## JAIPUR DEVELOPMENT AUTHORITY



## **Bid Document**

For

P/L/J of DI water pipe line for Eco Friendly Development of Veer HanumanJi Tourist Centre at Samod ( Khol), Chomu , Jaipur

Cost: Rs 30.00 Lacs

NIB No. 14/2015-16

Executive Engineer (PHE-III)
Jaipur Development Authority
Jaipur

#### 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.phe3@jaipurjda.org</u>

No: JDA/EE/PHE-III/2015-16/75

Dated: 09.02.2016

#### NOTICE INVITING BID

NIB No. : EE(PHE-III)/14/2015-16

Online Bids are invited up-to 6.00 PM of 07.03.2016 for "P/L/J of DI water pipe line for Eco friendly Development of Veer Hanuman Ji tourist Centre at Samod (Khol) Chomu, 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:

- 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.

(Sudhir Verma)
Executive Engineer (PHE-III)
JDA, Jaipur

Annexure: 2

## 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.phe3@jaipurjda.org</u>

Bid No:- JDA/EE/PHE-III/2015-16/75

Dated: 09.02.2016

#### **NOTICE INVITING BID**

NIB No.: EE(PHE-III)/14/2015-16

	NIB No. : EE(PHE-III)/14/2015-16				
Name & Address of the Procuring Entity  Name: Executive Engineer (PHE-III), Jaipur Development Author Address: 122, Main Building, Ram Kishore Vyas Bhavan, Indira JawaharLal Nehru Marg, Jaipur – 302 004 (Rajasthan) Email: ee.phe3@jaipurjda.org					
Subject Matter of Procurement	t > P/L/J of DI water pipe line for Eco friendly Development of Veer Hanuman Ji tourist Centre at Samod (Khol) Chomu, Jaipur.				
Bid Procedure	Single-stage Two part (envelope) open competitive eBid procedure at <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>				
Method	➤ Least Cost Based Selection (LCBS)				
Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.	➤ Websites: <u>www.sppp.rajasthan.gov.in</u> , <u>www.eproc.rajasthan.gov.in</u>				
Website for online Bid application and payment *	<ul> <li>➤ Website: www.jaipurjda.org</li> <li>➤ 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.</li> <li>○ Bidding document fee: Rs. 500/- Rupees (Five Hundred only)</li> <li>○ RISL Processing Fee: Rs. 1000/- (Rupees One Thousand only)</li> <li>Requisite Bid Security Deposit</li> </ul>				
Estimated Procurement Cost	➤ INR 30,00,000/- (Rupees Thirty Lacs only)				
Bid Security Deposit	Amount (INR): 2% (Rs. 60,000/-) of Estimated Procurement Cost, for A & AA class contractor registered in other department 0.5% of S.S.I. of Rajasthan, 0.5% (Rs. 15,000/-) 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				
Start/ End Date for Bid Applying, Online Payment and Bid Submission	> Start Date: 15/02/2016 at 9.30 AM onwards > End Date: 07/03/2016 at 6.00 PM				
**Date/ Time/ Place of Technical Bid Opening	➤ N. A.				
Date/ Time/ Place of Financial	>11/03/2016 at 03.00 PM				
Bid Opening	➤ CCC TF 309, Third Floor, Customer Care Building, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004 (Rajasthan)				

Bid Validity	➤ 120 days from the bid submission deadline
Completion period of work	➤ 03 Months
Job No.	➤ Jan/NR-079/2014-15 dated 27.01.2015

\*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:

- Bidder (authorised signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal.
- 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 <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>(bidders already registered on <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>(bidders already registered on <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>
- 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.
- Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
- 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: <a href="mailto:eproc@rajasthan.gov.in">eproc@rajasthan.gov.in</a> 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.
- 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.

(Sudhir Verma)
Executive Engineer (PHE-III)
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:

- 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.
- 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 <a href="mailto:eServices">eServices</a>>>JDA Tender

#### 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

XXXXXXXXXXXX

Mobile:

9829012345

Registration Type.

Individual Instrument Amount: 32500.00

Payment Mode Online/UTR

Payment Channel Payment Gateway/ICICI Branch - JDA

Instrument No: 456123789 Instrument Date :

17-06-2015

Dates Detail

Sr. No.

10000

10001

Publishing Date Bid Opening Date

Event Name

Specific Instrument Detail for eProc Rajasthan

Instrument Type: DD

Instrument Number Head Name Tender Fee

RISL Processing Fee

Bid Security Deposit

400.00 1000.00

**Event Date** 

01/06/2015 01:00 PM

01/07/2015 03:00 PM

30,000.00

Date 05/06/2015 05/06/2015

05/06/2015

Issuer Detail: Jaipur Development Authority

ChallanNumber:

641515600014

#### दैनिक भास्कर दिनांक.....पृष्ट सं. 12 11-2-2016





NOTICE INVITING BID

NIB No. -: EE(SR)/11 & 12/2015-16

NIB No. -: EE(SR)/11 & 12/2015-16

Online Bids are invited for the work of: -\*(1.) Total Station Survey work in JDA Region, JDA, Jaipur.

up-to 6.00 PM of 22/03/2016. (2.) Construction of 60 feet wide road connecting tonk road to 60 feet wide road opposite Sahara City in Sector-67, JDA, Jaipur. up-to 6.00 PM 10/03/2016. Details may be up-to-6.00 PM 10/03/2016.

seen in the Bioding Document at our omce or the website of State Public Procurement Portal Website

www.spp.ralasthan.gov.in. www.eproc.ralasthan.gov.in and www.jalpurda.org.

To participate in the bid, bidder has to be:

To participating in the Bid, the Bidder has to apply fo

The Bidder has to apply for

T Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Raj.Samwad/C/15/5527

#### दैनिक भास्कर

दिनांक......पृष्ठ सं. <u>14</u>

## JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

## दैनिक भास्कर

#### JAIPUR DEVELOPMENT AUTHORITY

NOTICE INVITING BID

No. JDA/EE-6/2015-16/D-384

NOTICE INVITING BID

NIB No.: EE-6/07/2015-16

Online Bids are invited up-to 6.00 PM of 04-04-2016 for Providing, fixing and maintenance of stepped escalator bridge infront of Triton Mail near Chomu Pulls on B.O.T. basis. 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.pipurida.org. For participating in the Bid, as the bidders participating in bid have to pay the bidding document fee, RISL processing fee and bid security deposit, online only. By registering on said www.jalpurida.org seen bidder will be able to deposit said payments online.

