JAIPUR DEVELOPMENT AUTHORITY



Bid Document

For

"Providing, Laying and Jointing of sewer line at Pada Mandi to khole wale hanuman ji Temple entrance Gate under PHE-II, JDA, Jurisdiction, JDA, Jaipur"

Cost : Rs 19.00 Lacs

NIB No. 01/2016-17 Due on 25.05.2016

Executive Engineer (PHE-II)
Jaipur Development Authority
Jaipur

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JAIPUR DEVELOPMENT AUTHORITY

Room No. 135, Main Building, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004 Telephone: +91-141-2569696 e.mail: ee.phe2@jaipurjda.org

No:- JDA/EE/PHE-II/2016-17/D-22 Dated: 29.04.2016

NOTICE INVITING BID

NIB No.: EE(PHE-II)/01/2016-17

Online Bids are invited up-to 3.00 PM of 25.05.2016 for "Providing, Laying and Jointing of sewer line at Pada Mandi to Khole Wale Hanuman Ji Temple entrance Gate Under PHE-II, JDA, Jurisdiction, JDA, Jaipur". Details may be seen in the Bidding Document at our office or the website of State Public Procurement Portal website www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jaipurjda.org.

To participate in the bid, bidder has to be:

- 1. Registered on JDA website www.jaipurjda.org For participating in the Bid, the Bidder has to apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
- 2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

(Manoj Kumar Singh) Executive Engineer (PHE-II) JDA, Jaipur

Dated: 29.04.2016

Detail NIB for uploading on SPP Portal, e-Procurement, JDA Protal & as part of NIB Document

JAIPUR DEVELOPMENT AUTHORITY

Room No. 135, Main Building, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004 Telephone: +91-141-2569696 e.mail: <u>ee.phe2@jaipurjda.org</u>

Bid No:- JDA/EE/PHE-II/2016-17/D-22

NOTICE INVITING BID

NIB No.: EE(PHE-II)/01/2016-17

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Name & Address of the Procuring Entity	➤ Name: Executive Engineer (PHE-II), Jaipur Development Authority ➤ Address: CCC TF 302, Third Floor, Customer Care Building, Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302 004 (Rajasthan) ➤ Email: ee.phe2@jaipurjda.org
Subject Matter of Procurement	➤ Providing, Laying and Jointing of sewer line at Pada Mandi to Khole Wale Hanuman Ji Temple entrance Gate Under PHE-II, JDA, Jurisdiction, JDA, Jaipur.
Bid Procedure	➤ Single-stage Two part (envelope) open competitive eBid procedure at http://eproc.rajasthan.gov.in
Bid Evaluation Criteria (Selection Method)	➤ Least Cost Based Selection (LCBS)
Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.	➤ Websites: www.sppp.rajasthan.gov.in , <a href="</th">
Website for online Bid application and payment *	 Website: www.jaipurjda.org For participating in the Bid, the Bidder has to apply for this Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only. Bidding document fee: Rs. 250/- Rupees (Two Hundred Fifty only) RISL Processing Fee: Rs. 1000/- (Rupees One Thousand only) Requisite Bid Security Deposit
Estimated Procurement Cost	➤ INR 19,00,000/- (Rupees Nineteen Lacs only)
Bid Security Deposit	➤ Amount (INR): 2% (Rs. 38000/-) of Estimated Procurement Cost, for A & AA class contractor registered in other department 0.5% of S.S.I. of Rajasthan, 0.5% (Rs. 9500/-) for Bidder registered as contractor in JDA, 1% for Sick Industries, other than S.S.I., whose cases are pending with Board of Industrial & Financial Reconstruction
Pre-Bid	>N/A
Published Date on SPP Portal*	> 29.04.2016 at 9.30 AM onwards
Document Sale / Download / Bid Participation Amount Deposit Start Date on JDA Portal Bid Submission Start Date on eProc	> 29.04.2016 at 3.30 AM onwards > 29.04.2016 at 5.00 PM
Portal of GOR Document Sale / Download / Bid	> 20.05-2016 at 6.00 PM
Participation Amount Deposit End Date on JDA Portal	

Bid Submission End date on eProc Portal of GOR	≥ 25.05.2016 at 3.00 PM
Physical BG Submission Start Date	> 26.05.2016 at 10.00 AM
Physical BG Submission Closing Date	> 27.05.2016 at 3.00 PM
Bid Opening Date on eProc Portal of GOR	> 27.05.2016 at 04.00 PM
Place of Technical Bid Opening	≽N.A.
Bid Validity	▶120 days from the bid submission deadline
Completion period of work	➤ 02 Months
Job No.	➤ Sep/280/2015-2016

*The amount is to be deposited online by bidder. In case the amount exceeds the online payment limit the payment may be made through RTGS/NEFT in ICICI BANK LTD Bank Account Number 675401700586 IFSC Code ICIC0006754. After successful payment, update the UTR/Instrument number on JDA Tender portal against the tender you want to participate. The amount deposited will be confirmed by JDA and will be updated online.

Note:

- 1. Bidder (authorised signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal.
- 2. In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted.
- 3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safecrypt, Ncode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on http://eproc.rajasthan.gov.in(bidders already registered on http://eproc.rajasthan.gov.in(bidders already registered on http://eproc.rajasthan.gov.in
- 4. JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
- 5. Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
- 6. Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested for training may contact e-Procurement Cell, DoIT&C for booking the training slot.
 - Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in Address: e-Procurement Cell, JDA, YojanaBhawan, Tilak Marg, C-Scheme, Jaipur
- 7. The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
- 8. No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.
- 9. Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
- 10. The provisions of RTPPA Act 2012 and Rules thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the later shall prevail.

(Manoj Kumar Singh) Executive Engineer (PHE-II) JDA, Jaipur

Process for Participation & Depositing Payment Online

JAIPUR DEVELOPMENT AUTHORITY, has decided to receive Bidding document fee, RISL Processing Fee and Bid Security Deposit (BSD) through online mode only for which the bidder has to get registered himself on JDA portal www.jaipurjda.org.

To participate in the bid, bidder has to be:

- 1. Registered on JDA website <u>www.jaipurjda.org</u>(by depositing Rs. 500.00 online, the validity of which remains 3 (three) years).
 - For participating in the Bid, the Bidder has to apply for this Bid and pay the Bid Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
- 2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Methods for depositing on line amount

- Online through Internet Banking, Debit Card or Credit Card.
- In case the amount exceeds the online payment limit, the payment may be made through RTGS / NEFT / Transfer in Bank Account Number 675401700586 IFSC Code ICIC0006754 of ICICI BANK Limited, JDA Campus Jaipur.

In case of RTGS / NEFT / Transfer the bidder is required to deposit the requisite amount in the dedicated bank account number as mentioned above and has to get the UTR / Reference number from the bank. This number requires to be updated whiling applying the bid on JDA portal.

While participation in the bid, a receipt will be generated through the system showing the submission details as per **Annexure-4**. The bidder is required to fill the instrument numbers for various heads on e-Procurement portal www.eproc.rajasthan.gov.in as mentioned in the receipt.

