**Ref No.: NWSDB/SBD/CIVIL/Ver5**

***REVISED ON 02-11-2022***

**GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC**

# OF SRI LANKA

MINISTRY OF WATER SUPPLY

# NATIONAL WATER SUPPLY AND DRAINAGE BOARD

### ……………………….. WATER SUPPLY/ SEWERAGE SCHEME

**BID FOR …………………………………………………..…**

***(BUILDING & CIVIL WORKS)***

**CONTRACT No.: …………………………………..**

***REVISED ON 02-11-2022***

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**GALLE ROAD,**

**RATMALANA.**

**……………………..**

**MONTH & YEAR**

**PREFACE TO THE FORTH REVISION**

**DOCUMENT NWSDB/SBD /CIVIL/Ver5**

This Civil works Bidding document was revised in August 2014 by the Standard Bidding Document Review Committee appointed by the General Manager and approved for implementation on 31stAugust 2011.

This document can be used for civil construction works and pipe laying up to the value of Rs. 100 million and this is limited to local contracts.

This document consists of volume 1 and volume 2. Volume 1 is the ICTAD /SBD/01 which is to be purchased from CIDA. NWSDB will issue only the volume 2.

Changes made to volume 1 is given in Bidding Data and Contract Data, which are in volume 2.

Users of this document shall fill in the blanks given in the Bidding Data and Contract Data for the particular bidding document. Please refer Guideline to obtain a general idea on fill in the blanks.

The Standard Bidding Document Review Committee Comprises of following officers.

Mr. G.A. Kumararathna Addl. G.M (Sewerage) Chairman

Mr. D.S.D. Jayasiriwardene Addl. GM (S/E) Member

Mr. K.R. Dewasurendra Addl. GM (WSP) Member

Ms. K.T.P. Fernando DGM (PC) Member

Mr. R.H. Ruvinis DGM (P&D) Member

Mrs. A.P.S de Silva DGM (Costing) Member

Mr. M. Abeysekara AGM (M&E-Services) Member

Mr. U.C. Pathiranage AGM (P&D- Doc) Member

Mr. R.A.A. Ranawaka AGM (T&C) Member

Mr. S.S.S. Vipulanandan AGM (P&C) Member

Mrs. D.S.P. R.D. Premachandra CE (P&D-Doc) Secretary

(This should not be included in the bidding document)

Revised on 11-01-2022

#### DOCUMENT ISSUANCE CERTIFICATE

(To be filled at the time of issue by the authorized issuing officer)

1. STANDARD DOCUMENT REFERENCE NUMBER: NWSDB/SBD/CIVIL/Ver5

2. CONTRACT NUMBER : ………………….…………...…………………….

3. a) ISSUED TO : ………..........................……...............................

b) ADDRESS : ………….................................…….....................

c) TELEPHONE NUMBER : ....……...............................…..................

d) FACSIMILE NUMBER : ……………………………….………...

4. a) TENDER FEE : Rs. ........ RECEIVED/NOT RECEIVED

IN CASH/BANK DRAFT

b) RECEIPT/BANK DRAFT NUMBER : .....................…….............

5. NUMBER OF COPIES ISSUED : ..................…….…....................…...........

6. NUMBER OF CANCELLED COPIES ISSUED : …….....................…........

7. CANCELLED COPY FEE : Rs...............…….... RECEIVED/NOT RECEIVED (IN CASH/BANK DRAFT)

8 BUSINESS REGISTRATION NUMBER : ..........................………................

9. a) ISSUING OFFICER : ................................................…….........

b) DESIGNATION : ....................................................……….

c) SIGNATURE : ..................................................………...

10. PLACE OF ISSUE : ........................................................….….

11. SEAL : ……………….………………………………………….…….

12. DATE : ............................ TIME : …..............................……

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**Volume - 1 of this document is the Volume – 1 of Standard Bidding Document, Procurement of Works -CIDA publication No. ICTAD/SBD/01 Second Edition – January 2007 with Addendum No. 1 issued in October 2009, and available for purchasing at CIDA, Wijerama Mawatha, Colombo 7.**

Volume 1 includes following sections

Section 1 - Instructions to Bidders

Section 2 - Standard Forms ( Contract) are not used – Refer Section 12 of Volume II

Section 3 - Conditions of Contract

Revised on 06-08-2015

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**CHECK LIST BEFORE SUBMISSION OF BIDS**

Bidders are advised to fill the following table:

|  |  |  |
| --- | --- | --- |
| **ITEM** | **REFERENCE** | **REMARKS** |
| Documentary evidence to establish eligibility of bidder. | ITB Clause 1.1 |  |
| Signatory to the BID |  |  |
| Evidence for authority for Signatory(ies)  enclosed? | ITB Clause 18 |  |
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| Addressed to the Employer? | ITB Clause 18 |  |
| Completed? | ITB Clause 18 |  |
| Signed? | ITB Clause 18 |  |
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| Addressed to the Employer? | ITB Clause 16 |  |
| Format as required? | ITB Clause 16 |  |
| Issuing Agency as specified? | ITB Clause 16 |  |
| Validity as mentioned in the bidding data | ITB Clause 16 |  |
| Qualification Information |  |  |
| All relevant information completed? | ITB Clause 4 |  |
| Signed? | ITB Clause 4 |  |
| Addendum |  |  |
| Contents of the addendum (if any)  taken in to account? | ITB Clause 10 |  |
| BID package |  |  |
| All the documents given in ITB Clause  12 enclosed in the original and copy? | ITB Clause 12 |  |
| ITB Clause 19 followed before Sealing  the Bid Package? | ITB Clause 19 |  |
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| Product Conformity Certificate | ITB Clause 4.3 |  |

Revised on 11-01-2022

VOLUME 1

Standard Bidding Document, Procurement of works ICTAD/SBD/01 Second Edition, - January 2007with Addendum No. 1 issued on October 2009 Published by Construction Industry Development Authority (CIDA) is applicable in respect of this contract. Any changes to these Clauses in the Instructions to Bidders and Conditions of Contracts in the Instructions to Bidders and Conditions of Contracts are indicated in Bidding data respectively and contract data respectively in Section 5.

**ICTAD/SBD/01 Second Edition – January 2007 with Addendum No. 1 is not provided with this Bidding document, and it is available for purchasing at CIDA, Wijerama Mawatha, Colombo 7.**

Revised on 24-08-2017

VOLUME 2

**INVITATION FOR BIDS**

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

MINISTRY OF ………………………..

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT No.: …………………………………..**

**……………………………..………………. Water Supply/Sewerage Scheme**

**Bid For …………………………………………….**

**INVITATION FOR BIDS (IFB)**

1. The Chairman, Department Procurement Committee, National Water Supply and Drainage Board (NWSDB), Galle Road, Ratmalana on behalf of the National Water Supply and Drainage Board (NWSDB) now invites sealed bids from eligible and qualified bidders for…….……………………………. of ……………………Water Supply/Sewerage Scheme.
2. Bidding will be conducted through National Competitive Bidding Procedure.
3. Alternative bids shall not be accepted.
4. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall have Registration with CIDA in the field of ….…………………………in Grade …………… at the time of the submission of the bid.
5. The estimated cost for this Bid is Rs………………………………. Million without VAT and the construction period is ……………… Days.
6. Interested bidders may obtain further information from Assistant General Manager, (Tenders and Contracts), NWSDB, Galle Road, Ratmalana over the telephone, number 011-2635885 or 011-2638999 Ext. 1750 or facsimile number 011-2635885 and bidding documents may be inspected free of charge at the office of the Assistant General Manager, (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka.

7. A complete set of Bidding documents in English language may be purchased by interested bidders on the submission of a written application on a business letter head to the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, from …………… until …………….09:00 hours to 15:00 hours on normal working days upon payment of a non - refundable tender fee of Rs……………………………./= Plus applicable VAT in cash.

8. Bids shall be delivered to the Chairman, Department of Procurement Committee,   
National Water Supply and Drainage, Galle Road, Ratmalana, Sri Lanka on or before …………………hrs on ………………Late Bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders’ representatives who choose to attend.

9 All Bids shall be accompanied by a bid security of Rupees………………………………and valid up to………………………. *(Specify the Date)*

**Chairman**

National Water Supply and Drainage Board

Galle Road, Ratmalana.

Sri Lanka

Revised on 11-01-2022

*[For Below 50 Million works]*

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

**MINISTRY OF …………………………………………………………….**

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT No.: ………………………………….**

**……………………………..………………. Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

**INVITATION FOR BIDS (IFB)**

1. The Chairman, Department Procurement Committee, National Water Supply and Drainage Board (NWSDB), Galle Road, Ratmalana, Sri Lanka on behalf of the National Water Supply and Drainage Board (NWSDB) invites sealed bids from eligible and qualified Bidders for…….……….……….…of……………………Water Supply Scheme.

2. Bidding will be conducted through National Competitive Bidding Procedure. As the Total Cost Estimate of this procurement is below Rs. 50 million, regional preference and CIDA grade preference shall apply as stipulated in Public Finance Circular No. 04/2016(ii).

3. Alternative Bids shall not be accepted.

4. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall have Registration with CIDA in the field of …. …………………………in Grade …………… at the time of the submission of the Bid.

5. The estimated cost for this Bid is Rs………………………………. Million without VAT and the construction period is ……………… Days

6 Interested Bidders may obtain further information from Assistant General Manager, (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka over the telephone number 011-2635885 or 011-2638999 Ext. 1750 or facsimile number   
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2. Bids shall be delivered to the Chairman, Department of Procurement Committee,   
   National Water Supply and Drainage, Galle Road, Ratmalana, Sri Lanka on or before …………………hrs on ………………Late Bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders’ representatives who choose to attend.

9. All Bids shall be accompanied by a bid security of Rupees…………………………………and valid up to………………………. *(Specify the Date)*

**Chairman**

National Water Supply and Drainage Board, Galle Road, Ratmalana, Sri Lanka

Revised on 11-01-2022

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

**MINISTRY OF …………………………………………………………….**

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT No.: ………………………………….**

**…………………………….. ……. Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

**INVITATION FOR BIDS (IFB)**

1. The Chairman, Regional Procurement Committee, National Water Supply and Drainage Board (NWSDB), ……………….………………………………………………………… …………………………………………… *[Insert relevant RSC Address]* on behalf of the National Water Supply and Drainage Board (NWSDB) invites sealed bids from eligible and qualified Bidders for…….….…………………….……….……of……………………Water Supply Scheme.
2. Bidding will be conducted through National Competitive Bidding Procedure. As the Total Cost Estimate of this procurement is below Rs. 50 million, regional preference and CIDA grade preference shall apply as stipulated in Public Finance Circular No. 04/2016(ii).

3. Alternative Bids shall not be accepted.

1. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall have Registration with CIDA in the field of ….…………………………in Grade …………… at the time of the submission of the bid.
2. The estimated cost for this Bid is Rs………………………………. Million without VAT and the construction period is ……………… Days
3. Interested Bidders may obtain further information from …………………………… …………………………………. over the telephone number …………………. Ext. …. or facsimile number ………………… and Bidding Documents may be inspected free of charge at the office of the …………………………………………………….

………………………………………….

1. A complete set of Bidding Documents in English language may be purchased by interested Bidders on the submission of a written application on a business Letterhead to the ………………………………………………………………………………………………………………………. from ………………. until ……………. from 09:00 hours to 15:00 hours on normal working days upon payment of a non-refundable tender fee of Rs………………………. /= plus applicable VAT in cash.

8. Bids shall be delivered to the …………………………………………………to the………………………………………………………………………………………. on or before …………………hrs on ………………Late Bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders’ representatives who choose to attend.

9. All Bids shall be accompanied by a bid security of Rupees…………………………………

and valid up to ……………………………. *(Specify the Date)*

**DGM (RSC……………………………….)**

………………………………………………….

………………………………………………… *(Insert Relevant Address of the RSC)*

Revised on 11-03-2022

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

**MINISTRY OF ……………………………………………………………….**

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT No.: ………………………………….**

**…………………………….. ……. Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

**INVITATION FOR BIDS (IFB)**

1. The Chairman, Project Procurement Committee, National Water Supply and Drainage Board (NWSDB), ……………………………………………………………… …………………. on behalf of the National Water Supply and Drainage Board (NWSDB) invites sealed bids from eligible and qualified Bidders for…….….……………………………

of……………………Water Supply Scheme.

1. Bidding will be conducted through National Competitive Bidding Procedure.

3. Alternative Bids shall not be accepted.

1. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall have Registration with CIDA in the field of …. …………………………in Grade …………… at the time of the submission of the bid.
2. The estimated cost for this Bid is Rs………………………………. Million without VAT and the construction period is ……………… Days
3. Interested Bidders may obtain further information from …………………………… …………………………………. over the telephone number …………………. Ext. …. or facsimile number ………………… and Bidding Documents may be inspected free of charge at the office of the …………………………………………………….

………………………………………….

1. A complete set of Bidding Documents in English language may be purchased by interested Bidders on the submission of a written application on a business Letterhead to the …………………………………………………………………………………………………. from ………………. until ……………. from 09:00 hours to 15:00 hours on normal working days upon payment of a non-refundable tender fee of Rs………………………. /= plus applicable VAT in cash.

8. Bids shall be delivered to the …………………………………………………to the………………………………………………………………………………………. on or before …………………hrs on ………………Late Bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders’ representatives who choose to attend.

9. All Bids shall be accompanied by a bid security of Rupees…………………………………

and valid up to ……………………………. *(Specify the Date)*

**Project Director,**

…………………………………………. Water Supply Scheme

…………………………………………….. (*Insert Relevant of the Project)*

Revised on 11-01-2022

*[For Below 50 Million works]*

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

**MINISTRY OF ……………………………………………………………….**

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT No.: ………………………………….**

**…………………………….. ……. Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

**INVITATION FOR BIDS (IFB)**

1. The Chairman, Project Procurement Committee, National Water Supply and Drainage Board (NWSDB), ……………………………………………………………… …………………. on behalf of the National Water Supply and Drainage Board (NWSDB) invites sealed bids from eligible and qualified Bidders for…….….……………………………

of……………………Water Supply Scheme.

1. Bidding will be conducted through National Competitive Bidding Procedure. As the Total Cost Estimate of this procurement is below Rs. 50 million, regional preference and CIDA grade preference shall apply as stipulated in Public Finance Circular No. 04/2016(ii).

3. Alternative Bids shall not be accepted.

1. To be eligible for contract award, the successful bidder shall not have been blacklisted and shall have Registration with CIDA in the field of …. …………………………in Grade …………… at the time of the submission of the bid.
2. The estimated cost for this Bid is Rs………………………………. Million without VAT and the construction period is ……………… Days
3. Interested Bidders may obtain further information from …………………………… …………………………………. over the telephone number …………………. Ext. …. or facsimile number ………………… and Bidding Documents may be inspected free of charge at the office of the …………………………………………………….

………………………………………….

1. A complete set of Bidding Documents in English language may be purchased by interested Bidders on the submission of a written application on a business Letterhead to the …………………………………………………………………………………………………. from ………………. until ……………. from 09:00 hours to 15:00 hours on normal working days upon payment of a non-refundable tender fee of Rs………………………. /= plus applicable VAT in cash.

8. Bids shall be delivered to the …………………………………………………to the………………………………………………………………………………………. on or before …………………hrs on ………………Late Bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders’ representatives who choose to attend.

9. All Bids shall be accompanied by a bid security of Rupees…………………………………

and valid up to ……………………………. *(Specify the Date)*

**Project Director,**

…………………………………………. Water Supply Scheme

…………………………………………….. (*Insert Relevant of the Project)*

Revised on 11-01-2022

## FORM OF BID AND QUALIFICATION

## INFORMATION

**THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

**MINISTRY OF …………………………………………………………….**

## NATIONAL WATER SUPPLY AND DRAINAGE BOARD

**(CONTRACT No.: ……………………………….)**

**………………………………………… Water Supply/Sewerage Scheme**

**Bid for …………………………………………………………………………………….**

## FORM OF BID

To: The Chairman, Department Procurement Committee,

National Water Supply & Drainage Board,

Galle Road,

Ratmalana.

Gentleman,

1. Having examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition, January 2007 – Procurement of Works] any amendments thereafter and Volume II including Bidding Data, Contract Data, Condition of Contract, Specifications, Drawings and Bills of Quantities etc. and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any Defect therein in conformity with the aforesaid Contract Data, Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees ...... …………………………………………………………………. (LKR………...............……) or such other sums as may be ascertained in accordance with the said Conditions.

2. We/I acknowledge that the Contract Data forms part of our Bid.

3. We/I undertake, if our Bid is accepted, to commence the Works as stipulated in the Contract Data, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.

4. We/I agree to abide by this Bid for the period of ninety one (91) Days from the date fixed for receiving or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

1. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

6. We/I understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this ............. day of ............ 20... in the capacity of ..........……………………................ duly authorized to sign tenders for and on behalf of ....................................………….....................................

(IN BLOCK CAPITALS)

Name :…………………………………..

Designation :…………………………………….

Signature : ……………………………………

Address : ……………………………………

……………………………………

Witness: Signature: ……………………………

Name : ……………………………….

Address: ……………………………………………………………………

Revised on 11-03-2022

**THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

**MINISTRY OF ……………………………………………………………….**

## NATIONAL WATER SUPPLY AND DRAINAGE BOARD

**(CONTRACT No.: ……………………………….)**

**………………………………………… Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

## FORM OF BID

To: The Chairman, Regional Procurement Committee,

…………………………….………..,

..........................................................,

........................................................... *[Insert relevant RSC Address]*

Gentleman,

1. Having examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition, January 2007 – Procurement of Works] any amendments thereafter and Volume II including Bidding Data, Contract Data, Condition of Contract, Specifications, Drawings and Bills of Quantities etc. and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any Defect therein in conformity with the aforesaid Contract Data, Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees ...... ………………………………. ……………...

