

# **SPPRA BIDDING DOCUMENT**

**STANDARD BIDDING DOCUMENT**

**PROCUREMENT OF WORKS**

*(For Contracts Costing up to Rs 2.5 MILLION)*

*Standard Bidding Document* is intended as a model for admeasurements (Percentage Rate/unit price for unit rates in a Bill of Quantities) types of contract. The main text refers to admeasurements contracts.

## **Instructions to Bidders/ Procuring Agencies.**

### **General Rules and Directions for the Guidance of Contractors.**

This section of the bidding documents should provide the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Agency. It should also give information on bid submission, opening and evaluation, and on the award of contract.

Matters governing the performance of the Contract or payments under the Contract, or matters affecting the risks, rights, and obligations of the parties under the Contract are included as Conditions of Contract and *Contract Data*.

The *Instructions to Bidders* will not be part of the Contract and will cease to have effect once the contract is signed.

**1.** All work proposed to be executed by contract shall be notified in a form of Notice Inviting Tender (NIT)/Invitation for Bid (IFB) hoisted on website of Authority and Procuring Agency and also in printed media where ever required as per rules.

NIT must state the description of the work, dates, time and place of issuing, submission, opening of bids, completion time, cost of bidding document and bid security either in lump sum or percentage of Estimated Cost/Bid Cost. The interested bidder must have valid NTN also.

**2.** Content of Bidding Documents must include but not limited to: Conditions of contract, Contract Data, specifications or its reference, Bill of Quantities containing description of items with scheduled/item rates with premium to be filled in form of percentage above/ below or on item rates to be quoted, Form of Agreement and drawings.

**3. Fixed Price Contracts:** The Bid prices and rates are fixed during currency of contract and under no circumstance shall any contractor be entitled to claim enhanced rates for any item in this contract.

**4.** The Procuring Agency shall have right of rejecting all or any of the tenders as per provisions of SPP Rules 2010.

**5. Conditional Offer:** Any person who submits a tender shall fill up the usual printed form stating at what percentage above or below on the rates specified in Bill of Quantities for items of work to be carried out: he is willing to undertake the work and also quote the rates for those items which are based on market rates. Only one rate of such percentage, on all the Scheduled Rates shall be framed. Tenders, which propose any alternative in the works specified in the said form of invitation to tender or in the time

allowed for carrying out the work, or which contain any other conditions, will be liable to rejection. No printed form of tender shall include a tender for more than one work, but if contractor wish to tender for two or more works, they shall submit a separate tender for each.

The envelope containing the tender documents shall refer the name and number of the work.

6. All works shall be measured by standard instruments according to the rules.

7. Bidders shall provide evidence of their eligibility as and when requested by the Procuring Agency.

8. Any bid received by the Agency after the deadline for submission of bids shall be rejected and returned unopened to the bidder.

9. Prior to the detailed evaluation of bids, the Procuring Agency will determine whether the bidder fulfills all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC (where applicable), turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.

10. Bid without bid security of required amount and prescribed form shall be rejected.

11. Bids determined to be substantially responsive shall be checked for any arithmetic errors. Arithmetical errors shall be rectified on the following basis;

(A) **In case of schedule rates**, the amount of percentage quoted above or below will be checked and added or subtracted from amount of bill of quantities to arrive the final bid cost.

(B) **In case of item rates**, If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of the Agency there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of the total costs shall prevail and the total bid amount shall be corrected.

(C) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

## **BIDDING DATA**

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

**(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadt @ Kamber**

**(b). Brief Description of Works:-** P/L/J & Testing P.E Pipe Trunk Mains Distt: system i/c restoration of Road cutting for Improvement & Extension of Urban Water Supply Sch: Kamber (ADP 2008-09)

**(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadt @ Kamber**

**(d). Estimated Cost:- 10.000 (Million)**

**(e). Amount of Bid Security:- 0.200 (Million)**

**(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).**

**(g). Security Deposit :- ( including bid security):- 10%**

**(h). Percentage, if any, to be deducted from bills:- 8%**

**(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.**

**(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.**

**(k). Time for Completion from written order of commence: - 06 Months.**

**(L). Liquidity damages:- \_\_\_\_\_**

**(m). Deposit Receipt No: Date: Amount: (in words and figures)**

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). Brief Description of Works:- Providing, Installing & Testing (Siemens made) Diesel/ Gas Generator 200 KVA @ Naurang Wah Tube Well site for Improvement & Extension of Urban Water Supply Scheme Kamber (ADP 2008-09)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). Estimated Cost:- 6.000 (Million)

(e). Amount of Bid Security:- 0.120 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). **Name of Procuring Agency:-** Public Health Engg: Divn: Kamber Shahdadt @ Kamber

(b). **Brief Description of Works:-** Repair & Renovation of Existing Mastoi Muhalla Tube Well site for Improvement & Extension of Urban Water Supply Scheme Kamber (ADP 2008-09)

(c). **Procuring Agency's address:-** Public Health Engg: Divn: Kamber Shahdadt @ Kamber

(d). **Estimated Cost:-** 2.000 (Million)

(e). **Amount of Bid Security:-** 0.040 (Million)

(f). **Period of Bid Validity (days):-** \_\_\_\_\_ (Not more than sixty days).

(g). **Security Deposit :- (including bid security):-** 10%

(h). **Percentage, if any, to be deducted from bills:-** 8%

(i). **Deadline for Submission of Bids along with time:-** 14/04/2015 upto 1.30 P.M.

(j). **Venue, Time, and Date of Bid Opening:-** 14/04/2015 upto 2.30 P.M.

(k). **Time for Completion from written order of commence: -** 06 Months.

(L). **Liquidity damages:-** \_\_\_\_\_

(m). **Deposit Receipt No: Date: Amount:** (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadtot @ Kamber

(b). Brief Description of Works:- Internal Electric fitting & Water Supply, Sanitation fitting @ City Pumping Station & Naurang Wah (Tube Well site) for Improvement & Extension of Urban Water Supply Scheme Kamber (ADP 2008-09)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadtot @ Kamber

(d). Estimated Cost:- 0.800 (Million)

(e). Amount of Bid Security:- 0.016 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). Brief Description of Works:- Construction of Water Supply Scheme of various villages (15 villages)  
Village Darya Khan Jatoi, Mitho Kariro & Arzi Gaibano Taluka Sijawal  
Junejo District Kamber Shahdadkot (ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). Estimated Cost:- 6.000 (Million)

(e). Amount of Bid Security:- 0.120 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer



## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). Brief Description of Works:- Construction of Water Supply Scheme of various villages (15 villages)  
Village Hassan Bhatti Taluka Sijawal Junejo District Kamber  
Shahdadkot (ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). Estimated Cost:- 3.000 (Million)

(e). Amount of Bid Security:- 0.060 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). Brief Description of Works:- Construction of Water Supply Scheme of various villages (15 villages)  
Village Purano Tharo & Khabbar Taluka Mirokhan District Kamber  
Shahdadkot (ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). Estimated Cost:- 8.000 (Million)

(e). Amount of Bid Security:- 0.160 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). **Name of Procuring Agency:-** Public Health Engg: Divn: Kamber Shahdaktot @ Kamber

(b). **Brief Description of Works:-** Construction of Water Supply Scheme of various villages (15 villages)  
Village Hashim Bhatti Taluka Shahdaktot District Kamber Shahdaktot  
(ADP 2013-14)

(c). **Procuring Agency's address:-** Public Health Engg: Divn: Kamber Shahdaktot @ Kamber

(d). **Estimated Cost:-** 5.500 (Million)

(e). **Amount of Bid Security:-** 0.110 (Million)

(f). **Period of Bid Validity (days):-** \_\_\_\_\_ (Not more than sixty days).

(g). **Security Deposit :- (including bid security):-** 10%

(h). **Percentage, if any, to be deducted from bills:-** 8%

(i). **Deadline for Submission of Bids along with time:-** 14/04/2015 upto 1.30 P.M.

(j). **Venue, Time, and Date of Bid Opening:-** 14/04/2015 upto 2.30 P.M.

(k). **Time for Completion from written order of commence: -** 06 Months.

(L). **Liquidity damages:-** \_\_\_\_\_

(m). **Deposit Receipt No: Date: Amount: (in words and figures)**

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdakt @ Kamber

(b). Brief Description of Works:- Construction of Water Supply Scheme of various villages (15 villages)  
Village Ali Ji Wandh Taluka Mirokhan District Kamber Shahdakt  
(ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdakt @ Kamber

(d). Estimated Cost:- 6.500 (Million)

(e). Amount of Bid Security:- 0.130 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). Brief Description of Works:- P/L/J & Testing P.E Pipe Rising Main, Pump House, Pumping Machinery  
25 BHP (3 Sets) for main disposal work under Construction of RCC  
Main Nala @ various places (06 Nos:) Shahdadkot (ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). Estimated Cost:- 25.000 (Million)

(e). Amount of Bid Security:- 0.500 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). Name of Procuring Agency:- Public Health Engg: Divn: Kamber Shahdadt @ Kamber

(b). Brief Description of Works:- P/L/J & Testing P.E Pipe Delivery Main, Pump House, Pumping Machinery 25 BHP (3 Sets) for Allah Abad disposal work under Construction of RCC Main Nala @ various places (06 Nos:) Shahdadt (ADP 2013-14)

(c). Procuring Agency's address:- Public Health Engg: Divn: Kamber Shahdadt @ Kamber

(d). Estimated Cost:- 24.000 (Million)

(e). Amount of Bid Security:- 0.480 (Million)

(f). Period of Bid Validity (days):- \_\_\_\_\_ (Not more than sixty days).

(g). Security Deposit :- (including bid security):- 10%

(h). Percentage, if any, to be deducted from bills:- 8%

(i). Deadline for Submission of Bids along with time:- 14/04/2015 upto 1.30 P.M.

(j). Venue, Time, and Date of Bid Opening:- 14/04/2015 upto 2.30 P.M.

(k). Time for Completion from written order of commence: - 06 Months.

(L). Liquidity damages:- \_\_\_\_\_

(m). Deposit Receipt No: Date: Amount: (in words and figures)

Executive Engineer

## BIDDING DATA

(This section should be filled in by the Executive Engineer/ Project Director (E.W) before issuance of the Bidding Documents).

(a). **Name of Procuring Agency:-** Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(b). **Brief Description of Works:-** Improvement & Extension of disposal work Kalar Muhalla consisting RCC Collecting Tank, Screening Chamber, Pump House, Staff Quarter & Compound Wall for Improvement & Extension of Urban Drainage Scheme Kamber (ADP 2008-09)

(c). **Procuring Agency's address:-** Public Health Engg: Divn: Kamber Shahdadkot @ Kamber

(d). **Estimated Cost:-** 6.000 (Million)

(e). **Amount of Bid Security:-** 0.120 (Million)

(f). **Period of Bid Validity (days):-** \_\_\_\_\_ (Not more than sixty days).

(g). **Security Deposit :- (including bid security):-** 10%

(h). **Percentage, if any, to be deducted from bills:-** 8%

(i). **Deadline for Submission of Bids along with time:-** 14/04/2015 upto 1.30 P.M.

(j). **Venue, Time, and Date of Bid Opening:-** 14/04/2015 upto 2.30 P.M.

(k). **Time for Completion from written order of commence: -** 06 Months.

(L). **Liquidity damages:-** \_\_\_\_\_

(m). **Deposit Receipt No: Date: Amount:** (in words and figures)

Executive Engineer

## Conditions of Contract

**Clause – 1: Commencement & Completion Dates of work.** The contractor shall not enter upon or commence any portion or work except with the written authority and instructions of the Executive Engineer-in-charge or of in subordinate-in-charge of the work. Failing such authority the contractor shall have no claim to ask for measurements of or payment for work.

The contractor shall proceed with the works with due expedition and without delay and complete the works in the time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall reckoned from the date on which the order to commence work is given to the contractor. And further to ensure good progress during the execution of the work, contractor shall be bound, in all in which the time allowed for completion of any work exceeds one month, to achieve progress on the prorate basis.

**Clause – 2: Liquidated Damages.** The contractor shall pay liquidated damages to the Agency at the rate per day stated in the bidding data for each day that the completion date is later than the Intended completion date; the amount of liquidated damage paid by the contractor to the Agency shall not exceed 10 per cent of the contract price. Agency may deduct liquidated damages from payments due to the contractor. Payment of liquidated damages does not affect the contractor's liabilities.

### **Clause – 3: Termination of the Contract.**

- (A) Procuring Agency/ Executive Engineer may terminate the contract if either of the following conditions exits:-
- (i) Contractor causes a breach of any clause of the Contract;
  - (ii) The progress of any particular portion of the work is unsatisfactory and notice of 10 days has expired;
  - (iii) In the case of abandonment of the work owing to the serious illness or death of the contractor or any other cause.
  - (iv) Contractor can also request for termination of contract if a payment certified by the Executive Engineer is not paid to the contractor within 60 days of the date of the submission of the bill;
- (B) The Engineer has power to adopt any of the following courses as may deem fit:-
- (i) To forfeit the security deposit available except conditions mentioned at A (iii) and (iv) above;
  - (ii) To finalize the work by measuring the work done by the contractor.



(C) In the event of any of the above courses being adopted by the Executive Engineer, the contractor shall have:-

- (i) no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advances on account of, or with a view to the execution of the work or the performance of the contract,
- (ii) However, the contractor can claim for the work done at site duly certified by the executive Engineer in writing regarding the performance of such work and has not been paid.

Executive Engineer may invite fresh bids for remaining work.

**Clause 4: Possession of the site and claims for compensation for delay.** The Executive Engineer shall give possession of all parts of the site to the contractor. If possession of site is not given by the date stated in the contract data, no compensation shall be allowed for any delay caused in starting of the work on account of any acquisition of land, water standing in borrow pits/ compartments or in according sanction to estimates. In such case, either date of commencement will be changed or period of completion is to be extended accordingly.

**Clause –5: Extension of Intended Completion Date.** The Procuring Agency either at its own initiatives before the date of completion or on desire of the contractor may extend the intended completion date, if an event (which hinders the execution of contract) occurs or a variation order is issued which makes it impossible to complete the work by the intended completion date for such period as he may think necessary or proper. The decision of the Executive Engineer in this matter shall be final; where time has been extended under this or any other clause of this agreement, the date for completion of the work shall be the date fixed by the order giving the extension or by the aggregate of all such orders, made under this agreement.

When time has been extended as aforesaid, it shall continue to be the essence of the contract and all clauses of the contract shall continue to be operative during the extended period.

**Clause –6: Specifications.** The contractor shall execute the whole and every part of the work in the most substantial and work-man-like manner and both as regards materials and all other matters in strict accordance with the specifications lodged in the office of the Executive Engineer and initialed by the parties, the said specification being a part of the contract. The contractor shall also confirm exactly, fully and faithfully to the designs, drawing, and instructions in writing relating to the work signed by the Executive Engineer in-charge and lodge in his office and to which the contractor shall be entitled to have access at such office or on the site of work for the purpose of inspection during office hours and the contractor shall, if he so requires, be entitled at his own expense to make or cause to be made copies of the specifications, and of all such designs, drawings, and instructions as aforesaid.

## **Clause – 7: Payments.**

- (A) **Interim/Running Bill.** A bill shall be submitted by the contractor as frequently as the progress of the work may justify for all work executed and not included in any previous bill at least once in a month and the Executive Engineer in-charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible before the expiry of ten days from the presentation of the bill, at any time depute a subordinate to measure up the said work in the presence of the contractor or his authorized agent, whose countersignature to the measurement list will be sufficient to warrant and the Executive Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

The Executive Engineer /Procuring Agency shall pass/certify the amount to be paid to the contractor, which he considers due and payable in respect thereof, subject to deduction of security deposit, advance payment if any made to him and taxes.

All such intermediate payment shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the Executive Engineer-in-charge from recoveries from final bill and rectification of defects and unsatisfactory items of works pointed out to him during defect liability period.

- (B) **The Final Bill.** A bill shall be submitted by the contractor within one month of the date fixed for the completion of the work otherwise Executive Engineer-in-charge's certificate of the measurements and of the total amount payable for the works shall be final and binding on all parties.

**Clause – 8: Reduced Rates.** In cases where the items of work are not accepted as so completed, the Executive Engineer-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on running account bills with reasons recorded in writing.

## **Clause – 9: Issuance of Variation and Repeat Orders.**

- (A) Agency may issue a Variation Order for procurement of works, physical services from the original contractor to cover any increase or decrease in quantities, including the introduction of new work items that are either due to change of plans, design or alignment to suit actual field conditions, within the general scope and physical boundaries of the contract.
- (B) Contractor shall not perform a variation until the Procuring Agency has authorized the variation in writing subject to the limit not exceeding the contract cost by of 15% on the same conditions in all respects on which he agreed to do them in the

work, and at the same rates, as are specified in the tender for the main work. The contractor has no right to claim for compensation by reason of alterations or curtailment of the work.

- (C) In case the nature of the work in the variation does not correspond with items in the Bill of Quantities, the quotation by the contractor is to be in the form of new rates for the relevant items of work, and if the Executive Engineer-in-charge is satisfied that the rate quoted is within the rate worked out by him on detailed rate analysis, and then only he shall allow him that rate after approval from higher authority.
- (D) The time for the completion of the work shall be extended in the proportion that the additional work bear to the original contract work.
- (E) In case of quantities of work executed result the Initial Contract Price to be exceeded by more than **15%**, and then Executive Engineer can adjust the rates for those quantities causing excess the cost of contract beyond 15% after approval of Superintending Engineer.
- (F) **Repeat Order:** Any cumulative variation, beyond the **15%** of initial contract amount, shall be subject of another contract to be tendered out if the works are separable from the original contract.

#### **Clause-10: Quality Control.**

- (A) **Identifying Defects:** If at any time before the security deposit is refunded to the contractor/during defect liability period mentioned in bid data, the Executive Engineer-in-charge or his subordinate-in-charge of the work may instruct the contractor to uncover and test any part of the works which he considers may have a defect due to use of unsound materials or unskillful workmanship and the contractor has to carry out a test at his own cost irrespective of work already approved or paid.
- (B) **Correction of Defects:** The contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require. The contractor shall correct the notified defect within the Defects Correction Period mentioned in notice.
- (C) **Uncorrected Defects:**
  - (i) In the case of any such failure, the Executive Engineer-in-charge shall give the contractor at least 14 days notice of his intention to use a third party to correct a defect. He may rectify or remove, and re-execute the work or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the contractor.