More details about Registration Process, Terms and Conditions and FAQ along with contact detail is available on JDA website www.jaipurjda.org under eServices>>JDA Tender

Template of Online Receipt as part of NIB Document

Bidder has to submitted as proof of deposited amount against the Bid on eProcurement Protal

Jaipur Development Authority

Bid Participation Receipt

Date & Time: 09/06/2015 05:13 PM

Bid Detail

Bid Id: 6215152001

Bid Title: Testing

Bid Value: 300000 Bid Opening Place: Manthan Hall, Jaipur Development Authority

Bidder Detail

Name of Entity: XXXXXXXXXXX Mobile: 9829012345 Registration Type: Individual Instrument Amount: 32500.00 Online/UTR Payment Mode: Payment Channel : Payment Gateway/ICICI Branch - JDA 456123789 Instrument Date: 17-06-2015 Instrument No:

Dates Detail

Sr. No.	Event Name	Event Date
1	Publishing Date	01/06/2015 01:00 PM
2	Bid Opening Date	01/07/2015 03:00 PM

Specific Instrument Detail for eProc Rajasthan

Instrument Number	Head Name	Amount	Date
10000	Tender Fee	400.00	05/06/2015
10001	RISL Processing Fee	1000.00	05/06/2015
10002	Bid Security Deposit	30,000.00	05/06/2015

Section A-1 Instructions to Bidders

JAIPUR DEVELOPMENT AUTHORITY JAIPUR

SCHEDULE AND SPECIFICATIONS

1. Name of work:- "Providing, Laying and Jointing of sewer line at Pada Mandi to khole wale hanuman ji Temple entrance Gate under PHE-II, JDA, Jurisdiction, JDA, Jaipur"

2. NIB No. :- E.E.(PHE-II)/01/2016-17

3. Bid cost :- Rs. 19,00,000/-

4. Cost of the tender documents :- Rs 250/-

5. Earnest Money :- Rs. @ ½% Rs. 9,500/-

(For Contractors Enlisted in JDA, Jaipur)

:- Rs. @ 2 % Rs. 38,000/-

(For Contractors Enlisted in other Govt. Deptts. In Class-A/AA Category)

6. Download of tender documents : - 29.04.2016 to 25.05.2016 (upto 3.00 PM)

7. Date & Time of upload of tenders :- 25.05.2016 (upto 3.00 P.M.)

8. Date & Time of Opening tenders :- 27.05.2016 at 5.00 P.M.

9. Completion period of work : - 2 Months.

SCHEDULE 'A': INFORMATION USEFUL FOR THE CONTRACTORS:

The tenderer should see the site and fully understand the condition of the site before tendering and include all lead, lifts etc. **Percentage above/Below or equal to be quoted on the rates as given in the 'G' Schedule.** The work shall be carried out in accordance with the Rajasthan PWD, PHED and JDA detailed specification and to the entire satisfaction of the Engineer-In charge of the work.

The bid will be opened only of those bidders deposit proper bid security, processing fee, tender fee, VAT clearance certificate (Valid upto Six months back from the opening of Bid) and copy of registration of contractor in required category are found to be in order. The Bid security, tender fee will be accepted only in from of demand draft/banker cheque in the name of Secretary JDA, Jaipur.

If any bidder quotes a rate below than the schedule "G" rates, i.e. rates below than at par, than the bidder has to deposit the difference amount i.e. amount between the rates as per at par and below, as work performance guarantee. This amount has to be deposited before the commencement of work and will be refunded after successful completion of work. Lowest bidder will be issued LOA (Letter of Acceptance) and within 7 days period he has to deposit difference amount in the from of B.G./FDR/NSC. The validity of these shall be for a period three months beyond the stipulated date of completion / actual date of completion. In case of non deposition of the same in specified period, the 2 % Bid security will be forfeited. In case work is not completed satisfactorily, the work performance security will be forfeited along with Bid security.

SCHEDULE 'B': LIST OF THE DRAWING TO BE SUPPLIED BY THE DEPARTMENT:

The drawings may also be seen in the office of undersigned.

SCHEDULE 'C': LIST OF THE DRAWING TO BE SUPPLIED BY THE CONTRACTOR:

List of the drawing to be supplied by the contractor NIL. But the contractor shall have to arrange at his own cost drawings required for the work after depositing necessary cost within JDA.

SCHEDULE 'D': TEST OF THE MATERIALS:

The test of the material and workmanship shall be conducted by the JDA staff as necessary, The result of such tests should confirm to the standard laid down in the Indian standards and or the standards laid down in the detailed specification of the Public Works Deptt,. Proper quality control is required to be maintained by the contractor. Qualified personnel as required under the contractor enlistments rules duly approved by the Deptt. shall have to be engaged at site by the contractor. The deptt. reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.

SCHEDULE 'E': SAMPLES OF THE MATERIALS:

The samples of the material to be used by the contractor shall be deposited 15 days in advance with the Engineer In charge and be got approved by him before use.

SCHEDULE 'F': TIME OF COMPLETION:

The work should start within Ten days of issue of work order and complete within 2 months.

SCHEDULE 'G': ATTACHED SEPARATELY BASED ON JDA PHE BSR and JDA BSR 2016, JAIPUR.

SCHEDULE 'H': SPECIAL CONDITION.

SCHEDULE 'I': SPECIAL TERMS & CONDITION FOR DRINKING WATER TUBE WELL/PIPE LINE WORKS: ATTACHED SEPARATELY.

Annexure A: Compliance with the code of Integrity and No Conflict of Interest

Annexure B: Declaration by the Bidder regarding Qualifications

Annexure C: Grievance Redressal during Procurement Process

Annexure D : Additional Conditions of Contract

SIGNATURE OF CONTRACTOR

EXECUTIVE ENGINNER (PHE-II)
Jaipur Development Authority,
Jaipur

with full address & Mobile No. :

Section A-2 General Conditions of Contract

(Appendix XI of PWF & AR. Govt. of Rajasthan effective up to date shall be applicable)

Section A-3 Scope of work & Special Conditions of Contract

SPECIAL CONDITIONS

- If there is any typographical error or otherwise in the 'G' Schedule the rates given in the relevant BSR on which schedule 'G' has been prepared, shall prevail.
- 2. The contractor shall follow the contractor labour regulation and abolition Act 1970 & Rule 1971.
- 3. The JDA shall have right to cause on audit and technical examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made within two years after payment of the final bills and if as a result such audit any amount is found to have been over paid/excess in respect of any work done by the contractor under the contract or any work claimed by him to have been done under this contract and found not to have been executed the contractor shall be liable to refund such amount and it shall be lawful; for the JDA to recover such sum from him in; the manner prescribed in special condition no. 8 or any other manner legally permissible and if it is found that the contractor was paid less then that was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be paid by the JDA to the contractor.
- 4. The contractor shall not work after the sunset and before sunrise without specific permission of the authority Engineer.
- Excise Duty Exemption on D.I. pipe line shall be applicable as per rules and bidder has to consider this while quoting the rates.
- 6. Whenever any claim against the contractor for the payment of a sum of money arises out or under the contracts, the JDA shall be entered to recover the sum by appropriating in part or whole of the security deposit of the contractor. In the event of the security being insufficient or if no security has been taken from the contractor then the balance of the total sum recoverable as the case may shall be deducted from any sum then due or which a any time there contract with the JDA should this sum be sufficient to recover the full amount recoverable, the contractor shall pay to JDA on demand the balance remaining due. The JDA shall further have the right to effect such recoveries under P.D.R. Act.
- 7. The rate quoted by the contractor shall remain valid for a period of 120 days from the date of opening of the tenders.
- By submission of this tender the contractor agree to abide with all printed conditions provided in the PWD manual from 64 (Chapter 3-para 36) and subsequent modification.
- 9. No conditions are to be added by the contractor and conditional tender is liable to be rejected.
- 10. All transaction in the execution of this work and this tender will be liable to sale-tax vide section 2(B) read with sub clause (4) Sale-tax Rule, 1954.
- 11. If any Bid withdraws his Bid prior to expiry of said validity period given at S.No. 7 or mutually extended prior or makes modifications in the rates, terms and conditions of the tender within the said period which are not acceptable to the department or fails to commence the work in the specified period, fails to execute the agreement and fails to furnish performance guarantee the department shall without prejudice to any, other right or remedy, be at liberty to forfeit the amount of earnest money given in any form absolutely. If any contractor, who having submitted a Bid does not execute the agreement or start the work or dose not complete the work and the work has to be put to re-biding, he shall stand debarred from participating in bidding in JDA for Six Months in addition to forfeiture of Earnest Money / Security Deposit /Performance Guarantee and other action under agreement
- 12. Rules regarding enlistment of contractors provide that work upto five times limit for which they are qualified for tendering can be allotted to them. Therefore, before tender the contractors will keep this in mind, and submit the details of work. Bids with incomplete or incorrect information are liable to be rejected.
- 13. Any material not conforming to the specifications collected at site shall have to be removed by the contractor within a period of 3 days of the instructions, issued by the Engineer-Incharge in writing. Failing which, such material shall be removed by the Engineer-Incharge at risk and the contractor after expiry of 3 days period.
- 14. The material collected at site and paid provisionally shall remain under the watch and ward of the contractor till it is consumed, fully on the work.
- 15. The rates provided in Bid documents are inclusive of all Taxes, royalty.
- 16. No extra lead of earth/material shall be paid over and above as specified in 'G' schedule. Source/borrow pit area for earth shall have to be arranged by the Contractor at his own cost.
- 17. Undersigned has full right to reject any or all Bids without given any reasons.
- 18. Mortar of Masonry work and lean concrete will be permitted mixer with hopper.
- 19. As per Supreme Court decision "All contracts with Governments shall require registration of workers under the building and other construction workers (Regulation of Employment and Conditions of Service) Act, 1996 and extension of benefits to such workers under the act."
- 20. The Bidder are required to submit copy of their enlistment as contractor.
- 21. Conditions of RPWA-100 will be mandatory & acceptable to the contractor.
- 22. Any Bid received with unattested cutting/overwriting in rates shall be rejected and such bidder will be debarred from Bidding for three months in JDA.
- 23. All the provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and Rules, 2013 will be applicable. If there is any contradictions in existing special conditions and provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and RULES, 2013 shall be applicable.