……………………………………………………………………. (LKR………...............…) or such other sums as may be ascertained in accordance with the said Conditions.

2. We/I acknowledge that the Contract Data forms part of our Bid.

3. We/I undertake, if our Bid is accepted, to commence the Works as stipulated in the Contract Data, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.

4. We/I agree to abide by this Bid for the period of ninety one (91) days from the date fixed for receiving or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

1. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

6. We/I understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this ............. day of ............ 20... in the capacity of ..........……………………................ duly authorized to sign tenders for and on behalf of ....................................………….....................................

(IN BLOCK CAPITALS)

Name :…………………………………..

Designation :…………………………………….

Signature : ……………………………………

Address : ……………………………………

……………………………………

Witness: Signature: ……………………………

Name : ……………………………….

Address: …………………………………………………………………

Revised on 02-09-2022

**THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

**MINISTRY OF ……………………………………………………………….**

## NATIONAL WATER SUPPLY AND DRAINAGE BOARD

**(CONTRACT No.: ……………………………….)**

**………………………………………… Water Supply Scheme**

**Bid for …………………………………………………………………………………….**

## FORM OF BID

To: The Chairman, Project Procurement Committee,

…………………………….………..,

..........................................................,

...........................................................

Gentleman,

1. Having examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition, January 2007 – Procurement of Works] any amendments thereafter and Volume II including Bidding Data, Contract Data, Condition of Contract, Specifications, Drawings and Bills of Quantities etc. and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any Defect therein in conformity with the aforesaid Contract Data, Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees ...... ………………………………………………. …………………………………………………………………. (LKR………...............……) or such other sums as may be ascertained in accordance with the said Conditions.

2. We/I acknowledge that the Contract Data forms part of our Bid.

3. We/I undertake, if our Bid is accepted, to commence the Works as stipulated in the Contract Data, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.

4. We/I agree to abide by this Bid for the period of ninety one (91) days from the date fixed for receiving or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

6. We/I understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this ............. day of ............ 20... in the capacity of ..........……………………................ duly authorized to sign tenders for and on behalf of ....................................………….....................................

(IN BLOCK CAPITALS)

Name :…………………………………..

Designation :…………………………………….

Signature : ……………………………………

Address : ……………………………………

……………………………………

Witness: Signature: ……………………………

Name : ……………………………….

Address: …………………………………………………………………….

Revised on 11-03-2022

**Qualification and General Information**

**(To be completed and submitted by the bidder, with the Bid)**

***1. Qualification Information***

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
| **CIDA Registration** |  | |
| Registration number | *(attach copies of relevant pages from the registration book)* | |
| Grade |  | |
| Specialty |  | |
| Expiry Date |  | |
|  |  | |
| **QUALIFICATIONS** | *(Details should be submitted as per ITB Clause No.4.4)*. | |
|  |  | |
| **Blacklisted Contractors** |  | |
| Have you been declared as a defaulted contractor by NPA or any other Agency? (Yes/No) | |  |
| IF yes provide details |  | |
|  |  | |
| **VAT Registration Number** |  | |
| **Work Program** | *(attach as annex) – Appendix 6* | |
| **Legal status** | *(attach relevant certified copies of registration)* | |
|  |  | |
| **Value of Construction works performed and ongoing in last 10 years** | *(attach copies of Certificate of Completion etc. and other documents such as profit-loss and income expenditure statement)* | |
| Year ….. | Complete details in Appendix 3A, 3C & 3E | |
| Year ….. |  | |
| Year ….. |  | |
| Year ….. |  | |
| Year ….. |  | |
|  |  | |
| **Value of similar works completed and ongoing in last 10 years (indicate only the three largest projects**) | Complete details in Appendix 3B, 3D & 3F  1. Value Year ……………..  2. Value Year …………..  3. Value Year …………….  (*attach copies of Certificate of Completion etc., as annex)* | |
|  |  | |
| **Major items of construction equipment proposed** | Complete details in Appendix 5A & 5B | |
| **Qualification and experience of Construction Management Services** | Complete details in Appendix 4A | |
| **Financial Capabilities** | (attach copies of Audited financial statements of the any consecutive 3 years within last 5 years)  Complete details in Appendix 2A | |
| **Bidder’s proposed DI/HDPE/PVC pipes, Fittings & Specials Manufacture’s Qualification** |  | |
| **Guarantee from DI/HDPE/PVC pipe Manufacturer, if Pipes and fittings are from different sources** | Complete details in Appendix 9 | |
| **Conformation of capability of production and supply according to the work program** | Complete details in Appendix 14 | |
| **Written power of attorney of the signatory to the Bid** | Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to Appendix 7 | |
| **Other information requested under ITB Clause 4** | Any other details in support of the bid.  Revised on 11-01-2022 | |

## 5. BIDDING DATA

**AND**

**CONTRACT DATA**

**BIDDING DATA**

The Bidding Data is a part of Instructions to Bidders and should be read in conjunction with the Instructions to Bidders.

If there is a discrepancy found in the Instructions to Bidders and the Bidding Data, the Content in the Bidding Data shall supersede the Content in the Instructions to Bidders in Volume 1 of This Document.

*(Note: What is typed in italic letters are guide lines to prepare the Bidding Data and they shall be removed after preparation of the Bidding Data.)*

Revised on 20-02-2018

**BIDDING DATA**

(Please note that the Clause numbers given here under are that of Instructions to Bidders)

**Instructions to Bidders**

**Clause Reference**

* 1. **The Employer is**

Name:National Water Supply and Drainage Board

Address: Galle Road,

Rathmalana

The Employer’s Authorized representative is

Chairman,

National Water Supply & Drainage Board

**Scope of Work**

*[Specify the scope of work with sufficient detail]*

Located at ………………………………………………

* 1. Intended Completion Date is **…….** Day**s** from the Start Date.
  2. The office for collection of Bid Documents is

Assistant General Manager (Tenders & Contracts)

National Water Supply & Drainage Board,

Galle Road, Ratmalana.

The non-refundable tender fee is **Rs ………+ Applicable VAT,**

Payable in cash.

The Bid forms will be issued until

…………………………………….....

Revised on 11-01-2022

(2.1) The Source of Funds is ………………………………………….

(4.2) The registration required

Specialty: ***……………………………….***

Grade: ***……………….***  *[Specify the CIDA grade]*

The following qualification information shall be provided in section 4:

(4.3) **Eligibility and Qualification Requirement**

Revised on 11-01-2022

|  |
| --- |
| All bidders shall include the following information and documents with their Bid (Refer Section 13 – Appendices).   1. Bidder shall not be a blacklisted Contractor at the time of bidding and the time of awarding. 2. CIDA registration as stated in Clause 4.2 (Appendix - 1). 3. Properly signed Form of Bid. 4. Legal status of the company (Appendix - 1). 5. General Information (Appendix - 1). 6. Bidders Authorization to sign the Bid (Appendix - 7). 7. Registration as per Act No.3 of 1987. 8. Valid Bid security as stated in Clause 16.1. 9. Audited financial reports (Appendix - 2A). 10. Evidence of Adequacy of Working capital (Appendix - 2B & 2C). 11. Annual volume of Construction work (Appendix - 3A, 3B, 3C & 3D). 12. Experience in work of a similar nature and size (Appendix - 3A, 3B, 3C & 3D). 13. Major items of Construction Equipment proposed (Appendix - 5A & 5B). 14. Details of Contract Management & Key Technical Staff (Appendix - 4A) 15. Time Schedule for Key staff (Appendix - 4B). 16. Proposed Work Program (Appendix - 6) 17. Method Statement (Appendix – 6A) 18. List of manufactures details for Goods to supply under the contract (Appendix - 8). 19. Quality Management System Certificates (ISO 9001:2015) for the factories of Manufactures proposed to supply Goods under the Contract. 20. Valid Product Conformity Certificate BS/BSEN for the Goods supplied under the Contract. 21. Certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for HDPE Pipes &fittings. 22. The Materials, Equipment and services, which are impossible or uneconomical to purchase from the country of origin, may be procured from countries other than the country of origin (the “country of manufacture”) with the prior consent of the Employer. However, the country of origin or country of manufacture shall have supplied records and end user certificates to developed countries. The Bidder shall submit the documentary evidence for his supplied records and end user certificates to developed countries with the Bid. The “developed countries” are defined as those countries having a Human Development Index (HDI) exceeding 0.800 (as of year 2020), as listed by the IMF as indicated in Appendix-AA to Bidding Data. 23. Functional Guarantee for DI/HDPE/PVC pipes, fittings, specials, rubber rings and Accessories (Appendix - 9). 24. Manufacturer’s authorization to sign the Contract and confirmation of capability of production of Goods & supply of Goods according to delivery schedule (Appendix - 10). 25. Manufacturer’s warranty for the Goods supplied under the Contract (Appendix - 12). 26. Local accredited agent’s confirmation of supply of Goods according to work program (Appendix - 14). 27. Details of Local accredited agent (Appendix - 16).   *\* Add if Any other.* |

Revised on 11-01-2022

|  |  |
| --- | --- |
| (4.4) | \* Minimum qualification to qualify for the award of the Contract is as given below:  a) Technical Capacity  (Specify the appropriate works based on the scope of the contract)   1. Over the last five years   *[Guideline for T/ plant – Water retaining structures of a corresponding value:*    *For Water Tower –*  *1. Below 300 m3 capacity– Any type of Water Tower*  *2. Above 300 m3 and below 1000 m3 capacity– Similar type Water*  *Tower*  *3. Above 1000 m3 capacity - Similar type but min. of 1000 m3 capacity.*  *For Reservoirs – above 450 m3 capacity – minimum of 450 m3 capacity reservoir.*  *below 450 m3 capacity – same capacity reservoir.*  *For pipe laying- range of diameter and length of laying (50% or 10 km whichever is less) (aggregate of pipe lengths under different contract should be considered)*  ***“Laying”*** *means laying of Pipes according to the Specifications, testing, backfilling, compaction, and disinfection and handing over.*  ***“Construction”*** *means construction according to the specification, testing, cleaning, disinfection and handing over.*   1. Average of the annual amount of construction work. 2. *If contract period is less than one year, the value of the Engineer’s estimate,* 3. *If contract period is more than one year, 1.5 times annual value of the proposed work \*1*   *\*1 Annual value of proposed work,*  *= 12 x Engineer’s estimate*  *Contract duration in months*   1. Proposals for the timely acquisition (own, lease, hire, etc.) of the essential Equipment listed in the Bidding Data Clause 4.3 shall be listed in Appendix - 5A & 5B. 2. Details of Construction Management Services shall be listed in Appendix - 4A.   **b) Financial capability shall be**  Working Capital \*1 + present available credit facilities for the company \*2 + credit facilities exclusively for this contract – 0.1 x current work commitments \*3 >Rs………......\*4  *\**1Working Capital = Current assets – Current Liabilities  \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.  \*3 Current work commitment = Work remaining uncompleted  *\*4 (I) For Major Contracts (more than Rs. 100 million) – Financial requirement for 4 months period.*  *(ii) For Other Contracts (less than Rs. 100 million) – Financial requirement for 3 months period.*  Documentary evidence to justify shall be submitted.  **c) If any which has to be supplied under the construction comes under the NWSDB pre-qualified manufacturers list, shall be from the NWSDB pre-qualified manufacturers. Lists of those manufacturers are given in Appendix – 17A & 17B.**  **d) Irrespective of region, to call open bids and to grant a 5% preference (regional preference) for the regional contractors whose Bids have become as responsive bids when the estimated cost of the bid is less than Rs. 50 Million as stipulated in Public Finance Circular No. 04/2016(ii).**  Revised on 11-01-2022 |
| (5.1) | Add to the Clause  Joint venture shall not be accepted. |

(9.1) Employer’s address for the purpose of clarification is;

Assistant General Manager (Tenders & Contracts),

National Water Supply & Drainage Board,

Galle Road,

Ratmalana.

*Tele - Fax: 0112-635885*

* 1. The language of the bidding documents shall be English.

(12.0) Add to the Clause

Duly filled all Appendices and schedule of particulars for pipes, fittings and valves included in the bidding document.

(13.3) Add to the Clause

VAT component shall not be included in the rates. The amount written in the

Form of Bid shall be without VAT. However, VAT component shall be shown separately at the end of the Summary of the Bills.

**If Bidders are registered for the purpose of VAT**, they shall indicate the amount of VAT claimed separately in the Bidding documents, in addition to the value of the Bidding, along with the VAT registration number. Declaration of VAT registration number is a mandatory requirement to pay the VAT amount.

If any Bidder is not registered for VAT**, he shall indicate the value of the Bid in Bidding documents. Under this category Bidder shall obtain a letter from the Commissioner of Inland Revenue Department certifying that his Company has not been registered for VAT and that letter shall be attached to the Bidding document.**

(13.4) The Contract is subjected to Price Adjustment in accordance with Clause

47 of the Conditions of Contract*.* If the Intended Completion Date from the Start Date exceeds 3 months.

* 1. If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sums in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. Contractor shall adjust all BOQ Rates deducting the discounted amount and shall endorse with the Contractor’s Signature. This rate is applicable for all extra works to complete the works in the Contract.

Revised on 11-01-2022

Add the Clause

In pricing the items of the Bills of Quantities, the bidder shall cover himself and will be deemed to have covered himself for:

1. All services and Goods which according to the true intent and meaning of the contract may be reasonably inferred as necessary for completion work as specified in bidding document.
2. Prices charged by the Bidder for the preceding incidental services, shall be included in the Contract Price for the Goods and Services.
3. Any taxes as stated in the Clause 65 of General Conditions of Contract.
4. Any price escalations which are not converted under Input indices shall be including in the Contract Price.

(13.6) Add the Clause

Bidder shall include all taxes on income and other taxes payable by the bidder

or his employees in accordance with the Laws and regulations of the government of Sri Lanka

(14.1) Bidders are not allowed to bid in foreign currencies. Prices shall be quoted only in Sri Lanka Rupees*.*

(15.1) The Bid shall be valid up to ……. Days from the date closing of the bids as

specified in the IFB.

*[Guideline, for DPC]*

* 1. Bid shall include a Bid Security in the form included in the section 12 of the Bidding Document.

Revised on 11-01-2022

Revised on 07-09-2021

|  |  |
| --- | --- |
| (16.2) | Bid Security shall be:   * For an amount **Rupees *…………………….***  1. Valid until ……………***………*** *[specify the date]*   And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12, Standard Forms.   1. A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka. 2. Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document). 3. A certified cheque issued by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka in favour of National Water Supply and Drainage Board. 4. A Bank guarantee issued by a Bank based in another country but the security or guarantee “confirmed” by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka.   **The term “confirmed” in relation to bank guarantee issued by a Bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.** |
| (17.0) | Pre-Bid meeting will/will not be held *(delete inappropriate)* |
|  | Pre-Bid meeting - venue \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Date & Time \_\_\_\_\_\_\_\_ |
| (19.2) a | The Employer’s address for the purpose of Bid submission is |
|  | ***For DPC Bids***  ………………………………………………………………..  ………………………………………………………………..  ……………………………………………………………….. |
| (19.2) b | Contract Name: ………………………………………………………….  Contract No: ……………………………………………………………. |
| (20.1)  & (23.0) | The deadline for submission and opening of Bids shall be as specified in Invitation for Bids. |
| (26.1)  26.1 (e)  26.4 | Add Clause 26.1 (e)  Meets the qualification criteria given in the Clause 4 of the Bidding Data  Add to the Clause 26.1  If a bid does not meet any one of the above requirements (a) to (c) and (e) it will be considered substantially non responsive and rejected by the Procurement Committee.  **Add to the end of Clause 26;**  If the Employer will determine that the bidder does not provide the proofing documents for the minimum qualification of technical and financial capacity (mentioned in Appendix 2A, 2B, 3A, 3B, 3C & 3D) the Bid is considered as non- responsive and it will be rejected. |
| **31.2** | **Add to the end of this Sub Clause;**  (d) To ensure that the bids made not unrealistic, following criteria will be  Revised on 11-01-2022  adopted;  (i) If the Bid value is 11% to 19% less than the Engineer’s estimate,  the performance bond should be increased by 5% of the Initial  Contract Price.  (ii) If the Bid value is 20% to 29% less than the Engineer’s estimate,  the performance bond should be increased by 10% of the Initial  Contract Price.  (iii) If the Bid value is 30% or higher percentage less than the  Engineer’s estimate, the bid will be rejected. |
| (33.7) | Deleted |
| (34.0) | The amount of Performance Security is 5% of the Initial Contract Price.  And issued by an agency stipulated below using the Form for Performance guarantee included in Section 12, Standard Forms  (a) A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.    (b) Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document).  (c) A certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.  (d) A Bank guarantee issued by a Bank based in another country but  the security or guarantee “confirmed” by a Bank operating in Sri  Lanka approved by the Central Bank of Sri Lanka.  Note: However, the requirement of confirmation of Performance Security issued by a bank based in another country, by a bank operating in Sri Lanka is not necessary, if the entity that issues the guarantee is an Export Credit Agency of any foreign government or a reputed International Financier acceptable to the Central Bank of Sri Lanka.  **The term “confirmed” in relation to bank guarantee issued by a bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.**  The Performance Security shall be valid until 28 Days beyond the Defects Liability Period.  Revised on 11-01-2022 |
| (34.3) | Add Following Sub Clause 34.3  Failure of the successful bidder to comply with the requirements of Clause 33 and 34 shall constitute a breach of Contract, cause for annulment of the award, forfeiture of the bid security, and any such other remedy the employer may take under the Contract and the Employer may resort to awarding the contract to the next ranked bidder. |
| (36.0) | **Not Applicable.** |

Revised on 11-01-2022

**BIDDING DATA**

(Please note that the Clause numbers given here under are that of Instructions to Bidders)

**Instructions to Bidders**

**Clause Reference**

* 1. **The Employer is**

Name:National Water Supply and Drainage Board

Address: Galle Road,

Rathmalana

The Employer’s Authorized representative is

Chairman,

National Water Supply & Drainage Board

*(Insert Relevant Address of the RSC)*

**Scope of Work**

*[Specify the scope of work with sufficient detail]*

Located at ………………………………………………

* 1. Intended Completion Date is **…….** Day**s** from the Start Date.
  2. The office for collection of Bid Documents is

Assistant General Manager (Tenders & Contracts)

National Water Supply & Drainage Board,

Galle Road, Ratmalana.