- (ii) If the Executive Engineer considers that rectification/ correction of a defect is not essential and it may be accepted or made use of; it shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

**Clause – 11:**

- (A) **Inspection of Operations.** The Executive Engineer and his subordinates, shall at all reasonable times have access to the site for supervision and inspection of works under or in course of execution in pursuance of the contract and the contractor shall afford every facility for and every assistance in obtaining the right to such access.
- (B) **Dates for Inspection and Testing.** The Executive Engineer shall give the contractor reasonable notice of the intention of the Executive Engineer-in-charge or his subordinate to visit the work shall have been given to the contractor, then he either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose, orders given to the contractor's duly authorized agent shall be considered to have the same force an effect as if they had been given to the contractor himself.

**Clause – 12: Examination of work before covering up.**

- (A) No part of the works shall be covered up or put out of view/beyond the reach without giving notice of not less than five days to the Executive Engineer whenever any such part of the works or foundations is or are ready or about to be ready for examination and the Executive Engineer shall, without delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such part of the works or of examining such foundations;
- (B) If any work is covered up or placed beyond the reach of measurement without such notice having been given, the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowance shall be made for such work, or for the materials with which the same was executed.

**Clause – 13: Risks.** The contractor shall be responsible for all risks of loss of or damage to physical property or facilities or related services at the premises and of personal injury and death which arise during and in consequence of its performance of the contract. if any damage is caused while the work is in progress or become apparent within three months of the grant of the certificate of completion, final or otherwise, the contractor shall make good the same at his own expense, or in default the Executive Engineer may cause the same to be made good by other workmen, and deduct the expenses from retention money lying with the Executive Engineer.

**Clause-14: Measures for prevention of fire and safety measures.** The contractor shall not set fire to any standing jungle, trees, bush-wood or grass without a written permit from the Executive Engineer. When such permit is given, and also in all cases when destroying, cutting or uprooting trees, bush-wood, grass, etc. by fire, the contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property. The contractor is responsible for the safety of all its activities including protection of the environment on and off the site. Compensation of all damage done intentionally or unintentionally on or off the site by the contractor's labour shall be paid by him.

**Clause-15:Sub-contracting.** The contractor shall not subcontract the whole of the works, except where otherwise provided by the contract. The contractor shall not subcontract any part of the works without the prior consent of the Executive Engineer. Any such consent shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as if these acts, defaults or neglects were those of the contractor, his agents' servants or workmen. The provisions of this contract shall apply to such subcontractor or his employees as if he or it were employees of the contractor.

**Clause – 16: Disputes.** All disputes arising in connection with the present contract, and which cannot be amicably settled between the parties, , the decision of the Superintending Executive Engineer of the circle/officer/one grade higher to awarding authority shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs drawings, and instructions, hereinbefore mentioned and as to the quality of workmanship, or materials used on the work or as to any other questions, claim, right, matter, or thing whatsoever in any way arising out of, or relating to the contract design, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the execution, of failure to execute the same, whether arising, during the progress of the work, or after the completion or abandonment thereof.

**Clause –17: Site Clearance.** On completion of the work, the contractor shall be furnished with a certificate by the Executive Engineer (hereinafter called the Executive Engineer in- charge) of such completion, but neither such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed all temporary structures and materials brought at site either for use or for operation facilities including cleaning debris and dirt at the site. If the contractor fails to comply with the requirements of this clause then Executive Engineer-in-charge, may at the expense of the contractor remove and dispose of the same as he thinks fit and shall deduct the amount of all expenses so incurred from the contractor's retention money. The contractor shall have no claim in respect of any surplus materials as aforesaid except for any sum actually realized by the sale thereof.

**Clause –18: Financial Assistance /Advance Payment.**

(A) **Mobilization advance** is not allowed.

(B) **Secured Advance against materials brought at site.**

- (i) Secured Advance may be permitted only against imperishable materials/quantities anticipated to be consumed/utilized on the work within a period of three months from the date of issue of secured advance and definitely not for full quantities of materials for the entire work/contract. The sum payable for such materials on site shall not exceed 75% of the market price of materials;
- (ii) Recovery of Secured Advance paid to the contractor under the above provisions shall be affected from the monthly payments on actual consumption basis, but not later than period more than three months (even if unutilized).

**Clause –19: Recovery as arrears of Land Revenue.** Any sum due to the Government by the contractor shall be liable for recovery as arrears of Land Revenue.

**Clause –20: Refund of Security Deposit/Retention Money.** On completion of the whole of the works (a work should be considered as complete for the purpose of refund of security deposit to a contractor from the last date on which its final measurements are checked by a competent authority, if such check is necessary otherwise from the last date of recording the final measurements), the defects notice period has also passed and the Executive Engineer has certified that all defects notified to the contractor before the end of this period have been corrected, the security deposit lodged by a contractor (in cash or recovered in installments from his bills) shall be refunded to him after the expiry of three months from the date on which the work is completed.

**Divisional Accounts Officer**

**Contractor**

**Executive Engineer**

**BILL OF QUANTITIES**

**(A) Description and rate of Items based on Composite Schedule of Rates.**

<b>Item No</b>	<b>Quantities</b>	<b>Description of item to be executed at site</b>	<b>Rate</b>	<b>Unit</b>	<b>Amount in Rupees</b>
1	2	3	4	5	6

**Amount TOTAL (a)**

----- % above/below on the rates of CSR.

**Amount to be added/deducted on the basis  
Of premium quoted.                      TOTAL (b)**

**Total (A) = a+b in words & figures:**

Contractor

Executive Engineer

**(B) Description and rate of Items based on Market (Offered rates)**

<b>Item No</b>	<b>Quantities</b>	<b>Description of item to be executed at site</b>	<b>Rate</b>	<b>Unit</b>	<b>Amount in Rupees</b>

**Total (B) in words & figures:**

Contractor

Executive Engineer



Summary of Bill of Quantities.

Cost of Bid

Amount

**1. (A) Cost based on Composite Schedule of Rates.**

**2. (B) Cost based on Non/Offered Schedule of Rates.**

TOTAL COST OF BID (C) = Total (A) + Total  
(B)

Contractor

Executive Engineer

# SCHEDULE 'B'

*Name of work: - Providing, Laying, Jointing & Testing P.E Pipe Trunk Main Distribution System i/c restoration of road Cutting for Improvement & Extension of Urban Water Supply Scheme Kamber*

*Head of A/C: - Annual Development Programme 2008-09*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## A: - P.E PIPE DISTRIBUTION SYSTEM

01. Dismantling & removing of road metalling **(CSI No: 51 P-13)**

**1000.00 cft** @Rs: 605/- P%cft **Rs: 6050/-**

02. Dismantling cement concrete plain 1:2:4 **(CSI No:19 (c) P-10)**

**1500.00 cft** @Rs: 3327/50 P%cft **Rs: 49913/-**

03. Dismantling cement concrete Plain 1:4:8 **(CSI No:19 (a) P-10)**

**1980.00 cft** @Rs: 1663/75 P%cft **Rs: 32942/-**

04. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5' and lead upto one chain. **(PHSI No:2,P-46)**

**208000.00 cft** @Rs: 3600/- P%0cft. **Rs: 748800/-**

05. Providing, Laying, & fixing in trenches i/c fitting . jointing & testing etc complete in all respects the high Density polyethylene P.E pipes (HDPE-100)for W/S confirming ISO DIN 8074/8075 B.S 3580& PSI 3051 **(PHSI No: 1, P-25) PN-08**

### 6" dia (160 mm O/D)

**4000.00 Rft** @Rs: 440/- P.Rft **Rs: 1760000/-**

### 4" dia (110 mm O/D)

**15000.00 Rft** @Rs: 224/- P.Rft **Rs: 3360000/-**

### 3" dia (90 mm O/D)

**15000.00 Rft** @Rs: 148/- P.Rft **Rs: 2220000/-**

06. Supplying C.I Sluice Valve heady pattern test pressure 21.0 K.g/ sq: cm or 300 lbs/sq: inch **Imported (PHSI No: 2 P-11 )**

**2 Nos:** 6" dia @Rs: 9360/- P.each **Rs: 9360/-**

**2 Nos:** 4" dia @Rs: 5460/- P.each **Rs: 10920/-**

**2 Nos:** 3" dia @Rs: 4290/- P.each **Rs: 8580/-**

07. Supplying and Providing M.S flange made out of M.S Sheet 3/8" **(Based on Schedule Parts )**

**2 Nos:** 6" dia @Rs: 804/77 P.each **Rs: 1610/-**

4 Nos:	<u>4" dia</u>	@Rs: 596/75	P.each	Rs: 2387/-
4 Nos:	<u>3" dia</u>	@Rs: 500/89	P.each	Rs: 2004/-
08. Supplying C.I Reducers ( <u>PHSI No: 11 P-15</u> )				
2 Nos:	<u>6"x3"</u>	@Rs: 893/75	P.each	Rs: 1788/-
2 Nos:	<u>6"x4"</u>	@Rs: 893/75	P.each	Rs: 1788/-
2 Nos:	<u>4"x3"</u>	@Rs: 568/75	P.each	Rs: 1138/-

### High Density Polyethylene Fitting (PE 100)

9. Supplying Elbow 45° (outer dia) (PHSMI No: A, P-18) (PN-10).

i) 6" dia (160 mm O/D)

2 Nos: @Rs: 3480/- P.each Rs: 20880/-

ii) 4" dia (110 mm O/D)

8 Nos: @Rs: 1655/- P.each Rs: 13240/-

iii) 3" dia (90 mm O/D)

8 Nos: @Rs: 1118/- P.each Rs: 8944/-

10. Supplying High Density P.E Equal Tee (outer dia) (PHSMI No: D, P-19) (PN-10)

i) 6" dia (160 mm O/D)

2 Nos: @Rs: 5219/- P.each Rs: 10438/-

ii) 4" dia (110 mm O/D)

4 Nos: @Rs: 2483/- P.each Rs: 9932/-

iii) 3" dia (90 mm O/D)

4 Nos: @Rs: 1676/- P.each Rs: 6704/-

11. Supplying High Density P.E Un-Equal Tee (outer dia) (PHSMI No: D, P-19) (PN-10)

i) 8"x3"x8" dia (200x90x200 mm O/D)

1 Nos: @Rs: 9028/- P.each Rs: 9028/-

ii) 6"x3"x6" dia (160x63x160 mm O/D)

8 Nos: @Rs: 3754/- P.each Rs: 30032/-

12. Supplying High Density P.E Elbow 90° (outer dia) (PHSMI No: F, P-19) (PN-10)

i) 6" dia (160 mm O/D) 1 x 4 = 4 Nos:

4 Nos: @Rs: 4349/- P.each Rs: 17396/-

ii) 4" dia (110 mm O/D)

10 Nos: @Rs: 2069/60 P.each Rs: 20690/-

iii) 3" dia (90 mm O/D)

10 Nos: @Rs: 1397/- P.each Rs: 13970/-

13. Supplying C.I Gibault Joints (PHSI No: 14 P-16)

(a). 8" dia 1 x 2 = 2 Nos:

2 Nos: @Rs: 1381/25 P.each Rs: 2763/-

(b). 6" dia 2 x 2 x 2 = 6 Nos:

4 Nos: @Rs: 1062/50 P.each Rs: 4250/-

(c). 4" dia 1 x 4 = 4 Nos:

4 Nos: @Rs: 731/25 P.each Rs: 2925/-

(d). 3" dia 1 x 4 = 4 Nos:

8 Nos: @Rs: 568/75 P.each Rs: 2275/-

14. Supplying flange Adapter. (M.R)

6" dia 2 Nos. @Rs: 2025/- P.each Rs: 4050/-

4" dia 4 Nos. @Rs: 1215/- P.each Rs: 4860/-

3" dia 4 Nos. @Rs: 675/- P.each Rs: 2700/-

15. Supplying High Density P.E Stable end places. (PHSMI No: G, P-20)

i) 6" dia (160 mm O/D)

2 Nos: @Rs: 4233/- P.each Rs: 8466/-

ii) 4" dia (110 mm O/D)

2 Nos: @Rs: 2020/- P.each Rs: 4040/-

16. Jointing C.I/ M.S. flanged pipes and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete (PHSI No.1 P-40).

2 Joints 6" dia @Rs: 938/- P.Joint Rs: 1876/-

4 Joints 4" dia @Rs: 513/- P.Joint Rs: 2052/-

4 Joints 3" dia @Rs: 499/- P.Joint Rs: 1996/-

17. Butt Fusion Joints (PHSI No.H P-20).

a) (50-90 mm O/D)

18 Joints @Rs: 600/ P.Joint Rs: 10800/-

b) (110-160 mm O/D)

22 Joints @Rs: 1000/ P.Joint Rs: 22000/-

c) (180-250 mm O/D)

6 Joints @Rs: 1800/ P.Joint Rs: 10800/-

18. Providing chamber 3½' x 2½" (1064x760mm) in side dimension 4½'(1372mm) deep as per approval design for sluice valve 3" to 12" with 18"(457 mm) dia inside cast iron cover and frame (wt: 1 cwt: 3 qr:) fixed in R.C.C 1:2:4 slab 4" (102mm) thick (with 5 lbs: steel per cft) 9" (229mm) thick brick masonry walls set in 1:6 cement mortar 6" (152mm) thick cement concrete 1:3:6 in foundation 1"(25mm) thick cement concrete 1:2:4 flooring ½" (12.50mm) thick cement plaster 1:3 to all inside wall surface and top i/c providing and fixing M.S foot rest at every one feet beyond 2½' depth curing excavation back filling and disposal of surplus earth etc complete. (PHSI No:1,P-40)

05 Nos: @Rs: 18820/- P.each. Rs: 94100/-

19. Refilling the excavated stuff in trenches in 6" thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. (PHSI No:24,P-53)

<b>191232.00 cft</b>	<b>@Rs: 2760/-</b>	<b>P%0cft.</b>	<b>Rs: 527800/-</b>
			<b>Rs: 9052449/-</b>

**Sub Work No.02: Restoration of Road Cutting**

01. Excavation in foundation of building, bridges & other structure i/c deg, belling dressing refilling around the structure with excavated earth watering, ramming lead upto 5 ft (b) in ordinary soil (GSI No:18, P-4)

<b>2000.00 cft.</b>	<b>@Rs: 3176/25</b>	<b>P%0cft.</b>	<b>Rs: 6352/-</b>
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02. C.C Brick or Stone Ballast 1 1/2 " to 2" gauge. 1:4:8. (CSI No.4 p-14).

<b>1320.00 cft.</b>	<b>@Rs: 9416/28</b>	<b>P%0cft.</b>	<b>Rs: 124295/-</b>
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03. C.C plain i/c placing compacting finishing and curing complete i/c screening and w/o stone aggregate w/o shuttering Ratio 1:4:8;(C.S.I No:5 Page14) Ratio 1:4:8

<b>1000.00 cft</b>	<b>@ Rs; 14429/25</b>	<b>P%0cft</b>	<b>Rs. 144293/=</b>
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04. Extra for every 50' additional lead or part thereof. (GSI No:8(a), P-3)

<b>2000.00 cft</b>	<b>@ Rs; 1914/82</b>	<b>P%0cft</b>	<b>Rs. 3830/=</b>
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**Total** **Rs: 278770/-**

**GENERAL ABSTRACT OF COST**

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. P.E Pipe Distt: system	Rs: 90,52,449/-	Rs: -	Rs: 90,52,449/-
02. Restoration of road cutting	Rs: 2,78,770/-	Rs: -	Rs: 2,78,770/-
<b>Total: -</b>	<b>Rs: 93,31,219/-</b>	<b>Rs: -</b>	<b>Rs: 93,31,219/-</b>

**1. CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
Public Health Engg: Division  
Kamber Shahdakt @ Kamber

# **SCHEDULE 'B'**

*Name of work:* - Providing Installing & Testing SIEMENS made Diesel / Gas Generator 200 KVA @ Naurang Wah Tube Well Site for Improvement & Extension Urban Water Supply Kamber

*Head of A/C:* - **Annual Development Programme 2008-09**

Qty:	S.No.	Item of work	Rate	Unit	Amount
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01. Supplying Diesel Generator Set with perk in engine & output 200 KVA (Standby)380/200 volts phase-III 50 Hz 1500 RMP (with started) batteries exhaust, silencer control panel etc complete. (R.A Attached).

**1 Set.** @ **Rs. 42,50,000/-** **P.Set** **Rs. 42,50,000/-**

02. Providing and laying (Main or Sub-Main) PVC insulated & PVC sheeted with 4 core copper conductor 600/1000 volts size 25 mm 2. (**Elect: Sch: 1 No.105, P-12**).