Signature of Contractor with full address & Mobile No.

Executive Engineer (PHE-II)
JDA, Jaipur

SPECIAL CONDITIONS OF THE CONTRACT

1 PROVISION FOR NOMINAL REINFORCEMENT IN PRE-CAST RINGS

The Contractor shall provide steel reinforcement as per design requirement in each Pre-Cast M-40 Grade Circular Rings, along with nominal **reinforcement @ 0.12%** of gross cross sectional area in both the direction i.e. vertical bar & circular rings) subject to a minimum of nominal reinforcement as per Code of "Practice of Plain and Reinforced Concrete" IS: 456 2000. No extra payment shall be made to him/firm on this part. The Contractor should therefore take provisions accordingly.

SETTING OUT

- 2. The contractor(s) shall set out the whole of the work in conjunction with an officer to be deputed by the Engineer-in-charge and during the progress of the work to amend on the requisition of the Engineer-in-charge any errors which may arise therein and provide all the necessary Labour materials and equipments for so doing. The contractor has to provide all tools, plant, machinery, Labour and materials which may be necessary and required for the work. All materials and workmanship shall conform to the relevant specifications mentioned in the tender documents.
- 3. The contractor shall carryout the detailed topographic survey (level survey) with in the site and prepare the pre-commencement maps for approval of the Engineer-in-charge. Based on the approved pre-commencement maps showing spot levels of road crossing, the contractor will prepare the necessary working drawings and L-sections for the purpose of execution of work.

Public Awareness / Information Display

- 4. The contractor shall, at his own cost, arrange to provide, erect and maintain necessary display boards/ flags/banners etc. at selection points of project site giving such information as considered necessary for public awareness/ information/ safety as directed by the Engineer-in-charge.
- 5. Contractor shall provide sufficient number of boards at site of work indicating "**JDA AT WORK**" at his own cost as required by Engineer-in-charge.

Transport of material is contractor's responsibility.

- 6. It shall be mandatory on the part of the contractor to arrange Crane of suitable size for the transportation, loading, unloading, and fixing in position of the Pre-cast manhole elements. No manual labour for such purpose shall be engaged.
- 7. The tested material will be transported to site by the contractor safely. If any material or pipe/precast elements got damaged during transportation, loading, unloading, stacking and lowering in the trench the same will be rejected and no payment shall be made.
- 8. The surplus earth and damaged materials will be immediately removed from the site of work and dumped as per instruction of Engineer-in-charge.
- 9. The material collected at site and paid provisionally shall remain under the watch and ward of the contractor till it is consumed fully on the work.
- 10. Any material not conforming to the specifications collected at site shall have to be removed by the contractor within a period of 3 days of the instructions, issued by the Engineer-In-charge in writing. failing which, such material shall be removed by the Engineer-In-charge at risk and the contractor after expiry of 3 days period.

Inspection of work/ Materials.

11. The testing of work /samples shall be carried out by Engineer-in-charge/authorized representative or directed by the Engineer-in-charge. The test shall be carried out as per relevant I.S. Specification at manufacture's site before transportation to site. Inspection cost/testing charges if any, shall be born by the contractor only. Inspection shall be carried out for various items for SW pipes/RCC pipes, PVC (SWR) pipes, Cast iron ring and frame, manhole cover Ferro-cement footsteps and Pre-cast manhole elements/components etc.

Sewer laying work and construction of manholes.

- 12. The JDA Site Engineer shall provide the reduced level value of Bench Marks and invert levels in reference to the Bench Marks while starting the work. The contractor/ Firm or company's technical staff will transfer levels in the trench to lay the sewer line at required gradient with standard level instruments and , boning rods, side rails. The Contractor/Firm or company will be fully responsible for any error while transferring levels from Bench Marks to the trench. While doing so, if any, line is laid wrongly and/or is not as per desired gradient it shall be the responsibility of contractor to get the line re-laid at his own cost
- 13. The contractor shall provide at the site all material he shall be required to use for timbering/stuttering shoring excavation of trenches and which he shall bring to the site, prior to start of excavation for approval of the Engineer-in-charge.
- 14. RR stone/ Pre-cast manhole chambers shall be constructed/assembled simultaneously with the laying of sewers as per drawing and detailed specification of PWD (B&R) Rajasthan.
- 15. Concreting work should be done in the presence of an Engineer-in-charge not below the rank of Site Engineer of the JDA after checking of reinforcement by the Sector Engineer. After taking layout, the contractor shall submit daily Schedule of work to the Engineer-in-charge 15 days in advance.
- 16. Only design mix concrete of grade M-40 shall be used for the precast manhole elements.
- 17. The contractor shall keep the trenches open between two consecutive manholes while laying the sewer line. Pipes shall be lowered in the trenches and cured minimum for three days, trench shall be refilled with excavated earth as per specification after the inspection of Sector / Site Engineer.
- 18. No extra payment will be made to the contractor on account of clearance of soakage well/septic falling in the alignment of the sewer line. The sewer line shall be tested at contractor's cost as per I.S. code no. 783-1985 and departmental specifications for water tightness, straightness and gradient by the Engineer In charge. If any leakage is found during testing the same will be replaced by the contractor at his own cost.
- 19. Two percent amount of each running bill shall be with held on account of testing of sewer system, which will be released only after successful testing. The contractor will be fully responsible for structural safety stability and water tightness of the sewer line and associated work.

Materials

- 20. Cement and steel shall not be supplied by the department.
- 21. Steel, when arranged by the contractor shall produce a test certificate for the whole lot as per the IS Code provisions from an authorized laboratory approved by the Engineer-in-charge.
- 22. Water for construction and testing purpose shall have to be arranged by the contractor at his own cost. In case it is supplied by the JDA, charges @ 1% of total value of item of construction work shall be taken and recovered from each running bill.

Design and Drawings.

- 23. JDA shall not be responsible for any error, in accuracy or permission of any kind in JDA's requirements as originally included in the contract. Any data or information received by the Contractor, from JDA or otherwise, shall not relieve the Contractor from his responsibility for the design and execution and structural stability of the per-cast elements.
- 24. The drawings of the pre-cast eccentric conical piece and circular rings is based on the departmental designs. Contractor may study the design, drawings and specifications carefully and if felt necessary, may increase the sectional thickness, reinforcement or the grade of concrete suitably. No extra payment shall be made to the contractor over the rates quoted by the contractor for any modifications / changes proposed by him. The contractor shall be fully responsible for the structural safety of the precast manhole elements/components.

As Built Drawings.

25. The submission of the as-built drawings of the sewer work is the precondition for the final payment. The final drawings shall be submitted in one reproducible set and 3 copies on linen bound in an album of an approved size. The scale of drawing and the size of drawing shall be as per the direction of the Engineer in Charge.

Safety aspects associated with the work.