The non-refundable tender fee is **Rs ………+ Applicable VAT,**

Payable in cash.

The Bid forms will be issued until

…………………………………….....

Revised on 11-03-2022

(2.1) The Source of Funds is ………………………………………….

(4.2) The registration required

Specialty: ***……………………………….***

Grade: ***……………….***  *[Specify the CIDA grade]*

The following qualification information shall be provided in section 4:

(4.3) **Eligibility and Qualification Requirement**

Revised on 11-01-2022

|  |
| --- |
| All bidders shall include the following information and documents with their Bid (Refer Section 13 – Appendices).   1. Bidder shall not be a blacklisted Contractor at the time of bidding and the time of awarding. 2. CIDA registration as stated in Clause 4.2 (Appendix - 1). 3. Properly signed Form of Bid. 4. Legal status of the company (Appendix - 1). 5. General Information (Appendix - 1). 6. Bidders Authorization to sign the Bid (Appendix - 7). 7. Registration as per Act No.3 of 1987. 8. Valid Bid security as stated in Clause 16.1. 9. Audited financial reports (Appendix - 2A). 10. Evidence of Adequacy of Working capital (Appendix - 2B & 2C). 11. Annual volume of Construction work (Appendix - 3A, 3B, 3C & 3D). 12. Experience in work of a similar nature and size (Appendix - 3A, 3B, 3C & 3D). 13. Major items of Construction Equipment proposed (Appendix - 5A & 5B). 14. Details of Contract Management & Key Technical Staff (Appendix - 4A) 15. Time Schedule for Key staff (Appendix - 4B). 16. Proposed Work Program (Appendix - 6) 17. Method Statement (Appendix – 6A) 18. List of manufactures details for Goods to supply under the contract (Appendix - 8). 19. Quality Management System Certificates (ISO 9001:2015) for the factories of Manufactures proposed to supply Goods under the Contract. 20. Valid Product Conformity Certificate BS/BSEN for the Goods supplied under the Contract. 21. Certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for HDPE Pipes &fittings. 22. The Materials, Equipment and services, which are impossible or uneconomical to purchase from the country of origin, may be procured from countries other than the country of origin (the “country of manufacture”) with the prior consent of the Employer. However, the country of origin or country of manufacture shall have supplied records and end user certificates to developed countries. The Bidder shall submit the documentary evidence for his supplied records and end user certificates to developed countries with the Bid. The “developed countries” are defined as those countries having a Human Development Index (HDI) exceeding 0.800 (as of year 2020), as listed by the IMF as indicated in Appendix-AA to Bidding Data. 23. Functional Guarantee for DI/HDPE/PVC pipes, fittings, specials, rubber rings and Accessories (Appendix - 9). 24. Manufacturer’s authorization to sign the Contract and confirmation of capability of production of Goods & supply of Goods according to delivery schedule (Appendix - 10). 25. Manufacturer’s warranty for the Goods supplied under the Contract (Appendix - 12). 26. Local accredited agent’s confirmation of supply of Goods according to work program (Appendix - 14). 27. Details of Local accredited agent (Appendix - 16).   *\* Add if Any other.* |

Revised on 11-01-2022

|  |  |
| --- | --- |
| (4.4) | \* Minimum qualification to qualify for the award of the Contract is as given below:  a) Technical Capacity  (Specify the appropriate works based on the scope of the contract)   1. Over the last five years   *[Guideline for T/ plant – Water retaining structures of a corresponding value:*    *For Water Tower –*  *1. Below 300 m3 capacity– Any type of Water Tower*  *2. Above 300 m3 and below 1000 m3 capacity– Similar type Water*  *Tower*  *3. Above 1000 m3 capacity - Similar type but min. of 1000 m3 capacity.*  *For Reservoirs – above 450 m3 capacity – minimum of 450 m3 capacity reservoir.*  *below 450 m3 capacity – same capacity reservoir.*  *For pipe laying- range of diameter and length of laying (50% or 10km whichever is less) (aggregate of pipe lengths under different contract should be considered)*  ***“Laying”*** *means laying of Pipes according to the Specifications, testing, backfilling, compaction, and disinfection and handing over.*  ***“Construction”*** *means construction according to the specification, testing, cleaning, disinfection and handing over.*   1. Average of the annual amount of construction work. 2. *If contract period is less than one year, the value of the Engineer’s estimate,* 3. *If contract period is more than one year, 1.5 times annual value of the proposed work \*1*   *\*1 Annual value of proposed work,*  *= 12 x Engineer’s estimate*  *Contract duration in months*   1. Proposals for the timely acquisition (own, lease, hire, etc.) of the essential Equipment listed in the Bidding Data Clause 4.3 shall be listed in Appendix - 5A & 5B. 2. Details of Construction Management Services shall be listed in Appendix - 4A.   **b) Financial capability shall be**  Working Capital \*1 + present available credit facilities for the company \*2 + credit facilities exclusively for this contract – 0.1 x current work commitments \*3 >Rs………......\*4  *\**1Working Capital = Current assets – Current Liabilities  \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.  \*3 Current work commitment = Work remaining uncompleted  *\*4 (I) For Major Contracts (more than Rs. 100 million) – Financial requirement for 4 months period.*  *(ii) For Other Contracts (less than Rs. 100 million) – Financial requirement for 3 months period.*  Documentary evidence to justify shall be submitted.  **c) If any which has to be supplied under the construction comes under the NWSDB pre-qualified manufacturers list, shall be from the NWSDB pre-qualified manufacturers. Lists of those manufacturers are given in Appendix – 17A & 17B.**  **d) Irrespective of region, to call open bids and to grant a 5% preference (regional preference) for the regional contractors whose Bids have become as responsive bids when the estimated cost of the bid is less than Rs. 50 Million as stipulated in Public Finance Circular No. 04/2016(ii).**  Revised on 11-01-2022 |
| (5.1) | Add to the Clause  Joint venture shall not be accepted. |

(9.1) Employer’s address for the purpose of clarification is;

Assistant General Manager (Tenders & Contracts),

National Water Supply & Drainage Board,

Galle Road,

Ratmalana.

*Tele - Fax: 0112-635885*

(11.1) The language of the bidding documents shall be English.

(12.0) Add to the Clause

Duly filled all Appendices and schedule of particulars for pipes, fittings and valves included in the bidding document.

(13.3) Add to the Clause

VAT component shall not be included in the rates. The amount written in the

Form of Bid shall be without VAT. However, VAT component shall be shown separately at the end of the Summary of the Bills.

**If Bidders are registered for the purpose of VAT**, they shall indicate the amount of VAT claimed separately in the Bidding documents, in addition to the value of the Bidding, along with the VAT registration number. Declaration of VAT registration number is a mandatory requirement to pay the VAT amount.

If any Bidder is not registered for VAT**, he shall indicate the value of the Bid in Bidding documents. Under this category Bidder shall obtain a letter from the Commissioner of Inland Revenue Department certifying that his Company has not been registered for VAT and that letter shall be attached to the Bidding document.**

(13.4) The Contract is subjected to Price Adjustment in accordance with Clause

47 of the Conditions of Contract*.* If the Intended Completion Date from the Start Date exceeds 3 months.

* 1. If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sums in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. Contractor shall adjust all BOQ Rates deducting the discounted amount and shall endorse with the Contractor’s Signature. This rate is applicable for all extra works to complete the works in the Contract.

Revised on 11-01-2022

Add the Clause

In pricing the items of the Bills of Quantities, the bidder shall cover himself and will be deemed to have covered himself for:

1. All services and Goods which according to the true intent and meaning of the contract may be reasonably inferred as necessary for completion work as specified in bidding document.
2. Prices charged by the Bidder for the preceding incidental services, shall be included in the Contract Price for the Goods and Services.
3. Any taxes as stated in the Clause 65 of General Conditions of Contract.
4. Any price escalations which are not converted under Input indices shall be including in the Contract Price.

(13.6) Add the Clause

Bidder shall include all taxes on income and other taxes payable by the bidder

or his employees in accordance with the Laws and regulations of the government of Sri Lanka

(14.1) Bidders are not allowed to bid in foreign currencies. Prices shall be quoted only in Sri Lanka Rupees*.*

(15.1) The Bid shall be valid up to ……. Days from the date closing of the bids as

specified in the IFB.

*[Guideline, for RSC]*

* 1. Bid shall include a Bid Security in the form included in the section 12 of the Bidding Document.

Revised on 11-01-2022

Revised on 07-09-2021

|  |  |
| --- | --- |
| (16.2) | Bid Security shall be:   * For an amount **Rupees *…………………….***  1. Valid until ……………***………*** *[specify the date]*   And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12, Standard Forms.   1. A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka. 2. Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document). 3. A certified cheque issued by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka in favour of National Water Supply and Drainage Board. 4. A Bank guarantee issued by a Bank based in another country but the security or guarantee “confirmed” by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka.   **The term “confirmed” in relation to bank guarantee issued by a Bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.** |
| (17.0) | Pre - Bid meeting will/will not be held *(delete inappropriate)* |
|  | Pre - Bid meeting - venue \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Date & Time \_\_\_\_\_\_\_\_ |
| (19.2) a | The Employer’s address for the purpose of Bid submission is |
|  | ***For RSC Bids***  ………………………………………………………………..  ………………………………………………………………..  ……………………………………………………………….. |
| (19.2) b | Contract Name: ………………………………………………………….  Contract No: ……………………………………………………………. |
| (20.1)  & (23.0) | The deadline for submission and opening of Bids shall be as specified in Invitation for Bids. |
| (26.1)  26.1 (e)  26.4 | Add Clause 26.1 (e)  Meets the qualification criteria given in the Clause 4 of the Bidding Data  Add to the Clause 26.1  If a bid does not meet any one of the above requirements (a) to (c) and (e) it will be considered substantially non responsive and rejected by the Procurement Committee.  **Add to the end of Clause 26;**  If the Employer will determine that the bidder does not provide the proofing documents for the minimum qualification of technical and financial capacity (mentioned in Appendix 2A, 2B, 3A, 3B, 3C & 3D) the Bid is considered as non- responsive and it will be rejected.  Revised on 11-01-2022 |
| 31.2 | **Add to the end of this Sub Clause;**  (d) To ensure that the bids made not unrealistic, following criteria will be  adopted;  (i) If the Bid value is 11% to 19% less than the Engineer’s estimate,  the performance bond should be increased by 5% of the Initial  Contract Price.  (ii) If the Bid value is 20% to 29% less than the Engineer’s estimate,  the performance bond should be increased by 10% of the Initial  Contract Price.  (iii) If the Bid value is 30% or higher percentage less than the  Engineer’s estimate, the bid will be rejected. |
| (33.7) | Deleted |
| (34.0) | The amount of Performance Security is 5% of the Initial Contract Price.  And issued by an agency stipulated below using the Form for Performance guarantee included in Section 12, Standard Forms  (a) A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.    (b) Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document).  (c) A certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.  (d) A Bank guarantee issued by a Bank based in another country but  the security or guarantee “confirmed” by a Bank operating in Sri  Lanka approved by the Central Bank of Sri Lanka.  Note: However, the requirement of confirmation of Performance Security issued by a bank based in another country, by a bank operating in Sri Lanka is not necessary, if the entity that issues the guarantee is an Export Credit Agency of any foreign government or a reputed International Financier acceptable to the Central Bank of Sri Lanka.  **The term “confirmed” in relation to bank guarantee issued by a bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.**  The Performance Security shall be valid until 28 Days beyond the Defects Liability Period.  Revised on 11-01-2022 |
| (34.3) | Add Following Sub Clause 34.3  Failure of the successful bidder to comply with the requirements of Clause 33 and 34 shall constitute a breach of Contract, cause for annulment of the award, forfeiture of the bid security, and any such other remedy the employer may take under the Contract and the Employer may resort to awarding the contract to the next ranked bidder. |
| (36.0) | **Not Applicable.** |

Revised on 11-01-2022

**BIDDING DATA**

(Please note that the Clause numbers given here under are that of Instructions to Bidders)

**Instructions to Bidders**

**Clause Reference**

* 1. **The Employer is**

Name:National Water Supply and Drainage Board

Address: Galle Road,

Rathmalana

The Employer’s Authorized representative is

Chairman,

National Water Supply & Drainage Board

*(Insert Relevant Address of the Project)*

**Scope of Work**

*[Specify the scope of work with sufficient detail]*

Located at ………………………………………………

* 1. Intended Completion Date is **…….** Day**s** from the Start Date.
  2. The office for collection of Bid Documents is

Assistant General Manager (Tenders & Contracts)

National Water Supply & Drainage Board,

Galle Road, Ratmalana.

The non-refundable tender fee is **Rs ………+ Applicable VAT,**

Payable in cash.

The Bid forms will be issued until

…………………………………….....

Revised on 11-03-2022

(2.1) The Source of Funds is ………………………………………….

(4.2) The registration required

Specialty: ***……………………………….***

Grade: ***……………….***  *[Specify the CIDA grade]*

The following qualification information shall be provided in section 4:

(4.3) **Eligibility and Qualification Requirement**

Revised on 11-01-2022

|  |
| --- |
| All bidders shall include the following information and documents with their Bid (Refer Section 13 – Appendices).   1. Bidder shall not be a blacklisted Contractor at the time of bidding and the time of awarding. 2. CIDA registration as stated in Clause 4.2 (Appendix - 1). 3. Properly signed Form of Bid. 4. Legal status of the company (Appendix - 1). 5. General Information (Appendix - 1). 6. Bidders Authorization to sign the Bid (Appendix - 7). 7. Registration as per Act No.3 of 1987. 8. Valid Bid security as stated in Clause 16.1. 9. Audited financial reports (Appendix - 2A). 10. Evidence of Adequacy of Working capital (Appendix - 2B & 2C). 11. Annual volume of Construction work (Appendix - 3A, 3B, 3C & 3D). 12. Experience in work of a similar nature and size (Appendix - 3A, 3B, 3C & 3D). 13. Major items of Construction Equipment proposed (Appendix - 5A & 5B). 14. Details of Contract Management & Key Technical Staff (Appendix - 4A) 15. Time Schedule for Key staff (Appendix - 4B). 16. Proposed Work Program (Appendix - 6) 17. Method Statement (Appendix – 6A) 18. List of manufactures details for Goods to supply under the contract (Appendix - 8). 19. Quality Management System Certificates (ISO 9001:2015) for the factories of Manufactures proposed to supply Goods under the Contract. 20. Valid Product Conformity Certificate BS/BSEN for the Goods supplied under the Contract. 21. Certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for HDPE Pipes &fittings. 22. The Materials, Equipment and services, which are impossible or uneconomical to purchase from the country of origin, may be procured from countries other than the country of origin (the “country of manufacture”) with the prior consent of the Employer. However, the country of origin or country of manufacture shall have supplied records and end user certificates to developed countries. The Bidder shall submit the documentary evidence for his supplied records and end user certificates to developed countries with the Bid. The “developed countries” are defined as those countries having a Human Development Index (HDI) exceeding 0.800 (as of year 2020), as listed by the IMF as indicated in Appendix-AA to Bidding Data. 23. Functional Guarantee for DI/HDPE/PVC pipes, fittings, specials, rubber rings and Accessories (Appendix - 9). 24. Manufacturer’s authorization to sign the Contract and confirmation of capability of production of Goods & supply of Goods according to delivery schedule (Appendix - 10). 25. Manufacturer’s warranty for the Goods supplied under the Contract (Appendix - 12). 26. Local accredited agent’s confirmation of supply of Goods according to work program (Appendix - 14). 27. Details of Local accredited agent (Appendix - 16).   *\* Add if Any other.* |

Revised on 11-01-2022

|  |  |
| --- | --- |
| (4.4) | \* Minimum qualification to qualify for the award of the Contract is as given below:  a) Technical Capacity  (Specify the appropriate works based on the scope of the contract)   1. Over the last five years   *[Guideline for T/ plant – Water retaining structures of a corresponding value:*    *For Water Tower –*  *1. Below 300 m3 capacity– Any type of Water Tower*  *2. Above 300 m3 and below 1000 m3 capacity– Similar type Water*  *Tower*  *3. Above 1000 m3 capacity - Similar type but min. of 1000 m3 capacity.*  *For Reservoirs – above 450 m3 capacity – minimum of 450 m3 capacity reservoir.*  *below 450 m3 capacity – same capacity reservoir.*  *For pipe laying- range of diameter and length of laying (50% or 10km whichever is less) (aggregate of pipe lengths under different contract should be considered)*  ***“Laying”*** *means laying of Pipes according to the Specifications, testing, backfilling, compaction, and disinfection and handing over.*  ***“Construction”*** *means construction according to the specification, testing, cleaning, disinfection and handing over.*   1. Average of the annual amount of construction work. 2. *If contract period is less than one year, the value of the Engineer’s estimate,* 3. *If contract period is more than one year, 1.5 times annual value of the proposed work \*1*   *\*1 Annual value of proposed work,*  *= 12 x Engineer’s estimate*  *Contract duration in months*   1. Proposals for the timely acquisition (own, lease, hire, etc.) of the essential Equipment listed in the Bidding Data Clause 4.3 shall be listed in Appendix - 5A & 5B. 2. Details of Construction Management Services shall be listed in Appendix - 4A.   **b) Financial capability shall be**  Working Capital \*1 + present available credit facilities for the company \*2 + credit facilities exclusively for this contract – 0.1 x current work commitments \*3 >Rs………......\*4  *\**1Working Capital = Current assets – Current Liabilities  \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.  \*3 Current work commitment = Work remaining uncompleted  *\*4 (I) For Major Contracts (more than Rs. 100 million) – Financial requirement for 4 months period.*  *(ii) For Other Contracts (less than Rs. 100 million) – Financial requirement for 3 months period.*  Documentary evidence to justify shall be submitted.  **c) If any which has to be supplied under the construction comes under the NWSDB pre-qualified manufacturers list, shall be from the NWSDB pre-qualified manufacturers. Lists of those manufacturers are given in Appendix – 17A & 17B.**  **d) Irrespective of region, to call open bids and to grant a 5% preference (regional preference) for the regional contractors whose Bids have become as responsive bids when the estimated cost of the bid is less than Rs. 50 Million as stipulated in Public Finance Circular No. 04/2016(ii).**  Revised on 11-01-2022 |
| (5.1) | Add to the Clause  Joint venture shall not be accepted. |

(9.1) Employer’s address for the purpose of clarification is;

Assistant General Manager (Tenders & Contracts),

National Water Supply & Drainage Board,

Galle Road,

Ratmalana.