Registered on e-procurement Portal of Government of Rajasthan www.sproc.rajasthan.gov.in for online e-Bidsubmission.

To participate in online bidding process, bidders must procure a Digital Signature certificate (Type III)s 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, Noods 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.ir (bidders\_already registered or http://eproc.rajasthan.gov.ir (bidders\_already registered\_con\_already\_c

जलते दीप दिनांक......पृष्ठ संख्या. 11-2-2016

## JAIPUR DEVELOPMENT AUTHORITY, JAIPUR Indira Circle, Jawahar Lai Nehru Marg, Jaipur- 302 004

Indira Circle, Jawahar Lal Nehru Marg, Jaipur-202-002No. JDA/EE-3/05/D27
NOTICE INVITING BID
Dated: 09-02-2016
NIB No.: JDA/EE-3/05/2015-16
Online Bids are invited up-to 86.00 PM of 29.02-2016 for "General Maint...nance of Amar Jawan Jyoti Monument at Janpath, JDA, Jaipur (for one year)". 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 participating 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.

Executive Engineer - 03

## Section A-1 Instructions to Bidders

## JAIPUR DEVELOPMENT AUTHORITY JAIPUR

#### SCHEDULE AND SPECIFICATIONS

 Name of work:- P/L/J of DI water pipe line for Eco friendly Development of Veer Hanuman Ji tourist Centre at Samod ( Khol) Chomu , Jaipur

2. NIB No.

:- E.E.(PHE-III)/14/2015-16

3. Bid cost

:- Rs. 30,00,000/-

4. Cost of the tender documents

:- Rs 500/-

5. Earnest Money

:- Rs. @ 1/2% Rs. 15,000/-

(For Contractors Enlisted in JDA, Jaipur)

:- Rs. @ 2 % Rs. 60,000/-

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

6. Download of tender documents

: - 15.02.2016 to 07.03.2016 (upto 6.00 PM)

7. Date & Time of upload of tenders

:- 07.03.2016 (upto 6.00 P.M.)

8. Date & Time of Opening tenders

:- 11.03.2016 at 3.00 P.M.

9. Completion period of work

: - 3 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 part-A and part-B. 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 3 months.

## SCHEDULE 'G': ATTACHED SEPARATELY BASED ON JDA PHE BSR 2013, 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

with full address & Mobile No. :

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

## 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

SCHEDULE 'H'

### SPECIAL CONDITIONS

- 1. 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.
- The contractor shall follow the contractor labour regulation and abolition Act 1970 & Rule 1971.
- 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.
- 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
- 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.
- 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.
- 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.
- 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-III) JDA, Jaipur

SCHEDULE 'I'

## Name of work:- P/L/J of DI water pipe line for Eco friendly Development of Veer Hanuman Ji tourist Centre at Samod ( Khol) Chomu , Jaipur

Scope of work:-

 Providing, Laying, Jointing, Testing and commissioning of D.I. pipeline including valves etc at Veer Hanuman Temple, Samod, Chomu

#### SPECIAL CONDITIONS OF THE CONTRACT (Part-A)

- Contractor shall get the D.I. pipe inspected from the third party (CEIL, SGS, RITES) before bringing the material at site. The inspection charges shall be born by the contractor. No payment of these items shall be made before the third party inspection.
- In case of pipe line testing shall be done as per the relevant Code and the leakage level shall not be more than as per IS 8329. Only 80% of the payment shall be released after providing, laying and jointing of pipes and special in trenches, 20% of the payment shall be released after testing as above.
- The quantity of work can be increased or decreased. However, no guarantee is given about the actual quantity of work.
- No extra payment shall be made to the contractor on account of excavation in collapsible strata or in hard or rocky strata. The tenderers shall have to make their own arrangement for completing the work and no claim in this respect will entertained.
- On collection of complete material for each section the same shall be got checked by Engineer-in-Charge or his
  authorized representative. Such approval shall in no way release the contractor of his responsibility regarding
  completion of work, as per required specification until the contract is complete.
- The electric connection, if required, for construction and testing purpose shall be arranged by the contractor at his own cost.
- 7. The contractor shall make his own arrangement regarding water required for the execution and testing of the work and shall also arrange for the supply of drinking water to his own employees. He shall defray all charges in this connection and should include in his rates a sufficient amount to cover such charges. All such facilities as are required now to be provided for the labour, made under labour welfare rules enforce, shall also be provided by the contractor at his own cost.
- The contractor will be required to see that the usual hours of work are adhered too. No work shall be done after the sun set without the permission of the engineer-in-charge.
- The security deposit of the work shall be refundable after six months from the date of completion of the work only
  after successful testing of the works.
- 10. 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 born by the contractor only and JDA will not be responsible in any way.
- 11. Water for construction / testing purpose shall have to arranged by contractor at his own cost. If water is supplied by the department, the same shall be recovered from the contractor from each running bill at the rate of 1% of total value of pipe line laying work, In case of metered connection the charges shall be recovered on the actual consumption basis on the commercial rates.
- 12. The contractor shall be fully responsible for structural safety and water tightness of pipeline when tested.
- 13. No secured advance against material procured at site will be allowed.
- 14. Pipeline laying should be done in the presence an Engineer not below the rank of Junior Engineer of the JDA, and trench shall be refilled after checking of Assistant engineer. After taking layout, the contractor shall submit day to day schedule of work to the Engineer-in-charge in advance.
- 15. 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 born by the contractor only
- 16. 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.
- 17. 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.
- 18. The surplus earth and damaged materials will be immediately removed from the site of work and dumped as per instruction of Engineer-in-charge.
- 19. 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.
- 20. 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, failing which, such material shall be removed by the Engineer-in-charge at risk and the contractor after expiry of 3 days period.
- 21. The contractor/firm/company is bound to get the workmen insured against accident from the Insurance Company at his own cost.
- 22. Contractor shall be the sole custodian of the men and material at work and will be fully responsible for any loss of life or other wise occurred during the execution of the works.