- 26. Safety And Accident Prevention Officer: Due precautions shall be taken by the Contractor, at his own cost, to ensure the safety and protection against accidents of all staff and Labour engaged on the works, local residents in the vicinity of the works, and the public traveling through the works. The contractor shall deploy at least one officer from his staff, qualified to promote and maintain safe working practices. This/these officer(s) shall has/have authority to issue instructions and shall take protective measures to prevent accidents, including but not limited to the establishment of safe working practices and the training of staff and labor in their implementation. The contractor shall furnish to the department the name(s) of such officer(s) before the start of the work.
- 27. The contractor/firm or company while executing the work will adopt all safety measures at his cost to safeguard from any loss of life and damage of public and private property. If any loss and damage is occurred, they will pay the full compensation from their own pocket to the concern. All the consequence (legal and or financial) will be borne by the contractor only and JDA will not be responsible in any way.
- 28. The contractor shall not work before sunrise and after the sunset.
- 29. The contractor/firm or company will take utmost care to safeguard the water mains, Electric and Telephone cable existing surface drains water connections etc., while executing the work. Any damages/rectification shall be borne by the contractor only.
- 30. The contractor/firm/company is bound to get the workmen insured against accident from the Insurance Company at his own cost.
- 31. The contractor will pay compensation to the house owner or to the owner of any adjoining property or any other works for the damaged sustained on account of this work while in progress or complete from his own pocket.
- 32. Electric and water connections, if needed, shall be arranged by the contractor himself at his own cost.
- 33. Contractor shall be the sole custodian of the men and material at work and will be fully responsible for any loss of life or otherwise occurred during the execution of the works

OMMISSIONS AND CORRECTIONS

34. If there is any typographical error or otherwise in the 'G' Schedule. The nomenclature and the rates as given in the relevant JDA BSR 2016 and JDA approved items/rates on which schedule 'G' is based, shall prevail.

The above conditions may be read very carefully and adhered strictly.

Signature of Contractor

Executive Engineer (PHE-II)
J.D.A. Jaipur

Section A-4

Specifications of Work

SPECIFICATION AND SCOPE OF WORK

- 1. The site is located at Delhi road from Pada Mandi cut to khole ke Hanuman Ji mandir under jurisdiction of PHE zone II, JDA, Jaipur.
- a) Setting out of works and carrying out confirmatory survey.
- b) Submission of working design and drawings and approval of same by the department.
- c) Providing, laying and jointing of to 300 diameter SW and to 300 Dia RCC NP-4 pipeline.
- d) Construction of new manholes with RCC Pre Cast Conical piece and RCC Pre Cast Rings as per enclosed drawings and specifications.
- e) Utility shifting.
- f) Restoration of Roads.
- g) Inspection of material at works.
- Removal of defects in laying and jointing of all sewers, fittings and manholes after testing and during defect notice periods.
- i) The drawings enclosed in **Section–A6**, appended herewith contains a plan of the area, The Schedule 'G' in volume II contains item wise classification of underground strata likely to be excavated but the same is not guaranteed and excavation work may have to be carried out in different strata other than given in schedule 'G'.
- j) Submission of as built drawings.
- **k)** Any other associated work as required by Engineer-in-charge.
- Prior to vacating the site, the contractor shall be responsible for and bear any costs of reinstating the site to a condition at least equal to that in which it was handed over to the contractor.
- m) Crossing of any Drainage/ Nallah is also included in the scope of this work.
- n) The newly laid sewer line should be connected at both the end of existing sewer line manholes.

The contractor is advised to visit site of work before quoting his rate and frame his own opinion about the live conditions prevailing at site.

2. DESCRIPTION OF WORK.

- a) The complete work will be consisting of the following main items as specified in detailed schedule and drawings as per the tender document enclosed herewith.
- b) Excavation of trenches, refilling and removal or surplus earth for laying pipes and construction of appurtenances like manhole and vent shaft along with requisite safety measures.
- c) Providing, laying and Jointing 200 mm to 300 mm dia SW and 200 mm to 300 mm dia RCC NP 4 pipes at required gradient and testing of joints and associated works.
- d) Providing and laying suitable bedding of cement concrete for pipes.
- e) Construction of required size RCC Pre Cast Manholes along with providing and fixing Ferro cement Manhole covers, C.I. frames and Ferro cement foot steps of required size, duty and weight as per drawing.
- f) Making connection to existing Sewers by dismantling wall and concrete channel and its related repairs.
- g) The drawings enclosed in section A-5 appended herewith contains a plan of the area, The Schedule -G in volume II contains item wise classification of underground strata likely to be excavated but the same is not guaranteed and excavation work may have to be carried out in different strata other than given in schedule-G.
- h) The contractor is advised to visit site of work before quoting his rate and frame his own opinion about the live conditions prevailing at site.
- i) Any other associated work as required by Engineer-in-charge.

2.1 DRAWING TO BE SUPPLIED BY CONTRACTOR

The following drawings are required to be supplied by the tenderer when required by the Engineer-in-charge and work should commensurate only after obtaining his approval in writing.

- a) Drawing of measuring boxes for cement, sand and other construction material supplied at site.
- b) Drawing of Ferro-cement manhole covers with cast iron ring, frame and Ferro-cement steps supplied at site.
- c) AS-BUILT DRAWINGS:-The submission of the as-built drawings for the equipment is the precondition for the final payment. The final drawings shall be submitted in one reproducible set and 3 copies on linen bound in an album of an approved size. The scale of drawing and the size of drawing shall be as per the direction of the Engineer in Charge. Any other drawings related to works included in the contract.

2.2 DRAWINGS TO BE SUPPLIED BY THE DEPARTMENT.

The drawings of the various manhole elements (Ferro-cement manhole cover, Ferro cement footsteps, Cast iron rim and frame), drawings showing the trench width for various invert depth of the corresponding diameters and the map/plan of the area showing the proposed lateral sewer network is enclosed in the section A-5 of the tender document shall be supplied by the department.

2.3 WORKING DRAWING:

The working drawings showing plan and positions of proposed sewers are available for inspection at the office of the undersigned. The interested may inspect these drawings during office Hrs. on any working day.

2.4 GENERAL DESIGN OBLIGATIONS

- a) The Contractor shall be deemed to have scrutinized, prior to submission of bid, design criteria, calculations, and drawing as per the JDA requirements.
- b) JDA shall not be responsible for any error, in accuracy or permission of any kind in JDA's requirements as originally included in the contract. Any data or information received by the Contractor, from JDA or otherwise, shall not relieve the Contractor from his responsibility for the design and execution of the works.

3. TESTS OF MATERIALS

The Engineer In charge or his authorized representative will carry out tests as and when considered necessary for the quantity and quality of work done and for the material used at the work. The contractor, unless otherwise specifically mention to do so, shall provide all facilities and arrangements to undertake those tests.

- 3.1 The contractor shall provide all necessary facilities to undertake tests for a lot of material supplied at site. All the testing charges for the test being conducted on construction material such as SW pipes, concrete, manhole cover, cement, fine aggregate, coarse aggregate etc at other/departmental Testing laboratories shall be borne by the contractor
- 3.2 The testing of all the building material shall be conducted as per relevant Indian Standard specification. If relevant Indian standard specifications are not available for a particular item, the testing for quality of material shall be done in accordance with detailed specification of PWD (B.S.R.) Rajasthan, however it is not possible for the contractor to take suitable arrangements for testing of sample the same shall be taken to the laboratory authorized by the Executive Engineer-in-charge. The contractor shall get the quality of material obtained from each source approved from the Engineer In charge. In case the source of supply of building material is changed at subsequent date sample as required above shall be got approved before using the material.
- 3.3 The samples submitted by the contractor required under schedule –G, Volume -II shall invariably be supplemented with the manufacturer's test certificate for approval of the Executive Engineer In charge. The Executive Engineer, in charge may ask for further testing of material before, approval and subsequent use at site. The contractor in such case shall supply required quantity of samples as desired by Executive Engineer, in charge. The samples as obtained shall be sent to authorized laboratory for testing. In case the material is not found to be as per specification the whole lot of supply shall be rejected.