**Qty: 75 Meters** @**Rs: 3312/-** **P.Meter** **Rs: 2,48,400/-**

**Total** **Rs: 44,98,400/-**

## **2. CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**

# **SCHEDULE 'B'**

*Name of work: - Repair & Renovation of Existing Mastoi Muhalla Tube Well site for Improvement & Extension of Urban Water Supply Scheme Kamber*

*Head of A/C: - Annual Development Programme 2008-09*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## **A: - SHALLOW TUBE WELL (02 NOS:)**

01. Boring for tube well in all bearing soils from ground level upto 100' or 30.50 meters depth i/c sinking & with drawing of casing pipe. **(PHSI No: 1,P-36)**

**100.00 Rft:                    12" dia                    @Rs: 743/-                    P.Rft:                    Rs: 74300/-**

02. Taking & preserving in box 2 lbs: (1 K.g) samples of strata from bore holes. **(PHSI No:6,P-36)**

**08 Samples.                    @Rs:101/-                    P.each.                    Rs: 808/-**

03. Taking samples of water from bore holes and placing in two separate bottles. **(PHSI No:7,P-37)**

**4 Samples.                    @Rs:131/-                    P.each.                    Rs: 524/-**

04. Supplying & Installing PVC strainer 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:9,P-30)**

**60.00 Rft:                    8" dia.                    @Rs:554/05                    P.Rft:                    Rs: 33243/-**

05. Supplying & Installing PVC blind pipe 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:12,P-31)**

**40.00 Rft:                    8" dia.                    @Rs: 516/80                    P.Rft:                    Rs: 20672/-**

06. Shrouding with graded Bajri (3/8" to 1/8") or (9 to 3 mm) in between bore and blind pipe for the following diameters of strainers. **(PHSI No:13,P-31)**

**100.00 Rft:                    8"dia.                    @Rs: 105/-                    P.Rft:                    Rs: 10500/-**

07. Providing & Fixing of PVC end plug of approved quality **(PHSI No: 1, P-18)**

**01 No:                    @Rs: 1000/-                    P.each                    Rs: 1000/-**

08. Providing & Fixing of Bail Plug of approved quality **(PHSI No: 3, P-17)**

**01 No:                    @Rs: 2607/-                    P.each                    Rs: 2607/-**

09. Development of Tube Well. **(PHSI No:1,P-43)**

**100.00 Rft:                    @Rs: 200/80                    P.Rft:                    Rs: 20000/-**

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**Rs: 163654/-**

**2x163654 = Rs: 327308/-**

## **SUB WORK NO.02 WELL HEAD PIT**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5' **in ordinary soil (CSI No:18(b),P-4)**

**50.00 cft.** @Rs: 3176/25 P%0cft. Rs: 159/-

02. C.C Plain i/c placing, compacting, finishing & curing complete i/c screening and washing of stone aggregate without shuttering **(GSI No: 5, P-17)**

**Ratio 1:4:8**

**6.25 cft.** @Rs: 11288/75 P%0cft. Rs: 706/-

**Ratio 1:2:4**

**2.25 cft.** @Rs: 14429/25 P%0cft. Rs: 325/-

03. Pacca brick work in foundation and plinth in cement sand mortar 1:6 **(GSI No:4(e),P-25)**

**50.62 cft.** @Rs: 11948/36 P%0cft. Rs: 6048/-

04. Cement Plaster 1:4, ½" thick upto 20' height. **(GSI No:1(b),P-57)**

**96.00 sft.** @Rs: 2283/93 P%0sft. Rs: 2193/-

05. R.C.C work in roof, slab, beams, columns, rafts, lintels & other structural members laid in situ or precast laid in position etc complete. **Ratio 1:2:4 (GSI No:6(a), P-19)**

**10.12 cft.** @Rs: 337/- P.Cft. Rs: 3410/-

06. Fabrication of M.S reinforcement for C.C i/c cutting, bending, laying in position making joints fastening i/c cost of binding wire also i/cs removal of rust from bars. **(GSI No: 7(ii), P-20)**

**0.40 cwt.** @Rs: 5001/70 P.Cwt. Rs: 2001/-

**Total:-** Rs: 14842/-

**2x14842/- =** Rs: 29684/-

## **SUB WORK NO.03 A.C ELECTRIC PUMPING MACHINERY.**

### **ELECTRIC PUMPING SET 15 BHP.**

1. Supplying & installing in position i/c transportation to site of **work at Mastoi Tube Well site for Urban Water Supply Scheme Kamber**, A.C Electric Pumping set consisting of A.C electric Motor of (SIMENS made) of 15 BHP 3 phase 50 cycles 400/420 volts of 2900 RPM (Siemens made) (type ILA7-166-2AA 60) coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 100 glns: per minute against a head of 165 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8" to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts and over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole and neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: and amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3'x2 ½' i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1") PVC conduit on surface as required i/c providing and fixing earthing set with 0.6Mx0.6Mx5.3MM(2'x2'x ½) copper plate buried in the ground at depth of 3.7M(12') or less as per Pak PWD specification and testing for the pumping set against the required head of 72 hours etc complete. **(R.A Approved).**

**Qty: 1 Set.** @ Rs. 312000/- P.Set. Rs.312000/-

**Total: -** Rs: 312000/-



**SUB WORK NO.04. INTER CONNECTION FOR PUMPING MACHINERY**

01.	Providing, laying & fixing in trenches i/c fitting jointing & testing etc complete in all respect the high density polyethylene P.E Pipes (HDPE-100) for W/S confirming ISO 4427/ DIN8074/8075 BS 3580 & PSI 3051 <b><u>(PHSI No.1 P-25) (PN-8).</u></b>			
	<b>55.00 rft</b>	<b>@Rs: 178/-</b>	<b>P.rft</b>	<b>Rs: 9790/-</b>
02.	C.I Bend with flanged end with holes <b><u>(PHSMI No:4, P-8)</u></b>			
	<b>0.52 cwt</b>	<b>@Rs: 6096/-</b>	<b>P.Cwt</b>	<b>Rs: 3170/-</b>
03.	Supplying Reflex Valve heavy pattern test pressure 300 lbs./sq: inch imported <b><u>(PHSMI No: 6, P-10)</u></b>			
	<b>Qty: 2 Nos: 3" dia</b>	<b>@Rs: 1543/75</b>	<b>P.each</b>	<b>Rs: 3088/-</b>
04.	Supplying C.I Sluice Valve heavy pattern test pressure 21.0 K. g/ cm or 300 lbs: / sq: inch (Imported) <b><u>(PHSMI No:2, P-9)</u></b>			
	<b>Qty: 1 Nos: 3" dia</b>	<b>@Rs: 4290</b>	<b>P.each</b>	<b>Rs: 4290/-</b>
05.	Supplying M.S Flanges <b><u>(PHSMI No:12, P-17)</u></b>			
	<b>Qty: 12 Nos:</b>	<b>@Rs: 500/89</b>	<b>P.each</b>	<b>Rs: 6011/-</b>
06.	Supplying Flange Adapter for P.E Pipe <b><u>(R.A Approved)</u></b> <b><u>90mm O/D</u></b>			
	<b>Qty: 12 Nos:</b>	<b>@Rs: 675/-</b>	<b>P.each</b>	<b>Rs: 8100/-</b>
07.	Butt Fusion Joint <b><u>(PHSMI-H, P-20)</u></b>			
	<b>12 Joints</b>	<b>@Rs: 600/-</b>	<b>P.Joint</b>	<b>Rs: 7200/-</b>
08.	Supplying Foot Valve Check valve heavy pattern with cone type gate. <b><u>(PHSI No: 2, P-9)</u></b>			
	<b>01 No: 3" dia</b>	<b>@Rs:731/25</b>	<b>P.each</b>	<b>Rs: 731/-</b>
09.	Supplying G.I Pipe Approved Quality. <b><u>(R.A Approved)</u></b>			
	<b>Qty: 12 Nos:</b>	<b>@Rs: 304/02</b>	<b>P.each</b>	<b>Rs: 2432/-</b>
10.	Supplying C.I Taper flat bottom or central bottomed flanged ends with holes i/c turning and facing of flanges all size. <b><u>(PHSMI No:9, P-10)</u></b>			
	<b>0.187 cwt</b>	<b>@Rs: 6096/-</b>	<b>P.Cwt</b>	<b>Rs: 1140/-</b>
11.	Supplying C.I Short pieces. <b><u>(PHSI No:9, P-13)</u></b>			
	<b>01 No: 3" dia</b>	<b>@Rs: 375/-</b>	<b>P.each</b>	<b>Rs: 375/-</b>
12.	Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete <b><u>(PHSI No.1 Page-33).</u></b>			
	<b>Qty: 12 Joints</b>	<b>@Rs: 499/-</b>	<b>P.Joint</b>	<b>Rs: 5988/-</b>
			<b>Total: -</b>	<b>Rs: 52315/-</b>
	<b>For 02 Nos: Pumping Sets</b>	<b>2x52315/-</b>	<b>=</b>	<b>Rs: 104630/-</b>

## **SUB WORK NO.05 REPAIR OF CIVIL WORK @ MASTOI TUBE WELL SITE**

01. Dismantling cement concrete reinforced separating reinforcement from concrete cement cleaning & straightening the same (CSI No.20 P-10)
- Qty: 234.37 cft @ Rs.5445/= P%cft Rs.12761/=**
02. Removing cement or lime plaster (CSI No.53 P-13)  
For deteriorated cement plaster inner & outer Pump House.
- Qty: 1680 Sft @ Rs.121/= P%Sft Rs.2033/=**
03. Pacca Brick work in ground floor in cement sand mortar Ratio 1:6 (CSI No.5 P-20)  
As the existing pump houses were constructed 26 years back now they has been depressed. So it is essential to rains ups these pump house from rain water, by raising roofs and floors.
- Qty: 393.75 Cft @ Rs.12674/36 P%Cft Rs.49905/=**
04. R.C.C work in roofs slabs beams columns rafts, lintels and other structural members laid in situ pre cost laid in position completed in all respects. **Ratio 1:2:4** (CSI No.6-a, P-16)
- Qty: 207.55 cft @ Rs.337/= P.Cft Rs.69944/=**
05. Fabrication of Mild steel reinforcement for cement concrete i/c cutting, banding, laying in position, making joints and fastenings i/c cost of binding wire (also i/c removal of rust from bars) (CSI No.8-a P-16)
- Qty: 8.33 cwt @ Rs.5001/70 P.Cwt Rs.41664/=**
06. Bars on Pit excavation undressed. (60.00 ft. to 100 ft.)
- Qty: 1152.00 cft @ Rs.7419/50 P%cft Rs.1064/=**
07. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5' in ordinary soil (CSI No:18,P-6)
- 60.48 cft. @Rs: 3176/25 P%0cft. Rs: 192/-**
08. Cement concrete brick or stone ballast ½"x2" gauge (1:4:8). (GSI No:4,P-14)
- 178.56 Cft. @Rs: 9416/28 P%Cft. Rs: 16814/-**
09. Pacca brick work in foundation and plinth in cement san mortar in 1:6 (GSI No:4(e),P-25)
- 108.00 Cft. @Rs: 11948/36 P%cft. Rs: 12904/-**
10. Cement Plaster (1:4) up to 12' height ½" thick (CSI No.11(6) P-51)
- Qty: 162.00 sft @ Rs.2283/93 P%/sft Rs.3700/=**
11. Cement Plaster 1:5, ½" thick upto 12' height. (CSI No: 11, P-51)
- 1986.00 sft. @Rs: 2206/60 P%sft. Rs: 43823/-**
12. Cement Plaster 1:4, 3/8" thick upto 12' height. (CSI No:11,P-53)
- 1986.00 sft. @Rs: 2197/52 P%sft. Rs: 43643/-**

13.	Fabrication of heavy steel with angles tees flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting drilling riveting handling assembling and fixing but excluding Errection in position. <u>(GSI No: 2, P-90)</u>			
	<b>2.03 cwt.</b>	<b>@Rs: 6420/61</b>	<b>P.Cwt.</b>	<b>Rs: 13034/-</b>
14.	Providing and laying 1” thick to toping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panels. <u>3” Thick. (GSI No.16, P-42)</u>			
	<b>552.00 Sft.</b>	<b>@Rs: 4000/-</b>	<b>P%Sft.</b>	<b>Rs: 12000/-</b>
15.	Repair of Steel Doors of Pump Houses, by replacing pieces of rusted angle, iron, angle iron & sheets i/c welding etc complete. <u>(GSI No. , P- )</u>			
	<b>Qty: 03 Jobs</b>	<b>@Rs: 6000</b>	<b>P%Sft.</b>	<b>Rs: 18000/-</b>
16.	Primary coats of chalk distemper. <u>(CSI No.23, P-53)</u>			
	<b>2287.50 Sft.</b>	<b>@Rs: 442/75</b>	<b>P%Sft.</b>	<b>Rs: 10128/-</b>
17.	Distemping two coats <u>(CSI No.24, P-53)</u>			
	<b>2287.50 sft</b>	<b>@ Rs.1043/90</b>	<b>P%Sft</b>	<b>Rs.23879/=</b>
18.	Painting old surface, painting doors & windows <u>(CSI No.4 P-67)</u>			
	<b>219.00 sft</b>	<b>@ Rs.1160/06</b>	<b>P%sft</b>	<b>Rs.2541/=</b>
			<b>Total</b>	<b>Rs: 391179/-</b>

#### **SUB WORK NO.04: REPAIR OF M&E WORKS**

01.	Rewinding of Electric Motor 3 Phase 400/440 Volts, 50 W/Cs with set quality insolated copper wire of required gauge i/c testing on load with satisfactory result upto one week’s time opening & refitting & replacing the bolts of necessary excluding the cost of work out material <u>(CSI No:97, P-109)</u>			
	<b>Qty: 15 BHP= 2 Nos.</b>	<b>@ Rs.14500/=</b>	<b>P.each</b>	<b>Rs.29000/=</b>
02.	Repair of KSB centrifugal pump i/c change of ball bearing, M.S shaft-bushes & impeller etc complete i/c testing with required discharge & head upto 72 homes with satisfactory <u>(MR)</u>			
	<b>Qty: 1x2= 2 Jobs</b>	<b>@ Rs.10000/=</b>	<b>P.each</b>	<b>Rs.20000/=</b>
03.	Supplying & fixing Automatic Motor Control Unit (MCU) Consist oil Starter (MEECO Pakistan) MCCB Breaker 10-A to 50-A (Shitlin Taiwan) Cutout 60 AMPS (China) Phase indication light (China) i/c Transformer oil (2.0 liters) Panel Board size (18”x26”x9”) and interval waving etc complete <u>(R.A approved).</u>			
	<b>Qty: 2 Nos.</b>	<b>@ Rs.29200/=</b>	<b>P.each</b>	<b>Rs. 58400/=</b>
			<b>Total</b>	<b>Rs. 107400/=</b>

# **GENERAL ABSTRACT OF COST**

	<b><u>Schedule Items</u></b>	<b><u>Non Sch: Items</u></b>	<b><u>G. Total</u></b>
01. Tube Well	Rs: 3,27,308/-	Rs: -	Rs: 3,27,308/-
02. Well Head Pit	Rs: 29,684/-	Rs: -	Rs: 29,684/-
03. Pumping Machinery	Rs: -	Rs: 3,12,000/-	Rs: 3,12,000/-
04. Inter Connection	Rs: 83,566/-	Rs: 21,064/-	Rs: 1,04,630/-
05. Repair of Civil Work	Rs: 3,91,179/-	Rs: -	Rs: 3,91,179/-
06. Repair of M & E Works	Rs: 29,000/-	Rs: 78,400/-	Rs: 1,07,400/-
	<hr/>		
<b>Total: -</b>	<b>Rs: 8,60,737/-</b>	<b>Rs: 4,11,464/-</b>	<b>Rs: 12,72,201/-</b>

## **CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**

# SCHEDULE 'B'

*Name of work: - Internal Electrification & Water Supply Sanitary Fittings @ City Pumping Station and Naurang Wah Tube Well Site for Improvement & Extension of Urban Water Supply Scheme Kamber*

*Head of A/C: - Annual Development Programme 2008-09*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## A: - INTERNAL ELECTRIFICATION

01. Wiring for plug or fan point with 3/029PVC insulated wire in 20mm (3/4") channel Patti on surface as required (Second Edition 2012). (S.No:129,P-15)

**16 Points** @Rs: 742/- P.Point Rs: 11872/-

02. Wiring for plug point with 3/029PVC insulated wire in 20mm (3/4") channel Patti on surface as required (Second Edition 2012). (S.No:130,P-15)

**146 Points** @Rs: 910/- P.Point Rs: 132860/-

03. Providing and laying (Main or Sub-Main) PVC insulated with size 2-7/044 (6mm<sup>2</sup>) Copper conductor in 3/4" dia PVC conduit on surface. (Second Edition 2012). (S.No:3,P-1)

**1x20 = 20 Meters** @Rs: 200/- P.Meter Rs: 4000/-

04. Providing and laying (Main or Sub-Main) PVC insulated with size 2-7/044 (6mm<sup>2</sup>) Copper conductor in 1" dia PVC conduit on surface. (Second Edition 2012). (S.No:5,P-1)

**120 Meters** @Rs: 305/- P.Meter Rs: 36600/-

05. Providing and fixing one way S.P 5 amps switch flush type.. (Second Edition 2012). (S.No:219,P-33)

**162 Nos:** @Rs: 54/- Each Rs: 8748/-

06. Providing and fixing two pin 5 amps plug & socket flush type. (Second Edition 2012). (S.No:225,P-33)

**16 Nos:** @Rs: 83/- Each Rs: 1328/-

07. Providing and fixing Brass Batten holders. (Second Edition 2012). (S.No:232,P-33)

**61 Nos:** @Rs: 70/- Each Rs: 4270/-

08. Providing and fixing Bras back-light ceiling rose with two terminal(2nd Edition 2012). (S.No:228,P-33)

**10 Nos:** @Rs: 72/- Each Rs: 720/-

09. Providing and fixing Brass ceiling fan 56" (good quality). (Second Edition 2012). (S.No:235,P-33)

**10 Nos:** @Rs: 3185/- Each Rs: 31850/-

10. Providing & fixing 3 pin 15 amps flush type S.P plug socket switch & shoe unit on given board recessed in the walls or columns & covered with plastic sheet. (S.No:18,P-11)

**02 Nos:** @Rs: 156/97 Each Rs: 324/-

11. Fixing A.C ceiling fan regulator on S.W Board (S.No:01(b),P-14)

**10 Nos:** @Rs: 91/30/- Each Rs: 913/-

12. Providing & fixing breakers 6 Amps to 63 Amps D.P i/c fixing on a prepared board and necessary connection (S.No:02,P-20)

**04 Nos:** @Rs: 948/02 Each Rs: 3792/-

**Total Rs: 237277/-**

## **B: - INTERNAL W/S & SANITATION FITTING**

01. Providing & Fixing type white glazed earthen ware w.e pan with i/c the cost of flushing cistern with internal fitting and flush pipe with bend & making requisite number of holes in walls plinth & floor for pipe connection & making in C.C 1:2:4 etc w.e of not less than 19" clear opening between flushing rims and 3 gallons flushing tank with 4" dia C.I tape and C.I thimble.. **(W.S.S.I No:1,P-01)**