- 23. The Engineer in Charge or his authorized representative will carry out as and when considered necessary for the quantity and quality of work done and for the materials used in the work. The contractor, unless otherwise specified shall provide all facilities and arrangements to undertake these tests and all testing charges shall be borne by the
- 24. The contractor shall supply required quantity of samples desired by executive engineer, the samples so obtained shall be sent to authorized laboratory for testing, if the material is not found according to the specifications the entire lot of supply will also be rejected. The entire cost of samples and testing shall be borne by the contractor.

The submission of the As-built drawings of the water line 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 contractor shall submit all the completion drawings. The scale of drawing and the size of drawing shall be as per the direction of the Engineer in Charge.

26. The contractor shall be solely responsible for all kind of liaison before starting the work with PHED/Other JDA zone/JVVNL & BSNL etc. which is required to avoid any damage of already laid pipe lines, Electric, BSNL cables.

The contractor shall also liaison for the inter connection work with existing PHED system.

27. Before start of work contractor has to inform concerned JDA zone officers to avoid/minimize road damage

28. The follow up / liaison for submitting Electric bill in JDA and deposited the cheque / DD to concern JVVNL, Jaipur office in every month during O & M period shall be in the scope of contractor.

29. If there is any typographical error or otherwise in the 'G' Schedule. The nomenclature and the rates as given in the relevant BSR-2013 and JDA approved items/rates on which schedule 'G' is based, shall prevail.

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

I/we confirm above

Signature of contractor

Executive Engineer (PHE-III) JDA, Jaipur

## Section A-4 Specifications of Work

#### General

#### **Standards**

Except as otherwise specified in this technical specification, the Indian/International Standards and Codes of Practice in their latest version shall be adhered to for the design, manufacturing, inspection, factory testing, packing, handling and transportation of product. Should any product be offered conforming to other standards, the equipment or products shall be equal to or superior to those specified and the documentary confirmation shall be submitted for the prior approval of the Engineer in Charge.

This specification requires a reference to the following standard specifications

	rins specification re	quires a reference to the following standard specifications
	IS: 4985	Unplasticized PVC pipes for potable water supplies
	IS: 10151	PVC and its conslymers for its cofe use in parts.
		PVC and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals, and drinking water
	IS: 10500	Drinking water specification
	IS: 12235	Mathods of toot for wall at it.
	IS: 4669	Methods of test for unplasticized PVC pipes for potable water supplies
	IS: 12818	Methods of test for PVC resin
	IS: 3400	Unplasticized PVC screen and casing pipes for bore/tube well
	IS: 1387	Methods of lest for vulcanized rubber (part-1 to 22)
		General requirements for the supply of metallurgical material
	IS: 210	Grey from casting
	IS: 1536	Centrifugally cast (spun) iron pressure pipe for water, gas and sewage
	IS: 1537	vertically cast iron pressure pipe for water has and sewage
	IS: 1538	Cast iron fittings for pressure pipes for water, gas and sewage
	IS: 5531	Of specials for Aspestos cement pressure pines for water gas & source
	IS: 1363	riexagon field boits, screws and nuts of product grade A and B (not:1 5)
	IS: 1367	reclifical supply conditions for threaded steel fasteners
	IS: 780	Sluice valve for water works purposes
	IS: 2906	Specifications for sluice valves for water works purposes
ş	IS: 318	Leaded tin bronze ingots and casting
	IS: 8543	Methods of testing plastics: Determination of density of solid plastics
	IS: 7181	Horizontally cast iron double floraged since faculty of solid plastics
	IS: 8794	Horizontally cast iron double flanged pipes for water, gas and sewage.
	IS: 5382	CI detachable joints for use with Asbestos cement pressure pipes
	IS: 5531	Rubber sealing rings for gas mains, water mains and sewers
	IS: 779	Cast iron specials for asbestos cement pressure pipes for water, gas and sewage Water meters
	IS: 3624	vvaler meters
	IS: 341	Pressure and vacuum gauges
	IS: 9862	Black japan, types A, B and C
	13. 9002	Ready mixed paint, brushing, bituminous, black, lead free, acid, alkali, water and chlorine
	IS: 1239	redicting
		Mild steel tubes, tubular and other wrought steel fittings
	IS: 7328	High density polyethylene materials for moulding and extrusion
	IS: 4984	Specification for high density polyethylene pipes for potable water supplies: sewage and
	WAS BUILD	madatrial eniderita
	IS: 554	Dimensions for pipe threads where pressure tight joints are required on the threads
	IS: 1592	Asbestos cerrient pressure pipes - Specifications
	IS: 778 *	Specifications for copper alloy gate, globe and check valves for water works purposed
	IS: 12820	Difficultional requirements for rupper daskets for mechanical joints and puch an initial factor
		use with cast iron pies and fittings for carrying water, gas and sewage.
	IS: 9523	Specification for DI fittings for pressure pipes for water, gas, and sewage.
	ISO: 2045	Single socket for uPVC and uPVC pressure pipes with elastic sealing ring type joints -
		Minimum depth of engagement
	ISO: 2507	PVC pipes and fittings- Vicat softening temperature - Test method and specification
	ISO: 3603	Fittings for PVC nine with electic cooling temperature - Test method and specification
	ISO: 1167	Fittings for PVC pipe with elastic sealing ring joints pressure test for leak profanes
	TO SAME	Thermoplastics pipes for the transport of fluids - Resistance to internal pressure - Test method and basic specification
	ISO 3451-5	Determination of Ash Dat 5
	ASTM: D 2152	Determination of Ash: Part-5 - Poly vinyl chloride
	7.0 TW. D 2 102	Standard test method for degree of fusion of extruded PVC pipe and moulded fittings by
	MTNL	Accione infinersion
	BS: 4772	Mahanagar Telephone Nigam Limited; Technical specifications for cable ducts.
		Specification for DI fittings
	IS: 7634- Parts 1-3	Code of practice for plastic pipe works for potable water supplies
	IS: 8329	Centrifugally cast (spun) ductile iron pressure pipes for water that and sewage
	IS: 12288	COUR OF DIRECTICE TOF TISE and Javing of ductile iron pines
	CPHEEO Manual on \	Water Supply and Treatment, III edition, Ministry of Urban Development, New Delhi- May
		y a state participation, new Delilla May
	Ductile Iron Pipe:-	
	The pipes will be cent	trifugally cast (spun) Ductile Iron pipes for Water and Sewage confirming to the IS 8329:
	16	the somege committing to the 15 6329.