The relevant standards for complying testing and specification for each material are as given below:

- 1. Stone ware pipe: IS 651-1983 (As amended upto date)
- 2. RCC pipes: IS 458 As amended upto date)
- 3. Ferro cement circular manhole cover and frames as per (Departmental specifications and drawing).
- 4. Ferro cement foot steps for manholes.
- 5. Precast manhole elements (Departmental specifications and drawing).

4. LIST OF MATERIAL TO BE SUPPLIED BY THE DEPARTMENT

Nil

5. DETAILED SPECIFICATIONS

The detailed specifications of the work to be executed shall be as per the provision of detailed specification PWD (B.S.R.) Rajasthan and the relevant Indian standard specifications unless otherwise mentioned above in the specification for work explained under scope of work. Wherever a reference to the I.S. code mentioned herein appears, it shall be taken as reference to the latest edition of the standard. The complete scope and detailed specification of work is as detailed herein after, item wise given in Schedule 'G' and drawings given in, volume-II and section A-5 of bid document respectively.

5.1 TRANSFER OF LEVELS AND ESTABLISHMENT OF GRADIENTS:

- a) The contractor should furnish his work program, construction methodology within 15 days after the letter of Notice to proceed for work and prior to start of the construction activities at site.
- b) To carry out the leveling survey of whole area or part of the area as a confirmatory survey as per Engineer-incharges instructions and confirm the ground levels, chain age, road network, etc. with the data available in design reports and got it approved from the Engineer-in-charge prior to commencement of the work.
- c) The transfer of level at ground from the specific bench mark (to be given with in 100 meter from the starting point of line) shall be done by contractor. The grade line shall be done with the help of sight rail and boning rods. The necessary equipment and manpower required shall be arranged by contractor for transfer of levels.

5.2 EXCAVATION AND REFILLING WORKS

- a) The excavation and refilling work shall be done in accordance with the detailed specification PWD (B.S.R.) Rajasthan and as per drawing appended in section A-5.
- b) The provision of IS 3764/1966 safety code for excavation work and is 4091-1967 safety code for blasting and related drilling operation shall be strictly met with at each site of work. The work shall be stopped in case these requirements are not met with.
- c) Excavation work for different size of sewers, manholes, as per working drawings in different soils / described item wise in schedule 'G' shall be carried out in the manner specified here in drawing No.1.
- d) Before excavating the trench the alignment of sewer line shall be approved by the Engineer.
- e) Before carrying out the excavation work the trial pits shall be taken along the proposed sewer line alignment by the contractor after mutual agreement and approval of the Engineer in advance of the excavations for the purpose of satisfying himself as to the location of underground obstructions or conditions. The contractor shall proceed with

caution, in any excavation and shall use every means to determine the exact location of underground structures, pipelines, conduits etc, and prior to excavation tin the immediate vicinity thereof. The contractor shall be solely responsible for the cost of protections or repair or replacement of any structure, pipeline, conduit etc, above or below ground which may be broken or otherwise damaged by his operations.

- f) The trenched shall be shored and timbered wherever necessary and specified. The blasting and dewatering work shall be carried out in the manner specified and all material and T & P shall be arranged by the contractor at his own cost. All hard and soft patches shall be treated in the manner specified after obtaining approval from Engineer-Incharge. Unless the description of items for excavation specified so, separate measurement shall not be taken for these time.
- g) The lighting, barricading, guarding of the trenches and the provision of watchman shall be done by the contractor at his cost.
- h) The barricading shall in no case be removed until the trench is excavated, the pipes are laid and Engineer-in -charge gives permission to proceed with the backfilling
- i) Contractor shall not be paid any additional compensation for excess excavation over what is specified as well as for any remedial measures that are specified.
- The excess excavated material shall be carried away from the site of works as specified, failing which in view of public safety and traffic convenience, Engineer-in-charge may carry out the work by any other agency at Contractors risk and cost

5.3 UNDER BED AND BEDDING WORK BELOW PIPES.

- a) The type of bedding as per specification of G schedule, working drawing along with under bed, where ever, required shall be provided in stages and manners specified in drawings and as per directions of engineer-in-charge. The complete material placement in specified dimensions and specified levels, connection etc. is included in scope of work.
- b) The bedding shall preferably be provided continuously between consecutive manholes. In case, it is not possible to do so, the vertical joints in bedding material shall be provided at outer edge of socket. No horizontal joints shall be permitted in concrete cradle.

5.4 SUPPLYING, LAYING, JOINTING AND TESTING OF PIPES:

- a) The Stone ware pipe (socket end) of specified internal diameter shall be supplied in accordance with I.S. 651-1992 specification for "Salt, glazed stone ware pipes and fittings". Stone ware pipes with spigot and socket ends of size and class as per working drawings, specifications given herein after and in standard length specified therein shall be supplied at site of work. No extra measurements will be taken for increase in number of joints on account of shorter lengths of pipe use and also for cutting of pipes wherever required as per site conditions. Any balance pipe lengths from a cut or rejected pipe lengths including their cost of transportation to and from the site will not be measured separately.
- b) The RCC S&S NP-4 pipes ISI Marked shall be supplied conforming to IS:458:1988 (Amended up to date) with anticorrosive bitumenastic paint of approved brand two or more coats (make Shalimar or equivalent) with ISI marked rubber ring/gasket lubricant etc.
- c) The laying and jointing of pipes shall be done in accordance with I.S. 4127-1967 "Code of practice of laying glazed stone ware pipes".
- d) The laying and jointing of RCC S&S pipes NP-4 shall be done in accordance with IS: 783: 1995 (Amended up to date) with hydraulic testing of sewer line.
- e) All pipes supplied shall be free from cracks, chipped ends and irregular angular space between pipes and socket /spigot end and should have smooth interior finish. All pipes shall be subjected to sound test by a suitable wooden hammer and ensured against invisible cracks. Any defective pipe, even after lowering into the trench shall be rejected and shall be immediately removed from site. The storage of pipes at site shall be in accordance with the provisions of ISS 4032-1977.
- f) The pipe shall be lifted towards alignment of sewer line covered and laid in the trenches, in the manner specified with equipments like chain-pulley etc. all arrange by the contractor. Any pipe damaged during above operation shall be removed and replaced by the contractor at his cost. Any material falling into the trench while lowering or otherwise shall be removed and trenches shall be kept clear all the time.
- g) The pipes fittings and other construction material shall be placed along the alignment in advance with utmost care during transit so that they are not damaged. Any damage due to these reasons shall be Contractor's liability.
- h) Laying of the pipe prior to install the pipe bedding in the pipe trench, the Trench Bottom Level (TBL) shall be checked to confirm the slope and relative depth with respect to design level and got it approved from the Engineer. At first stage bedding shall be done up to pipe bottom level and same shall be checked before laying the pipe. At second stage the remaining bedding shall be done with proper careful compaction and finally the pipe top level shall be checked to confirm the proper slope.
- i) All the sewer lines are to be laid perfectly true both in alignment and to gradient specified. In case of spigot and socket pipe, the socket end of the pipe shall face upstream.
- j) The sewer lines shall be laid such that the making on pipes appears at the top of the pipes.
- k) Properly fitted temporary wooden stoppers shall be provided to close the ends of all incomplete sewer line. The stoppers are only to be removed when pipes are being laid and jointed. Opening of sewer at end of day's work shall be capped and sealed.
- I) Sewer pipe laying and jointing shall be started and completed only section wise as per the instruction of the Engineer-in-charge. The sections shall be chosen manholes to manhole. However in unavoidable circumstances the section of sewer line shall be changed as per site condition and as directed by Engineer. The work of sewer line laying, manhole construction and vent shaft shall be done simultaneously so that all the necessary testing can be done efficiently. The construction of the works should progress from downstream end (i.e. the discharge point) and proceed towards upstream. Also, as the work to facilitate the house sewer connection shall be done simultaneously,

it will help in the commissioning of the works. As far as possible the testing of pipeline shall be done from manhole to

- m) The bedding for sewer lines shall be provided as specified in the drawings and as per direction of the Engineer.
- n) After 24 Hrs. of PCC bedding and laying of pipe line the trench shall be filled up to top of pipe with moist soil. The trench can be filled up to the top of the pipe level with moist soil to ensure curing of concrete and then after testing of sewer line, trench should be filled. In the duration before filling the trench, soil should be kept moist to ensure adequate curing.
- o) All the testing of sewer lines and other appurtenances, at both factory and site shall be carried out in presence of the Engineer or his representative.
- p) Special arrangements such as cranes, tripods with chain pulley block for lowering the pipes and fittings shall be made by contractor at his own cost. In no case pipes and fittings shall be dropped.
- q) The payment for the sewer lines and manholes shall be made only after satisfactory testing of the works, as directed by the Engineer.
- The reinstatement of road/footpath shall be done as specified and as per the requirements of the local authorities, on completion of all the works.

