

(REVISED)
CONTRACT FROM THE EXECUTIVE OF WORKS
GOVERNMENT OF THE PUNJAB

PUNJAB BUILDING DEPARTMENT
TENDER/CONTRACT DOCUMENTS

Name of Work:-

Name of Contractor: - _____

Estimated Cost of Work Rs:- _____

Amount of Earnest Money Rs:- _____

Deposit at Call No:- _____

Treasury Challan No:- _____

Time Limit:- _____

Contractor

Engineer In-charge

Stereo LB No, 386 (revised)

Agreement No.-----

Stereo I.B No. 389 (revised)

Stereo I.B No. 28(revised)

Stereo I.B No. 29(revised)

UNIVERSITY OF AGRICULTURE, FAISALABAD**ITEM RATE TENDER & CONTRACT FOR WORKS**

1	Name of work	1.Remaining Work of TST Road at Punjab Bio Energy, University of Agriculture, Faisalabad 2.Construction of Tube well Chamber / Operator Room, Electrical Works, Tube well / Pumping Machinery (Renala Khurd Farms 8KM away) at sub Campus Depalpur Okara University of Agriculture ,Faisalabad
2	Estimated cost	RS. 10.071Million/-, 4.87Million/-
3	Time for completion	01- Month, 01- Month
4	Amount of Bid Security	PKR----- Million (s)
5	Issued to	----- ----- -----
6	Pre-tender conference	-----
7	Dead Line for submission of Tender	27-05-2022 up to 11:00AM-----
8	Opening of Tender	27-05-2022 up to 11:30AM-----
9	Issued by	Executive Engineer, University of Agriculture, Faisalabad.

Signature:-----

Date:-----

OFFICE STAMP

Note: The officer opening the tender shall reject the tender which does not bear the stamp and signature of the issued official and which is not submitted by the same contractor to whom the tender form was issued

Contractor**Engineer In-charge**

**GENERAL DIRECTIONS FOR
THE GUIDANCE OF THE TENDERER**

1. These directions are provided to assist the tenderer in preparing and submitting his tender. The tender shall contain all information and data required to be furnished and shall be prepared and submitted in accordance with the instructions set forth herein.
2. All necessary documents, such as copies of specifications (excluding standard specification books, MRS, 1st Quarter 2022 District Faisalabad), (MRS, 1st Quarter 2022 District Okara) contract documents, including bill of quantities, estimated scheduled rates and any other documents required in connection with the preparation of tender or execution of works, signed by the engineer-in-charge will accompany the tender form and the cost of such annexed documents will be reflected in the cost of the tender form.
3. The tenderer will not be reimbursed for any costs of any kind, whatsoever, incurred in connection with the preparation and submission of his tender.
4. No single tender shall include more than one work. A tenderer who wishes to tender for two or more works shall submit tender for each work, separately.
5. The memorandum of work tendered for, and the schedule of materials and equipment to be supplied by the engineer-in-charge and the rates at which they are to be charged for (annexed hereto) shall be filled in the office of the engineer-in-charge before the tender form is issued. At this stage the tenderer should ensure that the tender form so issued is complete in all respects.
6. The tenderer shall note that the ultimate responsibility for the quality of work and its conformity with the specifications and drawings rests solely with the successful bidder whose tender is accepted.
7. The tenderer shall, at his own expense, inspect and examine the site and surroundings and obtain for himself, on his own responsibility, all information that may be necessary for preparing the tender and entering into contract, and shall determine and satisfy himself by such means as he may consider necessary or desirable as to all matters pertaining to the tender. The tenderer shall also satisfy himself before submitting his tender as to the nature of grounds, hydrological and climatic conditions, the form and nature of the site, the nature and lay out of the terrain, the availability of labour, water, electric power and transportation facilities in the area. The tenderer shall specially investigate into the sources of materials to be used for the works and satisfy himself about the quality and quantities of materials available for the completion of the work and the means of access to the site, the accommodation he may require and, in general, shall himself obtain all necessary information, as to the risks, contingencies and other circumstances which may influence or affect his tender. The engineer-in-charge shall not assume any responsibility regarding information gathered interpretation or deduction, which the tenderer may arrive at, from the date that may be furnished with the contract documents.
8. (a) The tenderer shall fill up the Bill of Quantities and indicate the percentage rate above or below the MRS of rates for the "MRS items" on which he is willing to undertake each item of work. No premium will be quoted by the contractor against non-MRS/item rates, for which the rate and amount has already been filled in by the engineer-in-charge in the bid schedule.

(b) In case tenders are called on item rate basis, the tenderer shall quote his own unit rate in the Bill of quantities on which he is willing to undertake each item of work.