*Tele - Fax: 0112-635885*

(11.1) The language of the bidding documents shall be English.

(12.0) Add to the Clause

Duly filled all Appendices and schedule of particulars for pipes, fittings and valves included in the bidding document.

(13.3) Add to the Clause

VAT component shall not be included in the rates. The amount written in the

Form of Bid shall be without VAT. However, VAT component shall be shown separately at the end of the Summary of the Bills.

**If Bidders are registered for the purpose of VAT**, they shall indicate the amount of VAT claimed separately in the Bidding documents, in addition to the value of the Bidding, along with the VAT registration number. Declaration of VAT registration number is a mandatory requirement to pay the VAT amount.

If any Bidder is not registered for VAT**, he shall indicate the value of the Bid in Bidding documents. Under this category Bidder shall obtain a letter from the Commissioner of Inland Revenue Department certifying that his Company has not been registered for VAT and that letter shall be attached to the Bidding document.**

(13.4) The Contract is subjected to Price Adjustment in accordance with Clause

47 of the Conditions of Contract*.* If the Intended Completion Date from the Start Date exceeds 3 months.

* 1. If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sums in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. Contractor shall adjust all BOQ Rates deducting the discounted amount and shall endorse with the Contractor’s Signature. This rate is applicable for all extra works to complete the works in the Contract.

Revised on 11-01-2022

Add the Clause

In pricing the items of the Bills of Quantities, the bidder shall cover himself and will be deemed to have covered himself for:

1. All services and Goods which according to the true intent and meaning of the contract may be reasonably inferred as necessary for completion work as specified in bidding document.
2. Prices charged by the Bidder for the preceding incidental services, shall be included in the Contract Price for the Goods and Services.
3. Any taxes as stated in the Clause 65 of General Conditions of Contract.
4. Any price escalations which are not converted under Input indices shall be including in the Contract Price.

(13.6) Add the Clause

Bidder shall include all taxes on income and other taxes payable by the bidder

or his employees in accordance with the Laws and regulations of the government of Sri Lanka

(14.1) Bidders are not allowed to bid in foreign currencies. Prices shall be quoted only in Sri Lanka Rupees*.*

(15.1) The Bid shall be valid up to ……. Days from the date closing of the bids as

specified in the IFB.

*[Guideline, for PPC]*

* 1. Bid shall include a Bid Security in the form included in the section 12 of the Bidding Document.

Revised on 11-01-2022

Revised on 07-09-2021

|  |  |
| --- | --- |
| (16.2) | Bid Security shall be:   * For an amount **Rupees *…………………….***  1. Valid until ……………***………*** *[specify the date]*   And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12, Standard Forms.   1. A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka. 2. Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document). 3. A certified cheque issued by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka in favour of National Water Supply and Drainage Board. 4. A Bank guarantee issued by a Bank based in another country but the security or guarantee “confirmed” by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka.   **The term “confirmed” in relation to bank guarantee issued by a Bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.** |
| (17.0) | Pre-Bid meeting will/will not be held *(delete inappropriate)* |
|  | Pre-Bid meeting - venue \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Date & Time \_\_\_\_\_\_\_\_ |
| (19.2) a | The Employer’s address for the purpose of Bid submission is |
|  | ***For PPC Bids***  ………………………………………………………………..  ………………………………………………………………..  ……………………………………………………………….. |
| (19.2) b | Contract Name: ………………………………………………………….  Contract No: ……………………………………………………………. |
| (20.1)  & (23.0) | The deadline for submission and opening of Bids shall be as specified in Invitation for Bids. |
| (26.1)  26.1 (e)  26.4 | Add Clause 26.1 (e)  Meets the qualification criteria given in the Clause 4 of the Bidding Data  Add to the Clause 26.1  If a bid does not meet any one of the above requirements (a) to (c) and (e) it will be considered substantially non responsive and rejected by the Procurement Committee.  **Add to the end of Clause 26;**  If the Employer will determine that the bidder does not provide the proofing documents for the minimum qualification of technical and financial capacity (mentioned in Appendix 2A, 2B, 3A, 3B, 3C & 3D) the Bid is considered as non- responsive and it will be rejected.  Revised on 11-01-2022 |
| 31.2 | **Add to the end of this Sub Clause;**  (d) To ensure that the bids made not unrealistic, following criteria will be  adopted;  (i) If the Bid value is 11% to 19% less than the Engineer’s estimate,  the performance bond should be increased by 5% of the Initial  Contract Price.  (ii) If the Bid value is 20% to 29% less than the Engineer’s estimate,  the performance bond should be increased by 10% of the Initial  Contract Price.  (iii) If the Bid value is 30% or higher percentage less than the  Engineer’s estimate, the bid will be rejected. |
| (33.7) | Deleted |
| (34.0) | The amount of Performance Security is 5% of the Initial Contract Price.  And issued by an agency stipulated below using the Form for Performance guarantee included in Section 12, Standard Forms  (a) A bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.    (b) Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document).  (c) A certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.  (d) A Bank guarantee issued by a Bank based in another country but  the security or guarantee “confirmed” by a Bank operating in Sri  Lanka approved by the Central Bank of Sri Lanka.  Note: However, the requirement of confirmation of Performance Security issued by a bank based in another country, by a bank operating in Sri Lanka is not necessary, if the entity that issues the guarantee is an Export Credit Agency of any foreign government or a reputed International Financier acceptable to the Central Bank of Sri Lanka.  **The term “confirmed” in relation to bank guarantee issued by a bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.**  The Performance Security shall be valid until 28 Days beyond the Defects Liability Period.  Revised on 11-01-2022 |
| (34.3) | Add Following Sub Clause 34.3  Failure of the successful bidder to comply with the requirements of Clause 33 and 34 shall constitute a breach of Contract, cause for annulment of the award, forfeiture of the bid security, and any such other remedy the employer may take under the Contract and the Employer may resort to awarding the contract to the next ranked bidder. |
| (36.0) | **Not Applicable.** |

Revised on 11-01-2022

**APPENDICES TO BIDDING DATA**

**Appendix - AA**

**CURRENT LIST OF DEVELOPED COUNTRIES (IMF/HDI) EXCEEDING**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Rank** | **Country/Territory** | **HDI** | **Rank** | **Country/Territory** | **HDI** |
|  | Norway | 0.954 | 32. | Greece | 0.872 |
|  | Switzerland | 0.946 | 33. | Poland | 0.872 |
|  | Ireland | 0.942 | 34. | Lithuania | 0.869 |
|  | Germany | 0.939 | 35. | United Arab Emirates | 0.866 |
|  | Hong Kong | 0.939 | 36. | Andorra | 0.857 |
|  | Australia | 0.938 | 36. | Saudi Arabia | 0.857 |
|  | Iceland | 0.938 | 38. | Slovakia | 0.857 |
|  | Sweden | 0.937 | 39. | Latvia | 0.854 |
|  | Singapore | 0.935 | 40. | Portugal | 0.850 |
|  | Netherlands | 0.933 | 41. | Qatar | 0.848 |
|  | Denmark | 0.930 | 42. | Chile | 0.847 |
|  | Finland | 0.925 | 43. | Brunei | 0.845 |
|  | Canada | 0.922 | 44. | Hungary | 0.845 |
|  | New Zealand | 0.921 | 45. | Bahrain | 0.838 |
|  | United Kingdom | 0.920 | 46. | Croatia | 0.837 |
|  | United States | 0.920 | 47. | Oman | 0.834 |
|  | Belgium | 0.919 | 48. | Argentina | 0.830 |
|  | Liechtenstein | 0.917 | 49. | Russia | 0.824 |
|  | Japan | 0.915 | 50. | Belarus | 0.817 |
|  | Austria | 0.914 | 51. | Kazakhstan | 0.817 |
|  | Luxembourg | 0.909 | 52. | Bulgaria | 0.816 |
|  | Israel | 0.906 | 53. | Montenegro | 0.816 |
|  | South Korea | 0.906 | 54. | Romania | 0.816 |
|  | Slovenia | 0.902 | 55. | Palau | 0.814 |
|  | Spain | 0.893 | 56. | Barbados | 0.813 |
|  | Czech Republic | 0.891 | 57. | Kuwait | 0.808 |
|  | France | 0.891 | 58. | Uruguay | 0.808 |
|  | Malta | 0.885 | 59. | Turkey | 0.806 |
|  | Italy | 0.883 | 60. | Bahamas | 0.805 |
|  | Estonia | 0.882 | 61. | Malaysia | 0.804 |
|  | Cyprus | 0.873 | 62. | Seychelles | 0.801 |

**Source:** https://en.wikipedia.org/wiki/Developed\_country

Revised on 11-01-2022

**CONTRACT DATA**

The Contract Data is a part of General Conditions of Contract and should be read in conjunction with the General Conditions of Contract.

If there is a discrepancy found in the General Conditions of Contract and the Contract Data, the Content in the Contract Data shall supersede the Content in the General Conditions of Contract.

*(Note: What is given in italic letters are guide lines to prepare the Contract Data and they shall be removed after preparation of the Contract Data.)*

Revised on 20-02-2020

**Contract Data**

Contract Data is a part of Condition of Contact and shall be read together. If any discrepancy is found content of the Contract Data shall supersede the Conditions of Contract

*(Please note that the Clause nos. given hereunder are that of Conditions of Contract)*

Revised on 11-01-2022

|  |  |  |  |
| --- | --- | --- | --- |
| (1.0) | **The Employer is**    Name: National Water Supply and Drainage Board  Address: Galle Road,  Ratmalana  Sri Lanka  Name of Authorized Representative: Chairman,  National Water Supply & Drainage Board,  Galle Road,  Rathmalana.  Sri Lanka. | | |
|  | **The Engineer is**    Name: General Manager,  Address: National Water Supply and Drainage Board  Galle Road,  Ratmalana,  Sri Lanka  Name of Engineer's Representative:  ……………………………………………………………….    *(Fill the name and designation of PD/DGM of the relevant RSC and designation).* | | |
|  | **Scope of Work**  *[Specify the scope of work in detail including supply of Goods, installation, testing, disinfection, commissioning & handover]*  Site is located at *………………………………………* | | |
|  | Contract No: *………………………………………* | | |
|  | | Add the following definitions.  ‘Supplier’ stated in the section – 6 Specifications, shall mean the “Contractor”  ‘Goods’ means all machinery, Plant, all Materials pipes & fittings special accessories, valves etc. which the contractor is required to supply for the due performance of his contractual obligations under the Contract;  "Services" means services ancillary to the supply of the Goods, such as transportation, insurance, and any other incidental services, such as storing, stacking provision of technical assistance, training and other such obligations of the Contractor covered under the Contractor. | | |
| 2.1 | | Joint Ventures Joint Venture shall not be accepted | | |
| (2.3) | | Start Date shall be 14 /28 *[Delete inapplicable]* Days from the Letter of Acceptance.  Replace the content with the followings;  The documents forming the contract shall be interpreted in the following order of Priority   1. Agreement 2. Letter of Acceptance, 3. Memorandum of understanding (if any)/Addenda prior to signing the Agreement, 4. Form of Bid, 5. Contract Data, 6. Conditions of Contract 7. Specifications (specifications given in this document supersedes the CIDA specification) 8. Drawings 9. Bills of Quantities 10. Schedule of Particulars 11. Any other document (if any) | | |
| (4.0) | | Engineer’s Decision | | |
|  | | Add following Sub-Clauses | | |
|  | | 4.2 Engineer shall carry out such duties in issuing decisions, certificates and orders as are specified in the contract. In the event of the Engineer being required in terms of his appointment by the Employer to obtain the specific approval of the Employer for the execution of any part of these duties, it shall be set out in this Conditions of Contract. | | |
|  | | 4.3 Engineer shall, upon receipt of the Contractor’s intimation on quantity variation as per Clause 39.2, take every action to establish the validity of the Contractor’s forecast and if found true, institute all relevant measures to inform the Employer thereof and seek and obtain the necessary Procurement Committee approval for executing works under variation order Revised on 11-01-2022 | | |
| (5.0) | | Duties and Powers of Engineer’s Representative | | |
|  | | Delete Sub - Clause 5.2 and add following Sub - Clause  5.2 Engineer’s Representative shall be responsible to the Engineer and his duties are to watch and supervise the Works and to test and examine any Materials to be used or workmanship employed in connection with the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor, except as expressly provided hereunder or elsewhere in the Contract, to order any work involving delay or any extra payment by the Employer, nor to make any variation of or in the Works**.** | | |
|  | | 5.3 Engineer may from time to time in writing delegate with the approval of the Employer, to the Engineer’s Representative any of the powers and authorities vested in the Engineer and shall furnish to the Contractor and to the Employer a copy of all such written delegations of powers and authorities. Any written instructions or approval given by the Engineer’s Representative to the Contractor within the terms of such delegation, but not otherwise shall bind the Contractor and the Employer as though it had been given by the Engineer provided always as follows; | | |
|  | | Failure of the Engineer’s Representative to disapprove any work or Materials shall not prejudice the power of the Engineer thereafter to disapprove such work or Materials and to order the pulling down, removal or breaking up thereof.  1. If the Contractor shall be dissatisfied by reason of any decision of the Engineer’s Representative, he shall be entitled to refer the matter to the Engineer, who shall thereupon confirm, reverse or vary such decision. | | |
|  | | Engineer’s Representative shall take every possible course of action to study technical and contractual details well in advance so that technical and contractual disparities in drawing, contract document and actual Site conditions that may give rise to contractual variations should be identified in time. | | |
|  | | Engineer’s Representative shall prepare all details on variations that arise and require approval for their execution as defined in Clause 39 and submit to the Engineer in such form and in such numbers along with supporting documents as the Engineer may prescribe from time to time. | | |
|  | | 5.4 Engineer or Engineer’s Representative may appoint any number of persons to assist the Engineer’s Representative in the carrying out of his duties under sub Clause 5.4. He shall notify the Contractor the names, duties and the authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instruction may be necessary to enable them to carry out their duties and to secure their acceptance of Materials, Plant or workmanship as being in accordance with the contract and any instructions given by them for these purposes shall be deemed to have been given by the Engineer’s Representative. Revised on 23-09-2019 | | |
| (8.1) | Schedule of other contractors**:** | | |
|  | **Bidder** | **Contract title** | **Period** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Clause 9 | Add to the Sub-Clause 9.1 | | |
| (9.1) | Schedule of Key Personnel:  Minimum persons with qualifications and experience to be defined,  (a) Technical  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *(please refer Appendix 4A)*  (b) Managerial  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
|  | Add following Sub-Clauses | | |
| 9.3 | Engagement of Labour The Contractor shall make his own arrangements for the engagement of all labour local or otherwise, and, save in so far as the contract otherwise provides for the transport, housing, feeding and payment thereof.  The Contractor shall where possible employ skilled and semi-skilled labour possessing National Certificate of Trade Tests issued by the National Apprentices and Industrial Training Authority. The Contractor shall ensure that at least 15% of his skilled/semi-skilled labour force at any time possess National Trade Test Certificates. In the alternative, the Contractor should arrange for at least 15% of his skilled/semi-skilled work force to be Trade Tested at the next National Trade Test being conducted by the National Apprentices and Industrial Training Authority. In respect of heavy earthmoving Equipment operators, the percentage of those possessing the National Certificate of Competence or those required to be tested will be 100%. The failure of the Contractor to comply with the above will result in a deduction of 0.3% of each interim payment certificate until compliance with above when the amount withheld will be refunded. | | |