5.5 CONSTRUCTION OF MANHOLE CHAMBER AND TESTING FOR WATER TIGHTNESS.

- a) The manholes shall be circular and constructed as RCC insitu for varying invert depths as per design and specification. The manholes shall generally conform to relevant I.S. and departmental specifications. The location of manhole shall be as per the drawing or layout given by the Engineer-in-charge or as directed by the Engineer-in-charge. The Manhole dimensions and other details shall be as per the enclosed drawing. The location of manholes shall be as per drawing or layout given by the Engineer-in-charge.
- b) The inspection and testing of manhole chambers frames and covers shall be done at factory in presence of Engineer or his representative or shall be got done through third party inspection. The load test for covers shall be done in accordance with Table 1 of IS 12592 (Part -I).
- c) The entire height of the manhole shall be tested for water tightness as per CPHEEO Manual or relevant IS code. The required water for testing and any other requirements shall be arranged by the Contractor at his own cost. .
- d) The testing shall be preferably be done between manhole to manhole lengths. In case of steep slopping sewers, the test pressure at lower end of pipe, length tested should not exceed the allowable static pressure, the pipe length should be subdivided, and plug at end shall be effectively fixed. The pipe length under test shall be charged gradually. The pipe length under test should remain filled with water at least 24 hrs. Before testing.
- Any defect noticed during the testing shall be immediately repaired removed and replaced. The testing should again be repeated if it satisfies above requirements. The test water should be left in pipe during bedding and back filling operations.

5.6 MAKING CONNECTION WITH EXISTING SEWER.

a) The connections in the existing sewer where required as per working drawings shall be made by cutting precast manhole walls preferably by using core cutting machine or other suitable means as specified by Engineer-incharge.

5.7 OTHER SERVICES

Contractor shall take the necessary precautions to avoid the damage to other services such as water supply lines, telephone cables, electrical cables, storm water drains etc. In case of any damages to any of the services, Contractor shall be responsible for restoring the facilities in bare minimum time at his own cost.

5.8 PRECAST REINFORCED CONCRETE

5.8.1 GENERAL REQUIREMENTS

- Concrete used for pre-casting the units should be well proportioned, mixed, placed and thoroughly compacted by vibrations or tamping to give dense concrete free voids and honey combing.
- b) Pre-cast articles shall have a dense surface finish showing no coarse aggregate and shall have no cracks or crevices likely to assist in disintegration of concrete or rusting of steel or other defects that would interfere with the proper placing of the units. All angles of the precast units with the exception of the angles resulting from the splayed or chamfered faces shall be true right angles. The arises shall be clean and sharp except those specified or shown to be rounded. The wearing surface shall be true to the lines. On being fractured, the interior of the units should present a clean homogeneous appearance.

5.8.2 CURING

- a) After having been cast in the mould or form the concrete shall be adequately protected during set-ting in the first stages of hardening from shocks and from harmful effects of frost, sunshine, drying winds and cold. The concrete shall be cured at least for 14 days from the date of casting.
- b) The precast articles shall be matured for 28 days before erection or being built in so that the concrete shall have sufficient strength to prevent damage to units when first handled.

5.8.3 MARKING

Precast units shall be clearly marked to indicate the top of member and its location and orientation in the structure.

5.8.4 MIX DESIGN PROPORTIONING

- a) Mix proportions shall be designed to ensure that the workability of fresh concrete is suitable for conditions of handling and placing, so that after compaction it surrounds all reinforcements and completely fills the formwork. When concrete is hardened, it shall have the formwork. When concrete is hardened, it shall have the stipulated strength, durability and impermeability.
- b) Determination of the proportions by weight of cement, aggregates and water shall be based on design of the mix.
- c) As a trial the manufacturer of concrete may prepare a preliminary mix according to provisions of SP: 23-1982. Reference may also be made to ACI 211.1-77 for guidance.
- d) Mix design shall be tried and the mix proportions checked on the basis of tests conducted at a recognized laboratory approved by the Engineer-in-charge.
- e) All concrete proportions for various grades of concrete shall be designed separately and the mix proportions established keeping in view the workability for various structural elements, methods of placing and compacting.

5.8.5 STANDARD DEVIATION

Standard deviation calculations of test results based on tests conducted on the same mix design for a particular grade designation shall be done in accordance with clause 9.2.4 of IS 456:2000

5.8.6 ACCEPTANCE CRITERIA

The acceptance criteria for compressive strength and flexural strength designation shall be done in accordance with the relevant clauses of the IS codes.

5.8.7 DESTRUCTIVE TESTS

- a) Load Test: Contractor shall make necessary arrangement for load test of precast units at manufacturer's site. The load test shall be carried out by Engineer-in-Charge or by Third Party after approval of Engineer-in-Charge.
- b) Core test: Core test, if ordered by the Engineer-in-charge, shall be done in accordance with IS 516. Samples for such test shall be taken from locations to be identified by the Engineer-in charge and such samples shall be collected in compliance with IS 1199.

5.8.8 NON DESTRUCTIVE TESTS

In case of doubtful structural strength non-destructive testing of the pre-cast manhole elements shall be done as per the instructions of Engineer-in- charge. Such tests may be any one or a combination of the following:-

- 1. REBOUND HAMMER TEST
- 2. WINDSOR PENETRATION PROBE TEST
- 3. PULSE VELOCITY (SONIC OR ULTRASONIC) TEST

Interpretation of Rebound Hammer, Windsor Probe and Pulse-velocity test results shall rest with the Engineer- in -charge.

5.8.9 SPECIFICATION FOR RCC ECCENTRIC CONICAL PIECE IN M40 GRADE.

The work involves construction of Pre-cast RCC M-40 grade circular manhole chamber of designated diameter 100/1200/1500 for various invert depths including required excavation of earth in all types of soils such as murrum, sand, sandy silt, black cotton soil, hard soil, kankar etc. disposing of surplus excavated material within a lead of 50 meter. The work includes laying of 150 mm thick plain cement concrete 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 20 mm nominal size) 1600/1800/2100 mm diameter bedding in foundation, providing and laying of plain cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate) in channel & circular starter base wall up to 50 mm above outer dia. of sewer pipe and P&F in position of 125 mm thick 150/225 mm high Pre-Cast M-40 grade cement concrete ring at bottom and consecutive standard size 300 mm high rings. The work includes P&F pre-cast reinforced cement concrete eccentric conical piece of M40 grade, 125 mm thick having 560 mm and 1000/1200/1500 mm internal diameter at top & bottom respectively, fitted with Ferro-cement cover of 33 kg cast iron double seal ring & frame (heavy-duty) etc to withstand for class AA loading including supply and fixing of Ferro-cement foot steps and sealing of all joints with cement mortar 1:1 complete job as per detailed specifications, drawings and directions of Engineer-In charge.

The height of the M-40 grade cement concrete circular rings of manhole can be increased only after the approval of Engineer-in-Charge subject to a maximum height of 1.20 m for which no extra payment shall be made to the contractor.

5.8.9.1 TOP ECCENTRIC CONICAL PIECE.

- a) Providing and fixing of Pre-cast RCC M-40 grade concrete eccentric conical piece for manhole manufactured using Weight Batching Plant.
- b) Only Design Mix Concrete of Grade M-40 shall be used.
- Shape:- Eccentric frustum of cone of designated diameter and thickness as per the enclosed drawings and specifications
- d) Testing: Apart from the usual strength test on of the concrete mix non-destructive test for strength of the concrete is to be carried out on sample piece of pre-cast manhole elements as per the instruction of engineer-in-charge.