Contractor

Engineer In-charge

9.
 - i. The tender shall work out the amount against each item of work in the Bill of Quantities and will indicate the total amount of his tender(including the cost of Non-MRS items rates for which the rate and amount has already been filled in by the engineer-in-charge in the Bill of Quantities) on which he is willing to complete the works. The total amount worked out in the Bill of Quantities shall be entered by the tenderer in his tender as his tender price for the work. In case of discrepancy between amounts in figures and in words, the amount in words shall prevail.
 - ii. Should any discrepancy be found in the amount of pay items or if a column of amount is found blank after filling in a unit rate, the unit rate filled by the tenderer will be extended in working out of the amount of the tender and the total amount of the bid schedule will be adjusted accordingly.
 - iii. If a unit rate is left blank, but the amount against the item is filled, the unit rate will be worked out on the basis of the amount divided by the quantity of the item shown in the bid schedule.
 - iv. If it is found that the tenderer has not entered any unit rate and amount against any of the pay items of the bid schedule, the engineer-in-charge shall fill in the blanks by noting the word "NIL" In such blanks at the time of opening of the tender. Such pay items shall be deemed to be covered by the rates of other items.
 - v. If the tenderer does not accept the adjusted/corrected amount of tender according to the above provision, his tender shall be rejected and the earnest money forfeited.
10. The tender which proposes any alteration in the works specified in the Bill of quantities or in the time allowed for carrying out the works or any other condition mentioned by the Engineer-in-charge, will be liable to rejection. The tenderer shall sign each and every page of the tender and contract documents, without making any alteration. All enclosures issued with the contract documents, shall be attached with the tender duly signed by the tenderer. Any addition or alteration made after filing the forms shall duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection.
11. The tenderer shall fill in the tender documents, in ink. Errors, if any, shall be scored out, and corrections re-written legibly and attested by the tenderer. Any addition or alteration made after filling the form shall be duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection. Any tender with unattested correction shall be attested by the tenderer in the presence of other tenderers at the time of opening of the tender except that no correction shall be permissible in the rate or amount of the bid schedule or in the tendered price after the opening of the tender.
12. Additional Clause (s) for a particular work shall be typed on separate sheet(s) by the Engineer-in-charge, which will be annexed to the contract documents specifying the number of sheets. The tenderer shall not add or delete any additional clause(s) in the additional clauses sheet (s), provided by the Engineer-in-charge.
13. The quantities mentioned in the Bill of Quantities are estimated quantities, to be used for preparing tenders, and the Engineer-in-charge does not expressly nor by implication agree that the actual amount of works to be performed will correspond therewith. No payment will be made on account of anticipated profits for work covered by the contract which is not performed, nor will any adjustment in the unit rates set forth in the bid schedule be made because of an increase or decrease in the actual quantities from the estimated quantities indicated therein, except as determined in accordance with the provisions of Clause 42 of the general conditions of contract.

Contractor

Engineer In-charge

14. No tender without earnest money shall be entertained, earnest money, calculated @ 2% of the estimated cost of the work (rounded suitably), shall be in the form of 'deposit at call receipt'. The earnest money of the unsuccessful tenderers shall normally be returned by the Engineer-in-charge within a week of opening of the tenders and in any case not later than sixty (60) days following the date set for opening of tenders. In the event of the tender being accepted, or receipt for the earnest money forwarded therewith, shall thereupon be given to the contractor. The earnest money of the successful tenderer on execution of the contract covering work will be adjusted towards the amount of security deposit to be retained from the first amount (s) payable to the contractor under the contract.
15. The successful tenderer will be required to enter into a contract, furnish the performance security (where-ever required) and to commence the work within the time specified in the memorandum of work. Should the successful tenderer refuse or fail for any reason to enter into contract, or to furnish the performance security or to commence the work within the time specified in the memorandum of work, it should constitute a just cause for the annulment of the award and in the event of such annulment, the entire earnest money shall be forfeited to Government, as compensation for such default.
16. (i) The tender shall be signed by the person (s) duly authorized to do so. In the event of the tender being submitted by a firm, it shall be signed separately by each member thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must disclose that the firm is duly registered under the Partnership Act, 1932, or any other law in force.
(ii) The tender submitted by a joint venture of two or more firms shall be accompanied by a document of formation of the joint venture, duly registered and authenticated by competent court, in which shall be stated precisely, the conditions under which it shall function, its period of validity, the person (s) authorized to represent it and accept it obligate, the participation of several firms forming the joint venture and any other information of necessary to permit a full appraisal of its function.
(iii) A tender submitted by a corporation must bear the seal of the corporation and be attested by its Secretary.
(iv) In all cases, the tender must be signed by an individual or individuals having powers to legally bind the firm, joint venture, corporation or companies on whose behalf they are signing.
17. Each tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and of the rates and prices stated in the bid schedule which rates and prices shall, except in so far as it is otherwise expressly provided in the contract, cover all obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.
18. The tenderer may modify or withdraw his tender after submission, provided that the modification or notice of withdrawal is received in writing by the engineer-in-charge prior to the prescribed deadline for submission of tenders. The tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered, with the inner envelopes additionally marked "MODIFICATION or WITHDRAWAL as appropriate. No tender may be modified subsequent to the deadline for submission of tender. Withdrawal of a tender during the interval between the deadline for submission of

tenders and the expiration of the period of tender validity i.e. sixty (60) days as specified by the tenderer in the Form of Tender may result in the forfeiture of the tender security.

19. The tenderer shall submit the original Tender Documents complete in all respects and keep a copy of the tender for his own record. The original should be sealed in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL". The inner and outer envelopes shall (a) be addressed to engineer-in-charge (b) and bear the following identification: Tender for (Name of Contract),(Reference Number of Tender),and the words "DO NOT OPEN BEFORE (Time and Date, set for opening)".The inner envelopes shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared to have been received late or is otherwise unacceptable. If the outer envelope is not sealed and marked and instructed above, the Engineer-in-charge will assume no responsibility for the misplacement or premature opening of the tender submitted. A tender opened prematurely because of improper identification will be rejected.
20. The tenderer shall indicate in the space provided in the tender his full and proper address at which notice may be legally served on him and to which all correspondence in connection with his tender and the contract is to be sent.
21. The presentation of a tender implies full acceptance on the part of the tenderer of these instructions and all other conditions set forth in the contract document.
22. Any tender received by the Executive Engineer (Engineer-in-charge) after the deadline for submission offenders prescribed in the Notice Inviting Tenders will be returned unopened to the tenderer.
23. The Engineer-in-charge or his duly authorized officer (not below the rank of Assistant Engineer) will open tenders in the presence of intending tenderers or their authorized agents, who may be present at the time. The officer opening the tender will announce the names of the tenderer, tender rates and the presence of requisite tender security.
24. Promptly after the opening of Tenders, the Engineer-in-charge will undertake a detailed evaluation of tenders. The Engineer-in-charge will determine whether each tender is substantially responsive to the requirements of the tender documents and conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. If a tender is not substantially responsive to the requirements of the tender documents, it will be rejected by the engineer-in-charge and may not subsequently be made responsive by the tenderer having corrected or withdrawn the non-confirming deviation or reservation.
25. Except for information to be read out by the Engineer-in-charge at the time of opening tenders in accordance with Para 23 above, no information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of contract shall not be disclosed to tenderers or other persons not officially concerned with such process. Any effort by the tenderer to influence the process of examination, clarification, evaluation and comparison of tenders, and in decisions concerning award of contract, may result in the rejection of his tender.
26. To assist in the examination, evaluation and comparison of tenders, the Engineer-in-

Contractor

Engineer In-charge

charge may ask tenderers individually for clarification of their tenders, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the Engineer-in-charge during the evaluation of the tender.