**02 Nos:** @Rs: 4802/60 P.Nos. Rs: 9605/-

02. Providing & Fixing 24"x18" lavatory basin in white glazed earthen ware complete with & i/c the cost of W.I or C.I cantilever breakers 6" inches built into walls painted white in two coat after a primary coat of red lead paint a pair or ½" dia rubber plug & chrome plated brass chain 1-4/4" dia malleable iron or C.P brass traps malleable in walls plinth & floor for pipe connection and making good in C.C 1:2:4**(W.S.S.I No:1,P-01)**

**02 Nos:** @Rs: 4253/90 P.Nos. Rs: 8508/-

03. Additional extra for labour for providing & fixing of earthen ware pedestal white or colored glazed etc. **(W.S.S.I No:8,P-03)**

**02 Nos:** @Rs: 2533/47 P.Nos. Rs: 5067/-

04. Supplying & Fixing Fiber glass tank of approved quality & design and wall thickness as specified i/c cost of nuts bolt and fixing platform or cement concrete 1:3:6 and making connection for inlet & outlet and over flow pipe etc complete. **(W.S.S.I No:3(a),P-21) 250 gallons wall thickness 3.50mm best quality.**

**02 Nos:** @Rs: 21989/61 P.Nos. Rs: 43979/-

05. Providing & Fixing or 6"x2" C.I floor trap of the approved self cleaning design with a C.I serewed down grating with or without a vent arm complete with & i/c making requisite number of holes in walls plinth & floor for pipe connection & making good C.C 1:2:4 **(W.S.S.I No:20, P-06)**

**02 Nos:** @Rs: 2024/43 P.Nos. Rs: 4049/-

06. Providing & Fixing ½" dia lead connection complete with a ½" dia brass stop cockes two bras nuts & lining jointed to lead pipe with plumber wiped solder joints ½" inch lead pipe to be of not less than 4 lbs local yard. **(S.I No:22, P-06)**

**02 Nos:** @Rs: 689/70 P.Nos. Rs: 1379/-

07. Providing & fixing 4" dia C.I soil & vent pipe i/c outing and fitting and extra painting to match the colour of the building **(W.S.S.I No:01, P-09)**

**20.00 Rft** @Rs: 333/29 P.Rft Rs: 6666/-

08. Providing & fixing in position nylon connections complete with ½" dia brass stop cock with pair of brass nuts and bolts lining joints to nylon connection **(W.S.S.I No:23, P-06)**

**02 Nos:** @Rs: 447/15 P. Nos. Rs: 894/-

09. Providing & Fixing 4" dia C.I branch of the required degree with access doors, rubber washer ¾" thick and bolts and nuts and extra painting to match the colour of building **(W.S.S.I No:3, P-9)**

**06 Nos:** @Rs: 702/- P. Nos. Rs: 4212/-

10. Providing & Fixing 4"x4x4" dia plain C.I branch of the required degree i/c extra painting to match the colour of the building. **(W.S.S.I No:7, P-9)**

**06 Nos:** @Rs: 704/20 P. Nos. Rs: 4225/-

11. Providing G.I Pipes specials and clamps etc i/c fixing cutting & fixing completer with and i/c the cost of breaking through walls and roof making good etc painting two coats after cleaning the pipe etc with white Zink paint with pigment to match the colours of the building and testing with water to a pressure head of 200' ft. and handling **(S.I No:1, P-12)**

½" Dia 1x100.00 = 100.00 Rft @Rs: 73/21 P.Rft Rs: 7321/-

¾" Dia 1x100.00 = 100.00 Rft @Rs: 95/79 P.Rft Rs: 9579/-

1" Dia 1x50.00 = 50.00 Rft @Rs: 128/55 P.Rft Rs: 6428/-

12. Supplying & fixing position brass bib cocks ½” dia brass bib cocks standard patterns (W.S.I No:a(a),P-16)

**10.00 Rft** @Rs: 377/92 **P.Rft** **Rs: 3779/-**

13. Supplying & fixing full way gun metal valves with wheels threaded or flanged ends with rubber washers ¾” dia (Light Pattern).

**03 Nos:** @Rs: 197/12 **P. Nos.** **Rs: 591/-**

14. Providing RCC pipe with colours class ‘B’ and digging the trenches to required depth & fixing in position i/c cutting fitting and jointing with asphalted composition & cement mortar 1:1 and testing with water pressure to a hand of 4 feet above the top of the highest pipe & refilling with excavated staff © 6” dia R.C.C Pipe Class ‘B’. (S.I No:2(c), P-23)

**6” Dia 1x100.00 = 100.00 Rft** @Rs: 199/25 **P.Rft** **Rs: 19925/-**

**12”Dia 1x50.00 = 50.00 Rft** @Rs: 401/97 **P.Rft** **Rs: 20099/-**

15. Providing & fixing approved @ single phase 1.0 BHP Pumping Set coupled with piston pump complete. (C.S.I No: , P- )

**01 Set** @Rs: 5275/- **P.Nos.** **Rs: 5275/-**

16. Providing & Supplying Hand Pumps i/c material & pipe. (R.A Approved)

**01 Job** @Rs: 4000/- **P.Job** **Rs: 4000/-**

17. Boring of Tube well in all water bearing soils from ground level upto 100ft depth i/c sinking and with drawing of casing pipe (PHSI No.1, P-41)

**80.00 Rft** **3” dia** @Rs: 160/- **P.Rft** **Rs: 12800/-**

18. Split tiles ¼” thick matt glazed or double glazed jointed in which cement and laid over 1:2 grey cement sand mortar ¾” thick i/c finishing complete (Flooring & Facing). (CSI No.69, P-48)

**412.00 Sft** @Rs: 21021/11 **P%Sft** **Rs: 86607/-**

**Total** **Rs: 264988/-**

## **GENERAL ABSTRACT OF COST**

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. Internal Electrification	Rs: 2,37,277/-	Rs: -	Rs: 2,37,277/-
02. Restoration of road cutting	Rs: 2,64,988/-	Rs: -	Rs: 2,64,988/-
<b>Total: -</b>	<b>Rs: 5,02,265/-</b>	<b>Rs: -</b>	<b>Rs: 5,02,265/-</b>

## **CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**

# **SCHEDULE 'B'**

Name of work: - *Construction of Water Supply Schemes of various villages (15 villages) village Darya Khan Jatoi, Mitho Karriro & Arzi Gaibano Taluka Sijawal Junejo District Kamber Shahdadkot*

Head of A/C: - *Annual Development Programme 2013-14*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## **A: - TUBE WELLS**

01. Boring for tube well in all bearing soils from ground level upto 100' or 30.50 meters depth i/c sinking & with drawing of casing pipe. (PHSI No: 1,P-41)

**100.00 Rft:**                      **12" dia**                      **@Rs: 743/-**                      **P.Rft:**                      **Rs: 74300/-**

02. Providing strong substantially built wooden locked with compartment for preserving 2 lbs (1 K.g) samples strata. (PHSI No: 5,P-43)

**01 Nos:**    **@Rs: 3530/-**                      **P.Rft:**                      **Rs: 3530/-**

03. Providing & Preserving inbox 2 lbs (1 K.g) sample of strata from bore holes. (PHSI No: 5,P-43)

**4 Samples.**    **@Rs:101/-**                      **P.each.**                      **Rs: 404/-**

04. Taking samples of water from bore holes and placing in two separate bottles. (PHSI No:7,P-37)

**4 Samples.**    **@Rs:131/-**                      **P.each.**                      **Rs: 524/-**

05. Supplying & Installing PVC blind pipe 'B' class of approved design, quality and make i/c necessary sockets etc complete. (PHSI No:12,P-31)

**39.00 Rft:**                      **8" dia.**                      **@Rs:516/80**                      **P.Rft:**                      **Rs: 20155/-**

06. Supplying & Installing PVC strainer 'B' class of approved design, quality and make i/c necessary sockets etc complete. (PHSI No:9,P-30)

**64.00 Rft:**                      **8" dia.**                      **@Rs: 554/05**                      **P.Rft:**                      **Rs: 35459/-**

07. Providing & Fixing M.S bail plug. (PHSI No: 8, P-43)

**1 No:**    **8" dia**                      **@Rs: 2607/-**                      **P.each**                      **Rs: 2607/-**

08. Shrouding with graded Bajri (3/8" to 1/8") or (9 to 3 mm) in between bore and blind pipe for the following diameters of strainers. (PHSI No:13,P-45)

**100.00 Rft**                      **8" dia**                      **@Rs: 105/-**                      **P.each**                      **Rs: 10500/-**

09. Development of Tube well. (PHSI No: 8,P-43)

**100.00 Rft**    **@Rs: 200/-**                      **P.each**                      **Rs: 20000/-**

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**Rs: 167479/-**

**For 4 Nos: x 167479/- = Rs: 669916/-**

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## **B: - PUMP HOUSE**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5'in ordinary soil **(CSI No:18,P-6)**

**147.50 cft.** @Rs: 3176/25 P%0cft. Rs: 468/-

02. Cement concrete brick or stone ballast 1 ½" to 2" gauge. Ratio 1:2:4 **(CSI No:4,P-14)**

**61.71 Cft.** @Rs: 9416/28 P%cft. Rs: 5811/-

03. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**158.20 Cft.** @Rs: 11948/36 P%cft. Rs: 18902/-

04. D.P.C with cement sand and shingle concrete 1:2:4 i/c 2 coat of asphaltic mixture **(G.S.I No. P-18)**  
**3" thick**

**39.55 Cft.** @Rs: 4982/18 P%cft. Rs: 1970/-

05. Filling Watering and ramming earth in floor with new earth excavated from out side lead upto 1 chain and lift upto 5' **(G.S.I No.22 P-4)**

**145.54 Cft.** @Rs: 3630/- P%0cft. Rs: 528/-

06. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**245.24 Cft.** @Rs: 12674/36 P%cft. Rs: 31083/-

07. R.C.C work i/c all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface i/c screening and washing of shingle (1) R.C work in roof slab members laid in situ or precast laid in position complete in a respect (i) Ratio 1:2:4 90 lbs cement 2 cft sand 4 cft shingle 1/8" to ¼" gauge **(GSI No.6, P-17)**

**70.50 Cft.** @Rs: 337/- P.Cft. Rs: 23759/-

08. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of biding wire also includes removal of rust from bars **(GSI No.7(ii)(a), P-19)**

**2.83 Cwt.** @Rs: 5001/70 P.Cwt. Rs: 14155/-

09. Providing and laying 3" thick to toping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panel. **(GSI No.16, P-42)**

**64.00 Sft.** @Rs: 4411/82 P%Sft. Rs: 2824/-

10. Cement Plaster 1:6, ½" thick upto 12' height. **(CSI No: 11, P-58)**

**273.25 sft.** @Rs: 2206/60 P%sft. Rs: 6030/-

11. Cement Plaster 1:4, 3/8" thick upto 12' height. **(CSI No:11,P-53)**

**273.25 sft.** @Rs: 2197/52 P%sft. Rs: 6005/-

12. Cement pointing struck joints on walls 1:3 **(CSI No.19 p-28).**

**333.25 sft.** @Rs: 1213/58 P%sft. Rs: 4044/-

13. Making and Fixing steel grated doors with 1/16" thick & ¼" sq: bars @ 4: c/c locking arrangements. **(CSI No:24,P-91)**

**22.75 sft.** @Rs: 726/72 P.Sft. Rs: 16533/-

14. Fabrication of heavy steel work with angles tees, flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting tanks i/c cutting drilling riveting handling assembling and fixing but excluding erection in position. **(CSI No.2, P-91)**

**2.03 Cwt.** @Rs: 4928/49 P.Cwt. Rs: 10005/-

15. Errection and fitting in position of iron trusses staging of water tanks etc. **(CSI No:3, P-91)**

**2.03 sft.** @Rs; 271/04 P.Sft. Rs: 550/-

16. Supplying and fixing in position iron / steel grill of ¾"x ½" size flat iron of approved design i/c painting 3 coats etc complete. **(CSI No:26, P-93)**

**24.00 sft.** @Rs; 180/50 P.Sft. Rs: 4332/-

### **PAINTING NEW SURFACE**

17. Preparing surface and painting of door and window any type i/c Edges 3 coats. **(GSI No:5, P-69)**

**93.50 sft.** @Rs; 2116/41 P%Sft. Rs: 1979/-

18. White washing one coat. **(GSI No:26, P-53)**

**136.00 sft.** @Rs: 416/63 P%Sft. Rs: 567/-

19. Colour washing 2 coats. **(GSI No:25, P-53)**

**606.50 sft.** @Rs: 859/90 P%Sft. Rs: 5215/-

**Total** Rs: 154760/-

**4x154760/- = Rs: 619040/-**

## **C: - PUMPING MACHINERY**

### **a). A.C Electric Pumping Set 7.50 BHP**

01. Supplying & installing in position i/c transportation to site of work Electric Pumping set consisting of A.C electric Motor of **7.50 BHP** made (KSB) 3 phase 50 cycles 400/420 volts of 1500 RPM type ILA7-130-4AA 60 coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 125 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8" to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts & over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole & neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: & amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3'x2 ½' i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1") PVC conduit on surface as required i/c providing & fixing earthing set with 0.6Mx0.6Mx5.3MM(2'x2'x ½) copper plate buried in the ground at depth of 3.7M(12') or less as per Pak PWD specification & testing for the pumping set against the required head of 72 hours etc complete. **(Approved R.A)**

**Qty: 4 Sets** @ Rs. 267000/- P.Set. Rs. 1068000/-

### **b). Diesel Engine Set 16 BHP**

01. Supplying & Installing in position i/c transportation to site of work Diesel Engine Pumping set consisting of Diesel Oil Engine **16 BHP** made (Golden made) fixed handle starter 2200 RPM i/c all accessories coupled with KSB Centrifugal ETA NORM pump Type (ETA-40-200) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 100 ft Pulley & Belt i/c installing of pumping set on cement concrete foundation (1:2:4) & Ratio 1:4:8 with stone ballast with M.S nuts bolts of 1/2" to be embedded in C.C foundation and testing for the pumping set against the required head of 72 hours etc. **(Approved R.A)**

**Qty: 2 Sets.** @ Rs. 236500/- P.Set. Rs. 473000/-

**Total** Rs: 1541000/-

## **D: - INTER CONNECTION**

01. Providing laying and fixing trenches i/c fitting, jointing and testing etc: complete in all respect the high Density polyethylene P.E pipes (HDPE-100) for W/S confirming ISO 4427/DIN 8074/8075 B.S 3580 & PSI 3051 **(PHSI-1, P-25)**

**60.00 Rft** @ Rs. 178/- P.Rft. Rs. 10680/-

02. Supplying M.S Flanges **(PHSMI No:12, P-17)**

<b>Qty: 12 Nos:</b>	<b>3" dia</b>	<b>@Rs: 500/89</b>	<b>P.each</b>	<b>Rs: 6011/-</b>
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03. C.I Sluice valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq inch. **(PHSMI No:1, P-11)**

<b>Qty: 01 Nos:</b>	<b>3" dia</b>	<b>@Rs: 4290/-</b>	<b>P.each</b>	<b>Rs: 4290/-</b>
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04. C.I Bend with flanges end with holes i/c turning & facing of flanges (for all sizes). **(PHSMI No:1, P-11)**

<b>0.83 Cwt</b>		<b>@Rs: 6096/-</b>	<b>P.Cwt</b>	<b>Rs: 5060/-</b>
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05. Supplying Reflex Valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq: inch**(PHSMI No:C, P-11)**

<b>Qty: 2 Nos:</b>	<b>3" dia</b>	<b>@Rs: 1543/75</b>	<b>P.each</b>	<b>Rs: 3088/-</b>
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06. C.I tapered flat bottomed or central tapered flanged end with holes i/c turning facing flanged all sizes. **(PHSMI No:7, P-11)**

<b>0.20 Cwt</b>		<b>@Rs: 6096/-</b>	<b>P.Cwt</b>	<b>Rs: 1219/-</b>
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07. Supplying Flange Adopter.