5.8.9.2 CIRCULAR RINGS.

- a) Providing and fixing of Pre-cast M-40 grade cement concrete circular rings for manhole chambers manufactured by using Weight Batching Plant.
- b) Only Design Mix Concrete of Grade M-40 shall be used.
- c) Shape:- Circular in shape with end keys at top and bottom of designated diameter, height and thickness as per the enclosed drawings and specifications. The height of rings can be increased in the multiples of 30cms after inspection and approval of Engineer-in-Charge.
- d) Testing: Apart from the usual strength test on of the concrete mix non-destructive test for strength of the concrete is to be carried out on sample piece of pre-cast manhole elements lot as per the instruction of engineer-in -charge
- **5.8.9.3** The contractor shall be responsible for the quality of the works during the executions of works with good Engineering practices. He shall, therefore, have his own independent and adequate setup for ensuring the same.

6.0 CONTRACTOR'S STAFF AND EQUIPMENT

- a) The contractor shall employ for the execution of the work only such persons as are skilled and experience in all activities required for the completion of the work, from reconnaissance surveys to detailed design, manufacturing, and execution and testing to commissioning.
- b) The contractor shall provide either one graduate or one diploma Engineer to supervise the construction of the work and to act as the contractor's Representative. The Engineer shall be B.E. Civil Eng. with minimum 1-year experience or a diploma in Civil Eng. with minimum 3 years experience in the field of sewer line work. The contractor shall also provide sufficient skilled, semi-skilled and un-skilled labor as are necessary to ensure completion of the various sections of the work in the time required the contractor shall not deploy/remove any supervisory staff or Labour from the site without approval of the Engineer in charge.
- c) The Engineer in charge shall be at liberty to object and direct the contractor to remove from the work any person who in the opinion, of the engineer in charge misconduct himself or is incompetent or negligent in the proper performance of his duties such person shall not be again employed without permission of the engineer in charge.
- d) The contractor shall at all times during progress of the work take all requisite precautions and use his best endeavors to prevent any notorious or unlawful behavior by or amongst the workers and other persons employed on the works and for the preservation of peace and protection of the inhabitants and the security of property in the neighborhood of the work.
- e) The contractor shall, if required by the Engineer in charge deliver to him a return in detail in such form and at such intervals as the Engineer in charge may prescribe, showing the supervisors and Labour employed by the contractor on the site The contractor shall make his own suitable arrangements for lodging and boarding of his, Labour supervisors and engineers

7.0 PROGRESS OF WORK

All components of works shall ensure a logical sequence of supply, installation, testing, and commissioning. If any supply of a material is made, not in conformity to the logical sequencing of the work component, no payments will be entitled against such supplies and installations.

Executive Engineer (PHE-II) JDA, Jaipur

Section A-5 Annexure

Annexure A:

Compliance with the code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall –

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit the misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation:
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest :-

The Bidder participating in a bidding process must not have a Conflict of interest.

A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

i. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:

- a. Have controlling partners/shareholders in common; or
- b. Receive or have received any direct or indirect subsidy from any of them; or
- c. Have the same legal representative for purposes of the Bid; or
- d. Have a relationship with each other; directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process; or
- e. The Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
- f. The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
- g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-incharge/ consultant for the contract.

Annexure B:

Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In	relation	to	my/our	Bid	submitted	to				for	procurement	of
					in response	to their	Notice invitin	g Bids No		Dat	ted	I/We
here	eby declare	under S	Section 7 of	Rajasthar	Transparen	cy in P	ublic Procuren	nent Act, 20	12, that	:		
		•		• .	sional, techn		ancial and ma	anagerial res	sources	and cor	mpetence requii	red by
			•	•	n to pay such		taxes payable	e to the Unio	on and t	he Stat	e Government	or any
	or a j	udicial o			•				•		ministered by a	
	4. I/We profe a pro	do not h ssional c curemer	nave, and out conduct or that tontract w	ne making vithin a pe	of false stat	ements years	or misreprese	entations as commencer	to my/o	ur quali	nce related to nifications to enti-	er into
	5. I/We	do not h		•			•	•	Bidding	Docum	ent, which mat	terially
	Date : Place :							Signa	ature of	bidder		
									Name Designa Address	tion:		

Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is Commissioner, JDA, Jaipur.

The designation and address of the Second Appellate Authority is Executive Committee (E.C.), JDA, Jaipur.

(1) Filing an appeal

- a. If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:
- b. Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings:
- c. Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.
- (2) The officer to whom an appeal is filed under para (1) shall deal with the appeal as expeditiously as possible and shall Endeavour to dispose it of within thirty days from the date of the appeal.
- (3) If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

(4)Appeal not to lie in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-

- (a) Determination of need of procurement;
- (b) Provisions limiting participation of Bidders in the Bid process:
- (c) The decision of whether or not to enter into negotiations;
- (d) Cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality.

(5) Form of Appeal

- (f) An appeal under para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.
- (g) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
- (h) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

(6) Fee for filing appeal

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

(7) Procedure for disposal of appeal

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
 - (i) Hear all the parties to appeal present before him; and
 - (ii) Peruse or inspect documents, relevant records or copies there of relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass and order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

FORM No. 1

[See Rule 83] Memorandum of Appeal under the Rajasthan Transparency in Public Procurement Act, 2012

Apı	peal	No Of Before the
	1.	Particulars of appellant :
	(i)	Name of the appellant :
	(ii)	Official address, if any :
	(iii)	Residential address:
	2.	Name and address of the respondent (s):
		(i)
		(ii)
		(iii)
	3.	Number and date of the order appealed against and name and designation of the officer/authority who
		passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity
		in contravention to the provisions of the Act by which the appellant is aggrieved:
	4.	If the Appellant proposes to be represented by a representative, the name and postal address of the
		representative:
	5.	Number of affidavits and documents enclosed with the appeal :
	6.	Grounds of appeal:
		(Supported by an affidavit)
	7.	Prayer:
Ju		Appellant's Signature

Annexure D:

Additional Conditions of Contract

1. Correction of arithmetical errors

Provided that a Financial Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:

- i. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as guoted shall govern and the unit price shall be corrected:
- ii. It there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected: and
- iii. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

2. Procuring Entity's Right to Vary Quantities

- (i) At the time of award of contract, the quantity of Goods, works or services originally specified in the Bidding Document may be increased or decreased by a specified percentage, but such increase or decrease shall not exceed twenty percent, of the quantity specified in the Bidding Document. It shall be without any change in the unit prices or other terms and conditions of the Bid and the conditions of contract.
- (ii) If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Conditions of Contract.
- (i) In case of procurement of Goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. However, the additional quantity shall not be more than 25% of the value of Goods of the original contract and shall be within one month from the date of expiry of last supply. If the supplier fails to do so, the Procuring Entity shall be free to arrange for the balance supply by limited Bidding or otherwise and the extra cost incurred shall be recovered from the supplier.

3. Dividing quantities among more than one Bidder at the time of award (In case of procurement of Goods)

As a general rule all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid is accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidders in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

4. "If any bidder quotes a rate below than the schedule ''G" rates, i.e. rates below than at par, than the bidder has to deposit the difference amount i.e. amount between the rates as per at par and below, as work performance guarantee. This amount has to be deposited before the commencement of work and will be refunded after successful completion of work. Lowest bidder will be issued LOA (Letter of Acceptance) and within 14 days period he has to deposit difference amount in the from of B.G./FDR/NSC. The validity of these shall be for a period three months beyond the stipulated date of completion / actual date of completion. In case of non deposition of the same in specified period, the 2 % Bid security will be forfeited. In case work is not completed satisfactorily, the work performance security will be forfeited along with Bid security."

Signature of Contractor with full address & Mobile No.