- 26 (A) In case the total tendered amount is less than 5% of the approved estimated (DNIT) amount, the lowest bidder will have to deposit additional performance security from the Scheduled Bank ranging from 5% to 10% as under, within 15 days of issuance of notice or within expiry period of bid, whichever is earlier.

TOTAL TENDERED AMOUNT BELOW CORRESPONDING ESTIMATED COST.	ADDITIONAL PERFORMANCE SECURITY.
5%	5%
6%	6%
7%	7%
8%	8%
9%	9%
10%	10%

27. The Engineer-in-charge shall have the right of the rejecting all or any of the tenders without assigning any reason thereof. The Engineer-in-charge will not be bound to award the contract to the lowest or to any other tenderer.
28. The unit rates and prices entered in the bid schedule will be the rates at which the contractor will be paid (subject to the adjustment specified in clause 55 of the annexed conditions) and shall be deemed to include all costs of performing the work, including income tax, super tax and/or other charges, duties and taxes of the Government, autonomous, semi-autonomous and local bodies, profits and costs of accepting the general risk, liabilities and obligations set forth in or implied from the contract.
29. Prior to the expiration of the period of tender validity (60 days) prescribed in the Tender Form or any extension thereof that may have been granted by the tenderer, the Engineer-in-charge will notify the successful tenderer by cable and confirm in writing by registered letter that his tender has been accepted. This letter of acceptance shall name the sum which will be paid in consideration of the execution, completion and maintenance of the works as prescribed in the contract, (hereinafter called the contract price). The notification of award will constitute the formation of the contract.
30. At the time, the Engineer-in-charge notifies acceptance of the tender to the tenderer he will send the tenderer the Form of Agreement provided in the tender documents, incorporating all agreements between the parties. Within fifteen (15) days of receipt of the of Agreement, the successful tenderer shall furnish the performance security (10% of the Contract Price) and sign the contract in the presence of the Engineer-in-charge.
31. After the successful tenderer has signed the -contract furnished adequate performance security the Engineer-in-charge will notify to the un-successful tenderers that they were unsuccessful.
32. The completion period will be reckoned from the date of delivering the award or the handing over of the site to the contractor, whichever is later.
33. A copy of the contract agreement may be obtained by the contractor at his own cost.

Contractor

Engineer In-charge

TENDER FOR WORK

To
The Executive Engineer

Dear Sir,

I/We.....

(Name of the contractor)

The undersigned tenderer, having examined the conditions of contract, specification, drawing bid schedule and addenda Nos..... thereto, for the work of

(Name of the work)

and the works associated therewith, and having examined the site of the above named works, or having caused the site to be visited OR our behalf by my/our competent and reliable agent, and having satisfied myself/ourselves as to all conditions under which the above named work must be performed, hereby offer to execute, complete and maintain the whole of the above mentioned work including its ancillary works associated therewith, in accordance with the said contract documents, including the addenda indicated above, at tender price of Rs. (Rupees).....

Or such other sums as may be ascertained in accordance with the said conditions of contract and the rates, and the prices set forth in the bid schedule.

2. As security for the due performance of the undertaking and obligations of this tender, I/We submit herewith a deposit at call receipt No..... dated. In the amount of Rs.....(Rupees.....from.....the.....BankBranch)drawn in your favour or may payable to you as earnest money, the full value of which will be absolutely forfeited to Government,, without prejudice to any other rights or remedies of the said *Government*, should I/We withdraw or modify' the tender within its validity period of sixty (60) days, following the date of receipt of tender.
- 3.I/We understand that if my/our tender is accepted, the foil value of the earnest money as attached with the tender shall be detained by *University* towards the amount of security deposit specified in clause 48 of the said conditions of contract and item (d) of the Memorandum of work.
4. Should this tender be accepted by you, I/We hereby undertake:-
 - (a) To sign ail the necessary documents for entering into a contract agreement in the form set out In the contract document within fifteen (15) days following your notification of such acceptance.
 - (b) To commence the work within the stipulated time named in item (f) of memorandum hereto annexed following the date of issuance of your order to proceed with or the handing over of the site, whichever is later and in the event of my/our failure to do so, the entire amount of earnest money deposited by me/us for which deposit at a call receipt is enclosed herewith, is to be absolutely forfeited to the University.. On the commencement of work, I/We hereby also agree to abide by and fulfill all the terms or provisions of the said conditions of the contract annexed hereto so far as applicable and in default thereof, to forfeit and pay to the University the sums of money mentioned in the said conditions.
 - (c) To complete and deliver the whole work comprised in the contract within the time stipulated in item no. (g) Of the Memorandum hereto annexed, subject to such extension in the time limit as may be granted under the conditions of contract.
 - (d) the furnishing of performance security under item (h) of the memorandum annexed hereto, in the sum equal to 10 (ten) percent of the cost of the work in same form sum equal to 10 (ten) percent of the cost of the work in the same form and on the same condition as are prescribed by and to the satisfaction of the Engineer-in-charge .
5. I/We also agree that when materials and/or equipment for the work are provided by the t, the rates to be paid for them shall be as provided in Appendices annexed hereto.

Contractor

Engineer In-charge

6. I/We agree to abide by this tender for the period of sixty (60) days following the date set for receiving of tenders and it shall remain binding upon me/us and may be accepted by you at any time before the expiration of that period.
7. Unless and until a formal agreement is prepared and executed, this tender, together with your written acceptance thereof, shall constitute a binding contract between us, and shall be deemed for all purposes to be the contract agreement.
8. I/We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by me/us in tendering.