Revised on 11-01-2022

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| **9.4** | Supply of Water |
|  | The Contractor shall, so far as is reasonably practicable, having regard to local conditions provide on the Site to the satisfaction of the Engineer’s Representative, an adequate supply of drinking and other water for the use of the Contractor’s staff and work force. |
| **9.5** | Alcoholic Liquor or drugs |
|  | The Contractor shall not, otherwise than in accordance with the Statutes, Ordinance and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any Alcoholic Liquor, or drugs or permit or suffer any such importation, sale, gift, barter or disposal by his Subcontractors, agents or Employees. |
| **9.6** | Arms and Ammunition |
|  | Contractor shall not give, barter or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid. |
| 9.7 | Festivals and Religious Customs |
|  | Contractor shall in all dealings with labour in his employment have due regard to all recognized festivals, days of rest and religious or other customs. |
| 9.8 | Epidemics |
|  | In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same. |
| 9.9 | **Disorderly Conduct etc.** |
|  | The Contractor shall at all time take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighborhood or the Works against the same. |
| 9.10 | **Rates of wages and conditions of labour** |
|  | Wages, and hours and conditions of employment shall be not less favorable than those prescribed for the time being by the wages Board Ordinance of Sri Lanka and the Contractor shall be bound by the said Wages Board Ordinance concerning his employees of any kind whatsoever. |

Revised on 23-09-2019

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| 9.11 | **Observance by Subcontractors** |
|  | Contractor shall be responsible for observance by his Subcontractor of the foregoing provisions. |
| 9.12 | **Other Conditions Affecting Labour and Wages.** |
|  | 9.12.1 The Contractor shall indemnify and keep the Employer indemnified against all claims made under the Sri Lanka’s Workmen’s Compensation Ordinance No. 19 of 1934 and the Employee’s Provident Fund Act No. 15 of 1958 and employees trust fund set No. 46 of 1980 and any statutory amendments thereto or modification thereof. Contractor shall make arrangements to enroll all his employees to Employees Provident Fund and Employee’s Trust Fund and any other statutory requirements and shall pay such sums to these institutions in time. |
|  | 9.12.2 The Contractor shall provide adequate latrines on the Site for the use of his staff and workers and separate latrines for the sole use of Engineer’s staff in accordance with requirements of the local authority and shall maintain same in a clean and good sanitary state at all times. |
|  | 9.12.3 The Contractor shall provide for the exclusive use of the Engineer’s  Representative and his staff an office, as specified below.    Provision of office and other related facilities by the Contractor. |

Revised on 11-01-2022

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|  |  | (C*an be amended to suit specific requirements when preparing the Bidding Document)*  **Project office:**  The office shall be well lighted, lockable and fully weather proof. A covered parking space for one vehicle shall be provided and another additional space for minimum 2 vehicles.  The office shall have two rooms with a total floor area of at least 120m2. The office shall have overhanging eaves and be provided with windows with lockable shutters for security. The office shall have two wash room and a pantry space. | | |
|  |  | Doors shall be fitted with a mortise lock at least with two keys and the Contractor shall hand over all keys to the Engineer’s Representative. The office shall be provided with a wash basin with cold running water and two ceiling fans. The Contractor shall provide electricity, communication facilities, air condition facilities, toilet facilities, potable drinking water facilities and the following furniture & Equipment to the office until maximum of 6 months in the Defect Notification Period where necessary. | | |
|  |  | **Item** | **Required No** | |
|  |  | Table 0.9m x 1.5m with four lockable drawers | …………. | |
|  |  | Table 0.9m x 1.5m with one lockable drawer | ………… | |
|  |  | Chairs | …………. | |
|  |  | Chairs with arm rest | …………. | |
|  |  | Lockable four drawer steel filing cabinet | …………. | |
|  |  | Computer with UPS & requires software | …………. | |
|  |  | Photocopy + Printing machine | …………. | |
|  |  | Binding machine | ………… | |
|  |  | Set of shelving 1.2m high by 0.9m long with shelves for keeping the drawings | …………. | |
|  |  | Domestic water filter | …………. | |
|  |  | Stand fans | ………… | |
|  |  | Personal Protection Equipment (PPE) | ………… | |
|  |  | Partitioned first aid box with the regular prescribed medicines and general medical dressings. | ………….. | |
|  |  | …….. |  | |
|  |  |  |  | |
|  |  | All office building and fittings in good condition and the Equipment and furnishings installed therein shall be provided and well maintained during the above period by the Contractor. Computer with ups & required softwares, photocopy, printing machine and binding machine shall be handover to the Employer in good condition at the end of the project period. The Contractor submits the all the reference details of the Equipment which are provided to employer’s representative upon the request done by the Engineer. All other Equipment and furnishing of office shall become the property of the Contractor thereafter. The Contractor shall be provided provide janitorial services to maintain a good working environment and security of the project office. At the end of the given period, the Contractor shall remove the office building as per the instructions given by the Engineer. | | |
|  |  | **Sub office/s or Site office/s:**  The Contractor shall provide and maintain sub office/s or Site office/s for the use of the Engineer’s staff in numbers stated in the BOQ. Each office shall be established at the Sites as directed by the Engineer maintained by the Contractor until the completion of construction works. | | |
|  |  | The sub office/s shall be provided with sufficient ventilation, light, weather proofed, insulated and painted internally and externally. Floor to ceiling height shall be at least 2.7 meters with minimum floor area 60m2. The office shall have external lockable doors and windows as necessary. | | |
|  |  | Water Supply, electricity supply, Air condition facility, sanitation facility and telephone shall be provided and maintained throughout the Contract period.  All necessary facilities & Equipment such as stationeries, consumables and office utilities shall also be provided by the Contractor. | | |
|  |  | Each sub office/Site office shall be supplied with the following new furniture, Equipment and services: | | |
|  |  | **Item** | | **Quantity** |
|  |  | Steel tables 1.2m x 0.75m with two lockable drawers | | ……….. |
|  |  | Steel four drawer lockable filing cabinet | | ………… |
|  |  | Arm chairs | | ……….. |
|  |  | Water filters | | ………… |
|  |  | Stand fans | | ………… |
|  |  | File Trays | | ………… |
|  |  | Leveling instrument | | ………… |
|  |  | Computers with UPS & required software | | ………… |
|  |  | Binding machine  Revised on 11-01-2022 | | ………… |
|  |  | Personal Protection Equipment (PPE) | | ………… |
|  |  | Partitioned first aid box with the regular prescribed medicines and general medical dressings. | | ………… |
|  |  | All office building and fittings in good condition and the Equipment and furnishings installed therein shall be provided and well maintained during the above period by the Contractor. Computer with ups & required softwares, binding machine and leveling instruments shall be handover to the Employer in good condition at the end of the project period. The Contractor submits the all the reference details of the Equipment which are provided to employer’s representative upon the request done by the Engineer. All other Equipment and furnishing of office shall become the property of the Contractor thereafter. The Contractor shall be provided a janitorial service to maintain a good working environment and security of the project office. At the end of the given period, the Contractor shall remove the office building as per the instructions given by the Engineer. | | |

Revised on 11-01-2022

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|  |  | **Mobile Office/s**  The Contractor shall provide and maintain mobile office/s for the use of the Engineer’s staff in numbers stated in the BOQ. Each office shall be established at locations as directed by the Engineer and shall be maintained by the Contractor until the completion of construction works.  The mobile office/s shall be provided with sufficient ventilation, weather proofed, insulated and painted internally and externally. Floor to ceiling height shall be at least 2.7 meters with minimum floor area 15m2. The office shall have external lockable doors and windows as necessary. The office shall be well lighted and ventilated.  Water Supply, electricity supply, air condition facility, sanitation facility and telephone shall be provided and maintained by the Contractor throughout the contract period.  Each mobile Office shall be supplied with the following new furniture, Equipment and services: | |
|  |  | **Item** | **Quantity** |
|  |  | Steel tables 1.2m x 0.75m with two lockable drawers | ……… |
|  |  | Steel four drawer lockable filing cabinet | ……… |
|  |  | Arm chairs | ……… |
|  |  | Computers with UPS & required software | ………. |
|  |  | Water filters | ………. |
|  |  | Stand fans | ………. |
|  |  | File Trays | ……….. |
|  |  | Leveling instrument | ………. |
|  |  | Personal Protection Equipment (PPE) | ………… |
|  |  | Partitioned first aid box with the regular prescribed medicines and general medical dressings. | ……….. |
|  |  | All office building and fittings in good condition and the Equipment and furnishings installed therein shall be provided and well maintained during the above period by the Contractor. Computer with ups & required softwares and leveling instruments shall be handover to the Employer in good condition at the end of the project period. The Contractor submits the all the reference details of the Equipment which are provided to employer’s representative upon the request done by the Engineer. All other Equipment and furnishing of office shall become the property of the Contractor thereafter.  The Contractor shall be provided a janitorial service to maintain a good working environment and security of each office. At the end of the given period, the Contractor shall remove each office building as per the instructions given by the Engineer. | |
|  |  | **Transport :**  The Contractor is required to provide ……… nos. Vehicles (Double Cabs not less than 2400 cc capacity) including drivers, fuel and other consumables for sole use of the Engineer’s representative and his staff. Contractor shall maintain these vehicles in good condition during the Contract period. Vehicle shall have “Full Insurance”, insurance cover including passengers.  Vehicle shall be Air conditioned with Digital FM Radio/Cassette player and complete with standard accessories. Years of vehicle registration should be less than 8 years.  In case of absence of driver or repair of vehicle, Contractor shall provide alternative driver or alternative vehicle to continue the Engineer’s Representative and his staff’s works smoothly. | |

Revised on 11-01-2022

Revised on 11-01-2016

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| **9.13** | **Return of Labour**  The Contractor shall if required by the Engineer, deliver to the Engineer’s Representative, or at his office a return in detail in such form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional Plant as the Engineer’s Representative may require. |
| **9.14** | **Construction Management Services**  To ensure the proper management of the construction of the Works, the Contractor shall furnish the names, qualifications and experience of such engineering and technical personnel above the grade of Technical Officer, who he intends employing for the purpose of providing proper construction management services for the Works. The personnel so listed should have the same qualifications and experience and numbers as indicated in the Tender Documents. Such personnel whether listed in the Bidding Document or not should be approved by the Engineer. The cost of this service will be priced and indicated as a provisional sum in the Bills of Quantities under a pay item designated - Provision of Construction Management Services - payment against this provisional sum will be made to the Contractor on the recommendation of the Engineer in accordance with the provisions to Clause 63 of these conditions. |
| (12.0)  12.2 | Contractor’s Risks Add following Sub-Clause Patent Rights and Royalties The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design, trademark or name or other protected rights in respect of any Constructional Plant machine work or material used for or in connection with the Works or any of them and from and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any for getting stone, sand, gravel, clay or other Materials required for the Works or any of them. |
| 13.1 | Add to the Clause 13.1  All insurance under this Contract shall be executed by a reputed insurance Company/Corporation registered under Insurance Board of Sri Lanka.  The minimum insurance covers shall be :  (a) • The minimum cover for insurance of the Works, Temporary Works and Plant and Materials is 110% of the Initial Contract Price. • The maximum deductible for insurance of the Works and of Plant andMaterials is 5% of each claim.• Marine Insurance in an amount equal to 110% of the CIF value of the goods from “Warehouse” to “Warehouse” on all risk basis.(b) • The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in an amount equal to 110% of the CIF value of the goods. The minimum cover for loss or damage to Equipment is the replacement costof Equipment • The maximum deductible for insurance of Equipment is 5% of the replacement  cost of the Equipment (c) • The minimum cover for insurance of other property (other than the Site) is (to cover the building and property adjacent to the Site and that of the Employer is Rs. ……………..). • The maximum deductible for insurance of other property (other than the Site) is 5% of the respective insured value. |
|  | (d) The minimum cover for personal injury or death,  • For Third party and employees of the Employer and other persons  engaged by the Employer in the Works is Rs 1,000,000 per event. Number of events are unlimited Add to the Sub-Clause 13.1  Revised on 23-09-2019 |
|  | (e) • The minimum cover for loss of business and loss of revenue due to the Project/Scheme is Rs.1,000,000.00 per event. Number of events are unlimited.  (f) • Minimum cover due to damages to existing properties / structures from excavation for pipe laying or and structures, driving sheet piles, working machineries, rock blasting operations is Rs. …………………. for event. No. of events are unlimited. |
| 13.2 | Add to the Clause 13.2  (a) The minimum cover for personal injury or death,   1. For the Contractor's workmen is Rs 1,000,000 per event. Number of events are unlimited. 2. Contractor's employees other than workmen is Rs. 1,000,000 per event. Number of events are unlimited. 3. Employer’s Employees and Consultant’s Employees is Rs. 1,000,000/= per event, number of events are unlimited. |
| (16.0) | **Contractor to Construct the Works.**  Add following Sub-Clauses. |
| 16.2 | Setting out Contractor shall carefully study drawings prior to setting out on the dimensions, elevations, connection to each structure and other details. If there is any discrepancy or mis-match in the dimensions or elevations or other details, those should be immediately brought to the notice of the Engineer for remedy.  The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness, subject as mentioned, of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels dimension or alignment of any part of the Works, the Contractor on being required so to do by the Engineer, or the Engineer’s Representative shall, at his own cost, rectify such error to the satisfaction of the Engineer or the Engineer’s Representative, unless, such error is based on incorrect data supplied in writing by the Engineer or the Engineer’s Representative, in which case the expense of rectifying the same shall be borne by the Employer. The checking of any setting-out or of any line or level by the Engineer or the Engineer’s Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench marks, Site rails, pegs and other things used in setting out of the Works.  Revised on 15-12-2021 |
| 16.3 | Boreholes and Exploratory Excavations |
|  | If, at any time during the execution of the Works, the Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirements shall be ordered in writing and shall be deemed to be an addition ordered under the provisions of Clause 39 hereof unless an item or a provisional sum in respect of such anticipated work shall have been included in the Bill of Quantities.  Revised on 11-01-2022 |
| 16.4 | Contractor to keep Site Clear During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstructions and shall store or dispose of any Constructional Plant and surplus material and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required |
| 16.5 | Clearance of Site on Completion (a) On completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant, surplus of material, rubbish and Temporary works of every kind and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer |
|  | (b) The Contractor may retain on Site with the consent of the Engineer until the end of maintenance period such Materials, Contractor’s Equipment and temporary works as required by him for the purpose of fulfilling his obligation during maintenance period. |
| 16.6 | Contractor’s Superintendence Notwithstanding the provisions made in the above Sub-Clause the Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor’s obligations under the Contract. The Contractor or a competent and authorized agent or representative approved of in writing by the Engineer. Which approval may at any time be withdrawn, is to be constantly on the Works and shall give his whole time to the superintendence of the same. If such approval shall be withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving written notice of such withdrawal, remove the agent from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another agent approved by the Engineer. Such authorized agent or representative shall receive, on behalf of the Contractor, directions and instructions from the Engineer or subject to the limitations of Clause 5 hereof, the Engineer’s Representative |
| 16.7 | **Contractor’s Employees** |
|  | The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the works.  Only such technical personnel as are skilled and experienced in their respective callings and such sub-agent, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise; and such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution & maintenance of the Works.  The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about execution or maintenance of the Works who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the performance of his duties, or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be again employed upon the Works without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer  Revised on 23-09-2019 |
| 16.8 | **Remedy on Contractor’s failure to carry out work required.**  If the contractor shall fail to do any such work as aforesaid required by the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which in the opinion of the Engineer, the Contractor was liable to do at his own expense under the contract, then all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer from any monies due which may become due to the contractor. |
| 16.9 | **Plant etc. Exclusive use for the Works** |
|  | All Constructional Plant, Temporary works and Materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent in writing of the Engineer, which shall not be unreasonably withheld. |
| 16.10 | **Removal of Vehicles** |
|  | Although “Constructional Plant” includes vehicles engaged in transporting personnel, Plant, Equipment or Materials to or from the Site, such vehicles may be removed from the Site as necessary for execution of the work without the consent in writing of the Engineer. |
| 16.11 | **Removal of Plant, etc.** |
|  | Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused Materials provided by the Contractor. |
| 16.12 | **Employer not liable for damage to plant, etc.** |
|  | The employer shall not at any time be liable for the loss of or damage to any of the said Constructional Plant, Temporary Works or Materials save as mentioned in Clause 10 hereof. |
| 16.13 | **Default of Contractor in Compliance** |
|  | In the case of default on the part of the Contractor in carrying out such order, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer, from any monies due or which may become due to the Contractor. |
| 16.14 | | **Standards**  The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, Preamble notes on BOQ and BOQ. When no applicable standard is mentioned, the Goods shall conform to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution. |
| (17.1) | | The Intended Completion Date for the whole of Works shall be ***……*Days** from the **Start Date.** |
| (19.0)  19.2 | Safety Add following Sub-Clauses Watching and Lighting The Contractor shall throughout the progress of the Works, have full regard for the safety of all persons entitled to be upon the Site and shall keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons and shall inter alia in connection with the Works provide and maintain at his own cost all light, guards, fencing, warning signs, night lights, luminous stickers , traffic controls in efficient manner and watching when and where necessary or required by the Engineer or the Engineer’s Representative or by any competent Statutory or other Authority for the protection of the Works or for the safety and convenience of the public or others. |
| 19.3 | **Interference with Traffic and adjoining properties**.  All operations necessary for the execution of the Work shall so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the convenience of the public or the access to use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters in so far as the Contractor is responsible therefore**.** |
| 19.4 | **Avoidance of damage to Highway etc.**  The approval of the appropriate Highway/ Road Authority is to be obtained prior to the movement of any extra-ordinary loads. The Contractor shall use every possible means to prevent any of the highway or bridges communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his Subcontractors and, in particular shall select routes, choose and use vehicles and restrict and distribute loads, so that, any such extra-ordinary traffic as will inevitably arise from the moving of Plant and Material from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such highway /or Roads and bridges.  Contractor shall maintain all roads where pipe laying was done in good condition acceptable to the relevant Road Authority/ Local government body until roads are handed over to the Road Authority / Local government body at the contractor’s cost.  Revised on 23-09-2019 |
| 19.5 | **Transport of Constructional Plant**  Save in so far as the Contract otherwise provides the Contractor shall be responsible for and shall pay the cost of temporarily strengthening any bridges or altering or improving any highway /Road communicating with the Site to facilitate the movement of Constructional Plant, Equipment or Temporary Works required in the execution of the Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any Highway/Road or Bridge or Culvert communicating with the Site caused by such movement including such claims as may be made by competent authority directly against the Employer pursuant to any Act of Parliament or other Statutory Institution and shall negotiate and pay all claims arising solely out of such damage. |
| 19.6 | **Waterborne Traffic** |
|  | Where the nature of the works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this shall be construed as though “Highway” included a lock, dock, sea wall or other structure related to a waterway and “vehicle” included craft, and shall have effect accordingly. |
| 19.7 | **Staff and Labour**  The Contractor shall:   1. (a) comply with all applicable safety regulations; 2. (b) take care for the safety of all persons entitled to be on the Site;   Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labour |
| 19.8 | **Temporary Works**  Provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land |
| 19.9 | **Protection of the Environment**  Contractor shall take every measures to protect environment in accordance with the laws enacted by the Environmental Authority and relevant local government bodies |
| (20.0)  20.2  (21.0) | **Discoveries**  Add Sub-Clause 20.2  Contractor shall protect in proper and safe manner all such discoveries and keep them in safe custody until the Engineers instructions are received.  **Possession of the Site**  Revised on 11-01-2022 |
| 21.1 | The Site Possession Date for the first section of the pipe laying shall be 14 Days from the Letter of Acceptance. Other sections shall be handed over according to the approved work programme by the Engineer. |
| (24.0) | **Dispute Resolution**  Add Sub-Clause 24.2  Delete the paragraph and replace with the following; |
| 24.1 | Amicable Settlement  Any dispute of whatever nature arising out of or in relation to this agreement shall in the first instance be attempted to be resolved by way of amicable settlement by the Employer and the Contractor.  The Employer and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.  If after thirty (30) Days from the commencement of such informal negotiation the Employer and the Contractor have been unable to resolve amicably a contractual dispute, either party may require that the dispute be referred for resolution to the formal mechanism stated in Clause 25 herein. These mechanisms may include, but not restricted to, condition mediated by a third party, adjudication in an agreed national forum and/or arbitration. |
| (25.0) | **Procedure for Adjudication**  Not Applicable. |
| 25.9 | Replacement of Adjudicator  Not Applicable. |
| (26.0)  26.1 | **Arbitration**   1. Any dispute of whatever nature arising from, out of or in connection with this agreement, on the interpretation thereof, or the rights, duties, obligations or liabilities of any party, or the operation, breach, termination, abandonment, foreclosure or invalidity thereof, shall be referred to by either party to arbitration for final settlement, in accordance with the Arbitration Act No. 11 of 1995, or any amendment thereof, |
| 26.4 | Venue: Colombo, Sri Lanka  Language: English |
| 27.1 | The Contractor shall submit a programme for the Works within **7 Days** of delivery of the Letter of Acceptance. |
| 27.3  27.4 | The period between Programme update is within the quarter of the Contract period.  The amount to be withheld for late submission of a Programme is 2% of the Initial Contract Price. |
| 27.5 | Add Sub Clause 27.5  **Night or Sunday work** |
|  | Subject to any provision to the contrary contained in the Contract, none of the Permanent Works shall, save as hereafter provided, be carried on during the night or on Sundays, full moon Poya days or other Statutory days of rest without the permission in writing of the Engineer’s Representative, except when the work is unavoidable or absolutely necessary for the saving of life or property or for safety of the Works, in which case the Contractor shall immediately advice the Engineer’s Representative. Provided always that the provision of this Clause shall not be applicable in the case of any work which it is customary to carry outside normal working hours by rotary or double shifts. Normal working hours should be 7.30 a.m. to 5.00 p.m.  Revised on 11-03-2022 |
| 27.6 | **Rate of Progress**  If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any section is at any time, in the opinion of the Engineer, too slow to ensure completion by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary, and the Engineer may approve to expedite progress so as to complete the Works or such Section by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor shall seek the Engineer’s permission to do any work at night or on Sundays, or other recognized days of rest, such permission shall not be unreasonably refused |
| (31.0) | Progress meeting shall be held at least once a month and progress report shall be submitted by the Contractor in three copies to the Engineer within a week of the progress meeting. |
| (33.0)  33.2 | **Identifying Defects**  **Add to Clause 33.2**  The Contractor shall, if required by the Engineer in writing, search under the directions of the Engineer for the cause of any Defect, imperfection or fault appearing during the progress of the Works or in the period of Maintenance. Unless such Defect imperfection or fault shall be one for which the Contractor is liable under the Contact, the cost of the work carried out by the Contractor in searching as aforesaid shall be borne by the Contractor and he shall in such case repair, rectify and make good such Defect, imperfection or fault at his own expense in accordance with the provisions of Clause 54 hereof. Notice of searching for that Defect and pricing the cost of searching shall be as defined in Clause 40. |
|  |  |
| (34.0) | Tests Add following Sub-Clauses. |
| 34.2 | Quality of Materials, Workmanship and Tests All Materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer’s instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places  Revised on 23-09-2019 |
|  | The Contractor shall provide such assistance instruments, machines, labour and Materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of Materials before incorporation in the Works for testing as may be selected and required by the Engineer.  **Approval for the all material shall be obtained from the Engineer, before incorporating in the Work**. |
| 34.3 | Examination of work before covering up |
|  | No work shall be covered up or put out of view without the approval of the Engineer or the Engineer’s Representative and the Contractor shall afford full opportunity for the Engineer or the Engineer’s Representative to examine and measure and work which is about to be covered up or put out of view and to examine foundations before permanent Works is placed thereon. The Contractor shall give due notice to the Engineer’s Representative whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer’s Representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examine such foundations |
| 34.4 | Uncovering and making openings The Contractor shall uncover any part or parts of the Works or make openings in or through the same as the Engineer may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Engineer. If any such part or parts have been covered up or put out of view after compliance with the requirements of Sub-Clause 34.4 and are found to be executed in accordance with the Contract, the expenses of uncovering making openings in or through, reinstating and making good the same shall be borne by the Employer, but in any other case all costs shall be borne by the Contractor through, reinstating and making good the same shall be borne by the Employer, but in any other case all costs shall be borne by the Contractor. |
| 34.5 | Removal of improper work or Materials The Engineer shall during the progress of the Works have power to order in writing from time to time.   1. the removal from the Site, within such time or times as may be specified in the order, of any Materials which, in the opinion of the Engineer, are not in accordance with the Contract 2. the substitution of proper and suitable Materials and 3. the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefore, of any work which in respect of Materials or workmanship is not, in the opinion of the Engineer, in accordance with the Contract |
| 34.6 | Inspections and Testing of Goods (Materials/Pipes, Fittings, Specials, Accessories, Manhole Covers and Valves) under the contract. |
|  | 34.6.1 Testing and Inspection Agencies Revised on 11-01-2022 |
|  | 34.6.1.1 The Employer or his representative shall have the right to inspect and/or to test the Goods for their conformity to the Contract. The Contract Data of Contract and/or the Technical Specifications shall specify what inspections and tests the Employer requires not specified anywhere and where they are to be conducted. The Employer shall notify the Contractor in writing of the identity of any representatives retained for these purposes. |