16

2000. The pipes used will be either with push on joints (Rubber Gasket Joints) or Flanged joints. The class of pipe to be used shall be of the class K-7.

The pipes shall be coated with bitumen as per appendix C and have factory provided cement mortar lining in the inside as per the provisions of Appendix B of the IS 8329: 2000.

The pipes will be supplied in standard length of 5.50 and 6.00 meters length with suitably rounded or chamfered ends. Each pipe of the push on joint variety will also be supplied with a rubber EPDM gasket. Any change in the stipulated lengths will be approved by the Engineer - in charge. The gaskets will confirm to the IS 5382:1985.

The gaskets should also be supplied by the manufacturer of the pipes. They should preferably be manufactured by the manufacturer of the pipes. In case they are not, it will be the responsibility of the manufacturer of the pipes to have them manufactured from a suitable manufacturer under it's own supervision and have it tested at his/sub contractors premises as per the contract. The pipe manufacturer will however be responsible for the compatibility and quality of the products.

The flanged joints will confirm to the Clause 6.2 of IS 8329. The pipe supply will also include one rubber gaskets for each flange.

Inspection and Testing:

The pipes will be subjected to following tests for acceptance:

Visual and dimensional check as per Clause 13 and 15 of IS 8329

Mechanical Test as per Clause 10 of IS 8329

Hydrostatic Test as per Clause 11 of IS 8329

The test reports for the rubber gaskets shall be as per acceptance tests of the IS 5832 and will be in accordance to Clause 3.8

The sampling shall be as per the provisions of the IS 8329

Marking

All pipes will be marked as per Clause 18 of IS 8329 and show as below:

Manufacturer name/ stamp

Nominal diameter

Class reference

A white ring line showing length of insertion at spigot end

Packing and Transport:

The pipes should be preferably transported by road from the factory and stored as per the manufacturer specifications to protect damage.

#### Specials for Ductile Iron Pipes

General

This section covers the general requirements for Ductile Iron (DI) fittings suitable for Tyton joints to be used with Ductile Iron pipes with flanged and Tyton jointing system.

Types of specials

The following types of DI fittings shall be manufactured and tested in accordance with IS: 9523 or BS: 4772.

flanged socket flanged spigot

Double socket bends (900, 450, 22 1/2 0, 11 1/4 0)

Double socket branch flanged tee

All socket tee.

Double socket taper.

All Flanged Tee.

All Flanged taper.

Supply

All the DI fittings shall be supplied with one rubber ring for each socket. The rubber ring shall conform to IS: 12820 and IS: 5382 as described in the preceding chapter. Flanged fittings shall be supplied with one rubber gasket per flange and the required number of nuts and bolts.

General

This section covers the requirements for lubricant for the assembly of Ductile Iron pipes and specials suitable for Tyton push-in rubber ring joints

Specification

The lubricant has to have the following characteristics:

must have a paste like consistency and be ready for use

has to adhere to wet and dry surfaces of DI pipes and rubber rings

to be applied in hot and cold weather; ambient temperature 0 - 50 °C, temperature of exposed pipes up to 70 °C

must be non toxic

must be water-soluble

must not affect the properties of the drinking water carried in the pipes

must not have an objectionable odour

has to inhibit bacterial growth

must not be harmful to the skin

must have a shelf live not less than 2 years

Acceptance tests

They shall be conducted in line with the provisions of the IS 9523

All the DI fittings shall be properly packed with jute cloth. Rubber rings shall be packed in polyethylene bags.

Rubber rings in PE bags and nuts, bolts etc. shall be supplied in separate jute bags.

The fittings should also be supplied by the manufacturer of the pipes. They should preferably be manufactured by the manufacturer of the pipes. In case they are not, it will be the responsibility of the manufacturer of the pipes to have them manufactured from a suitable manufacturer under it's own supervision and have it tested at his/sub contractors premises as per the contract. The pipe manufacturer will however be responsible for the compatibility and quality of the products.

#### Laying and jointing of DI pipes

Pipes should be lowered into the trench with tackle suitable for the weight of pipes. For smaller sizes, up to 200 mm nominal bore, the pipe may be lowered by the use of ropes but for heavier pipes suitable mechanical equipment have to be used.

All construction debris should be cleared from the inside of the pipe either before or just after a joint is made. This is done by passing a pull-through in the pipe, or by hand, depending on the size of the pipe. All persons should vacate any section of trench into which the pipe is being lowered

On gradients of 1:15 or steeper, precautions should be taken to ensure that the spigot of the pipe being laid does not move into or out of the socket of the laid pipe during the jointing operations. As soon as the joint assembly has been completed, the pipe should be held firmly in position while the trench is back filled over the barrel of the pipe. The designed anchorage shall be provided to resist the thrusts developed by internal pressure at bends, tees, etc. Where a pipeline crosses a watercourse, the design and method of construction should take into account the characteristics of the watercourse to ascertain the nature of bed, scour levels, maximum velocities, high flood levels, seasonal variation, etc. which affect the design and laying of pipeline.

The assembly of the pipes shall be made as recommended by the pipe manufacturer and using the suitable tools. The socket and spigot ends of the pipes shall be brushed and cleaned. The chamfered surface and the end of the spigot end have to be coated with a suitable lubricant recommended by the manufacturer of the pipes. Oil, petroleum bound oils, grease or other material which may damage the rubber gasket shall not be used as lubricant. The rubber gasket shall be inserted into the cleaned groove of the socket. It has to be checked for correct positioning.