Thanking you,

Yours faithfully,

(Signature of Tenderer)

Dated thisDay

NAME.....

Of20...

*Address.....

I hereby accept the above tender on behalf of the Government.

(Signature of Executive Engineer)

*In case the above address is changed, the contractor will immediately notify in writing to the *Executive Engineer* his new address.

Contractor

Engineer In-charge

MEMORANDUM OF WORK

- a) General Description **1.Remaining Work of TST Road at Punjab Bio Energy, University of Agriculture, Faisalabad
2.Construction of Tube well Chamber / Operator Room, Electrical Works, Tube well / Pumping Machinery (Renala Khurd Farms 8KM away) at sub Campus Depalpur Okara University of Agriculture ,Faisalabad**
- b) Estimated Cost **RS. 10.071Million/-, 4.87Million/-**
- c) Amount of earnest money to accompany the tender (to be furnished by the tenderer in the shape of “deposit at call” from a scheduled Bank of Pakistan) **Rs. 201,420/-, 97,400/-**
- d) Percentage of security deposit to be retained form the bills.
- i) On the amount of work done up to Rs.5.0 million Ten (10) percent
- ii) On the amount of work done beyond Rs.5.0 million. Five (5) percent
- e) Minimum amount of interim running bills Rupees five million (Rs.----- only
- f) Mobilization period Fifteen (15) calendar days
- g) Time allowed for completing the work after the expiry of mobilization period -----calendar months
- h) Amount of performance security in the form of Bank Guarantee (see contract conditions clause 7 and General direction 26 (a) Five (05) percent of the accepted tender price in the case of tenders with cost of exceeding Rs.50.00 million and as per general condition 26(a) for all tenders.
- i) Period of maintenance (after the date of issuance of certificate of completion) Twelve (12) calendar months.

Contractor

Engineer In-charge

SUMMARY OF COST**REMAINING WORK OF TST ROAD AT PUNJAB BIO ENERGY UAF.**

SR#	DESCRIPTION	AMOUNT (Rs)
01	Civil Work	
	Total	
	Add 5% PRA	
	Grand Total	
	IN MILLION	

Contractor**Engineer In-charge**

Sr. No		Description of Items	Unit	Quantity	Rate	Rate Quoted by the Contractor	Amount
1	ch.4/29	Dismantling brick soiling or flagged flooring without concrete foundation.	100 Sft	54,000.00	718.1		
2	ch.3/21	Excavation of foundation of building, bridges and other structure including dagbellings, refilling around structure with excavated earth, watering and remaining lead upto one chain (30m) and lift upto 5ft m in ordinary soil.	1000 cft	337.50	8949.60		
3	ch.6/5h	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): Ratio 1: 3: 6	100 Cft	148.50	25489.20		
4	ch.7/30	Supplying and filling sand under floor; or plugging in wells	100 Cft	13,500.00	2872		
5	ch.18/20	Providing and laying dry brick pavement/soiling in streets or roads, etc. sand grouted, laid in proper camber, including preparation, watering, compaction of bed to proper camber, and sand cushion. Only labour rate	100 Cft	14,850.00	4870.8		
6	ch.18/20	Providing and laying dry brick pavement/soiling in streets or roads, etc. sand grouted, laid in proper camber, including preparation, watering, compaction of bed to proper camber, and sand cushion.	100 Cft	5,400.00	22225.2		
7	ch.18/5	Providing and laying road edging of 3" (75 mm) wide and 9" (225 mm) deep brick on end, complete in all respects.	Per Rft	9,830.00	49.1		

Contractor

Engineer In-charge

8	ch.3/5	Earth work in ordinary soil for embankments lead upto 100ft (30m) i/c ploughing and mixing with blade grade or disc harrow or other suitable equipment, compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respect. 95% to 100% maximum modified AASHO dry density. leed upto 10 mile	1000cft	13,200.00	17832.5		
9	N.S	Compaction of base corse i/c mixing of stone dust 25% on Existing Road complete in all respect.	100 Cft	28,590.00	2200.00		
10	ch.6/52ii	Providing&fixing precast Edge KerbStone (4"to6"thick)and14"highofCompressiveStrengthof 3500PSIIaidincementsandmortar(1:3)overpre-laid brick masonry for drain cum footpath etc complete in all respect. (ii) With painting	Per Rft	300.00	276.45		
11	ch.18/3ii	Providing and laying sub-base course of stone product of approved quality and grade, including placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHO dry density, including carriage of all material to site of work except gravel and. aggregate. (ii) Crushed stone aggregate.	100 Cft	2,250.00	10787.37		
12	ch.18/4	Providing and laying base course of crushed stone aggregate of approved quality and grade, and supply and spreading of stone screening, including placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHO dry density, including carriage of all materials to site of work except gravel and. aggregate.	100 Cft	2,250.00	13239.82		

Contractor

Engineer In-charge

13	ch.18/8	Providing surface treatment to roads, including supply of bitumen and bajri/crushed stone aggregate of approved quality, including cleaning of road surface, heating and spraying bitumen, spreading bajri and rolling with road roller (including its operation cost, fuel and hire charges, etc.) etc. complete including carriage of all materials to site of work except bajri/crushed stone aggregate. (i) 40 lbs. bitumen, and 5.5 Cft. bajri of nominal size 1" (25 mm) per 100 sq. feet or 1.96 Kg bitumen and 0.017 cu.metre bajri per square metre. (i) 25 lbs. bitumen, and 2.75 Cft. bajri of nominal size ½" (13 mm) per sft or 1.23 Kg bitumen and 0.008 cu. metre bajri per sq.metre. 14 lbs. bitumen, and 1.5 Cft. bajri of nominal size ¼" (6 mm) per %sft or 0.69 Kg bitumen and 0.005 cubic metre bajri per sq.metre.	100 Sft	61,680.00	6787.56		
14	ch.13/35	Painting Traffic Lane Marking of specified width(1.5mmthick),withThermoplastic(TP)Paintin cludingGlassBeads,completeinallrespect,as approved and directed by Engineer incharge (i) 5" wide	Per Rft	9,830.00	42.20		
Total							

