mm $ imes$ 15mm with bolts					
25	and nuts etc. complete	4	Job.			
	Providing and fixing top cap of PVC Dummy					
	suitable for 165mm dia nominal bore pipe					
26	etc. complete	1	Pair.			

SL	DESCRIPTION OF ITEM	QTY.	UNIT	UNIT RATE (RS)		
SL No.				IN	IN	AMOUNT (Rs.)
INO.				FIGURE	WORDS	(KS.)
	Design, supply and installation of					
	submersible pump sets of 3 phase electric					
	motor frame with coupling guard and it's					
	fasteners, and pumping water from bore					
	well including providing, laying jointing					
	65mm dia HDPE Pipeconfirmed as per					
	relevant IS code pump shall be installed at					
	a depth of 85m from ground level and					
	delivery pipe shall be left 1.50m above					
	ground level. Rate to include cost of pump					
	sets, GI pipes with in the bore well, 3 core					
	x 4sqmm electric cable, star delta starter,					
	single phase preventer, dry running					
	preventer, outer door type electrical panel					
	board, start & stop bush button, voltmeter					
	Ampere meter, etc., provision for the					
	maintenance of the pumps, chain block with					
	pulley etc. complete. The supplier shall give					
	one year guarantee, complete as					
	specified and directed by Engineer's					
	Make: KSB/ Texmo / Kirloskar					
	HP. Suitable HP for considering the					
	capacity & Head of pump sets					
	Capacity, 625 lpm					
27	Nominal speed : 2900 rpm	1	Each			
	geologist and field staffs to the work site					
	and conducting the electrical resistivity					
	test at site for ground water survey and					
	submission of test report etc complete in					
	all respect along with all taxes and					
28	royality.	1	Job.			
			•	TOTAL AM	OUNT(B)=	
	•	TOT	AL AMO	UNT(A+B)	=Rs.	
TOTAL AMOUNT(IN WORDS)						