The two pipes shall be aligned properly in the pipe trench and the spigot end shall be pushed axially into the socket either manually or with a suitable tool specially designed for the assembly of pipes and as recommended by the manufacturer. The spigot has to be inserted up to the insertion mark on the pipe spigot. After insertion, the correct position of the socket has to be tested with a feeler blade

Deflection of the pipes -if any- shall be made only after they have fully been assembled. The deflection shall not exceed 75 % of the values indicated by the pipe manufacturer.

#### Anchoring of the pipeline

Thrust blocks shall be provided at each bend, tee, taper, end piece to prevent undue movements of the pipeline under pressure. They shall be constructed as per design of ENGINEER- IN- CHARGE according to the highest pressure during operation or testing of the pipes, the safe bearing pressure of the surrounding soil and the friction coefficient of the soil.

#### Leakage Test

ving and jointing the pipeline shall be tested for tightness of barrels and joints, and stability of thrust blocks in sections approved by the Engineer in Charge. The length of the sections depends on the topographical conditions. Preferably the pipeline stretches to be tested shall be between two chambers (air valve, scour valve, bifurcation, other chamber). At the beginning, the Contractor shall test stretches not exceeding 2 km. After successful organization and execution of tests the length may be extended to more than 2 km after approval of the Engineer in Charge.

The water required for testing shall be arranged by the contractor himself. The Contractor shall fill the pipe and compensate the leakage during testing. The Contractor shall provide and maintain all requisite facilities, instruments, etc. for the field testing of the pipelines. The testing of the pipelines generally consists in three phases: preparation, pre-test/saturation and test immediately following the pre-test. Generally, the following steps are required which shall be monitored and recorded in a test protocol if required

The testing conditions for the pipelines are summarized as follows:

Maximum hydrostatic test pressure for DI K-7 pipes shall be 1.5.0 times of maximum design pressure in the pipeline.

Pre test and saturation period with addition of make-up water

Pressure:

Test pressure

Duration:

3 hrs for DI pipes without cement mortar lining / 24 hrs for DI pipes with

cement mortar lining

Pressure test with addition of make-up water

Pressure:

Test pressure

Duration:

3 hrs

Test criteria for DI pipes:

Q = 1 liter per km per 10mm of pipe per 30 m test pressure per 24 hrs.

All pressure testing at site should be carried out hydrostatically. The pipes shall be accepted to have passed the pressure test satisfactorily, if the quantity of water required to restore the test pressure as per the latest codal provisions does not exceed the amount 'Q', calculated by the above formula.

If it is required to test a section of a pipeline with a free end, it is necessary to provide temporary support against the considerable end thrust developed by the application of the test pressure. The end support can be provided by inserting a wooden beam or similar strong material in a short trench excavated at right angle to the main trench and inserting suitable packing between the support and pipe end.

The pipeline stretch will pass the test if the water added during the test period is not exceeding the admissible limits. No section of the pipe work shall be accepted by the Engineer in charge until all requirements of the test

have been obtained.

On completion of a satisfactory test any temporary anchor blocks shall be broken out and stop ends removed. Backfilling of the pipeline shall be completed.

Failure to pass the test

All pipes or joints which are proved to be in any way defective shall be replaced or remade and re-tested as often as may be necessary until a satisfactory test shall have been obtained. Any work, which fails or is proved by test to the unsatisfactory in any way, shall be redone by the Contractor.

Flushing and disinfecting of pipelines

After testing and commissioning the contractor shall flush the pipes with a velocity not less than 1 m/s or as approved by the Engineer in Charge. Disinfection of drinking water pipelines shall be made by engineer- in charge. Supply of Ductile Iron Pipes:-

The Contractor will have to supply DI pipes manufactured by manufacturer who has been in business of supply of DI pipes rubber ring jointed and have proven record of successful supply and testing of pipeline for minimum one year.

#### Inspection

#### Third Party Inspection:

The following items of supply will be got inspected from approved inspecting agency (CEIL, SGS. RITES) at manufacturers premises before dispatch at his own cost.

D.I. pipes

#### Specifications for Laying and Jointing of Pipe Line System for Water Supply

#### Preparatory work

The contractor will inspect the route along which the pipe line is proposed to be laid. He should observe/ find out the existing underground utilities/ construction and propose an alignment along which the pipeline is to be laid. He should make all efforts to keep the pipe as straight as possible with the help of ranging rods. Wherever there is need for deviation, it should be done with the use of necessary specials or by deflection in pipe joints (limited to 75% of permissible deflection as per manufacturer). The alignment as proposed should be marked on ground with a line of white chalk and got approved from Engineer In-Charge. The Contractor will than prepare an L-Section along this alignment showing the location of proposed pipeline. The L-section should be got approved from the site Engineer. The position of fittings, valves, should be shown on the plan.

#### Alignment and the L-Sections

The alignments, L-section (depth of laying) and location of specials, valves and chambers may be changed at site in cooperation with and after approval of the Engineer in Charge. The minimum cover to the top of the pipe shall be 1 m.

#### Standards

Except as otherwise specified in this technical specification, the Indian Standards and Codes of Practice in their latest version, National Building code, PWD specification of the state of Rajasthan and Manual of water supply of GOI shall be adhered to for the supply, handling, laying, installation, and site testing of all material and works.

Tools and equipment

The contractor has to provide all the tools and equipment required for the timely, efficient and professional implementation of the work as specified in the various sections of the contract and as specified by the instructions of manufacturers of the pipes and other material to be handled under this contract. On demand he shall provide to the Engineer in Charge a detailed list of tools and equipment available. If in the opinion of the Engineer in Charge the progress or the quality of the work cannot be guaranteed by the available quantity and type of tools and equipment the contractor has to provide additional ones to the satisfaction of the Engineer in Charge. The Contractor will always have a leveling instrument on site.