<b>12 Nos:</b>	<b>3" dia</b>	<b>@Rs: 675/-</b>	<b>P.each</b>	<b>Rs: 8100/-</b>
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08. Foot Valve heavy pattern with cone type gate imported. **(PHSMI No:1, P-11)**

<b>1 No:</b>	<b>3" dia</b>	<b>@Rs: 731/25</b>	<b>P.each</b>	<b>Rs: 731/-</b>
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09. Butt Fusion Joint **(PHSMI-H, P-20)**

<b>12 Joints</b>	<b>3" dia</b>	<b>@Rs: 600/-</b>	<b>P.Joint</b>	<b>Rs: 7200/-</b>
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10. Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete **(PHSI No.1 Page-33).**

<b>12 Joints</b>	<b>3" dia</b>	<b>@Rs: 499/-</b>	<b>P.Joint</b>	<b>Rs: 5988/-</b>
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11. Providing G.I pipes 3" dia **(PHSI No.1 Page-33).**

<b>08.00 Rft</b>	<b>3" dia</b>	<b>@Rs: 304/02</b>	<b>P.Rft</b>	<b>Rs: 2432/-</b>
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			<b>Total</b>	<b>Rs: 54799/-</b>
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	<b>For 04 Nos:</b>	<b>4 x 54799/-</b>	<b>=</b>	<b>Rs: 219196/-</b>
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## **E: - PVC PIPE RISING MAIN & DISTT: SYSTEM**

01. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5' and lead upto one chain. **(PHSI No:2,P-46)**

<b>87000.00 cft</b>		<b>@Rs: 3600/-</b>	<b>P%0cft.</b>	<b>Rs: 313200/-</b>
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02. Providing, UPVC pipes of Class "B" (equal vent make) make fixing in trench i/c cutting fitting and jointing with "Z" joint with one rubber ring i/c testing with water to head 61 meter or 200 ft **(GSI No: 1, P-22)**

<b>4350.00 Rft</b>	<b>3" dia Pipe</b>	<b>@Rs: 90/-</b>	<b>P.Rft.</b>	<b>Rs: 391500/-</b>
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<b>10200.00 Rft</b>	<b>4" dia pipe</b>	<b>@Rs: 137/-</b>	<b>P.Rft.</b>	<b>Rs: 1397400/-</b>
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**C.I PLAIN BEND**

<b>4 Nos.</b>	<b>3" dia</b>	<b>@Rs: 570/-</b>	<b>P.Rft.</b>	<b>Rs: 2280/-</b>
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10 Nos.	4" dia	@Rs: 812/-	P.Rft.	Rs: 8120/-
<b>END PLUG</b>				
2 Nos.	3" dia	@Rs: 382/-	P.Rft.	Rs: 764/-
1 No.	4" dia	@Rs: 544/-	P.Rft.	Rs: 544/-
<b>C.I Tee Plain</b>				
03 Nos.	3" dia	@Rs: 771/-	Each	Rs: 2313/-
06 Nos.	4" dia	@Rs: 1055/-	Each	Rs: 6330/-

03. Making joints to C.I specials fitting i/c laying and required diameter and testing the joints along-with A.C pressure pipe line to specified pressure and testing the all leaky joints etc complete. **(PHSMI No: 1, P-49)**

10 Joints	3" dia	@Rs: 62/-	P.Joint	Rs: 620/-
17 Joints	4" dia	@Rs: 62/-	P.Joint	Rs: 1054/-

04. Refilling the excavated stuff in trenches in 6" thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. **(PHSI No:24,P-53)**

78300.00 cft	@Rs: 2760/-	P%0cft.	Rs: 216108/-
<b>Total: -</b>			<b>Rs: 2340233/-</b>

## **GENERAL ABSTRACT OF COST**

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. Tube Wells	Rs: 6,69,916/-	Rs: -	Rs: 6,69,916/-
02. Pump House	Rs: 6,19,040/-	Rs: -	Rs: 6,19,040/-
03. Pumping Machinery	Rs: -	Rs: 15,41,000/ -	Rs: 15,41,000/-
04. Inter Connection	Rs: 2,19,196/-	Rs: -	Rs: 2,19,196/-
05. PVC Pipe R/M & Distt: system	Rs: 23,40,233/-	Rs: -	Rs: 23,40,233/-
<b>Total: -</b>	<b>Rs: 38,48,385/-</b>	<b>Rs: 15,41,000/-</b>	<b>Rs: 53,89,385/-</b>

## **CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**



## **B: - PUMP HOUSE**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5' in ordinary soil **(CSI No:18,P-6)**

**147.50 cft.** @Rs: 3176/25 P%0cft. Rs: 468/-

02. Cement concrete brick or stone ballast 1 ½" to 2" gauge. Ratio 1:2:4 **(CSI No:4,P-14)**

**61.71 Cft.** @Rs: 9416/28 P%cft. Rs: 5811/-

03. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**158.20 Cft.** @Rs: 11948/36 P%cft. Rs: 18902/-

04. D.P.C with cement sand and shingle concrete 1:2:4 i/c 2 coat of asphaltic mixture **(G.S.I No. P-18)**  
**3" thick**

**39.55 Cft.** @Rs: 4982/18 P%cft. Rs: 1970/-

05. Filling Watering and ramming earth in floor with new earth excavated from out side lead upto 1 chain and lift upto 5' **(G.S.I No.22 P-4)**

**145.54 Cft.** @Rs: 3630/- P%0cft. Rs: 528/-

06. Pacca brick work in foundation and plinth in cement san mortar in 1;6 **(GSI No:4(e),P-25)**

**245.24 Cft.** @Rs: 12674/36 P%cft. Rs: 31083/-

07. R.C.C work i/c all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface i/c screening and washing of shingle (1) R.C work in roof slab members laid in situ or precast laid in position complete in a respect (i) Ratio 1:2:4 90 Ibs cement 2 cft sand 4 cft shingle 1/8" to ¼" gauge **(GSI No.6, P-17)**

**70.50 Cft.** @Rs: 337/- P.Cft. Rs: 23759/-

08. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of biding wire also includes removal of rust from bars **(GSI No.7(ii)(a), P-19)**

**2.83 Cwt.** @Rs: 5001/70 P.Cwt. Rs: 14155/-

09. Providing and laying 3" thick to topping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panel. **(GSI No.16, P-42)**

**64.00 Sft.** @Rs: 4411/82 P%Sft. Rs: 2824/-

10. Cement Plaster 1:6, ½" thick upto 12' height. **(CSI No: 11, P-58)**

**273.25 sft.** @Rs: 2206/60 P%sft. Rs: 6030/-

11. Cement Plaster 1:4, 3/8" thick upto 12' height. **(CSI No:11,P-53)**

**273.25 sft.** @Rs: 2197/52 P%sft. Rs: 6005/-

12. Cement pointing struck joints on walls 1:3 **(CSI No.19 p-28).**

**333.25 sft.** @Rs: 1213/58 P%sft. Rs: 4044/-

13. Making and Fixing steel grated doors with 1/16" thick & ¼" sq: bars @ 4: c/c locking arrangements. **(CSI No:24,P-91)**

**22.75 sft.** @Rs: 726/72 P.Sft. Rs: 16533/-

14. Fabrication of heavy steel work with angles tees, flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting tanks i/c cutting drilling riveting handling assembling and fixing but excluding erection in position. **(CSI No.2, P-91)**

**2.03 Cwt.** @Rs: 4928/49 P.Cwt. Rs: 10005/-

15. Erection and fitting in position of iron trusses staging of water tanks etc. **(CSI No:3, P-91)**

**2.03 sft.** @Rs; 271/04 P.Sft. Rs: 550/-

16. Supplying and fixing in position iron / steel grill of ¾”x ½” size flat iron of approved design i/c painting 3 coats etc complete. **(CSI No:26, P-93)**

**24.00 sft.** @Rs; 180/50 P.Sft. Rs: 4332/-

### **PAINTING NEW SURFACE**

17. Preparing surface and painting of door and window any type i/c Edges 3 coats. **(GSI No:5, P-69)**

**93.50 sft.** @Rs; 2116/41 P%Sft. Rs: 1979/-

18. White washing one coat. **(GSI No:26, P-53)**

**136.00 sft.** @Rs: 416/63 P%Sft. Rs: 567/-

19. Colour washing 2 coats. **(GSI No:25, P-53)**

**606.50 sft.** @Rs: 859/90 P%Sft. Rs: 5215/-

**Total** Rs: 154760/-

**2x154760/- = Rs: 309520/-**

## **C: - PUMPING MACHINERY**

### **a). A.C Electric Pumping Set 7.50 BHP**

01. Supplying & installing in position i/c transportation to site of work Electric Pumping set consisting of A.C electric Motor of **7.50 BHP** made (KSB) 3 phase 50 cycles 400/420 volts of 1500 RPM type ILA7-130-4AA 60 coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2” x 1½” mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 125 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8” to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts & over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole & neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: & amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3’x2 ½’ i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1”) PVC conduit on surface as required i/c providing & fixing earthing set with 0.6Mx0.6Mx5.3MM(2’x2’x ½) copper plate buried in the ground at depth of 3.7M(12’) or less as per Pak PWD specification & testing for the pumping set against the required head of 72 hours etc complete. **(Approved R.A)**

**Qty: 2 Sets** @ Rs. 267000/- P.Set. Rs. 534000/-

### **b). Diesel Engine Set 16 BHP**

01. Supplying & Installing in position i/c transportation to site of work Diesel Engine Pumping set consisting of Diesel Oil Engine **16 BHP** made (Golden made) fixed handle starter 2200 RPM i/c all accessories coupled with KSB Centrifugal ETA NORM pump Type (ETA-40-200) size 2” x 1½” mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 100 ft Pulley & Belt i/c installing of pumping set on cement concrete foundation (1:2:4) & Ratio 1:4:8 with stone ballast with M.S nuts bolts of 1/2” to be embedded in C.C foundation and testing for the pumping set against the required head of 72 hours etc. **(Approved R.A)**

**Qty: 1 Set.** @ Rs. 236500/- P.Set. Rs. 236500/-

**Total** Rs: 770500/-

## **D: - INTER CONNECTION**

01. Providing laying and fixing trenches i/c fitting, jointing and testing etc: complete in all respect the high Density polyethylene P.E pipes (HDPE-100) for W/S confirming ISO 4427/DIN 8074/8075 B.S 3580 & PSI 3051 **(PHSI-1, P-25)**

**60.00 Rft** @ **Rs. 178/-** **P.Rft.** **Rs. 10680/-**

02. Supplying M.S Flanges **(PHSMI No:12, P-17)**

**Qty: 12 Nos:** **3" dia** @ **Rs: 500/89** **P.each** **Rs: 6011/-**

03. C.I Sluice valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq inch. **(PHSMI No:1, P-11)**

**Qty: 01 Nos:** **3" dia** @ **Rs: 4290/-** **P.each** **Rs: 4290/-**

04. C.I Bend with flanges end with holes i/c turning & facing of flanges (for all sizes). **(PHSMI No:1, P-11)**

**0.83 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 5060/-**

05. Supplying Reflex Valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq: inch **(PHSMI No:C, P-11)**

**Qty: 2 Nos:** **3" dia** @ **Rs: 1543/75** **P.each** **Rs: 3088/-**

06. C.I tapered flat bottomed or central tapered flanged end with holes i/c turning facing flanged all sizes. **(PHSMI No:7, P-11)**

**0.20 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 1219/-**

07. Supplying Flange Adopter.

**12 Nos:** **3" dia** @ **Rs: 675/-** **P.each** **Rs: 8100/-**

08. Foot Valve heavy pattern with cone type gate imported. **(PHSMI No:1, P-11)**

**1 No:** **3" dia** @ **Rs: 731/25** **P.each** **Rs: 731/-**

09. Butt Fusion Joint **(PHSMI-H, P-20)**

**12 Joints** **3" dia** @ **Rs: 600/-** **P.Joint** **Rs: 7200/-**

10. Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete **(PHSI No.1 Page-33)**.

**12 Joints** **3" dia** @ **Rs: 499/-** **P.Joint** **Rs: 5988/-**

11. Providing G.I pipes 3" dia **(PHSI No.1 Page-33)**.

**08.00 Rft** **3" dia** @ **Rs: 304/02** **P.Rft** **Rs: 2432/-**

**Total** **Rs: 54799/-**

**For 03 Nos: 3 x 54799/-** **=** **Rs: 164397/-**

## **E: - PVC PIPE RISING MAIN & DISTT: SYSTEM**

01. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5' and lead upto one chain. **(PHSI No:2,P-46)**

**40800.00 cft** @ **Rs: 3600/-** **P%0cft.** **Rs: 146880/-**

02. Providing, UPVC pipes of Class "B" (equal vent make) make fixing in trench i/c cutting fitting and jointing with "Z" joint with one rubber ring i/c testing with water to head 61 meter or 200 ft **(GSI No: 1, P-22)**

**3000.00 Rft** **3" dia Pipe** @ **Rs: 90/-** **P.Rft.** **Rs: 270000/-**

**3800.00 Rft** **4" dia pipe** @ **Rs: 137/-** **P.Rft.** **Rs: 520600/-**



## C.I PLAIN BEND

4 Nos.	3" dia	@Rs: 570/-	P.Rft.	Rs: 2280/-
5 Nos.	4" dia	@Rs: 812/-	P.Rft.	Rs: 4060/-

## END PLUG

2 Nos.	3" dia	@Rs: 382/-	P.Rft.	Rs: 764/-
1 No.	4" dia	@Rs: 544/-	P.Rft.	Rs: 544/-

## C.I Tee Plain

02 Nos.	3" dia	@Rs: 771/-	Each	Rs: 1542/-
02 Nos.	4" dia	@Rs: 1055/-	Each	Rs: 2110/-

03. Making joints to C.I specials fitting i/c laying and required diameter and testing the joints along-with A.C pressure pipe line to specified pressure and testing the all leaky joints etc complete. **(PHSMI No: 1, P-49)**

06 Joints	3" dia	@Rs: 62/-	P.Joint	Rs: 372/-
06 Joints	4" dia	@Rs: 62/-	P.Joint	Rs: 372/-

04. Refilling the excavated stuff in trenches in 6" thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. **(PHSI No:24,P-53)**

36720.00 cft	@Rs: 2760/-	P%0cft.	Rs: 101347/-
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**Total: -** Rs: 1050871/-

## GENERAL ABSTRACT OF COST

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. Tube Wells	Rs: 3,34,958/-	Rs: -	Rs: 3,34,958/-
02. Pump House	Rs: 3,09,520/-	Rs: -	Rs: 3,09,520/-
03. Pumping Machinery	Rs: -	Rs: 7,70,500/ -	Rs: 7,70,500/-
04. Inter Connection	Rs: 1,64,397/-	Rs: -	Rs: 1,64,397/-
05. PVC Pipe R/M & Distt: system	Rs: 10,50,871/-	Rs: -	Rs: 10,50,871/-
<b>Total: -</b>	<b>Rs: 18,59,746/-</b>	<b>Rs: 7,70,500/-</b>	<b>Rs: 26,30,246/-</b>

## CONDITIONS

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

CONTRACTOR

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**

# **SCHEDULE 'B'**

Name of work: - *Construction of Water Supply Schemes of various villages (15 villages) village Purano Tharo & Khabbar Taluka Mirokhan District Kamber Shahdadkot*

Head of A/C: - *Annual Development Programme 2013-14*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## **A: - TUBE WELLS**

01. Boring for tube well in all bearing soils from ground level upto 100' or 30.50 meters depth i/c sinking & with drawing of casing pipe. **(PHSI No: 1,P-41)**

**100.00 Rft:**                      **12" dia**                      **@Rs: 743/-**                      **P.Rft:**                      **Rs: 74300/-**

02. Providing strong substantially built wooden locked with compartment for preserving 2 lbs (1 K.g) samples strata. **(PHSI No: 5,P-43)**

**01 Nos:**    **@Rs: 3530/-**                      **P.Rft:**                      **Rs: 3530/-**

03. Providing & Preserving inbox 2 lbs (1 K.g) sample of strata from bore holes. **(PHSI No: 5,P-43)**

**4 Samples.**    **@Rs:101/-**                      **P.each.**                      **Rs: 404/-**

04. Taking samples of water from bore holes and placing in two separate bottles. **(PHSI No:7,P-37)**

**4 Samples.**    **@Rs:131/-**                      **P.each.**                      **Rs: 524/-**

05. Supplying & Installing PVC blind pipe 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:12,P-31)**

**39.00 Rft:**                      **8" dia.**                      **@Rs:516/80**                      **P.Rft:**                      **Rs: 20155/-**

06. Supplying & Installing PVC strainer 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:9,P-30)**

**64.00 Rft:**                      **8" dia.**                      **@Rs: 554/05**                      **P.Rft:**                      **Rs: 35459/-**

07. Providing & Fixing M.S bail plug. **(PHSI No: 8, P-43)**

**1 No:**    **8" dia**                      **@Rs: 2607/-**                      **P.each**                      **Rs: 2607/-**

08. Shrouding with graded Bajri (3/8" to 1/8") or (9 to 3 mm) in between bore and blind pipe for the following diameters of strainers. **(PHSI No:13,P-45)**

**100.00 Rft**                      **8" dia**                      **@Rs: 105/-**                      **P.each**                      **Rs: 10500/-**

09. Development of Tube well. **(PHSI No: 8,P-43)**

**100.00 Rft**    **@Rs: 200/-**                      **P.each**                      **Rs: 20000/-**

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**Rs: 167479/-**

**For 5 Nos: x 167479/- =**

**Rs: 837395/-**

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## **B: - PUMP HOUSE**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5'in ordinary soil **(CSI No:18,P-6)**

**147.50 cft.** @Rs: 3176/25 P%0cft. Rs: 468/-

02. Cement concrete brick or stone ballast 1 ½" to 2" gauge. Ratio 1:2:4 **(CSI No:4,P-14)**

**61.71 Cft.** @Rs: 9416/28 P%cft. Rs: 5811/-

03. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**158.20 Cft.** @Rs: 11948/36 P%cft. Rs: 18902/-

04. D.P.C with cement sand and shingle concrete 1:2:4 i/c 2 coat of asphaltic mixture **(G.S.I No. P-18)**  
**3" thick**

**39.55 Cft.** @Rs: 4982/18 P%cft. Rs: 1970/-

05. Filling Watering and ramming earth in floor with new earth excavated from out side lead upto 1 chain and lift upto 5' **(G.S.I No.22 P-4)**

**145.54 Cft.** @Rs: 3630/- P%0cft. Rs: 528/-

06. Pacca brick work in foundation and plinth in cement san mortar in 1;6 **(GSI No:4(e),P-25)**

**245.24 Cft.** @Rs: 12674/36 P%cft. Rs: 31083/-

07. R.C.C work i/c all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface i/c screening and washing of shingle (1) R.C work in roof slab members laid in situ or precast laid in position complete in a respect (i) Ratio 1:2:4 90 lbs cement 2 cft sand 4 cft shingle 1/8" to ¼" gauge **(GSI No.6, P-17)**

**70.50 Cft.** @Rs: 337/- P.Cft. Rs: 23759/-

08. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of biding wire also includes removal of rust from bars **(GSI No.7(ii)(a), P-19)**

**2.83 Cwt.** @Rs: 5001/70 P.Cwt. Rs: 14155/-

09. Providing and laying 3" thick to toping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panel. **(GSI No.16, P-42)**

**64.00 Sft.** @Rs: 4411/82 P%Sft. Rs: 2824/-

10. Cement Plaster 1:6, ½" thick upto 12' height. **(CSI No: 11, P-58)**

**273.25 sft.** @Rs: 2206/60 P%sft. Rs: 6030/-

11. Cement Plaster 1:4, 3/8" thick upto 12' height. **(CSI No:11,P-53)**

**273.25 sft.** @Rs: 2197/52 P%sft. Rs: 6005/-

12. Cement pointing struck joints on walls 1:3 **(CSI No.19 p-28).**

**333.25 sft.** @Rs: 1213/58 P%sft. Rs: 4044/-

13. Making and Fixing steel grated doors with 1/16" thick & ¼" sq: bars @ 4: c/c locking arrangements. **(CSI No:24,P-91)**