Revised on 11-01-2022

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|  | | 34.6.1.2 The inspections and tests may be conducted on the premises of the Supplier or his Subcontractor(s), at point of delivery and/or at the Good's final destination. Where conducted on the premises of the Supplier or its Subcontractor(s), all reasonable facilities and assistance including access to drawings, documents and production data shall be furnished to the inspectors at no charge to the Employer.  34.6.1.3 Should any inspected or tested Goods fail to conform to the specifications, the Employer may reject them and the Supplier shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of charge to the Employer.  34.6.1.4 The Employer's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Employer's stores shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Employer or its representative prior to the delivery of Goods or Goods' shipment from the country of origin, in case of importing.  34.6.1.5 The Employer requires the goods to be supplied under this contract shall conform to the requirements given in Section 6. The Contractor shall obtain the Certificates of Inspection for the specific requirement of this contract document carried out by an Authorized Accredited Agency which is a member of International Accreditation Forum (IAF) acceptable to the Employer. The Authorized Accredited Agency shall have the authority for the accreditation of mentioned goods in their scope of accreditation.  34.6.1.6 The selected Authorized Accredited Agency’s name and cost to same has to be given in summary of price schedule. On the acceptance of the bid, the Employer shall inform directly to the selected Authorized Accredited Agency with a copy to Contractor, the specific requirements for testing including deviations accepted by the Employer, if any, to be tested. However, the payment to the Authorized Accredited Agency has to be made directly by the employer on production of test reports. Terms of Reference (TOR) for the Authorized Accredited Agency is given in the document as Appendix.  34.6.1.7 Nothing in Clause 34 shall in any way release the Contractor from any warranty or other obligations under this Contract.  34.6.1.8 The Contractor shall obtain the approval of the Engineer to ship the goods to be imported for the Works or to deliver such Materials and Plant to the Site. Applications for such consent to ship shall be accompanied by manufacturer’s test certificates and certificates of inspection prescribed in the Contract or agreed with the Engineer. Application shall be made so as to give the Engineer a reasonable time to deal with such applications.  34.6.1.9 Nominated Authorized Accredited Agency shall carryout inspection and testing during Manufacturing process, after Manufacturing and at any time prior to shipping and shall confirm that Materials are in conformity with specifications included in the Contract document. He shall submit his inspection report to the Employer including all items given in the Terms of Reference (TOR) for the Nominated Authorized Accredited Agency which is included in the Contract document as Appendix – 13   * + 1. **Pre-shipment Inspection by the Nominated NWSDB Engineers for Foreign Manufactures**   The Contractor shall arrange for Two (2) number of Nominated NWSDB Engineers for pre-shipment inspection visit to country of manufacture before dispatching the DI/HDPE Pipes, fittings, Valves, Specials and Accessories etc. and Treatment Plant Equipment.  Each shipment should be inspected by Nominated NWSDB Engineers before dispatching at Manufacturer’s factory.  The Contractor shall in his bid provide detailed proposals for pre-shipment inspection visit he offers to provide under this Clause. The following guidelines shall be used by the Contractor to formulate his proposals   1. The duration of inspection for Pre-Shipment Inspection by Nominated NWSDB Engineers shall be worked out based on following guidelines. 2. If DI pipes and fittings are manufactured in same premises, duration of the inspection shall not be less than Eight (8) Days. 3. If DI pipes and fittings are manufactured in different premises, duration of the inspection shall not be less than Ten (10) Days. 4. If HDPE pipes and fittings, duration of the inspection shall not be less than Ten (10) Days 5. DI valves Eight (8) Days 6. For Pumps and other Equipment as follows, but maximum duration shall be Ten (10) Days for one inspection.  |  |  | | --- | --- | | **Scope** | **Duration for Pre-shipment Inspection** | | For number of pumps not exceeding 8  Additional 02 pumps | 8 Days  1 Day | | 01 Generator  Additional 01 Generator | 1 Day + Travelling to factory  1 Day | | 01 Chlorinator  Additional 01 Chlorinator | 1 Day + Travelling to factory  1 Day | | 01 Air blower  Additional 01 Air blower | 1 Day + Travelling to factory  1 Day | | De-odorization system  01 unit  Additional 01 unit | 1 Day + Travelling to factory  1 Day | | Chemical mixers | 1 Day + Travelling to factory | | Electrical Panel | 1 Day + Travelling to factory | | Chemical feeding pumps | 1 Day + Travelling to factory  Revised on 11-01-2022 | | For SCADA system | 8 Days | | For water meters | 8 Days |   (b) Most of the time shall be centered round the manufacturer’s goods which the Contractor proposes to use in the work.  (c) The inspection at the specific manufacturer shall include;   * + A general introduction to the manufacturer’s country, area, town & source of Materials, etc.   + Introduction to design standards and procedures adopted.   + Introduction to relevant production procedures and quality control standards.   + Manufacturing process, and Quality Assurance procedure.   + Testing procedures, mill certificates, product conformity certificate, Quality Management System Certificate and any other relevant certificates etc. regarding the products.   + packing & dispatching procedure   + Site visits to inspect installed or application of similar products/Materials.  |  | | --- | | (d) The Nominated NWSDB Engineers shall be guided by experienced engineers and quality controllers who are also competent in English language.  (e) Each Nominated NWSDB Engineer shall be paid a per diem to include combined allowances, the allowance the amount specified in the Appendix 18 prior to departure.  (f) All visas, Insurance (Life, Health and Travel), air fares, permits, taxes, transfer fees, travelling within the manufactures country and all other facilities required to carry out pre-shipment inspections at the manufacturer’s factory/premise shall be arranged by the Contractor and shall be included in the rates and prices of the contract. Contractor is not liable for providing food and accommodation. Contractor shall assist Nominated NWSDB Engineers for booking accommodation if requested.  (g) The Nominated NWSDB Engineers shall be provided Terms of Reference (TOR) as shown in Appendix – 13A, 13B, 13C, 13D, 13E & 13F for the inspection jointly agreed by the contractor and the engineer and with printed catalogues, manuals, illustrative videos etc., relevant to the manufacturing process and also obtain extra information requested by them, and shall arrange to dispatch these to Nominated NWSDB Engineers, by the Contractor at his own cost.  (h) Contractor shall provide a detailed programme (itinerary) showing details of inspection, travelling, and all other arrangement etc. Required for the pre-shipment Inspection and submit to the Inspection team prior to departure. Contractor shall discuss the inspection Programme in detail with the inspection team and shall be agreed with the Pre-Shipment Inspection team prior to departure.  Revised on 11-01-2022  (i) Contractor shall assist and bear all costs associated with for obtaining visa for the inspection from the relevant Embassy/ High commission for the Nominated NWSDB Engineers.  (j) Nominated NWSDB Engineers shall inspect and test DI/HDPE pipes, fittings, Valves, specials and Accessories etc. and Treatment Plant Equipment as per the attached check list for pre shipment as given in Appendix 15A, 15B, 15C & 15D respectively. Manufacturers should perform any other tests which may be required by the Nominated NWSDB Engineers. | | (k) Nominated inspection agency shall be present during pre-shipment inspection by the Nominated NWSDB Engineers and shall assist the Nominated NWSDB Engineers for the testing and inspection  (l) Any inspections carried out by Inspection Agencies or the Nominated NWSDB Engineers shall not relieve the Contractor of his obligations under the Contract.  (m) Contractor/Manufacturer shall not ship/deliver by plane Materials from the Factory or Stores without approval of the Engineer. | |
|  | | 34.6.3 **Pre-shipment Inspection by the Nominated NWSDB Engineers for Local Manufactures** |
|  | | The Contractor shall arrange for two (2) number of Nominated NWSDB Engineers for pre-delivery inspection visit of local manufacturer before dispatching the HDPE/uPVC Pipes, fittings, Specials and Accessories etc.  Each delivery should be inspected by Nominated NWSDB Engineers before dispatching at Manufacturer’s factory.  The Contractor shall in his bid provide detailed proposals for pre-delivery inspection visit he offers to provide under this Clause. The following guidelines shall be used by the Contractor to formulate his proposals.   1. Most of the time shall be centered round the manufacturer’s Materials which the Contractor proposes to use in the work. 2. The inspection at the specific manufacturer shall include;    * introduction to design standards and procedures adopted.    * introduction to relevant production procedures and quality control standards.    * manufacturing process, and Quality Assurance procedure.    * testing procedures, mill certificates, product conformity certificate, Quality Management System Certificate and any other relevant certificates etc. regarding the products.    * packing & dispatching procedure.    * Site visits to inspect installed or application of similar products/materials.   Revised on 11-01-2022   1. The Nominated NWSDB Engineers shall be guided by experienced engineers and quality controllers who are also competent in English language.   (d) The Nominated NWSDB Engineers shall be provided Terms of Reference (TOR) as shown in Appendix - 13B for the inspection jointly agreed by the Contractor and the Engineer and with printed catalogues, manuals, illustrative videos etc., relevant to the manufacturing process and also obtain extra information requested by them, and shall arrange to dispatch these to Nominated NWSDB Engineers, by the Contractor.  (e) Nominated NWSDB Engineers shall inspect and test HDPE/uPVC Pipes, fittings, Specials and Accessories etc. as per the attached check lists as given in Appendix-15B & 15E respectively. Manufacturers should perform any other tests which may be required by the Nominated NWSDB Engineers.    (f) Nominated inspection agency shall be present during pre-delivery inspection by the Nominated NWSDB Engineers and shall assist the Nominated NWSDB Engineers for the testing and inspection.  (g) Any inspections carried out by Inspection Agencies or Nominated NWSDB Engineers shall not relieve the Contractor of his obligations under the Contract. |
| 35.1 | | The Defects Liability Period is 365 Days from the date of certificate of Completion of the Works. Warranty for goods supplied under this contract shall be as mentioned in Clause 76 hereof. |
| (38.0) | Changes in the Quantities Add following Sub-Clauses. |
| 38.4 | Quantities |
|  | The quantities set out in the Bill of Quantities are the estimated quantities of the work, but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfillment of his obligations under the Contract. Quantities are taken in accordance with the Civil Engineering Standard Method of Measurements (CESMM 3) and SLS 573:1999. |
| 38.5 | Works to be measured. |
|  | The Engineer shall, except as otherwise stated, ascertain and determine by measurement the value in terms of the Contract of work done in accordance with the Contract. |
|  | He shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor’s authorized agent or representative, who shall forthwith attend or send a qualified agent to assist the Engineer or the Engineer’s Representative in making such measurement, and shall furnish all particulars required by either of them. Should the Contractor not attend, or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. For the purpose of measuring such permanent work, as is to be measured by records and drawings, the Engineer’s Representative shall prepare records and drawings month by month of such work and the Contractor, as and when called upon to do so in writing shall within fourteen days, attend to examine and agree such records and drawings with the Engineer’s Representative and shall sign the same when so agreed. Revised on 11-01-2022 |
|  | If the Contractor does not so attend to examine and agree such records and drawings, they shall be taken to be correct. If after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless, be taken to be correct, unless the Contractor shall, within (14) fourteen Days of such examination lodge with the Engineer’s Representative, for decision by the Engineer, notice in writing of the respects in which such records and drawings are claimed by him to be incorrect |
| 38.6 | Method of Measurement |
|  | The Works shall be measured net, except where otherwise specially described or prescribed in the Contract. |
|  | For the purpose of arriving at a valuation for interim payments the Contractor shall submit for the approval of the Engineer within 28 Days after receipt of Letter of Acceptance a cash flow statement of all lump sum items. |
| (39.0) | Variations Add the following Sub-Clauses. |
| 39.2 | Engineer may order variations up to a total cumulative value of not exceeding the amount allocated for contingencies and any savings from other items in the Summary of Bills. |
| 39.7 | Add Sub-Clause  If at any time it should appear to the Contractor that the likely final quantity of a BOQ item/items will vary considerably from the quantity stated in the BOQ or that additional work/works or omission of work/works will have to be encountered, he shall, forthwith, inform the Engineer thereof giving, if possible, the reasons for such variation. He shall seek and ascertain the reason/reasons for such variation to the best of his ability either by himself or in collaboration with Engineer’s Representative if instructed by the Engineer to do so. |
|  | Add Sub-Clause  The Employer may at any time, by a written order given to the Contractor make changes within the general scope of the Contract in any one or more of the following:  (i) drawings, designs or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Employer;  (ii) the method of shipment or packing;  (iii) the place of delivery; and/or  (iv) the Services to be provided by the Contractor. |
| (42.0)  42.2 | Payment certificates Add Sub Clause  Engineer shall check whether contractor’s monthly statement for payment includes all required supporting documents. If not, engineer shall within 14 days, return the payment certificate to the contractor to resubmit with the required supporting documents. Engineer shall check the validity of guarantees and bonds in accordance with the contract prior to certifying any payment certificate.  Revised on 02-09-2022 |
| (43.0) | **Payments** |
| 43.5 | | Add new Sub-Clause  Contractor shall provide following documents with the request for Payments to the Engineer.  **(i)** **On requesting Mobilization Advance Payment**  a) Written request for payment of mobilization advance in the form of a tax invoice.   1. A Bank Guarantee for Mobilization advance payment to the equivalent amount in the form prescribed in the bidding document.   c) A Performance Security  **(ii)** **On Delivery of Materials to Site**  Payments shall be made as Materials at Site and following documents shall be submitted (material at Site).   1. Contractor's tax invoice based on the BOQ and showing description of Goods delivered, quantity, units, amount and total amount.   b) Manufacturer's test certificate (original)  c) Manufacturer's Warranty (Original)  d) Inspection and test certificates, issued by Independent Inspection Agency listed in the contract document for imported goods.   1. Certificate for the conformity to the standards specified in the specifications. 2. Pre- Shipment Inspection certificate issued by the NWSDB Engineers who inspected the goods at Manufacturer’s premises. 3. Copy of Bill of lading 4. Supplier’s Invoice 5. Packing list |
| (44.0)    44.1 | **Compensation Events**  The following events shall also be Compensation Events: (If required, Engineer shall fill)   1. ………………………………………………………….   Revised on 11-01-2022   1. …………………………………………………………. |
| (46.0) | **Currencies**  Add to the Clause 46.1 |
| 46.1 | **Payments to Contractor**  All payments shall be made in Sri Lanka Rupees |
| 46.2 | **Payment to the Employer** |
|  | All payment to the Employer by the Contractor including payments made by way of deduction or set-off shall be made in Sri Lanka Rupees. |
| (47.0)  47.1 | **Price Adjustment**  The Contract Price is subjected to price adjustment, if the Intended Completion Date from the Start Date exceeds 3 months.  Weightings of Inputs are given in Appendix - A. |
|  | Non adjustable elements are given in Appendix - A. |
| (48.0)  48.1 | | **Retention**  The retention from each payment shall be **10%** of the certified work done.  The limit of Retention Money shall be 5% of the Initial Contract Price.  When Retention amount reaches 5% of Contract Price, upon the issue of the Taking-Over Certificate the full amount of the Retention Money may be released on submission of unconditional, on demand guarantee issued by a commercial bank operating in Sri Lanka approved the Central Bank of Ceylon and acceptable to the Employer. This Guarantee shall be valid until 28 Days beyond the Defects Liability Period.  The form for Retention Money Guarantee is given in Section 12. |
| 48.2 | | Deleted the Clause |
| 48.3    49.1 | | Deleted the Clause  The liquidated damages for the whole of the Works shall be **Rs…………. /=** per Day. *(enter the value)*  *[ Guideline to fill*  *Liquidated damages/ per day = 10% of the contract price*  *1/3 of the contract period in days]* |
|  | | The maximum amount of liquidated damages for the whole of the Works shall be **10 %** of the Initial Contract Price.  Revised on 11-03-2022 |
| **(51.0)**  51.1  **(52.0)** | **Advanced payment**  Add to the Clause  An Advance Payment of maximum of 20 % of the Initial Contract Price excluding provisional sums and contingencies shall be paid on submission of an unconditional Bank guarantee for Advance payment issued by a recognized Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka in the Form for Advance payment Security included in Volume 2: Section 12- Standard Forms and the Performance Guarantee as specified in the Bidding Document.  Number of Installments of Advance Payment is one (01)  **Securities** |
| 52.1  52.2  52.3 | | Deleted the last sentence of the Clause.  Add to the Clause:  The Performance Security shall be **5%** of the Initial Contract Price, and shall be provided in the following forms acceptable to the Employer.  (a) Bank Guarantee issued by a reputed bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.  (b) Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board, (The original receipt for such deposit shall be attached to the original tender document).  (c) A certified cheque issued by a reputed Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka, in favour of National Water Supply and Drainage Board.  (d) A Bank guarantee issued by a Bank based in another country but the security or guarantee “confirmed” by a Bank operating in Sri Lanka approved by the Central Bank of Sri Lanka.  However, the requirement of confirmation of Bid guarantees issued by a bank based in another country, by a bank operating in Sri Lanka is not necessary, if the entity that issues the guarantee is an Export Credit Agency of any foreign government or a reputed International Financier acceptable to the Central Bank of Sri Lanka.  **The term “confirmed” in relation to bank guarantee issued by a bank based in another country means that the “confirmed” bank held liable for paying the respective guaranteed amount at the request of first demand by the beneficiary.**  Add to the Clouse:  The performance security shall be valid 28 Days beyond the Defects Liability Period as specified under Sub-Clause 55 and Sub-Clause 56.  Add to the Clause.  Performance security shall be provided at the Contractor’s cost. |
| (53.0)  53.4 | Revised on 11-01-2022 DayworksThe Contractor shall be paid for such work under the conditions set out in the Dayworks Schedule included in the Contract and at the rates and prices affixed thereto in his Bid. |