#### Handling and laying of pipes

Transportation of pipes and specials & Storage:-

The Contractor has to transport the pipes and other materials from manufacturer to the site of laying as indicated by the Engineer in Charge. Pipes should be handled with care to avoid damage to the surface and the socket and spigot ends, deformation or bending. Pipes shall not be dragged along the ground or the loading bed of a vehicle. Pipes shall be transported on flat bed vehicles/trailers. The bed shall be smooth and free from any sharp objects. The pipes shall rests uniformly on the vehicle bed in their entire length during transportation. Pipes shall be loaded and un-loaded manually or by suitable mechanical means without causing any damage to the stacked pipes.

The transportation and handling of pipes shall be made as per IS 12288. Handling instructions of the manufacturers of the pipes shall be followed. All precautions set out shall be taken to prevent damage to the protective coating, damage of the jointing surfaces or the ends of the pipes.

Whatever method and means of transportation is used, it is essential that the pipes are carefully placed and firmly secured against uncontrolled movement during transportation to the satisfaction of engineer in charge.

Cranes or chain pulley block or other suitable handling and lifting equipment shall be used for loading and un-loading of heavy pipes. However, for pipes up to 400 mm nominal bore, skid timbers and ropes may be used. Where using crane hooks at sockets and spigot ends hooks shall be broad and protected by rubber or similar material, in order to avoid damage to pipe ends and lining. Damage to lining must be repaired before pipe laying according to the instructions of the pipe manufacturer. Pipes shall not be thrown directly on the ground or inside the trench.

When using mechanical handling equipment, it is necessary to employ sufficient personnel to carry out the operation efficiently with safety. The pipes should be lifted smoothly without any jerking motion and pipe movement should be controlled by the use of guide ropes in order to prevent damage caused by pipes bumping together or against surrounding objects.

Rolling or dragging pipes along the ground or over other pipes already stacked shall be avoided.

The pipe should be given adequate support at all times. Pipe should be stored on a reasonably flat surface free from stones and sharp projections so that the pipe is supported through out its length. In storage, pipe racks should provide continuous support and sharp corners of metal racks should be avoided. Socket and Spigot pipes should be stacked in layer with sockets placed in alternate ends of the stack to avoid lop sided stacks.

Pipes should not be stored inside another pipe. On no account the pipes should be stored in stressed or bent condition or near the sources of heat. Pipes should not be stacked more than 1.5 m high and pipes of different sizes and classes should be stacked separately. The ends of the pipes should be protected from abrasion. The pipes should be protected from U.V. rays and excessive heat at all times. Their storage facility should be well ventilated.

The Contractor shall provide proper and adequate storage facilities to protect all the materials and equipment's against damage from any cause whatsoever and in case of any such damage/theft, the Contractor shall be held responsible.

The contractor will lay the pipelines along the alignments as per the layout given by the Engineer in Charge. The layout shall be given keeping in view the information available regarding existing services like water lines, sewers, telephone and electric lines/ cables. The contractor shall take all due care to avoid damage to any such services and, in case of any damage occurring to them in progressing the work, the Contractor shall make good the same at his own cost. No additional time shall, however, be allowed on this account.

#### Stringing of pipes along the alignment

The pipes shall be laid out properly along the proposed alignment in a manner that they do not create any significant hindrance to the public and that they are not damaged.

Stringing of the pipe end to end along the working width should be done in such a manner that the least interference is caused in the land crossed. Gaps should be left at intervals to permit the passing of equipment across the working area. Pipes shall be laid out that they remain safe where placed and that no damage can occur to the pipes and the coating until incorporated in the pipeline. If necessary, pipes shall be wedged to prevent accidental movement. Precautions shall be made to prevent excessive soil, mud etc. entering the pipe.

Generally, the pipes shall be laid within two weeks from the date of their dispatch from the manufacturer /store .

#### Pipe trench

Trench excavation

The trench excavation of pipeline shall be in accordance with IS 12288. Pipe trenches shall be excavated to the lines and levels shown on the drawings or as directed by the Engineer in Charge. The depth of the excavated trench shall be as given in the drawings or as directed by the Engineer in Charge. The width of the trench at bottom between the faces of sheeting shall be such as to provide 200 mm clearance on either side of the Diameter. No pipe shall be laid in a trench until the section of trench in which the pipe is to be laid has been approved by the Engineer in Charge.

The depth should be sufficient to provide a cover not less than 1000 mm. It may be necessary to increase the depth of pipeline to avoid land drains or in the vicinity of roads, railways or other crossings. Care should be taken to avoid the spoil bank causing an accumulation of rainwater.

The bottom of the trench shall be trimmed and leveled to permit even bedding of the pipes. It should be free from all extraneous matter, which may damage the pipe or the pipe coating. Additional excavation shall be made at the joints of the pipes, so that the pipe is supported along its entire length.

All excavated material shall be stacked in such a distance from the trench edge that it will not endanger the work or workmen and it will avoid obstructing footpaths, roads and driveways. Hydrants under pressure, surface boxes, fire or other utility

controls shall be left unobstructed and accessible during the construction work. Gutters shall be kept clear or other satisfactory provisions made for street drainage, and natural watercourses shall not be obstructed.

To protect persons from injury and to avoid damage to property, adequate barricades, construction signs, torches, red lanterns and guards, as required, shall be placed and maintained during the progress of the work and until it is safe for traffic to use the roadways. All materials, piles equipment and pipes which may serve as obstruction to traffic shall be enclosed by fences or barricades and shall be protected by illuminating proper lights when the visibility is poor.

As far as possible, the pipe line shall be laid below existing services, like water and gas pipes, cables, cable ducts and drains but not below sewers, which are usually laid at greater depth. Where it is unavoidable, pipeline should be suitably protected. A minimum clearance of 150 mm shall be provided between the pipeline and such other services.

Trees, shrubbery fences, poles, and all other property and surface structures shall be protected. Tree roots shall be cut within a distance of 50 cm from pipe joints in order to prevent roots from entering them. Temporary support, adequate protection and maintenance of all under ground and surface structures, drains, sewers and other obstructions encountered in the progress of the work shall be provided. The structures, which will be disturbed, shall be restored after completion of the work.