**22.75 sft.** @Rs: 726/72 P.Sft. Rs: 16533/-

14. Fabrication of heavy steel work with angles tees, flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting tanks i/c cutting drilling riveting handling assembling and fixing but excluding erection in position. **(CSI No.2, P-91)**

**2.03 Cwt.** @Rs: 4928/49 P.Cwt. Rs: 10005/-

15. Erection and fitting in position of iron trusses staging of water tanks etc. **(CSI No:3, P-91)**

**2.03 sft.** @Rs; 271/04 P.Sft. Rs: 550/-

16. Supplying and fixing in position iron / steel grill of ¾"x ½" size flat iron of approved design i/c painting 3 coats etc complete. **(CSI No:26, P-93)**

**24.00 sft.** @Rs; 180/50 P.Sft. Rs: 4332/-

### **PAINTING NEW SURFACE**

17. Preparing surface and painting of door and window any type i/c Edges 3 coats. **(GSI No:5, P-69)**

**93.50 sft.** @Rs; 2116/41 P%Sft. Rs: 1979/-

18. White washing one coat. **(GSI No:26, P-53)**

**136.00 sft.** @Rs: 416/63 P%Sft. Rs: 567/-

19. Colour washing 2 coats. **(GSI No:25, P-53)**

**606.50 sft.** @Rs: 859/90 P%Sft. Rs: 5215/-

**Total** Rs: 154760/-

**5x154760/- = Rs: 773800/-**

## **C: - PUMPING MACHINERY**

### **a). A.C Electric Pumping Set 7.50 BHP**

01. Supplying & installing in position i/c transportation to site of work Electric Pumping set consisting of A.C electric Motor of **7.50 BHP** made (KSB) 3 phase 50 cycles 400/420 volts of 1500 RPM type ILA7-130-4AA 60 coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 125 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8" to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts & over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole & neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: & amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3'x2 ½' i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1") PVC conduit on surface as required i/c providing & fixing earthing set with 0.6Mx0.6Mx5.3MM(2'x2'x ½) copper plate buried in the ground at depth of 3.7M(12') or less as per Pak PWD specification & testing for the pumping set against the required head of 72 hours etc complete. **(Approved R.A)**

**Qty: 4 Sets** @ Rs. 267000/- P.Set. Rs. 1068000/-

### **b). Diesel Engine Set 16 BHP**

01. Supplying & Installing in position i/c transportation to site of work Diesel Engine Pumping set consisting of Diesel Oil Engine **16 BHP** made (Golden made) fixed handle starter 2200 RPM i/c all accessories coupled with KSB Centrifugal ETA NORM pump Type (ETA-40-200) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 100 ft Pulley & Belt i/c installing of pumping set on cement concrete foundation (1:2:4) & Ratio 1:4:8 with stone ballast with M.S nuts bolts of 1/2" to be embedded in C.C foundation and testing for the pumping set against the required head of 72 hours etc. **(Approved R.A)**

**Qty: 2 Sets.** @ Rs. 236500/- P.Set. Rs. 473000/-

**Total** Rs: 1541000/-

## **D: - INTER CONNECTION**

01. Providing laying and fixing trenches i/c fitting, jointing and testing etc: complete in all respect the high Density polyethylene P.E pipes (HDPE-100) for W/S confirming ISO 4427/DIN 8074/8075 B.S 3580 & PSI 3051 **(PHSI-1, P-25)**

**60.00 Rft** @ **Rs. 178/-** **P.Rft.** **Rs. 10680/-**

02. Supplying M.S Flanges **(PHSMI No:12, P-17)**

**Qty: 12 Nos:** **3" dia** @ **Rs: 500/89** **P.each** **Rs: 6011/-**

03. C.I Sluice valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq inch. **(PHSMI No:1, P-11)**

**Qty: 01 Nos:** **3" dia** @ **Rs: 4290/-** **P.each** **Rs: 4290/-**

04. C.I Bend with flanges end with holes i/c turning & facing of flanges (for all sizes). **(PHSMI No:1, P-11)**

**0.83 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 5060/-**

05. Supplying Reflex Valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs:/sq: inch **(PHSMI No:C, P-11)**

**Qty: 2 Nos:** **3" dia** @ **Rs: 1543/75** **P.each** **Rs: 3088/-**

06. C.I tapered flat bottomed or central tapered flanged end with holes i/c turning facing flanged all sizes. **(PHSMI No:7, P-11)**

**0.20 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 1219/-**

07. Supplying Flange Adopter.

**12 Nos:** **3" dia** @ **Rs: 675/-** **P.each** **Rs: 8100/-**

08. Foot Valve heavy pattern with cone type gate imported. **(PHSMI No:1, P-11)**

**1 No:** **3" dia** @ **Rs: 731/25** **P.each** **Rs: 731/-**

09. Butt Fusion Joint **(PHSMI-H, P-20)**

**12 Joints** **3" dia** @ **Rs: 600/-** **P.Joint** **Rs: 7200/-**

10. Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete **(PHSI No.1 Page-33)**.

**12 Joints** **3" dia** @ **Rs: 499/-** **P.Joint** **Rs: 5988/-**

11. Providing G.I pipes 3" dia **(PHSI No.1 Page-33)**.

**08.00 Rft** **3" dia** @ **Rs: 304/02** **P.Rft** **Rs: 2432/-**

**Total** **Rs: 54799/-**

**For 05 Nos: 5 x 54799/-** **=** **Rs: 273995/-**

## **E: - PVC PIPE RISING MAIN & DISTT: SYSTEM**

01. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5' and lead upto one chain. **(PHSI No:2,P-46)**

**105600.00 cft** @ **Rs: 3600/-** **P%0cft.** **Rs: 380160/-**

02. Providing, UPVC pipes of Class "B" (equal vent make) make fixing in trench i/c cutting fitting and jointing with "Z" joint with one rubber ring i/c testing with water to head 61 meter or 200 ft **(GSI No: 1, P-22)**

**7100.00 Rft** **3" dia Pipe** @ **Rs: 90/-** **P.Rft.** **Rs: 639000/-**

**4500.00 Rft** **4" dia pipe** @ **Rs: 137/-** **P.Rft.** **Rs: 616500/-**

**6000.00 Rft** **6" dia pipe** @ **Rs: 262/-** **P.Rft.** **Rs: 1572000/-**

## C.I PLAIN BEND

4 Nos.	3" dia	@Rs: 570/-	P.Rft.	Rs: 2280/-
5 Nos.	4" dia	@Rs: 812/-	P.Rft.	Rs: 4060/-
5 Nos.	6" dia	@Rs: 1582/-	P.Rft.	Rs: 7910/-

## C.I Tee Plain

03 Nos.	3" dia	@Rs: 771/-	Each	Rs: 2313/-
03 Nos.	4" dia	@Rs: 1055/-	Each	Rs: 3165/-
04 Nos.	6" dia	@Rs: 2029/-	Each	Rs: 8116/-

## C.I Gibault Joints

02 Nos.	3" dia	@Rs: 568/75	Each	Rs: 1138/-
02 Nos.	4" dia	@Rs: 731/25	Each	Rs: 1463/-
02 Nos.	6" dia	@Rs: 1062/50	Each	Rs: 2125/-

03. Making joints to C.I specials fitting i/c laying and required diameter and testing the joints along-with A.C pressure pipe line to specified pressure and testing the all leaky joints etc complete. **(PHSMI No: 1, P-49)**

10 Joints	3" dia	@Rs: 62/-	P.Joint	Rs: 620/-
10 Joints	4" dia	@Rs: 62/-	P.Joint	Rs: 620/-
11 Joints	6" dia	@Rs: 72/-	P.Joint	Rs: 792/-

04. Refilling the excavated stuff in trenches in 6" thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. **(PHSI No:24,P-53)**

95040.00 cft	@Rs: 2760/-	P%0cft.	Rs: 262310/-
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Total: -

Rs: 3504572/-

## GENERAL ABSTRACT OF COST

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. Tube Wells	Rs: 8,37,395/-	Rs: -	Rs: 8,37,395/-
02. Pump House	Rs: 7,73,800/-	Rs: -	Rs: 7,73,800/-
03. Pumping Machinery	Rs: -	Rs: 15,41,000/ -	Rs: 15,41,000/-
04. Inter Connection	Rs: 2,73,995/-	Rs: -	Rs: 2,73,995/-
05. PVC Pipe R/M & Distt: system	Rs: 35,04,572/-	Rs: -	Rs: 35,04,572/-
<b>Total: -</b>	<b>Rs: 53,89,762/-</b>	<b>Rs: 15,41,000/-</b>	<b>Rs: 69,30,762/-</b>

## CONDITIONS

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

CONTRACTOR

EXECUTIVE ENGINEER  
Public Health Engg: Division  
Kamber Shahdadkot @ Kamber

# **SCHEDULE 'B'**

*Name of work: - Construction of Water Supply Schemes of various villages (15 villages) village Hashim Bhatti Taluka Shahdadt District Kamber Shahdadt*

*Head of A/C: - Annual Development Programme 2013-14*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## **A: - PUMP HOUSE**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5' in ordinary soil **(CSI No:18,P-6)**

**147.50 cft.** @Rs: 3176/25 P%0cft. Rs: 468/-

02. Cement concrete brick or stone ballast 1 1/2" to 2" gauge. Ratio 1:2:4 **(CSI No:4,P-14)**

**61.71 Cft.** @Rs: 9416/28 P%cft. Rs: 5811/-

03. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**158.20 Cft.** @Rs: 11948/36 P%cft. Rs: 18902/-

04. D.P.C with cement sand and shingle concrete 1:2:4 i/c 2 coat of asphaltic mixture **(G.S.I No. P-18)**  
**3" thick**

**39.55 Cft.** @Rs: 4982/18 P%cft. Rs: 1970/-

05. Filling Watering and ramming earth in floor with new earth excavated from out side lead upto 1 chain and lift upto 5' **(G.S.I No.22 P-4)**

**145.54 Cft.** @Rs: 3630/- P%0cft. Rs: 528/-

06. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**245.24 Cft.** @Rs: 12674/36 P%cft. Rs: 31083/-

07. R.C.C work i/c all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface i/c screening and washing of shingle (1) R.C work in roof slab members laid in situ or precast laid in position complete in a respect (i) Ratio 1:2:4 90 lbs cement 2 cft sand 4 cft shingle 1/8" to 1/4" gauge **(GSI No.6, P-17)**

**70.50 Cft.** @Rs: 337/- P.Cft. Rs: 23759/-

08. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of biding wire also includes removal of rust from bars **(GSI No.7(ii)(a), P-19)**

**2.83 Cwt.** @Rs: 5001/70 P.Cwt. Rs: 14155/-

09. Providing and laying 3" thick to toping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panel. **(GSI No.16, P-42)**

**64.00 Sft.** @Rs: 4411/82 P%Sft. Rs: 2824/-

10. Cement Plaster 1:6, 1/2" thick upto 12' height. **(CSI No: 11, P-58)**

**273.25 sft.** @Rs: 2206/60 P%sft. Rs: 6030/-

11. Cement Plaster 1:4, 3/8" thick upto 12' height. <u>(CSI No:11,P-53)</u>			
<b>273.25 sft.</b>	<b>@Rs: 2197/52</b>	<b>P%sft.</b>	<b>Rs: 6005/-</b>
12. Cement pointing struck joints on walls 1:3 <u>(CSI No.19 p-28).</u>			
<b>333.25 sft.</b>	<b>@Rs: 1213/58</b>	<b>P%sft.</b>	<b>Rs: 4044/-</b>
13. Making and Fixing steel grated doors with 1/16" thick & 1/4" sq: bars @ 4: c/c locking arrangements. <u>(CSI No:24,P-91)</u>			
<b>22.75 sft.</b>	<b>@Rs; 726/72</b>	<b>P.Sft.</b>	<b>Rs: 16533/-</b>
14. Fabrication of heavy steel work with angles tees, flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting tanks i/c cutting drilling riveting handling assembling and fixing but excluding erection in position. <u>(CSI No.2, P-91)</u>			
<b>2.03 Cwt.</b>	<b>@Rs: 4928/49</b>	<b>P.Cwt.</b>	<b>Rs: 10005/-</b>
15. Errection and fitting in position of iron trusses staging of water tanks etc. <u>(CSI No:3, P-91)</u>			
<b>2.03 sft.</b>	<b>@Rs; 271/04</b>	<b>P.Sft.</b>	<b>Rs: 550/-</b>
16. Supplying and fixing in position iron / steel grill of 3/4"x 1/2" size flat iron of approved design i/c painting 3 coats etc complete. <u>(CSI No:26, P-93)</u>			
<b>24.00 sft.</b>	<b>@Rs; 180/50</b>	<b>P.Sft.</b>	<b>Rs: 4332/-</b>

### PAINTING NEW SURFACE

17. Preparing surface and painting of door and window any type i/c Edges 3 coats. <u>(GSI No:5, P-69)</u>			
<b>93.50 sft.</b>	<b>@Rs; 2116/41</b>	<b>P%Sft.</b>	<b>Rs: 1979/-</b>
18. White washing one coat. <u>(GSI No:26, P-53)</u>			
<b>136.00 sft.</b>	<b>@Rs: 416/63</b>	<b>P%Sft.</b>	<b>Rs: 567/-</b>
19. Colour washing 2 coats. <u>(GSI No:25, P-53)</u>			
<b>606.50 sft.</b>	<b>@Rs: 859/90</b>	<b>P%Sft.</b>	<b>Rs: 5215/-</b>
			<b>Rs: 154760/-</b>
	<b>Total</b>		
	<b>2x154760/-</b>	<b>=</b>	<b>Rs: 309520/-</b>

### B: - PUMPING MACHINERY

#### a). A.C Electric Pumping Set 7.50 BHP

01. Supplying & installing in position i/c transportation to site of work Electric Pumping set consisting of A.C electric Motor of **7.50 BHP** made (KSB) 3 phase 50 cycles 400/420 volts of 1500 RPM type ILA7-130-4AA 60 coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2" x 1 1/2" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 125 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8" to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts & over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole & neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: & amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3'x2 1/2' i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1") PVC conduit on surface as required i/c providing & fixing earthing set with 0.6Mx0.6Mx5.3MM(2'x2'x 1/2) copper plate buried in the ground at depth of 3.7M(12') or less as per Pak PWD specification & testing for the pumping set against the required head of 72 hours etc complete. (Approved R.A)

<b>Qty: 2 Sets</b>	<b>@ Rs. 267000/-</b>	<b>P.Set.</b>	<b>Rs. 534000/-</b>
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## **b). Diesel Engine Set 16 BHP**

01. Supplying & Installing in position i/c transportation to site of work Diesel Engine Pumping set consisting of Diesel Oil Engine **16 BHP** made (Golden made) fixed handle starter 2200 RPM i/c all accessories coupled with KSB Centrifugal ETA NORM pump Type (ETA-40-200) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 100 ft Pulley & Belt i/c installing of pumping set on cement concrete foundation (1:2:4) & Ratio 1:4:8 with stone ballast with M.S nuts bolts of 1/2" to be embedded in C.C foundation and testing for the pumping set against the required head of 72 hours etc. **(Approved R.A)**

<b>Qty: 1 Set.</b>	<b>@ Rs. 236500/-</b>	<b>P.Set.</b>	<b>Rs. 236500/-</b>
		<b>Total</b>	<b>Rs: 770500/-</b>

## **C: - INTER CONNECTION**

01. Providing laying and fixing trenches i/c fitting, jointing and testing etc: complete in all respect the high Density polyethylene P.E pipes (HDPE-100) for W/S conforming ISO 4427/DIN 8074/8075 B.S 3580 & PSI 3051 **(PHSI-1, P-25)**

**60.00 Rft** @ **Rs. 178/-** **P.Rft.** **Rs. 10680/-**

02. Supplying M.S Flanges **(PHSMI No:12, P-17)**

**Qty: 12 Nos:** **3" dia** @ **Rs: 500/89** **P.each** **Rs: 6011/-**

03. C.I Sluice valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq inch. **(PHSMI No:1, P-11)**

**Qty: 01 Nos:** **3" dia** @ **Rs: 4290/-** **P.each** **Rs: 4290/-**

04. C.I Bend with flanges end with holes i/c turning & facing of flanges (for all sizes). **(PHSMI No:1, P-11)**

**0.83 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 5060/-**

05. Supplying Reflex Valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs:/sq: inch **(PHSMI No:C, P-11)**

**Qty: 2 Nos:** **3" dia** @ **Rs: 1543/75** **P.each** **Rs: 3088/-**

06. C.I tapered flat bottomed or central tapered flanged end with holes i/c turning facing flanged all sizes. **(PHSMI No:7, P-11)**

**0.20 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 1219/-**

07. Supplying Flange Adopter.

**12 Nos:** **3" dia** @ **Rs: 675/-** **P.each** **Rs: 8100/-**

08. Foot Valve heavy pattern with cone type gate imported. **(PHSMI No:1, P-11)**

**1 No:** **3" dia** @ **Rs: 731/25** **P.each** **Rs: 731/-**

09. Butt Fusion Joint **(PHSMI-H, P-20)**

**12 Joints** **3" dia** @ **Rs: 600/-** **P.Joint** **Rs: 7200/-**

10. Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete **(PHSI No.1 Page-33).**

**12 Joints** **3" dia** @ **Rs: 499/-** **P.Joint** **Rs: 5988/-**

11. Providing G.I pipes 3" dia **(PHSI No.1 Page-33).**

08.00 Rft	3" dia	@Rs: 304/02	P.Rft	Rs: 2432/-
			Total	Rs: 54799/-
	For 03 Nos:	3 x 54799/-	=	Rs: 164397/-

## **D: - PVC PIPE RISING MAIN & DISTT: SYSTEM**

01. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5' and lead upto one chain. **(PHSI No:2,P-46)**