Contractor

Engineer In-charge

SUMMARY OF COST

CONSTRUCTION OF TUBEWELL CHAMBER / OPERATOR ROOM, ELECTRICAL WORKS, TUBEWELL / PUMPING MACHINERY (Renala Khurd Farms 8Km away)

SR#	DESCRIPTION	AMOUNT (Rs)
01	Tubewell Chamber / Operator Room	
02	Tubewell Chamber Electrical Works	
03	Tubewell / Pumping Machinery	
	Total	
	Add 5% PRA	
	Grand Total	
	IN MILLION	

Contractor

Engineer In-charge

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR -
OKARA (HEC FUNDED)
CONSTRUCTION OF TUBEWELL CHAMBER / OPERATOR ROOM
ENGINEER'S ESTIMATE**

Item No.	REF. Nos CH/ITEM	Description of Items					
			Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 1st BI-ANNUAL-2022 (1st JANUARY-2022 to 30th JUNE -2022) DISTRICT OKARA							
SCHEDULE ITEMS-A							
Earth Work							
Operator Room							
1	CH:3 item 21(b) P-30	Excavation in foundation of building and other structures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	816	8,727.85		
2	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15 P-29 (i)	i) with surplus earth from foundation, etc.	1000 Cft	544	4,197.60		
Anti-Termite							

Contractor

Engineer In-charge

3	CH:25 item 42 P-177	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect .as approved by the Engineer Incharge.	Per Sft	1,305	9.95		
Plain and Reinforcement Concrete							
4	CH:6 item 3 (b) P-41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-(b) Ratio 1: 4: 8	100 Cft	145	17,850.30		
5	CH:6 item 6 P-42	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
5.1	(a)(i)	Reinforced cement concrete slabs, beams, girders, Lintels and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-					
GROUND FLOOR							
	(a)(i)(3)	Type C (nominal mix 1: 2: 4)	Per Cft	142	471.80		
Steel Reinforcement							

Contractor

Engineer In-charge

6	CH:6 item 9 (c) P-45	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars) (c) Deformed bar (Grade 60)	100Kg	457	26,320.60		
7	CH:6 item 33 (b)(ii) P-48	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (b) with 2 coats of bitumen:	100 Sft	101	7,786.60		
8	CH:6 item 35 (a)(b-ii- b) P-49	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating (b) with 2 coats of bitumen:- ii) Ratio 1:3 b) ¾ " thick (20 mm)	100 Cft	134	4,749.35		
Brick Work							
9	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	608	23,783.05		
GROUND FLOOR							
10	CH:7 item 5 (i) P-54	Pacca brick work in ground floor :- Cement, sand mortar:-Ratio 1:6	100 Cft	580	25,572.95		
Flooring							
11	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	248	2,863.20		
12	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½ to 2"(40 mm to 50 mm) gauge mixed with 25 % sand, for floor foundation, complete in all respects	100 Cft	195	6,331.30		
13	CH:6 item 5 (f) P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-Ratio 1: 2: 4	100 Cft	124	28,971.35		

Contractor

Engineer In-charge

14	CH:10 item 15 (e) P-69	Providing and laying topping of cement concrete including surface finishing and dividing in panels:-(e) 2"(50 mm) thick	100 Sft.	745	7,111.40		
15	CH:10 item 42 (a) P-72	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels a) Size 1½" x 3/8" (40 x 10 mm)	Per Rft.	470	13.20		
		Surface Rending					
16	Ch-11 item 10 (b) P-74	Cement plaster ratio 1:3 under soffit of RCC roof slabs only , upto 20' height. 3/8" (10 mm) thick.	100 Sft	221	2,958.90		
17	Ch-11 item 9 (b) P-74	Cement plaster 1:4 upto 20' (6 m) height. 1/2" (13 mm)	100 Sft	609	2,595.85		
18	Ch-11 item 18 (b) P-75	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-b) ratio 1:3	100 Sft	764	2,668.55		
		Wood Work					
19	Ch-12 item 51 P- 85	Providing and fixing panelled door of M.S. sheet, with forged door leaves of M.S. sheet 22 SWG fitted in hollow frame chowkat 3"x4½" (75 mmx113 mm) made of M.S. sheet 18 SWG filled with plain cement concrete 1:3:6 etc. complete with all fittings and hammer painting, including carriage to site and fixing in position.	Per/Sft	29	646.05		
		Painting and Warnishing					
20	Ch-11 item 22 P- 75	Priming coat of chalk under distemper.	100 Sft	871	220.55		
21	Ch-11 item 23 (a)(iii) P- 75	Distemping:-a) new surface:-iii) three coats	100 Sft	871	1,150.30		

Contractor

Engineer In-charge

22	Ch-13 item 5 (c) P-88	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	59	2,242.30		
Metal Work							
23	Ch-25 item 44 P-172	Providing and fixing windows consisting of M.S. section frame 2"x1½", (50x40mm) leaves frame 1½"x1" (40x25mm) box section frame for glazing 3/8"x3/8" (10x10mm) using 16 SWG sheet 'U' shaped rubber supported with 1"x1/8" (25x3mm) M.S. flat for fixing 3/16" (5 mm) thick glass panes M.S. box section ½"x½" (13x13mm) of 16 SWG for fixing 24 SWG wire gauze on outer side by means of ¾"x1/8" (20x3mm) M.S. flat and screws including grill of M.S. flat ½"x1/8" (13x3mm) or ¼"x¼" (6x6mm) square bar with independent frame of ½"x½" (13x13mm) box section of 16 SWG i/c all C.P. fitting and painting 3 coats complete in all respect.	Per/Sft	13	1,365.70		
24	Ch-25 item 10 P-168	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position.	100 Kg	122	27,271.40		
Roofing & Water Proofing							
25	Ch-9 item 5 P-62 + Ch-26 item 37(iix2) P-176	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4" (100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.i/c P/L double layer polythene sheet 500 gauge	100 Sft	269	10290.55		