Where water forms or accumulates in any trench the Contractor shall maintain the trench free of water during pipe laying.

Wherever necessary to prevent caving, trench excavations in soils such as sand, gravel and sandy soil shall be adequately sheeted and braced. Where sheeting and bracing are used, the net trench width after sheeting shall not be less than that specified above. The sides of the excavation shall be adequately supported at all times and, except where described as permitted under the Contract, shall be not battered.

The Engineer in Charge in co-operation with the Contractor shall decide about the sheeting/ bracing of the trench according to the soil conditions in a particular stretch and taking into account the safety requirements of the Contractor's and Engineer-Ir-Charge's staff. Generally, safety measures against caving have to be provided for trenches with vertical walls if they are deeper than 2.0 m.

Trench excavation to commensurate with the laying progress

The work of trench excavation should be commensurate with laying and jointing of the pipeline. It should not be dug in advance for a length greater than 500 m ahead of work of laying and jointing of pipeline unless otherwise permitted by the Engineer in Charge. The Contractor has to ensure the following:

- safety protections as mentioned above have to be incorporated in the work process
- hindrances to the public have to be minimized
- the trench must not be eroded before the pipes are laid
- · the trench must not be filled with water when the pipes are laid
- · the trench must not be refilled before laying of the pipes

The bed for the laying of the pipes has to be prepared according to the L-Section immediately before laying of the pipes.

Bedding of the pipes

The trench bottom shall be even compact and smooth so as to provide a proper support for the pipe over its entire length, and shall be free from stones, lumps, roots and other hard objects that may injure the pipe or coating. Holes shall be dug in the trench bottom to accommodate sockets so as to ensure continuous contact between the trench and the entire pipe barrel between socket holes.

#### Laying and jointing of pipes

#### General

The pipes will be cleaned in the whole length with special care of the spigot and sockets on the inside/ outside to ensure that they are free from dirt and unwarranted projections. The whole of the pipes shall be placed in position singly and shall be laid true to profile and direction of slope indicated on longitudinal sections. The pipes shall be laid without deflection in a straight alignment between bends and between high and low points. Vertical and horizontal deflections between individual pipes need the approval of the Engineer in Charge. In no case the deflection shall be more than 75 % of those recommended by the manufacturer.

Before pipes are jointed they shall be thoroughly cleaned of all earth lumps, stones, or any other objects that may have entered the interior of the pipes, particularly the spigot end and the socket including the groove for the rubber ring.

Pipes and the related specials shall be laid according to the instructions of the manufacturers and using the tools recommended by them.

Cutting of pipes shall be reduced to a minimum required to conform to the drawings. Cutting has to be made with suitable tools and according to the recommendations of the manufacturer. The spigot end has to be chamfered again at the same angle as the original chamfered end. Cutting shall be perpendicular to the Centre line of the pipe. In case of ductile iron pipes the cut and chamfered end shall be painted with two coats of epoxy paint. If there is no mark for the insertion depth on the spigot end of the (cut) pipe it shall be marked again according to the instructions of the manufacturer.

Before pipes are jointed they shall be thoroughly cleaned of all earth lumps, stones, or any other objects that may have entered the interior of the pipes, particularly the spigot end and the socket including the groove for the rubber ring. End caps

are removed only just before laying and jointing

All specials like bends, tees etc. and appurtenances like sluice or butterfly valves etc. shall be laid in synchronization with the pipes. The Contractor has to ensure that the specials and accessories are ready in time to be installed together with the pipes. At the end of each working day and whenever work is interrupted for any period of time, the free ends of laid pipes shall be protected against the entry of dirt or other foreign matter by means of approved plugs or end caps. When pipe laying is not in progress, the open ends of installed pipe shall be closed by approved means to prevent entrance of

trench water and dirt into the line.

No pipe shall be laid in wet trench conditions that preclude proper bedding, or when, in the opinion of the Engineer in Charge, the trench conditions or the weather are unsuitable for proper installation.

The pipeline laid should be absolutely straight unless planned otherwise. The accuracy of alignment should be tested before starting refilling with the help of stretching a string between two ends of the straight stretch of pipes to rectify possible small kinks in laying.

#### Special Cast Iron fittings and Accessories

Normally when pipeline is laid, a certain number of cast iron fittings such as tees, bends, reducers, etc, and special fittings such as air or sluice valves are required.

Laying of Fittings - All cast iron fittings shall be plain ended to suit the outside diameter of Asbestos cement pressure pipes and to the class and diameter of pipe manufactured. When using such cast iron fittings, they are jointed by cast iron detachable joints only. For cast iron specials having flanges, they are jointed in the pipeline with cast iron flange adaptors having one end flanged and the other plain ended.

Anchorages - It should particularly be noted that the cast iron joints do not hold pipe ends within it firmly. During working or test pressure, there will be tendency for the pipe ends or special ends to slip out of the joint, more so with the case of blank end cap used for closure of pipeline and all degree bends and tees. In order to keep them firmly in the pipeline, anchoring of these specials are necessary against the direction of thrust.

The anchorage shall consist of either concrete cast-in-situ or masonry built in cement mortar. The anchors shall be extended to the firm soil of the trench side. The shape of the anchors will depend on the kind of specials used. They shall be spread full width of trench and carried vertically by the side and over the special to about 15 cm. The bearing area on sides of the trench will be proportional to the thrust and to bearing capacity of the sides of the trench.

#### Back filling and tamping

The soil under the pipe and coupling shall be tamped in order to provide a firm and continuous support or the pipeline. Tamping shall be done either by tamping bars or by using water to consolidate the back fill material.

The initial back fill material used shall be free of large stones and dry lumps. In stony areas the material for initial back fill can be shave from the sides of the trenches. In bogs and marshes, the excavated material is usually little more than vegetable matter and this should not be used for bedding purposes. In such cases, gravel or crushed stone shall be hauled in.