40800.00 cft	@Rs: 3600/-	P%0cft.	Rs: 146880/-
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02. Providing, UPVC pipes of Class "B" (equal vent make) make fixing in trench i/c cutting fitting and jointing with "Z" joint with one rubber ring i/c testing with water to head 61 meter or 200 ft **(GSI No: 1, P-22)**

3000.00 Rft	3" dia Pipe	@Rs: 90/-	P.Rft.	Rs: 270000/-
3800.00 Rft	4" dia pipe	@Rs: 137/-	P.Rft.	Rs: 520600/-

### **C.I PLAIN BEND**

4 Nos.	3" dia	@Rs: 570/-	P.Rft.	Rs: 2280/-
5 Nos.	4" dia	@Rs: 812/-	P.Rft.	Rs: 4060/-

### **END PLUG**

2 Nos.	3" dia	@Rs: 382/-	P.Rft.	Rs: 764/-
1 No.	4" dia	@Rs: 544/-	P.Rft.	Rs: 544/-

### **C.I Tee Plain**

02 Nos.	3" dia	@Rs: 771/-	Each	Rs: 1542/-
02 Nos.	4" dia	@Rs: 1055/-	Each	Rs: 2110/-

03. Making joints to C.I specials fitting i/c laying and required diameter and testing the joints along-with A.C pressure pipe line to specified pressure and testing the all leaky joints etc complete. **(PHSMI No: 1, P-49)**

06 Joints	3" dia	@Rs: 62/-	P.Joint	Rs: 372/-
06 Joints	4" dia	@Rs: 62/-	P.Joint	Rs: 372/-

04. Refilling the excavated stuff in trenches in 6" thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. **(PHSI No:24,P-53)**

36720.00 cft	@Rs: 2760/-	P%0cft.	Rs: 101347/-
		Total: -	Rs: 1050871/-

## **E: - SEMI PACCA STORAGE TANKS**

01. Excavation for tanks and reservoirs in soft soils i/c trimming and dressing sides to true alignment / design section / profiles and shape. Leveling of beds of tanks to correct level and grade i/c laying of earth in 6" layer fro construction of banks and dressing and disposal of surplus Excavated earth within one chain as

directed by flags wherever required. lift up to 5 feet.(1.52 M) and lead up to one chain (30.5 M) .  
**(PHSI NO: 1 Page 67)**

**25697.25 cft @ Rs 3000/00 P%0 cft RS: 77092/=**

02. Excavation for tanks and reservoirs in wet soil/ clay or mud i/c trimming and Dressing sides to true alignment / design section / profiles and shape, leveling of beds of tank to correct level and grade i/c laying of earth in 6" layer fro construction of bank and dressing and disposal of surplus Excavated earth within one chain as directed by Engineer Incharge i/c providing fence guards, lights, flags wherever required lift up to 5 feet ( 1.52 M) and lead up to one chain (30.5 M). (PHSI NO: 14 page 67)

**68947.0 cft @RS. 4800/00 P%0 cft RS; 68947/=**

03. Earth work compacting sheep foot Roller and power roller with optimum moisture contents (a) 85% modified AASHO Density (Sch: of high way work No. 7(c) Page 2)

**24157.00 cft @RS. 1445/48 P%0 cft RS. 34921/=**

04.Excavation for pipe line in trenches in pits in soil i/c trimming dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting joint holes and disposal of surplus excavated earth with in one chain & lift up to 5;ft or as directed by engineer in charge i/c providing fence guards lights flanges & temporary crossing for non vehicular Traffic where ever required lift up to 5ft in ordinary soil. (PHSI NO; 1 P-60)

**Qty: 600.00 Cft. @ Rs.3600/00 P.%0Cft Rs.2160/0**

**5' – 8' depth**

**Qty: 7370.00 Cft. @ Rs.4150/00 P.%0Cft Rs.7370/0**

05. Excavation in foundation of building, bridges & other structure i/c deg, belling dressing refilling around the structure with excavated earth watering, ramming lead upto one chain and lift upto 5' **in ordinary soil. (GSI No: 18, P-6)**

**749.25 cft. @Rs: 3176/25 P%0cft. Rs: 23798/-**

06.Extra for every 50'additional lead or part there off (soft, ordinary ,hard and every hard)(GSINO: 8 (a) P-2)

**40058.25 cft. @Rs: 1209/36 P%0cft. Rs: 48445/-**

07.C.C Brick or stone ballast 1/12" to 2' guage ratio 1:4:8 (GSI No.2, P-82)

**1665.00 cft. @Rs: 9416/28 P%0cft. Rs: 48445/-**

08. C.C plain i/c placing compacting finishing and curing complete i/c screening and w/o stone aggregate w/o shuttering Ratio 1;4;8.(C.S.INO:5 Page15)**Ratio 1:4:8**

**1663.50 @ Rs; 12595/00 P% cft Rs. 187788/=**

09. Brick lining (9" x 4 1/2" x 3") in 1: 6 cement sand mortar ( CSI NO. 8. Page 74)

**275424.00 @ Rs; 13163/40 P% cft Rs. 275424/=**

09.Pacca Brick work in foundation and plinth in cement sand mortal 1.6 (C.S.I NO: 4 page 19)  
Toe wall

<b>937.78 cft</b>	<b>@ 11948/36</b>	<b>P%cft</b>	<b>RS. 111691/=</b>
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10. Dry Brick on edge paving sand grouted i/c preparation of bed by watering, raining and bringing the same to proper chamber by 1/2" thick mud plaster (C.S. I NO: 5 Page 39)

<b>2628.0</b>	<b>@ Rs; 3823/57</b>	<b>P% cft</b>	<b>Rs.100483/=</b>
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11. Cement plaster 1:4 up to 20' feet height inch 1/2" thick (C.S. I NO:11 page51)

<b>1752.00 sft</b>	<b>@ 2283/93</b>	<b>P% sft</b>	<b>RS;40014/=</b>
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12. Providing R.C.C pipe of ASTM C-76-62 T/C 76-70 class II wall B class and fixing in trenches i/c cutting and jointing with rubber rings i/c testing with water to specified (PHSI NO;1P-17)  
**12" dia**

<b>40.0 rft</b>	<b>@ Rs; 412.00</b>	<b>P.rft</b>	<b>Rs;16480/0</b>
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13. Refilling the excavated stuff in trenches in 6" thick layers leveling dressing i/c watering ramming to full compaction etc complete ( PHSI NO: 24 P\_ 53 )

<b>Qty: 600.0Cft.</b>	<b>@ Rs.2760/00</b>	<b>P% Cft</b>	<b>Rs. 1490/-</b>
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**TOTAL**

**Rs: 1454009/-**

### **F: - STAFF QUARTER (HUT TYPE)**

01. Excavation for foundation of building, bridges and other structure i/c deg belling dressing refilling around the structure with excavated earth watering ramming lead up to one chain and lift up to 5.0 ft. in ordinary soil.(CSI No.18(b) page-05 )

347.00 Cft.	@ Rs.3176/25	P.%0Cft	Rs: 1102/-
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02. C.C Brick or Stone Ballast 1 1/2 " to 2" guage. 1:4:8. (CSI No.5 p-16).

165.47 Cft.	@ Rs. 9416/28	P%Cft.	Rs. 15581/-
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03. Pacca brick work in foundation and plinth in cement sand mortar 1:6 (GSI No:4(e),P-25)

390.21 cft	@Rs: 11948/83	P%cft.	Rs: 46626/-
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04. Damp proof course with cement and shingle concrete 1:2:4 i/c 2 coats of asphaltic 3" thick (CSI No:28,P-18)

93.04 cft	@Rs: 4982/18	P%cft.	Rs: 4635/-
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05. Pacca brick work in ground floor i/c striking of joints upto 20' height. **(CSI No:5,P-25) Ratio 1:6**

<b>509.75 cft.</b>	<b>@Rs: 12674/36</b>	<b>P%cft.</b>	<b>Rs: 64613/-</b>
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06. Reinforcement cement concrete work i/c all Labour and material except the cost of steel reinforcement and its Labour for bending and binding which will paid separately. This rate also i/c all kinds of forms moulds, lifting shuttering curing rendering and finishing and exposed surface i/c screening and washing of shingle. R.C.C work in roof, slab, beams, columns, rafts, lintels & other structural members laid in situ or precast laid in position etc complete. **Ratio 1:2:4 (GSI No:6(a), P-19)**

<b>169.62 cft.</b>	<b>@Rs: 337/-</b>	<b>P.Cft.</b>	<b>Rs: 57162/-</b>
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07. Fabrication of M.S reinforcement for C.C i/c cutting, bending, laying in position making joints fastening i/c cost of binding wire also i/cs removal of rust from bars. **(GSI No: 7(ii), P-20)**

<b>6.81 cwt.</b>	<b>@Rs: 5001/70</b>	<b>P.Cwt.</b>	<b>Rs: 34062/-</b>
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08. Cement Plaster 1:6, 1/2" thick upto 12' height. **(CSI No: 11, P-58)**

<b>954.45 sft.</b>	<b>@Rs: 2206/60</b>	<b>P%0sft.</b>	<b>Rs: 21061/-</b>
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09. Cement Plaster (1:4) 3/8" thick up to 12' Height. (CSI No.11(b) page-53 )

954.45 Sft.	@ Rs. 2197/52	P%Sft	Rs. 20974/-
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10. Cement pointing struck joints on walls. Ratio 1:3 (CSI No.19 (b) P-59)

584.70 sft	@ Rs. 1213/58	P%Sft	Rs: 7096/-
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11. Filling watering ramming earth in floor with surplus earth from foundation lead upto one chain and lift upto 5' (**CSI No: 21,P-4**)

<b>442.00 cft.</b>	<b>@Rs: 3630/00</b>	<b>P%0cft.</b>	<b>Rs: 1604/-</b>
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12. Providing, Laying 1" thick topping C.C 1:2:4 i/c surface finishing and dividing into panels **3" thick** (**CSI No:16,P-41**)

<b>238.00 sft.</b>	<b>@Rs: 4411/82</b>	<b>P%0sft.</b>	<b>Rs: 10500/-</b>
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13. Providing & Fixing ornamental cement Jali 2" thick 1:2:4 without steel. (**CSI No:11,P-17**)

<b>27.50 sft.</b>	<b>@Rs: 226/02</b>	<b>P.sft.</b>	<b>Rs: 6103/-</b>
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14. Making and Fixing steel grated doors and windows with 1/16" thick sheeting i/c angle iron frame 2"x2"x 3/8" and 3/4" sq; bars 4" center to center with locking arrangements. (**CSI No:23,P-97**)

<b>22.75 sft</b>	<b>@ Rs: 726/72</b>	<b>P.Sft</b>	<b>Rs: 16533/-</b>
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15. Supplying & Fixing in position iron / steel grill of 3/4"x1/4" size flat iron of approved design i/c painting 3 coats etc complete (weight not to be less than 3.7 lbs: /sq; feet on finished grill) (**GSI No: 26, P-92**)

<b>24.00 sft.</b>	<b>@Rs: 180/50</b>	<b>P.sft.</b>	<b>Rs: 4332/-</b>
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16. Fabrication of Metalled steel. (**CSI No. 24, P-60**)

<b>2.03 Cwt.</b>	<b>@Rs: 5001/70</b>	<b>P.Cwt.</b>	<b>Rs: 10005/-</b>
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17. Painting new surface preparing surface & painting of door & windows grating. (CSI No. 4(d) P-76) **3 coats**

<b>120.00 sft.</b>	<b>@ Rs. 2116/41</b>	<b>P%0Sft.</b>	<b>Rs. 2540/-</b>
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18. White washing two coats (**CSI No: 28, P-60**)

<b>1296.70 sft</b>	<b>@Rs: 425/84</b>	<b>P%0sft</b>	<b>Rs: 5522/-</b>
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<b>Total: -</b>	<b>Rs: 372062/-</b>
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**G: - COMPOUND WALL SIZE 2 (150+200) = 700 Rft - 16..00 = 684.00**

01. Excavation for foundation of building, bridges and other structure i/c deg belling dressing refilling around the structure with excavated earth watering ramming lead up to one chain and lift up to 5.0 ft. in ordinary soil.(CSI No.18(b) page-05 )

2772.00 Cft.	@ Rs.3176/25	P.%0Cft	Rs: 8805/-
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02. C.C Brick or Stone Ballast 1 ½ “ to 2” gauge. 1:4:8. (CSI No.5 p-16).			
693.00 Cft.	@ Rs. 11288/75	P%Cft.	Rs. 65255/-
03. Pacca brick work in foundation and plinth in cement sand mortar 1:6 (GSI No:4(e),P-25)			
2308.50 cft	@Rs: 11948/36	P%cft.	Rs: 275828/-
04. DPC with cement sand shingle concrete 1:2:4 i/e two coats of asphalt mixture. (CSI No.27 P-23). <b>3” THICK.</b>			
769.50 sft.	@ Rs. 4982/18	P% sft.	Rs. 38338/-
05. Pacca Brick work other than building i/c striking of joints upto 20’ height in cement sand mortar 1:6. (CSI No.7(i)P-26).			
1147.50 Cft.	@ Rs. 12346/65	P%Cft.	Rs. 141678/-
06. Cement Plaster (1:6) ½ “thick up to 12’ Height. (CSI No.12(a) Page-58 ) 1 <sup>st</sup> coat Inner side			
4392.00 Sft.	@ Rs. 2206/60	P%Sft	Rs. 96914/-
07. Cement Plaster (1:4) 3/8“thick up to 12’ Height. (CSI No.11(b) page-53 )			
34554.00 Sft.	@ Rs. 2197/52	P%Sft	Rs. 96515/-
08. Cement pointing struck joints on walls. Ratio 1:3 (CSI No.19 (b) P-59).			
2448.00 sft	@ Rs. 1213/58	P%Sft	Rs: 29708/-
09. Making and fixing steel gated doors complete with locking arrangement angle iron frame 2”x2”x3/8” and ¾ “ sq: bars @ c/c. (CSI No.24 p-97).			
60.00 sft	@ Rs. 726/72	P.Sft	Rs. 43603/-
10. R.C.C work in roof, slab, beams, columns. <b>(CSI No:6, P-18)</b>			
<b>69.00 Cft:</b>	<b>@Rs: 337/-</b>	<b>P%Cft:</b>	<b>Rs: 23253/-</b>
11. Fabrication of metallised steel. <b>(CSI No. 24, P-60)</b>			
<b>2.77 Cwt.</b>	<b>@Rs: 5001/70</b>	<b>P.Cwt.</b>	<b>Rs: 13855/-</b>
12. White wash of Chalk distemper. (CSI No.28 P-60).			
6840.00 sft	@ Rs. 416/63	P.Sft	Rs. 28497/-
13. Colour wash two coats. (CSI No. P- ).			
6840.00 sft	@ Rs. 859/90	P.Sft	Rs. 58817/-
14. Painting new surface preparing surface & painting of guard bars gates of iron bars grating, railing i/c standard braces etc. (T.similar open work).(CSI No. 4(d) P-76). 2 coats			
120.00 sft.	@ Rs. 1489/68	P%Sft.	Rs. 1788/-
			<b>Total</b>
			<b>Rs. 922854/-</b>

## **H: - FEEDING CHANNEL, RCC SUMP**

01. Excavation in foundation of building, bridges & other structure i/c deg, belling dressing refilling around the structure with excavated earth watering, ramming lead upto one chain and lift upto 5’ **in ordinary soil. (GSI No: 18, P-6)**

<b>850.98 cft.</b>	<b>@Rs: 3176/25</b>	<b>P%0cft.</b>	<b>Rs: 2702/-</b>
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02. Cement concrete plain i/c placing compacting finishing curing and Washing stone aggregate w/o shuttering Ratio 1:2:4.(CSI No.5 Page-17)

**225.96 cft.** @Rs: 14429/25 **P%0cft.** **Rs: 5411/-**

03. Pacca Brick work in foundation and plinth in cement sand mortal 1.6 (C.S.I NO: 4 page 19)

**600.00 cft.** @Rs: 11948/36 **P%0cft.** **Rs: 71690/-**

04. Reinforcement cement concrete work i/c all Labour and material accept the cost of steel reinforcement and its Labour for bending and binding which will paid separately. This rate also i/c all kinds of forms moulds, lifting shuttering curing rendering and finishing and exposed surface i/c screening and washing of shingle. R.C.C work in roof, slab, beams, columns, rafts, lintels & other structural members laid in situ or precast laid in position etc complete. Ratio 1:2:4 (GSI No:6(a), P-19)

**249.82 cft.** @Rs: 337/ **P.Cft.** **Rs: 84189/-**

05. Fabrication of M.S reinforcement for C.C i/c cutting, bending, laying in position making joints fastening i/c cost of binding wire also i/c des removal of rust from bars. (CSI No:7, P-18)

**10.03 cwt.** @Rs: 5001/70 **P.Cwt.** **Rs: 50167/-**

06. Cement Plaster (1:4) 1/2" thick up to 12' Height. (CSI No.11, P-58)

**650.00 Sft.** @ Rs. 2283/93 **P%Sft** **Rs. 14845/-**

**Total = Rs; 254512/-**

## **GENERAL ABSTRACT OF COST**

	<u>Schedule Items</u>	<u>Non Sch: Items</u>	<u>G. Total</u>
01. Pump House	Rs: 3,09,520/-	Rs: -	Rs: 3,09,520/-
02. Pumping Machinery	Rs: -	Rs: 7,70,500/ -	Rs: 7,70,500/-
03. Inter Connection	Rs: 1,64,397/-	Rs: -	Rs: 1,64,397/-
04. PVC Pipe R/M & Dist: system	Rs: 10,50,871/-	Rs: -	Rs: 10,50,871/-
05. Semi Pacca Storage Tanks	Rs: 14,54,009/-	Rs: -	Rs: 14,54,009/-
06. Staff Quarter (Hut Type)	Rs: 3,72,062/-	Rs: -	Rs: 3,72,062/-
07. Compound Wall	Rs: 9,22,854/-	Rs: -	Rs: 9,22,854/-
08. Feeding Channel i/c Sump Well	Rs: 2,54,512/-	Rs: -	Rs: 2,54,512/-
<b>Total: -</b>	<b>Rs: 45,28,225/-</b>	<b>Rs: 7,70,500/-</b>	<b>Rs: 52,98,725/-</b>