Executive Engineer (PHE-II) JDA, Jaipur

Section A6 Drawings

JAIPUR DEVELOPMENT AUTHORITY

Name of work:- Providing, Laying and Jointing of sewer line at Pada Mandi to khole wale hanuman ji Temple entrance Gate under PHE-II, JDA, Jurisdiction, JDA, Jaipur"

G- Schedule

Based on JDA PHE BSR and JDA BSR 2016 Rates

Based on JDA PHE BSR an					
S.No.	PARTICULARS	Qty.	Rate	Unit	Amount (In Rs.)
1	Providing, laying and jointing of 200 mm diameter Stone Ware pipes grade "A" ISI Marked conforming to IS:651:1980 (Amended up to date) with 10 cm thick and 63 cm wide plain cement 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 20 mm nominal size) bedding and hunching upto 1/4 of outer diameter of pipe of sewer and laying stone ware pipes confirming to IS: 4127: 1983 (Amended up to date) with hydraulic testing of sewer line including cost of water and equipment required for testing. The work includes earth work in excavation in all types of soil such as murrum, sand, sandy silt, black cotton soil, hard soil, kankar etc. including disposing off surplus excavated material within a lead of 50 meter including cost of close timbering beyond 1.50 meter average invert depth, shoring and strutting and refilling of trenches with excavated material, watering and ramming in layers as per PWD specifications complete in all respect and as per direction of Engineer-in-charge for following average invert depths: (D-142 dt. 28.04.2008)				
1.1	At av. Depth 1.5 meter [From 1.50 m to 1.79 m]	120.00	418.00	Mtr.	50160.00
1.2	At av. Depth 1.8 meter [From 1.80 m to 2.09 m]	120.00	556.00	Mtr.	66720.00
1.3	At av. Depth 2.1 meter [From 2.10 m to 2.39 m]	150.00	586.00	Mtr.	87900.00
1.4	At av. Depth 2.4 meter [From 2.40 m to 2.69 m]	250.00	625.00	Mtr.	156250.00
2	Providing Laying and Jointing of 300 mm dia RCC S&S Class NP-2 ISI marked pipe with anti corrosive bitumen paint of approved brand (two or more coats) (IS458:1988) amended upto date) approved make with ISI marked rubberring /gasket lubricants etc. with 10 cm thick and 50 cm wide plain cement concrete 1:4:8 (1 Cement: 4 coarse sand: 8 graded stone aggregate 20 mm nominal size) bedding and haunching up to ¼ of outer dia of pipe of sewer and laying RCC S&S pipes conforming to IS:783-1995 (Amended upto date) with hydraulic testing of sewer line including cost of water and equipment for testing. The work includes earthwork in all types of soil such as murrum, sand, silt, black cotton soil, kankar etc. disposing off surplus excavated material within a lead of 50 meter including cost of close timbering shoring & strutting and than refilling of trenches with excavated material, watering and ramming barricading along trenches as per drawings & specification complete in all respect and as per direction of Engineer incharge for following average invert depths.				
2.1	At av. Depth 2.4 meter [From 2.40 m to 2.69 m]	100.00	759.00	Mtr.	75900.00
2.2	At av. Depth 2.7 meter [From 2.70 m to 2.99 m]	140.00	803.00	Mtr.	112420.00
2.3	At av. Depth 3.0 meter [From 3.00 m to 3.29 m]	150.00	843.00	Mtr.	126450.00

3	Construction of Pre-cast RCC M-40 grade circular manhole chamber for invert depth from 1.800 meter to 2.990 meter having 1200 mm internal diameter including required excavation of earth in all types of soils such as murrum, sand, sandy silt, black cotton soil, hard soil, kankar etc., disposing of surplus excavated material within a lead of 50 meters. The work includes laying of 150 mm thick plain cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size) 1600 mm dia bedding in foundation, providing and laying of plain cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate) in channel & circular starter base wall up to 50 mm above outer diameter of sewer pipe and P&F in position of 125 mm thick 150/225 mm high precast M-40 grade cement concrete ring at bottom and consecutive standard size 300 mm high rings. The work includes P&F pre-cast reinforced cement concrete eccentric conical piece of M40 grade, 125 mm thick having 560 mm and 1000 mm internal diameter at top & bottom respectively, fitted with Ferrocement cover of 33 kg Cast Iron double seal ring & frame (heavy-duty) etc., to withstand for Class-AA loading including supply and fixing of Ferro-cement foot steps and sealing of all joints with cement mortar 1:1 complete job as per detailed specifications, drawings and directions of Engineer- In-charge, for following average invert depths.				
	For 200 mm dia Sewer line				
3.1	At av. Depth 1.8 meter [From 1.80 m to 2.09 m]	14.00	10451.00	Each	146314.00
3.2	At av. Depth 2.1 meter [From 2.10 m to 2.39 m]	14.00	11695.00	Each	163730.00
3.3	At av. Depth 2.4 meter [From 2.40 m to 2.69 m]	14.00	12941.00	Each	181174.00
	For 300 mm dia Sewer line				
3.1	At av. Depth 2.4 meter [From 2.40 m to 2.69 m]	11.00	12935.00	Each	142285.00
3.2	At av. Depth 2.7 meter [From 2.70 m to 2.99 m]	11.00	14182.00	Each	156002.00
4	Construction of Pre-cast RCC M40 grade circular manhole chamber for invert depth from 3.000 meter and above having 1500 mm internal diameter including required excavation of earth in all types of soils such as murrum, sand, sandy silt, black cotton soil, hard soil, kankar etc., disposing of surplus excavated material within a lead of 50 meters. The work includes laying of 150 mm thick plain cement concrete 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 20 mm nominal size) 1600 mm diameter bedding in foundation, providing and laying of plain cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate) in channel & circular starter base wall up to 50 mm above outer dia. of sewer pipe and P&F in position of 125 mm thick 150/225 mm high precast M40 grade cement concrete ring at bottom and consecutive standard size 300 mm high rings. The work includes P&F pre-cast reinforced cement concrete eccentric conical piece of M40 grade, 125 mm thick having 560 mm and 1000 mm internal diameter at top & bottom respectively, fitted with Ferro-cement cover of 33 kg Cast Iron double seal ring & frame (heavy-duty) etc to withstand for Class-AA loading including supply and fixing of Ferro-cement foot steps and sealing of all joints with cement mortar 1:1 complete job as per detailed specifications, drawings and directions of Engineer- in -charge, for following average Invert depths.				
6.1	For 300 mm dia Sewer line	10.00	1001000		00075 / 55
6.1	At av. Depth 3.0 meter [From 3.00 m to 3.29 m]	12.00	18642.00	Each	223704.00

6.2	At av. Depth 3.3 meter [From 3.30 m to 3.59 m]	4.00	20155.00	Each	80620.00
5	Carriage of Earth sand lime, morrum manure or sludge for 1 Km lead.	1000.00	36.63	СИМ	36630.00
6	Barricading with sal ballies as per design including tying wit vertical posts by coconut strings complete in all respect with two horizontal members height 1.2 meter upto 1.5 meter above G.L. and vertical support upto 2.5 meter C/C and for 3 days period incl. removal and cleaning the site complete in all respects.	1200.00	14.85	Mt. Per Day	17820.00
7	Providing laying and Jointing of ISI mark centrifugally cast (Spun) ductile Iron pressure pipe for water with socket and spigot end and Tyton joint confirming to IS 8329/200 and departmental specification in standard length (Aa required) for (Class K-7) suitable for push on Joint (rubber gaskets jointing) with side cement mortar linig with cutting of pipe and fixing of C.I. special joint where ever required. This also include the excavation of trench up to 1.5 meter depth in all type of soil cutting of road surface pavement where required lift upto 1.5 mt. stacking the soil clear from the edge of excavation and refiling of soil after laying and jointing of pipe line with proper compaction and disposing of all surplus soil as directed with in lead of 30 meter. This also include getting the pipe line tested and site clearance etc.				
7.1	300 mm	18.00	4024.00	P Mtr.	72432.00
				Total Rs.	1896511.00

Executive Engineer (PHE-II) JDA, Jaipur

We Quote as % Above/ Below the schedule " G "	
n Words)'	

Signature of Contractor With full Address & Mobile No.