Revised on 11-01-2022

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| 53.5 | In respect of all work executed on a Dayworks basis, the Contractor shall, during the continuance of such work, deliver each day to the Engineer’s Representative an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all Materials and Plant used thereon or therefore (other than Plant which is included in the percentage addition in accordance with the Schedule herein after referred to). One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer’s Representative and returned to the Contractor. |
| 53.6 | At the end of each month the Contractor shall deliver to the Engineer’s Representative a priced statement of the labour, Material and Plant except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. |
| (55.0)  55.1 | Completion Add following Sub Clause Engineer shall provide in writing to the contractor specifying all the works or Defects which is the engineer’s opinion, requires to be done by the contractor before issuing of such certificates as mentioned in the Sub-Clause 55.1. The contractor shall attend and complete all such works or Defects to the satisfaction of the engineer and then the contractor shall be entitled to receive such certificates. |
| 58.1 | | **Operation & Maintenance manuals**  Operating and maintenance manuals and as-built drawings shall be submitted within **28 Days** of Intended Completion Date |
| 58.2 | The Engineer shall withhold 5% of the Initial Contract Price.  Add to the end of clause 58 |
| 58.3  (60.0)  60.1 | | Contractor shall provide complete set of “as built” drawings;   1. in AutoCAD format and submit 01 set of A3 size white paper hard copy and 01 soft copy in a CD. 2. in GIS format as per the Specification given in Volume 2: Section 6 in the Bidding Document.   **Payment upon termination**  Add to the Clause  The percentage to apply to the value of the work not completed, representing Employer’s additional cost for completing the Works, is **25%** of the value of the remaining works. |
| (65.0) | **Add following Clauses**  **Taxation** |
| 65.1 | **Giving of Notice and Payment of Fees.**  The Contractor shall give all notices and pay all fees required to be given or paid by any National or State Statutes, Ordinance, or other Law or any regulation or bye-law of any local or other duly constituted authority in relation to the execution of the Works and by rules and regulations of all public bodies and companies whose property or rights are affected or may be affected, in any way by the Works. |

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| 65.2 | **Compliance with statutes, Regulations etc.** |
|  | The Contractor shall conform in all respects with the provisions of any such Statute, Ordinance or Law as aforesaid and the regulations or bye-laws of any local or other duly constituted authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against  all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law. |
| 65.3 | **Local Taxation, Income Tax and VAT** |
|  | 1. The prices bid by the Contractor shall show separately Value Added Tax (VAT) with the VAT Registration Number. All other taxes that may be levied according to the Laws and regulations in being as of the date 30 Days prior to the submission of bids in Sri Lanka on the constructional Plant, Materials and supplies (both permanent, temporary and consumable) acquired for the purpose of the Contract and on the services performed under the Contract shall be included in the rates and prices of the contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay the tax that, may be levied in Sri Lanka on profits made by him in respect of the Contract. |
|  | 1. If the Contractor is not registered for VAT a letter from Department of Inland Revenue should be attached stating that he is not registered for VAT. |
|  | (c) National Water Supply & Drainage Board is a VAT registered institution according to Value Added Tax Act No. 14 of 2002. The VAT registration number of NWSDB is 4090 31820 7000. The Contractors who are VAT liable shall issue VAT invoices specifically stated as ‘TAX INVOICES’ to NWSDB including their VAT registration numbers and showing bill amounts and applicable VAT separately along with the requests for payments. The date of TAX INVOICE shall be within 28 Days of work done.  (d) The Contractor shall be entirely responsible for all taxes, stamp duties, license fees, etc. including all costs stipulated in Preamble Notes on Pricing incurred until completion of contract. The Contractor shall comply with the regulations of the Department of Inland Revenue of Sri Lanka for payment of Value Added Tax, Profit Tax and any other taxes arising out of the Contract. |
| 65.4 | **Income Taxes on Staff** |
|  | The Contractor's Staff, personnel and labour will be liable to pay personal income taxes in Sri Lanka in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations. |
| **(66.0)**  66.1 | **Completion of outstanding works and remedying Defects**  To the intent that the Works shall at or as soon as practicable after the expiration of the Defect Liability Period be delivered to the Employer in the Condition required by the Contract, fair wear and tear excepted to the satisfaction of the Engineer, the Contractor shall finish the work, if any, outstanding at the date of completion, as certified under Clause. 55 hereof as soon as practicable after such date and shall execute all such work of repair, amendment, reconstruction, rectification, and making good Defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Defect Liability Period, or within fourteen days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration. |
| 66.2 | **Cost of Execution of Work of Repair etc.** |
|  | All such work shall be carried out by the Contractor at his own expense, if the necessity thereof shall, in the opinion of the Engineer, be due to the use of Materials or workmanship not in accordance with the Contract, or to neglect of failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor’s part under the Contract, If, in the opinion of the Engineer, such necessity shall be due to any other cause, the value of such work shall be ascertained and paid for as if it were additional work |
| (68.0) | Claims |
|  | The Contractor shall send to the Engineer’s Representative once in every month an account giving particulars, as full and as detailed as possible of all claims for any additional payment to which the Contractor may consider himself entitled and of all extra or additional work ordered by the Engineer which he has executed during the proceeding month. |
|  | No final or interim claim for payment for any such work or expense will be considered which has not been included in such particulars. Provided always that the Engineer shall be entitled to authorize payment to be made for any such work or expense, notwithstanding the Contractor’s failure to comply with this condition, if the Contractor has, at the earliest practicable opportunity, notified the Engineer in writing that he intends to make a claim for such work**.** |
| (69.0) | Add following Sub Clauses |
| 69.1 | **Cessation of Employer’s Liability** |
|  | The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the Works, unless the Contractor shall have made a claim in writing in respect thereof before the issuing of the Final Certificate under this Clause.  Revised on 11-01-2022  Revised on 11-01-2022 |
| 69.2 | Unfulfilled Obligations |
|  | Notwithstanding the issue of the Final Certificate, the Contractor and subject to Sub-Clause 42.2, the Employer shall remain liable for the fulfillment of any obligation incurred under the provisions of the contract prior to the issue of the Final Certificate which remains unperformed at the time such Certificate is issued, and for the purpose of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties hereto. |
| 69.3 | **Urgent Repairs** If by reason of any accident, or failure, or other event occurring to in or in connection with the works, or any part thereof, either during the execution of the works, or during the period of maintenance, any remedial or other work or repairs, shall, in the opinion of the Engineer or the Engineer’s Representative, be urgently necessary for the safety of the works and the Contractor is unable or unwilling at once to do such work or repair, the Employer may employ and pay other persons to carry out such work or repair, as the Engineer or the Engineer’s Representative may consider necessary. If the work or repair so done by the Employer is work which, in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contractor, all expenses properly incurred by the Employer in so doing shall be recoverable form the Contractor by the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor. Provided always that the Engineer or the Engineer’s Representative, as the case may be, shall, as soon after the occurrence of any such emergency as may be reasonably practicable to notify the Contractor hereof in writing |
| (70.0) | Custom Clearance & Import of Machinery |
|  | The Employer will assist the Contractor, where required, in obtaining clearance through the customs of Constructional Plant, Equipment, Materials and other things required for the Works. However, the clearance through the custom of constructional Plant, Equipment, Materials and other things are the sole responsibility of the contractor. |
|  | The Contractor shall be fully responsible for timely opening of Letters of Credit with regard to all the imports of goods, Machinery, Plant and Equipment, Material and any other thing which shall be required for the proper completion of construction of works. |
| (71.0) | **Miscellaneous** |
| 71.1 | **Employees Trust Fund** |
|  | The Contractor shall make contribution to the Employee’s Provident Fund (EPF), Employee’s Trust Funds (ETF), and Gratuity etc. as required by the governing Law of the Government of Sri Lanka. |
| 71.2 | **Bribes** |
|  | If the Contractor or any of his subcontractors, agents or servants offers to give or agrees to offer or give to any person, any bribe, gift, gratuity or commission as an inducement or regard for doing or forbearing to do any action in relation to the contract or any other contract with the Employer or for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Employer, then the Employer may enter upon the Site and Works and terminate the employment of the Contractor and the provision of Clause 59 hereof shall apply as if such entry and termination had been made pursuant to that Clause. |
| (72.0)  72.1 | | **Packing of Goods**  The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.  The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract and, subject to Clause 39 hereof in any subsequent instructions ordered by the Purchaser. |
| 72.2 | |
| 72.3 | | The Supplier will be required to make separate packages for each consignee. Each package shall be marked on three sides with proper indelible paint as follows:   1. National Water Supply & Drainage Board, Sri Lanka 2. Contract Number 3. Description of Goods 4. Country of Origin of Goods 5. Suppliers' Name 6. Packing List Reference Number |
| (73.0) | | **Transportation of goods**  The Contractor shall be required to meet all transport and storage expenses until delivery to the destination as specified in the Contract.  The pipe Materials and pipe appurtenance shall be stored in Contractor’s stores within reasonable distances from Work Sites and only the quantities that can be laid in excavated trenches for the daily work shall be kept along the road. Left-overs shall not be kept at the roadsides and it shall be returned to the Contractor’s stores.  Revised on 11-03-2022  Revised on 11-01-2022 |
| (74.0)  74.1  74.2 | | **Incidental Services**  The Supplier shall provide any or all of the following services, if required, without any extra cost to the Purchaser.  (a) Furnishing of tools required for assembly and/or maintenance of the  supplied Goods;  (b) Furnishing of a detailed installation, operations and maintenance  manual for each appropriate unit of the supplied Goods;  (c) Conduct training of the Purchaser's personnel, at the Supplier's Plant  and/or on-Site, in assembly, operation, maintenance and/or repair of  the supplied Goods.  Prices charged by the Supplier for the preceding incidental services, shall be included in the Contract Price for the Goods. |

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|  |  |
| --- | --- |
| (75.0) | **Spare Parts**  The Supplier shall be required to provide the following Materials and notifications pertaining to spare parts manufactured or distributed by the Supplier:  (a) Such spare parts as the Purchaser may elect to purchase from the Supplier,  provided that this election shall not relieve the Supplier of any warranty obligations under the Contract;  (b) The Supplier shall carry sufficient inventories to assure ex- stock supply of  consumable spares such as Gaskets, Plugs, Bolts, Nuts and Washers etc.  (c) In the event of termination of production of the spare parts:  (i) Advance notification to the Purchaser of the pending termination, in  sufficient time to permit the Purchaser to procure needed requirements;  and  (ii) Following such termination, furnishing at no cost to the Purchaser, the  blue-prints, drawings and specifications of the spare parts, if and when  requested. |
| (76.0)  76.1 | **Warranty**  The Supplier warrants that the Goods supplied under the Contract is new, unused, of the most recent or current models and incorporates all recent improvements in design and Materials unless otherwise provided in the Contract. The Supplier further warrants that the Goods supplied under this Contract shall have no Defect arising from design, Materials or workmanship (except insofar as the design or Material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination. |

|  |  |
| --- | --- |
| 76.2  76.3  76.4  76.5  76.6 | This warranty shall remain valid for thirty six (36) months after the Goods, or any portion thereof as the case may be, have been delivered (and commissioned) to the final destination indicated in the Contract.  The Purchaser shall promptly notify the Contractor in writing of any claims arising under this warranty.  Upon receipt of such notice, the Contractor shall, with all reasonable speed, repair or replace the Defective Goods or parts thereof, without costs to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.  If the Supplier, having been notified, fails to remedy the Defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.  The manufacturer shall submit the warranty for all Materials Supplied by him for 36 months in the form given in Appendix - 12.  Revised on 11-01-2022 |

**Appendix A**

**For Contract Data**

* 1. **Input Percentages for Major Items**

With reference to Sub–Clause 47 (b) of the conditions of Contract, the “input percentages’ for major items are

|  |  |
| --- | --- |
| **Input Name** | **Input Percentage** |
|  |  |
| **Total** | 90.0 % |

* 1. **Non Adjustable Elements**

With reference to Sub-Clause 47 (c) of the “Conditions of Contract” the BOQ item Nos that shall be considered as ‘Non- Adjustable elements are

Items in General Bill, Provisional Sums, DI/PVC/HDPE/GI/Steel/GRP Pipes, Fittings, Specials, accessories and Valves (All pipes, fittings, specials, accessories and valves) and any other items which does not belong to the categories of Inputs listed above).