Contractor

Engineer In-charge

26	Ch-9 item 15 P-62	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm).	Each	1	680.00		
27	Ch-9 item 16 P-62	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1	1,206.25		
28	Ch-21 item 15-A P-130	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	Per set	1	13,484.00		
Total "A"(Schedule items) C/o to Summary of Cost:							
NON SCHEDULE ITEMS-B							
Miscellenious							
1	N.S	Providing and fixing Chain Pulley Block of 5 ton capacity with 5 meter length of chain as shown in drawing and as approved by the Engineer Incharge. The cost also includes the labour and tool plant.	Each	1	15,312.00		
2	Ch 23, Item 26 b	Supply, provide and fix in position PVC Pipe Class B, 4" Dia for rain water down pipe.					
		4" dia	Rft	20	383		
3	Ch 23, Item 37 B	Provide and fix PVC plain bends BSS Class B					
		4" dia	Each	6	470		
Total "B"(Schedule items) C/o to Summary of Cost:							
Total (A+B)							

Contractor

Engineer In-charge

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR -
OKARA (HEC FUNDED)
CONSTRUCTION OF TUBEWELL CHAMBER / OPERATOR ROOM ELECTRICAL WORKS
ENGINEER'S ESTIMATE**

Item No.	REF. Nos CH/ITEM	Description of Items					
			Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
AMMENDED MRS, IST BI-ANNUAL-2022 (01.01.2022 to 30.06.2022) DISTRICT OKARA							
A) Schedule Items							
1		1.1	Light Circuits.				
			Supply, installation and commissioning of light circuit wiring, to be wired with 3x2.5mm sq. (1P+1N+1CPC) PVC insulated 300/500 V grade wire, manufactured by M/s. Pakistan Cables Ltd, Pioneer Cables, Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium, recessed in , walls, Roof slab, or on surface or above false ceiling or as required as per site conditions, all PVC conduit accessories, pull boxes, steel pull wires , complete in all respects. Each circuit shall have independent CPC. Maximum wiring of 2 light circuits can be pulled through 1" dia. PVC conduit. (CK=8)				

Contractor

Engineer In-charge

	[Ref: Item 10 (a-iii)/24]]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1 No. 1x 2.5 mm (7/0.029")	Rft	180	21.28		
	[Ref: Item 3(iii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	60	81.78		
		1.2	<u>1st Light Point Controlled By One Switch</u>					

Contractor

Engineer In-charge

			Wiring of first light point controlled by one switch and wired with 2x1.5 mm sq.(P+N) PVC insulated wires 300/500 V grade, manufactured by M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium, recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexible conduit from ceiling junction box to light fixture with brass chuck nut including 1.5mm sq. PVC insulated wire of colour green as CPC, M.S. sheet steel switch box 16 SWG with earth terminal and 2 coats of enameled paint, M.S. box shall be of the same size as that of 1, 2 or 3 gang flush type plate switches, including cost of gang type light switches 10 amps (CK=33) MAKE Bush, Clipsal.				
	[Ref: Item 10 (a-i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in pre-laid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1 No. 1x 1.5 mm (3/0.029")	Rft	80	16.3	
	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	70.76	

Contractor

Engineer In-charge

		1.3	Point- Points Wiring					
			Same as Item No. 1.2 but Loop wiring of a light point from fist light point with 2x1.5 mm sq.(P+N) PVC insulated wires 300/500 V grade, manufactured by M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexible conduit from ceiling junction box to light fixture with brass chuck nut including 1.5mm sq. PVC insulated wire of colour green as CPC, M.S. sheet steel switch box 16 SWG with earth terminal and 2 coats of enameled paint. make Clipsal, Bush.. (CK=70)					
	[Ref: Item 10 (a-i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1 No. 1x 1.5 mm (3/0.029")	Rft	60	16.3		
	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm PVC pipe	Rft	30	70.76		
		1.4	1- 13 Amps Switch Socket					

Contractor

Engineer In-charge

			Wiring and fixing of one 13A light plug sockets from DB to point with 2x1 core 4 mm sq. + 1x2.5mm sq. CPC, PVC wires 300/500 Volt grade, M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta, Shavyl or Premium recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint , M.S. box shall be of the same size as that of 1-13Amps switch socket, including cost of 13 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB without any claim of circuit. (CK=10)				
	[Ref: Item 10 (a-iv)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in pre-laid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x4 mm ² (7/0.036")	Rft	120	29.69	
	[Ref: Item 10 (a-iii)/24]	ii	Supply and erection of single core PVC insulated copper conductor cables in pre-laid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) ii) Cost of 1x2.5 mm ² (7/0.029")	Rft	60	21.28	

Contractor

Engineer In-charge

[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials iii) Cost of 25 mm PVC pipe	Rft	60	81.78		
	1.5	Loop-Loop- 13 Amps Switch Socket					
		Same as above item No. 1.4 but loop wiring of 13A light plug socket outlet from DB to point with 2x1 core 4 mm sq. + 1x2.5mm sq. CPC, PVC wires 300/500 Volt grade, make M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta, Shavyl or Premium recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint , M.S. box shall be of the same size as that of 1-13Amps switch socket, including cost of 13 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB without any claim of circuit.					
[Ref: Item 10 (a-iv)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only)	Rft	80	29.69		