The initial back fill shall be placed evenly in a layer of about 100 mm thick. This shall be properly

Consolidated and this shall be continued till there is a cushion of at least 300 mm of cover over the pipe.

If it is desired to observe the joint or coupling during the testing of mains they shall be left exposed.

Sufficient back fill shall be placed on the pipe to resist the movement due to pressure while testing.

Balance of the back fill need not be so carefully selected as the initial material. However, care shall be taken to avoid back filling with large stones, which might damage the pipe when spaded into the trench.

Pipes in trenches on a slope shall have extra attention to make certain that the newly placed back fill will not become a blind drain in effect because until back fill becomes completely consolidated, there is a tendency for ground or surface water to move along this looser soil resulting in a loss of support to the pipe. In such cases, the back fill should be tamped with extra care and the tamping continued in 100 mm layers right up to the ground level.

Anchoring of the pipeline

Thrust blocks shall be provided at each bend, tee, taper, end piece to prevent undue movements of the pipeline under pressure. They shall be constructed as per actual design and approval of Engineer in Charge according to the highest pressure during operation or testing of the pipes, the safe bearing pressure of the surrounding soil and the friction coefficient of the soil.

## 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
- 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
- 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

ln	relation	to	my/our	Bid	submitted	to	The second of th	***************************************	for	nroourous suf	0.000
v	***********				in response		r Notice inviting E	Dida Na	101	procurement	of
here	by declare	under S	Section 7 of	Rajastha	an Transparer	ncy in P	ublic Procurement	nt Act, 2012, tha	Dai t :	ted	l/We
	I/We potential     the Bid	ossess ding Do	the necessa	ary profe	essional, techr	nical, fir Entity;	nancial and mana	gerial resources	and cor	mpetence require	ed by
	2. I/We ha	ave fulf	illed my/our	obligati		n of the	taxes payable to	the Union and	the Stat	e Government o	r any
å	3. I/We ar or a jud	e not in	nsolvent, in	receiver	ship, bankrup	t or bei	ng wound up, no s suspended ant	t have my/our a	ffairs ad of legal p	ministered by a proceeding for a	court ny of
	profess a procu	ional co rement	onduct or th t Contract w	e makin ithin a p	g of false state eriod of three	ements years p	ave, been conviction or misrepresentation or misrepresentation or misrepreseding the continuity of the	ations as to my/o	our quali	fications to enter	r into
	5. I/We do	not h					the Act, Rules		Docum	ent, which mate	rially
	Date : Place :							Signature of	bidder		
•	1400 .							× ×			
								Name Designa Address	ition:		

Annexure C:

## 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

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:

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

(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;

- Provisions limiting participation of Bidders in the Bid process;
- 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.
- 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

Appea	(First/Second Appellate Authority)	Before	the
1.	Particulars of appellant :		
(i)	Name of the appellant :		
(ii)	Official address, if any :	3%	
(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 Pr	ocurina F	ntity
	in contravention to the provisions of the Act by which the appellant is aggrieved:	oouring L	incity
4.	If the Appellant proposes to be represented by a representative, the name and postal a representative:	ddress of	the
5.	Number of affidavits and documents enclosed with the appeal :		
6.	Grounds of appeal:	<u>*</u> :	
	(Supported by an affidavit)		
7.	Prayer:		
±725			
	······································		
	Appellan	's Signat	ture
	· · · · · · · · · · · · · · · · · · ·	Oigilai	.ui C

#### 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:

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 quoted 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.
- 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-III) JDA, Jaipur

## Section A6 Drawings

## JAIPUR DEVELOPMENT AUTHORITY

Name of work:- P/L/J of DI water pipe line for Eco friendly Development of Veer Hanuman Ji tourist Centre at Samod ( Khol) Chomu , Jaipur

#### G- Schedule

Part-A

Based on JDA PHE BSR Rates

S.NO	PARTICULARS	QTY	UNIT	RATE	AMOUNT
1.00	Providing laying & Jointing of ISI mark centrifugally cast (Spun) ductile iron pressure pipe for water with socket and spigot end and Tyton joint confirming to IS 8329/2000 and departmental specification in standard length (As required) for (Class K-7) suitable for push on joint (rubber gaskets jointing) with side cement mortar lining 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 up to 1.5 Mt. stacking the soil clear form 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.(D-878 dt.01.09.2008)		/5	NATE	AMOUNT
1.10	100 mm	1,520.00	P. Mtr.	1397.00	2123440.00
1.20	150 mm	400.00	P. Mtr.	2013.00	
2.00	Providing/fixing/testing KG of DI specials (K-7) i.e. bend, tees, tail pieces, flanges etc. of various size as per the site condition and requirement including all jointing material in all respects, As per PHED specification. (D-306 dt. 28.04.2009)	100.00	Kg.	90.00	9000.00
3.00	Providing, fabricating and installing MS specials including rolling, cutting, welding in different shape and size. (D-547 dt. 20.12.2011)	200	Kg.	80.00	16000.00
4.00	Supply and fixing of cast iron double sluice valves IS 14846/2000 specification (ISI marked) of PN-1 rating including cost of rubber flange gaskit and nut bolts complete as required for following sizes.		6		
4.10	100 mm	2.000	Each	5,541.00	11082.00
4.20	150 mm	2.000	Each	8,107.00	16214.00
5.00	Supply and fixing of cast Iron Air valves 14845/20 specification (ISI marked) including cost of MS clamp, GI pipe, MS/GI flange, rubber flange gaskit and nut bolts complete as required for following sizes.	2.000	Lacii	3,107.00	10214.00
5.10	25 mm size Air valve	2.000	Each	1,202.00	2404.00
6.00	Supply of cast iron specials (class-10) as per IS: 5531-1988) specification as required.			1,202.00	2404.00
6.10	80 mm to 150 mm	100.000	Kg	58.00	5800.00
	Total Part-A Rs.	. 55.555	1.9	30.00	2989140.00

Exècutive Engineer (PHE-III) JDA, Jaipur

I/We Quote as	% Above/ Below the schedule " G "
(In Words	)

Signature of Contractor With full Address & Mobile No.