## **CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
Public Health Engg: Division  
Kamber Shahdadkot @ Kamber

# **SCHEDULE 'B'**

*Name of work: - Construction of Water Supply Schemes of various villages (15 villages) village Ali-Ji-Wandh Taluka Mirokhan District Kamber Shahdadkot*

*Head of A/C: - Annual Development Programme 2013-14*

Qty:	S.No.	Item of work	Rate	Unit	Amount
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## **A: - TUBE WELLS**

01. Boring for tube well in all bearing soils from ground level upto 100' or 30.50 meters depth i/c sinking & with drawing of casing pipe. **(PHSI No: 1,P-41)**

**100.00 Rft:**                      **12" dia**                      **@Rs: 743/-**                      **P.Rft:**                      **Rs: 74300/-**

02. Providing strong substantially built wooden locked with compartment for preserving 2 lbs (1 K.g) samples strata. **(PHSI No: 5,P-43)**

**01 Nos:**    **@Rs: 3530/-**                      **P.Rft:**                      **Rs: 3530/-**

03. Providing & Preserving inbox 2 lbs (1 K.g) sample of strata from bore holes. **(PHSI No: 5,P-43)**

**4 Samples.**    **@Rs:101/-**                      **P.each.**                      **Rs: 404/-**

04. Taking samples of water from bore holes and placing in two separate bottles. **(PHSI No:7,P-37)**

**4 Samples.**    **@Rs:131/-**                      **P.each.**                      **Rs: 524/-**

05. Supplying & Installing PVC blind pipe 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:12,P-31)**

**39.00 Rft:**                      **8" dia.**                      **@Rs:516/80**                      **P.Rft:**                      **Rs: 20155/-**

06. Supplying & Installing PVC strainer 'B' class of approved design, quality and make i/c necessary sockets etc complete. **(PHSI No:9,P-30)**

**64.00 Rft:**                      **8" dia.**                      **@Rs: 554/05**                      **P.Rft:**                      **Rs: 35459/-**

07. Providing & Fixing M.S bail plug. **(PHSI No: 8, P-43)**

**1 No:**    **8" dia**                      **@Rs: 2607/-**                      **P.each**                      **Rs: 2607/-**

08. Shrouding with graded Bajri (3/8" to 1/8") or (9 to 3 mm) in between bore and blind pipe for the following diameters of strainers. **(PHSI No:13,P-45)**

**100.00 Rft**                      **8" dia**                      **@Rs: 105/-**                      **P.each**                      **Rs: 10500/-**

09. Development of Tube well. **(PHSI No: 8,P-43)**

**100.00 Rft**    **@Rs: 200/-**                      **P.each**                      **Rs: 20000/-**

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**Rs: 167479/-**

**For 3 Nos: x 167479/- =**

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**Rs: 502437/-**



## **B: - PUMP HOUSE**

01. Excavation for foundation of building, bridges & other structure i/c deg belling dressing, refilling around the structure with excavated earth watering ramming lead upto one chain and lift upto 5' in ordinary soil **(CSI No:18,P-6)**

**147.50 cft.** @Rs: 3176/25 P%0cft. Rs: 468/-

02. Cement concrete brick or stone ballast 1 ½" to 2" gauge. Ratio 1:2:4 **(CSI No:4,P-14)**

**61.71 Cft.** @Rs: 9416/28 P%cft. Rs: 5811/-

03. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**158.20 Cft.** @Rs: 11948/36 P%cft. Rs: 18902/-

04. D.P.C with cement sand and shingle concrete 1:2:4 i/c 2 coat of asphaltic mixture **(G.S.I No. P-18) 3" thick**

**39.55 Cft.** @Rs: 4982/18 P%cft. Rs: 1970/-

05. Filling Watering and ramming earth in floor with new earth excavated from out side lead upto 1 chain and lift upto 5' **(G.S.I No.22 P-4)**

**145.54 Cft.** @Rs: 3630/- P%0cft. Rs: 528/-

06. Pacca brick work in foundation and plinth in cement san mortar in 1:6 **(GSI No:4(e),P-25)**

**245.24 Cft.** @Rs: 12674/36 P%cft. Rs: 31083/-

07. R.C.C work i/c all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface i/c screening and washing of shingle (1) R.C work in roof slab members laid in situ or precast laid in position complete in a respect (i) Ratio 1:2:4 90 lbs cement 2 cft sand 4 cft shingle 1/8" to ¼" gauge **(GSI No.6, P-17)**

**70.50 Cft.** @Rs: 337/- P.Cft. Rs: 23759/-

08. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastening i/c cost of biding wire also includes removal of rust from bars **(GSI No.7(ii)(a), P-19)**

**2.83 Cwt.** @Rs: 5001/70 P.Cwt. Rs: 14155/-

09. Providing and laying 3" thick to toping Cement Concrete (1:2:4) i/c surface, finishing and dividing in to panel. **(GSI No.16, P-42)**

**64.00 Sft.** @Rs: 4411/82 P%Sft. Rs: 2824/-

10. Cement Plaster 1:6, ½" thick upto 12' height. **(CSI No: 11, P-58)**

**273.25 sft.** @Rs: 2206/60 P%sft. Rs: 6030/-

11. Cement Plaster 1:4, 3/8" thick upto 12' height. **(CSI No:11,P-53)**

**273.25 sft.** @Rs: 2197/52 P%sft. Rs: 6005/-

12. Cement pointing struck joints on walls 1:3 **(CSI No.19 p-28).**

**333.25 sft.** @Rs: 1213/58 P%sft. Rs: 4044/-

13. Making and Fixing steel grated doors with 1/16" thick & 1/4" sq: bars @ 4: c/c locking arrangements. **(CSI No:24,P-91)**

**22.75 sft.** @Rs; 726/72 **P.Sft.** **Rs: 16533/-**

14. Fabrication of heavy steel work with angles tees, flat iron round iron and sheet iron for making tresses girders, tanks etc i/c cutting tanks i/c cutting drilling riveting handling assembling and fixing but excluding erection in position. **(CSI No.2, P-91)**

**2.03 Cwt.** @Rs: 4928/49 **P.Cwt.** **Rs: 10005/-**

15. Errection and fitting in position of iron trusses staging of water tanks etc. **(CSI No:3, P-91)**

**2.03 sft.** @Rs; 271/04 **P.Sft.** **Rs: 550/-**

16. Supplying and fixing in position iron / steel grill of 3/4"x 1/2" size flat iron of approved design i/c painting 3 coats etc complete. **(CSI No:26, P-93)**

**24.00 sft.** @Rs; 180/50 **P.Sft.** **Rs: 4332/-**

### **PAINTING NEW SURFACE**

17. Preparing surface and painting of door and window any type i/c Edges 3 coats. **(GSI No:5, P-69)**

**93.50 sft.** @Rs; 2116/41 **P%Sft.** **Rs: 1979/-**

18. White washing one coat. **(GSI No:26, P-53)**

**136.00 sft.** @Rs: 416/63 **P%Sft.** **Rs: 567/-**

19. Colour washing 2 coats. **(GSI No:25, P-53)**

**606.50 sft.** @Rs: 859/90 **P%Sft.** **Rs: 5215/-**

**Total** **Rs: 154760/-**

**3x154760/- = Rs: 464280/-**

## **C: - PUMPING MACHINERY**

### **a). A.C Electric Pumping Set 7.50 BHP**

01. Supplying & installing in position i/c transportation to site of work Electric Pumping set consisting of A.C electric Motor of **7.50 BHP** made (KSB) 3 phase 50 cycles 400/420 volts of 1500 RPM type ILA7-130-4AA 60 coupled with (KSB Centrifugal pump Type (ETA-40-20) size 2" x 1 1/2" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 125 ft i/c installing of pumping set on cement concrete foundation (1:2:4) with M.S nuts bolts of 5/8" to be embedded in C.C foundation i/c providing and fixing on prepared board A.C 50 cycles 3 phase 12-25 amps: trip rating push button type oil amerced start delta starter complete with no volts & over lead release as required i/c providing & fixing on prepared board iron (clad) triple pole & neutral switch fuse with rewire able type fuse link carrier 500 volts grade 30 amps: & amps: meter 0-50 installed on metal board i/c providing & fixing Metalled board to accommodate main or sub-main control switches recessed in the wall size 3'x2 1/2' i/c providing phase indicators bulbs with holders and providing internal electric wiring 660 volts grade in 25 mm (1") PVC conduit on surface as required i/c providing & fixing earthing set with 0.6Mx0.6Mx5.3MM(2'x2'x 1/2) copper plate buried in the ground at depth of 3.7M(12') or less as per Pak PWD specification & testing for the pumping set against the required head of 72 hours etc complete. **(Approved R.A)**

**Qty: 3 Sets** @ **Rs. 267000/-** **P.Set.** **Rs. 801000/-**

## **b). Diesel Engine Set 16 BHP**

01. Supplying & Installing in position i/c transportation to site of work Diesel Engine Pumping set consisting of Diesel Oil Engine **16 BHP** made (Golden made) fixed handle starter 2200 RPM i/c all accessories coupled with KSB Centrifugal ETA NORM pump Type (ETA-40-200) size 2" x 1½" mounted on common steel frame or base plate capable of discharging 90 glns: per minute against a head of 100 ft Pulley & Belt i/c installing of pumping set on cement concrete foundation (1:2:4) & Ratio 1:4:8 with stone ballast with M.S nuts bolts of 1/2" to be embedded in C.C foundation and testing for the pumping set against the required head of 72 hours etc. **(Approved R.A)**

<b>Qty: 1 Set.</b>	<b>@ Rs. 236500/-</b>	<b>P.Set.</b>	<b>Rs. 236500/-</b>
		<b>Total</b>	<b>Rs: 1037500/-</b>

## **D: - INTER CONNECTION**

01. Providing laying and fixing trenches i/c fitting, jointing and testing etc: complete in all respect the high Density polyethylene P.E pipes (HDPE-100) for W/S conforming ISO 4427/DIN 8074/8075 B.S 3580 & PSI 3051 **(PHSI-1, P-25)**

**60.00 Rft** @ **Rs. 178/-** **P.Rft.** **Rs. 10680/-**

02. Supplying M.S Flanges **(PHSMI No:12, P-17)**

**Qty: 12 Nos:** **3" dia** @ **Rs: 500/89** **P.each** **Rs: 6011/-**

03. C.I Sluice valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs/sq inch. **(PHSMI No:1, P-11)**

**Qty: 01 Nos:** **3" dia** @ **Rs: 4290/-** **P.each** **Rs: 4290/-**

04. C.I Bend with flanges end with holes i/c turning & facing of flanges (for all sizes). **(PHSMI No:1, P-11)**

**0.83 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 5060/-**

05. Supplying Reflex Valve heavy pattern test pressure 21 kg/sq, cm or 300 lbs:/sq: inch **(PHSMI No:C, P-11)**

**Qty: 2 Nos:** **3" dia** @ **Rs: 1543/75** **P.each** **Rs: 3088/-**

06. C.I tapered flat bottomed or central tapered flanged end with holes i/c turning facing flanged all sizes. **(PHSMI No:7, P-11)**

**0.20 Cwt** @ **Rs: 6096/-** **P.Cwt** **Rs: 1219/-**

07. Supplying Flange Adopter.

**12 Nos:** **3" dia** @ **Rs: 675/-** **P.each** **Rs: 8100/-**

08. Foot Valve heavy pattern with cone type gate imported. **(PHSMI No:1, P-11)**

**1 No:** **3" dia** @ **Rs: 731/25** **P.each** **Rs: 731/-**

09. Butt Fusion Joint **(PHSMI-H, P-20)**

**12 Joints** **3" dia** @ **Rs: 600/-** **P.Joint** **Rs: 7200/-**

10. Jointing C.I/ M.S. flanged pipe and specials flanged ends inside trenches i/c supply rubber packing of required thickness ruts belts with washers and other tools required for jointing and testing the joints to the specified pressure etc complete **(PHSI No.1 Page-33).**

**12 Joints** **3" dia** @ **Rs: 499/-** **P.Joint** **Rs: 5988/-**

11. Providing G.I pipes 3” dia (PHSI No.1 Page-33).

<b>08.00 Rft</b>	<b>3” dia</b>	<b>@Rs: 304/02</b>	<b>P.Rft</b>	<b>Rs: 2432/-</b>
			<b>Total</b>	<b>Rs: 54799/-</b>
	<b>For 04 Nos:</b>	<b>4 x 54799/-</b>	<b>=</b>	<b>Rs: 219196/-</b>

## **E: - PVC PIPE RISING MAIN & DISTT: SYSTEM**

01. Excavation for pipe line in trenches i/c pits in soft soil i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting, joints holes & disposal of surplus earth within one chain or as directed by Engineer Incharge i/c providing fence guards light flanges and temporary crossing for non vehicular traffic where ever required lift upto 5’ and lead upto one chain. (PHSI No:2,P-46)

<b>91200.00 cft</b>	<b>@Rs: 3600/-</b>	<b>P%0cft.</b>	<b>Rs: 328320/-</b>
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02. Providing, UPVC pipes of Class “B” (equal vent make) make fixing in trench i/c cutting fitting and jointing with “Z” joint with one rubber ring i/c testing with water to head 61 meter or 200 ft (GSI No: 1, P-22)

<b>4100.00 Rft</b>	<b>3” dia Pipe</b>	<b>@Rs: 90/-</b>	<b>P.Rft.</b>	<b>Rs: 369000/-</b>
<b>3600.00 Rft</b>	<b>4” dia pipe</b>	<b>@Rs: 137/-</b>	<b>P.Rft.</b>	<b>Rs: 493200/-</b>
<b>7500.00 Rft</b>	<b>6” dia pipe</b>	<b>@Rs: 262/-</b>	<b>P.Rft.</b>	<b>Rs: 1965000/-</b>

### **C.I PLAIN BEND**

<b>4 Nos.</b>	<b>3” dia</b>	<b>@Rs: 570/-</b>	<b>P.Rft.</b>	<b>Rs: 2280/-</b>
<b>5 Nos.</b>	<b>4” dia</b>	<b>@Rs: 812/-</b>	<b>P.Rft.</b>	<b>Rs: 4060/-</b>
<b>5 Nos.</b>	<b>6” dia</b>	<b>@Rs: 1582/-</b>	<b>P.Rft.</b>	<b>Rs: 7910/-</b>

### **C.I Tee Plain**

<b>04 Nos.</b>	<b>3” dia</b>	<b>@Rs: 771/-</b>	<b>Each</b>	<b>Rs: 3084/-</b>
<b>03 Nos.</b>	<b>4” dia</b>	<b>@Rs: 1055/-</b>	<b>Each</b>	<b>Rs: 3165/-</b>
<b>05 Nos.</b>	<b>6” dia</b>	<b>@Rs: 2029/-</b>	<b>Each</b>	<b>Rs: 10145/-</b>

### **C.I Gibault Joints**

<b>02 Nos.</b>	<b>3” dia</b>	<b>@Rs: 568/75</b>	<b>Each</b>	<b>Rs: 1138/-</b>
<b>02 Nos.</b>	<b>4” dia</b>	<b>@Rs: 731/25</b>	<b>Each</b>	<b>Rs: 1463/-</b>
<b>02 Nos.</b>	<b>6” dia</b>	<b>@Rs: 1062/50</b>	<b>Each</b>	<b>Rs: 2125/-</b>

17. Making joints to C.I specials fitting i/c laying and required diameter and testing the joints along-with A.C pressure pipe line to specified pressure and testing the all leaky joints etc complete. (PHSMI No: 1, P-49)

<b>10 Joints</b>	<b>3” dia</b>	<b>@Rs: 62/-</b>	<b>P.Joint</b>	<b>Rs: 620/-</b>
<b>10 Joints</b>	<b>4” dia</b>	<b>@Rs: 62/-</b>	<b>P.Joint</b>	<b>Rs: 620/-</b>
<b>12 Joints</b>	<b>6” dia</b>	<b>@Rs: 72/-</b>	<b>P.Joint</b>	<b>Rs: 864/-</b>

18. Refilling the excavated stuff in trenches in 6” thick layers for leveling dressing i/c watering, ramming to full compaction etc complete. (PHSI No:24,P-53)

<b>82080.00 cft</b>	<b>@Rs: 2760/-</b>	<b>P%0cft.</b>	<b>Rs: 226541/-</b>
	<b>Total: -</b>		<b>Rs: 3419535/-</b>

# **GENERAL ABSTRACT OF COST**

	<b><u>Schedule Items</u></b>	<b><u>Non Sch: Items</u></b>	<b><u>G. Total</u></b>
01. Tube Wells	Rs: 5,02,437/-	Rs: -	Rs: 5,02,437/-
02. Pump House	Rs: 4,64,280/-	Rs: -	Rs: 4,64,280/-
03. Pumping Machinery	Rs: -	Rs: 10,37,500/ -	Rs: 10,37,500/-
04. Inter Connection	Rs: 2,19,196/-	Rs: -	Rs: 2,19,196/-
05. PVC Pipe R/M & Distt: system	Rs: 34,19,535/-	Rs: -	Rs: 34,19,535/-
<b>Total: -</b>	<b>Rs: 46,05,448/-</b>	<b>Rs: 10,37,500/-</b>	<b>Rs: 56,42,948/-</b>

## **CONDITIONS**

01. No cartage of any material will be paid separately.
02. No premium will be allowed on Non schedule items.
03. Work shall be carried out as per PWD/PHE Specifications.
04. Material such as Bajri, Hill sand Cement shall be brought by the contractor from the places mentioned in the estimate.
05. Any error / omission in the rates, unit & description will be governed by the respectively schedule of rates.

**CONTRACTOR**

**EXECUTIVE ENGINEER**  
**Public Health Engg: Division**  
**Kamber Shahdadkot @ Kamber**