Contractor

Engineer In-charge

			i) Cost of 1x4 mm ² (7/0.036")				
	[Ref: Item 10 (a-iii)/24]	ii	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) ii) Cost of 1x2.5 mm ² (7/0.029")	Rft	40	21.28	
	[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials iii) Cost of 25 mm PVC pipe	Rft	40	81.78	
		1.6	<u>1 x 3 Pin 20 Amps Switch Socket</u>				
			Wiring and fixing of one 20A power sockets outlet with 2x 4mm ² (P+N) & 1x2.5mm ² as CPC single core cables from DB to point_ combined switch socket outlet creamic Base with Rocker Switch (Shuttered) Silver Point, Neon Light Heavy duty 2P+E, 20A,250V. PVC wires 300/500 Volt grade, M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta , Popular recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta, Shavyl or Premium accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint , M.S. box shall be of the same size as that of				

Contractor

Engineer In-charge

			1-20Amps switch socket, including cost of 15 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB without any claim of circuit.(CK=2)					
	[Ref: Item 10 (a-iv)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x4 mm ² (7/0.036")	Rft	120	29.69		
	[Ref: Item 10 (a-iii)/24]	ii	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x2.5 mm (7/0.029")	Rft	60	21.28		
	[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25 mm	Rft	60	81.78		
		1.7	Fan Points Conforming to same specifications as mentioned above for Item No. 1.2. but wiring of ceiling fan points, including cost of MS hook box circular type having MS hook 16 mm (5/8") dia make Unique, Beta to be casted in RCC slab, MS switch board of appropriate size to accommodate dimmer, complete in all respects, including dimmer provided by the Fan					

Contractor

Engineer In-charge

			manufacturer.(CK=13)					
	[Ref : Item 49/24]	i	Supply and erection of 3/8" (10 mm) dia M.S. bar fan hook placed at the time of casting of slab.	Each	1	57.36		
	[Ref : Item 14(ii)/24]	ii	Back Box (7"x4")	Each	1	315.52		
	[Ref: Item 10 (a-i)/24]	iii	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")	Rft	80	16.29		
	[Ref: Item 3(ii)/24]	iv	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	70.76		
		1.8	<u>Exhaust Fans Points</u> Conforming to same specifications as mentioned above in Item No. 1.2 but wiring of exhaust fan point excluding cost of hook box but including cost of 10 A switch make Clipsal M.S box 16 SWG with earth terminal, 2 coats of antirust point, all fixing accessories, 1-5 Amps ceiling rose and including one switch of 10 amps switch. (CK=4)					
	[Ref: Item 10 (a-i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")	Rft	80	16.3		

Contractor

Engineer In-charge

	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	70.76		
2			<u>L.T. Power Cables</u>					
			Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade manufactured by any one of the manufacturers M/s. Pakistan Cables Ltd, Pioneer Cables, Newage Cables in pre-laid conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the employers electrical engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed.					
	-	2.1	<u>4 Core Cable PVC/PVC</u>					
	13-d-(iv)/24		a) 4 core 70mm sq.	Rft	164	1635.52		
	13-d-(iii)/24		b) 4 core 50mm sq.	Rft	30	1184.24		

Contractor

Engineer In-charge

		2.2	<u>Circuit Protective Conductor (CPC)</u>					
	12-(ii)/24		a) 1 core 25mm sq.	Rft	194	154.86		
3			<u>Light Fittings And Fixtures</u>					
	43-(i)/24	3.1	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete. Double rod (80 watts) with two chokes and 2 starters.	No	2	1613.90		
4			<u>Lightning Conductor Copper Rod</u>					
	74/24	i	Supply and erection of 25 mm (1") dia and one metre long lightning conductor copper rod with 5 spikes on ball and base, etc. complete.	Job	6	3564.73		
	73i/24	ii	Supply and erection of copper tape, including copper staple copper nails, cement, sand, etc tape 40x3 mm (1½"x1/8")	Rrt	380	326.13		
4			<u>PVC Conduit</u>					
			Supply at site of PVC conduit heavy duty make Beta, Shavyl or Premium to be concealed in RCC slabs, walls, floor, columns above false ceiling or as required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all respects.					
	6(ii)/24	a	80 mm i/d	Rft	100	197.37		
	6(i)/24	a	50 mm i/d	Rft	30	158.45		
	3-(v)/24	c	40 mm i/d	Rft	30	125.33		
			Total "A"(Schedule items) C/o to Summary of Cost:					

Contractor

Engineer In-charge

B) Non-Schedule Items.								
1			Switch & Sockets.					
	N.S	1.1	Providing and fixing of 6 gang switch kit E-31/1/2A 10 Amp Bush / Clipsal Australia made, or Eqv.including PVC Sheet Back Box As per approval of Engineer Incharge.	Each	1	1184.20		
	N.S	1.2	Providing and Fixing of Universal Switched Socket E-15U 10 Amp Bush / Clipsal Australia made, or Eqv. .including PVC Sheet Back Box as per approval of Engineer Incharge.	Each	2	505.76		
	N.S	1.3	Providing and Fixing of Power Switched Socket E-15/15 15 Amp Bush // Clipsal Australia made, or Eqv. .including PVC Sheet Back Box As per approval of Engineer Incharge.	Each	2	773.56		
2			<u>Ceiling Fans</u>					
	N.S	1.4	Providing and installtion of ceiling fan 56" Size including dimmer & hanging Rod G.F.C/PAK Made. (Energy Efficient Fan as approved by PEECA)complete in all respect and as approved by the Engineer Incharge.	Each	1	6299		
3			<u>Exhaust Fans</u>					
			Supply, installation and commissioning of Exhaust Fans of following sizes plastic body, louvers, all necessary fixing accessories, make Asia, Climax, PAK National complete in all respects. (Energy Efficient as approved by PEECA)					

Contractor

Engineer In-charge

	N.S	i	12" dia (Plastic Body).	Each	1	4057			
		5.2	<u>Earth Connecting Point</u>						
	N.S		Supply, installation of earth connecting points consisting of copper plate 12" long, 2" wide and 1/2" thick to be installed as and where shown on drawings on the wall of the trenches, complete with fixing arrangement, brass nuts bolts complete in all respects to facilitate connections of Incoming copper strips and Outgoing CPC.	Nos.	2	5194			
		5.3	<u>Manhole</u>						
	N.S		Constructing of 2'x 2'x 2.5' (internal size) including earth work 4" thick PCC 1:4:8 9" thick first class burnt brick work in 1:5 mortar, plastered inside in 1:5 cement sand and 4" thick RCC cover with grade 40 reinforcement.	Nos.	2	12154			
			Total "B"(Schedule items) C/o to Summary of Cost:						
			Net Total (A+B):						

Contractor

Engineer In-charge

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR -
OKARA (HEC FUNDED)**

TUBEWELL / PUMPING MACHINERY (Renala Khurd Farms 8Km away)

BILL OF QUANTITIES

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty.	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 1st BI-ANNUAL-2022 (1st JANUARY-2022 to 30th JUNE -2022) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
1	Ch.23 Item 5/P-130	Direct Rotary / Reverse Rotary drilling of bore for tubewell in all type of soil except shingle/gravel and rock					
		a) from ground level to 250 ft. below ground level ii) 20" to 26" (500 to 650 mm) i/d	Rft	250	913.55		
		b) exceeding 250 ft. depth below ground level ii) 20" to 26" (500 to 650 mm) i/d	Rft	150	913.55		
3	Ch.23 Item 7/P-130	Providing strong substantially built box of wood 4"x 21/2" x 4" box with compartments lock and locking arrangement for preserving of strata from bore hole.	Job	1	29,192.35		
4	Ch.23 Item 14(j)/P-132	Providing and installing M.S. blind pipe socketed / welded joint, M.S. reducer (where necessary), in tubewell bore hole, including jointing/welding with strainer, etc. complete:-					
		(j) 12" i/d, 1/4" (300 mm i/d 6 mm) thick housing pipe	Rft	200	3,901.40		

Contractor

Engineer In-charge

5	Ch.23 Item 15(a)/P-133	Providing and installing P.V.C. blind pipe, B.S.S. Class `B', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete. a) 3" i/d (75 mm)	Rft	150	285.60		
6	Ch.23 Item 18/P-133	Shrouding with graded pea gravel 3/8" to 1/8" around tubewell in bore hole.	Cft	980	144.30		
7	Ch.23 Item 17(ii)/P-133	Testing and developing of tubewell of size 6" (150 mm) i/d and above continuously. ii) above 1.5 cs. Discharge	Per hour	36	1,780.20		
8	Ch.23 Item 19(f)/P-133	Laying cutting, jointing, testing and disinfecting cast iron pipe line in trenches, with spigot and socket caulked lead joints, including cost of materials, such as lead, yarn, etc.complete in all respects:- f) 10" (250 mm) i/d	Rft	40	282.35		
9	Ch.23 Item 15(f)/P-149	Providing and installing M.S. blind pipe socketed/welded joint, M.S. reducer (where necessary), in tubewell bore hole, including jointing/welding with strainer, etc. complete:- 6" i/d, 3/16" (150 mm i/d 5 mm) thick	Rft	50	1,917.45		
Total "A"(Schedule items) C/o to Summary of Cost:							
2	N.S	Providing and fixing 1/2" thick M.S Cap for 12" I/d housing pipe joint by means of welding & hinges with lock & locking arrangements. complete in all respect to the entire satisfaction of The Engineer.	Each	1	2,280.00		

Contractor

Engineer In-charge

3	N.S	Providing fixing Suspension clamp on 12" i/d M.S house pipe of tube well. Clamp will be made of 4" wide 1/2" thick flat iron in two parts each in semi circular shape equal to 8.50" i/d at center with 1.5 ft extended length on each side, including providing fixing 3/4" dia 4 Nos fully threaded nuts bolts 8 Nos M.S washers. rate also includes the cost of providing with tubewell pipe the 4 Nos stiffner of 2"x4"x1/2" around the M.S housing pipe to hold the clamp. Rate further includes the providing at situ the P.C.C 1:2:4 block having size 4'x4'x2 i/d excavation if any. complete in all repect to the entire satisfaction of The Engineer.	Job	1	19,181.00		
4	N.S	Providing and Installing. Fiber Glass Blind Pipe socket/welded joints, in tubewell boring, including jointing/welding with strainer etc. complete in all respects as per specification & drawings. 10" i/d, 1/4" thick	Rft	170	3,487.00		
5	Ch 23, Item 11g	Providing and Laying PVC Strainer BSS Class B including sockets and solvent complete in all respects. 12" i/d 300mm	Rft	80	1,804.00		
6	Ch 23, Item 13 i g	Providing and Installing PVC Bail/End Plud BSS Class 12" 1/d 300mm	Each	10	791.40		
7	Ch 10, Item 7	Grouting with CS Mmortar Ratio 1:5	100sft	100	2,123.00		
8	N.S	Hire charges of air compressor or turbine/submersible pump for 72 hours.	Job	1	41,760.00		
9	N.S	Electrical logging of the borehole for conversion	Job	1	53,453.00		

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Engineer In-charge

10	N.S	Providing and installing non return valve dia 8", PN-10, standard BS-1868 as per specifications and/or as directed by the Engineer Incharge complete in all respects.	Each	1	117,181.00		
11	N.S	LT or HT pannel wall mounted with one incoming 150/250 A tripple pole adjustable MCCB and outgoing 100/160 A tripple pole MCCB for pump and motor including star delta starter with all protection like thermal, over load, phase failiure, dry running protection, trip indication lights for trip, start standby condition ampere meter, volt meter, with selector switch, one outgoing 10 A SP MCB for each outgoing circuit, cable from MCB to starter to pump motor complete in all respects with earthing system for motor and LT-Pannel all as per drawings or directed by The Engineer.	No.	1	167,040		
12	N.S	Fixing Charges of 1 cusic vertical Turbine (KSB) made complete in all respect as directed by engineer in charge.	Job	1	300,000		
Total "B"(Schedule items) C/o to Summary of Cost:							
Net Total (A+B):							

Contractor

Engineer In-charge