………………………………………………………………………………………………

………………………………………………………………………………………………

(State if there are any others) ………………………………………………………………………………………………

……………………………………………………………………………………

Revised on 11-03-2022

**6. SPECIFICATION**

List of Specifications

|  |  |  |
| --- | --- | --- |
|  | Works |  |
|  | CIDA General Specifications: |  |
| 1 | Civil Engineering Construction | 6a |

* *Add the relevant list of NWSDB Standard Specifications to the document****from below list according to the requirement of the work.***
* *Add the all Specifications selected from this list to the document* ***from NWSDB web (under the “Restrict inks”) when preparing the Bidding Document.***

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|  |  |  |
| --- | --- | --- |
| NWSDB Standard Specifications List | | |
|  | The sections of each specification come under CIDA General Specifications given above shall be superseded from the following NWSDB Standard Specifications. |  |
| No. | Name of Specification | Page No. |
|  | Works |  |
| 2 | Trench Excavation, Backfilling and Road Reinstatement for Pipe Laying | 6b |
| 3 | Service Connection | 6c |
| 4 | Trenchless Pipe Installation | 6d |
| 5 | Instruction for Prevention of Mosquito Breeding | 6e |
| 6 | Surveying Works | 6f |
| 7 | Timber Works | 6g |
| 8 | Pipeline Warning Tape | 6bc |
| 9 | Mastic Materials & Installation | 6bj |
| 10 | Pressure Testing for DI, HDPE & PVC Pipes | 6bk |
| 11 | As-built information in GIS format | 6bx |
|  | Pipes, Valves & Accessories |  |
| 1 | DI Pipes and Fittings | 6h |
| 2 | DI pipes, fittings, specials and accessories for Sewerage Applications | 6bb |
| 3 | PVC Pipes and Fittings | 6i |
| 4 | HDPE Pipes and Fittings for Water Supply | 6j |
| 5 | HDPE pipes, fittings, specials and accessories for Sewerage Applications | 6bd |
| 6 | Steel Pipes and Fittings | 6k |
| 7 | Galvanized Pipes & Fittings | 6l |
| 8 | Valve, Hydrants, Surface Boxes & Manhole Covers | 6m |
| 9 | Mechanical Couplings, Repair Clamps and Flange Adaptors | 6n |
| 10 | Clamp Saddles | 6o |
| 11 | Ball Valves | 6p |
| 12 | Stop Valves | 6q |
| 13 | Repair Clamps | 6r |
| 14 | Penstocks & Headstocks | 6w |
| 15 | Supply and Installation of power surge protection devices | 6ai |
| 16 | PVC/ ABS/ Stainless Steel/ Bronze/ DI/ CI Valves, Shear gates, Slide gates and Manhole Covers & Frames of Sewerage Application | 6x |
| 17 | PVC Pipes for Sewerage | 6bi |
| 18 | PP Clamp Saddles | 6bf |
| No. | Name of Specification | Page No. |
| 19 | Surge vessels & Air compressor | 6aj |
|  | Water Pumps |  |
| 1 | Motor Driven Self lubricated vertical Turbine pumping sets and Accessories | 6y |
| 2 | Horizontal shaft driven double suction pumping sets and accessories | 6aa |
| 3 | End Section vertical delivery Back pull-out centrifugal Pumping sets and Accessories | 6ab |
| 4 | Vertical Shaft driven double suction centrifugal pumping sets and Accessories | 6ac |
| 5 | Vertically/ Horizontally mounted in line booster pumping sets & Accessories | 6ad |
| 6 | Bore hole type submersible pumping sets and Accessories | 6z |
|  | Sewer Pumps |  |
| 1 | Supply & Installation of Auto Coupling type wet well electrically driven submersible pumps and accessories (Wet well below 30 kw) | 6ae |
| 2 | Wet well Above 30 kw | 6af |
| 3 | Dry well below 30 kw | 6ag |
| 4 | Dry well Above 30 kw | 6ah |
|  | Air Condition & Lighting Protection |  |
| 1 | Air Conditioner - Window type | 6ap |
| 2 | Air Conditioner - Split & Cassette Type | 6aq |
| 3 | Lighting protection system | 6ar |
|  | Office Equipment |  |
| 1 | Computer | 6ax |
| 2 | Photo Copier | 6ay |
|  | Miscellaneous |  |
| 1 | Hiring of Vehicle (English) | 6az |
| 2 | Hiring of Vehicle (Sinhala) | 6bm |
| 3 | Janitorial works | 6ba |
| 4 | Water Bowsers | 6be |
| 5 | Pontoon Intake | 6bg |
|  | Water/Wastewater/Flow Meters and Gun Metal Ferule |  |
| 1 | Waltman Type Bulk Water Meters | 6t |
| 2 | Flow Meters and Waste Meters | 6u |
| 3 | Weir type Wastewater Flow Meters | 6bn |
| 4 | Portable type Wastewater Flow Meters | 6bo |
| 5 | Electromagnetic Type Wastewater Flow Meters | 6bbm |
| 6 | Water Meters & Spare Parts | 6s |
| 7 | Gun Metal Ferrules | 6v |
|  | Chlorinators and related Equipment |  |
| 1 | Gas Chlorinators and Accessories | 6ak |
| 2 | Lime and Alum/ Poly Aluminium chloride dosing packages | 6al |
| 3 | Hosting Equipment and accessories | 6am |
| 4 | Water sampling collection system | 6an |
| 5 | Laboratory Equipment | 6ao |
| 6 | Granular Activated Carbon | 6bh |

Note:

1. Bidder shall submit a detailed technical comparison (Specified Vs Supplied) if their products deviate from performance criteria manifested in the Specifications.

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**7. SCHEDULE OF PARTICULARS**

**SCHEDULE OF PARTICULARS**

(Information to be provided by the Bidder for the supply items only after reference to the Specifications, Bills of Quantities and Appendices).

Note : Where pamphlets, catalogues and drawings are accompanied with the bid, their reference should be quoted in the Schedule of Particulars.

Copies of the Technical Literature with regard to pipes, specials and fittings shall be submitted to establish conformity with BS, BS EN or ISO standards along with ISO 9001:2015Quality Management System Certification, together with the offer.

1. PVC pipes and Fittings.
2. Ductile Iron (DI);

2.1 Pipes & Fittings.

2.2 Mechanical Couplings & Flange Adaptors.

2.3 Manhole Covers & Surface boxes.

1. DI Valves and Accessories:

3.1 Gate/Sluice Valves.

3.2 Butterfly Valves.

3.3 Air Valve.

3.4 Check Valves.

3.5 Pressure Reducing Valves.

3.6 Pressure Sustaining/Relief Valves.

3.7 Flow Control Valves.

3.8 Altitude Valves.

3.9 Ball Float Valves.

3.10 Flap Valves.

3.11 Fire Hydrants.

3.12 Fire Hydrants - Dry Barrel Type.

1. High Density Polyethylene (HDPE) pipes and fittings.
2. Galvanized Iron pipes and fittings.
3. Pumps.

6.1 Motor Driven Self Lubricated Vertical Turbine Pumping Sets and Accessories.

6.2 Borehole Type Submersible Pumping Sets and Accessories.

6.3 Horizontal Shaft Driven Double Suction Pumping Sets and Accessories.

6.4 End Suction Vertical Delivery Back Pull – Out Centrifugal Pumping Sets and Accessories.

6.5 Vertical Shaft Driven Double Suction Centrifugal Pumping Sets and Accessories.

6.6 Vertically/Horizontally Mounted In Line Booster Pumping Sets and Accessories.

1. Joint Protection Material.
2. Gas Chlorinators and Accessories.

SCHEDULE OF PARTICULARS

Revised on 02-09-2022

1. PVC PIPES AND FITTINGS

1.0 Name of the Manufacturer : ……………………………………..

1.1 Address of Manufacturer's Factory : Pipes –

Fittings -

1.2 Standards to which pipes and fittings conform: Pipes –

Fittings -

Is Certificate of relevant Standards Institute Provided?

* 1. Whether fittings (except bends) provided are:

a) Moulded ……………..

b) Fabricated ………………

* 1. Whether bends provided are:

a) Single cast ……………..

b) Fabricated ………………

1.5 Year of manufacture of pipes & fittings :

1.6 Quantity of solvent cement required per joint :

|  |  |
| --- | --- |
| Pipe Dia. | Quantity of solvent cement  required per joint |
| 15 mm  …………  …………  63 mm  ………… | ………………….  ………………….  ………………….  ………………….  …………………. |

1.7 For PVC pipes and fittings of dia. 90 mm or greater :

* + 1. Joint Rings for mechanical joints :

Material :

Class :

Standard to which it conforms :

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* + 1. Make of Lubricant for mechanical joints for safety in water supply :

To confirm whether it complies :

Quantity of lubricant required per joint

|  |  |
| --- | --- |
| Pipe Dia. | Quantity of lubricant required |
| 225 mm.  160 mm  110 mm  90 mm | ………………….  ………………….  ………………….  ……….…………. |

1.7.3 Vacuum to which the mechanical joint will hold (As per the test in

APP. G of BS 4346 part 2):

1.7.4 Indicate whether the manufacturing process of the items offered comply with ISO 9001:2015 Quality Management System Standard.

1.8 FLANGES

1.8.0 Name of the Manufacturer : ……………………………………..

1.8.1 Address of Manufacturer :……………………………………..

1.8.2 Standard to which flanges conform :……………………………………..

1.8.3 (a) Standard to which Gaskets conform :

(b) Specify whether gaskets are inside bolt circle type or

full face type :

1.8.4 Details of flanges :

|  |  |
| --- | --- |
| Pipe Dia. | Bolts & Nuts for one set  Dia. Length No. off |
| 225 mm.  160 mm  110 mm  90 mm  63 mm | ………………….  ………………….  ………………….  ……….………….  ………………….. |

1.8.5 Material : Gaskets :

Nuts & Bolts :

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1.9 SADDLE STRAPS

1.9.0 Name of the Manufacturer : ………………………………..

1.9.1 Country of Manufacture : ………………………………….

1.9.2 Manufacturer’s Address : …………………………………..

1.9.3 Make :

Standard to which saddle straps conform : ……………………………..

Is certificate of relevant Standard Institutions Provided : ……………….

1.9.4 Material - Straps :

Joint Rings :

Bolts & Nuts :

1.9.5 Indicate whether the manufacturing process of the items offered comply with

ISO 9001:2015 Quality Management System Standard ………….

Is certificate of relevant Standard Institutions Provided: ……………….

2. DUCTILE IRON (DI)

* 1. PIPES AND FITTINGS

2.1.0 Name of the Manufacturer : (1) Pipes …………………………………………………

(2) Fittings…………………………………………………

2.1.1 Country of manufacture: (1) Pipes ……………………………………………………

(2) Fittings…………………………………………………

* + 1. Manufacturers’ Address: (1) Pipes ………………………………………..

…………………………………………………….

(2) Fittings ………………………………………

……………………………………………………

2.1.3 2.2.3.1 Standards to which pipes and fittings conform:

(1) Pipes ………………………………

(2) Fittings ……………………………

* + - 1. No of Shipments proposed by the Contractor:……………………..

2.1.4 Is Certificate for conformity to standards from relevant standards Institution provided

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to the factory/factories : (1) Pipes ………………….

(2) Fittings ………………..

* + 1. Is ISO 9001:2015 Quality Management System Certificate provided to the factory/factories : (1) Pipes ……………………

(2) Fittings …………………

* + 1. Class of Pipes and fittings :

Class

S/S Pipes ………………..

Pipes with integral casted flanges ………………..

Pipes with factory welded flanges ………………..

Pipes with screwed flanges ……………….

Tees …………………

Bends & Other Fittings ……………….

2.1.7 Whether factory welded flange pipes tested for each flanged joint? ...............

2.1.8 Whether Pipes & Fittings are from same Manufacturer ?…………..

2.1.9 Gaskets, Joint rings and Lubricant :

2.1.10 Standard to which Gaskets, Joint rings conforms: ……………………………

2.1.11 Is Certificate for conformity to standards from relevant standards Institution provided

to the factory/factories : ………………

2.1.12 Make of Gaskets, Joint rings and Lubricant :

Make

Gaskets ………………

Joint rings ………………

Lubricant ………………

2.1.13 Material of Gaskets, Joint rings and Lubricant :

Gaskets ………………

Joint rings ………………

Lubricant ………………

2.1.14 Hardness range of Gaskets and Joint Rings

Hardness Range (1RHD)

Gaskets ……………………

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Joint Rings ……………………

2.1.15 Standard to which Flanges conform : ………………………………

2.1.16 Whether Flanges are integrally casted or Factory welded ? …………………………

2.1.17 Type of external coating and grade : …………………………………………………

2.1.18 Standard to which external coating conform: …………………………………………

2.1.19 Type of internal coating/lining and standard: ………………………………………..

2.1.20 Standard to which nuts and bolts, washers conform and the type of material:

Standard …………………………………..

Material ……………………………………

2.1.21 Standard to which polyethylene sleeving conform and the colour

Standard ………………………….

Colour …………………………...

2.1.22 Quantity of joint protection materials required per flanged joint as per manufacturer’s

recommendation

Diameter Mastic Paste Tape uPVC/Polyethylene outer

(mm) /Primer (litres) (kg) (m) wrapping (m)

150 …………….. ………….. ………….. …………………….

200 ……………. …………. …………. …………………….

………. ……………. …………. …………. …………………….

……… ……………. ………… …………. …………………….

2.1.23 Port of shipment : …………………………………………………………………….

2.1.24 Packing and protection in transit : ………………………………….

2.1.25 Time of delivery: …………………………………………………….

2.1.26 Reference of the catalogues, technical literature, drawing provided with the Bid: …....

2.1.27 Name and address of the Supplier’s accredited agent in Sri Lanka: …………………..

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2.1.28 Deviations from specifications (if any): ……………………………………………….

2.2 MECHANICAL COUPLINGS AND FLANGE ADAPTERS

2.2.0 Name of the Manufacturer : ………………………

2.2.1 Country of manufacture :………………………….

2.2.2 Manufacturers’ Address:……………………………………………………

2.2.3 2.2.3.1 Make, Material, Hardness Range and Standard :

Make Material Hardness Standard Date of

Range Manufacture

Sleeve: …………. ……….. N/A .………… ………………

Flange : …………. ……….. N/A ………… ………………

Gaskets: …………. ………. …………. ………… ………………

Joint Rings: …………. ……….. ………… ………… ………………

* + - 1. No of Shipments proposed by the Contractor: ……………………………

2.2.4 Type of external coating and thickness: ………………………………………………

2.2.5 Type of internal coating and lining: ……………………………………………………

2.2.6 Time of Delivery : ……………………………………………………………………

2.2.7 Port of Shipment: …………………………………………………………………….

2.2.8 Reference of the catalogues, technical literature, drawings provided with the Bid :

2.2.9 Name and Address of supplier’s agent (if any) in Sri Lanka ………………………..

2.2.10 Deviations from Specifications (if any) : ………………………………………………

2.2.11 Is ISO 9001:2015 Quality Management System Certificate provided to the Factory ………………..

2.3 SURFACE BOXES AND MANHOLE COVERS

2.3.0 Name of the Manufacturer : ……………………………

* + 1. Country of Manufacture :…………………………….

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2.3.2 Manufacturer’s Address :………………………………………………….

2.3.3 Material :………………………………………

2.3.4 Class, Make, Standard and Date of Manufacture

Class Make Standard Date of Manufacture

Manhole Covers : ……… ……….. ………… ………………

Surface Boxes : ………. ………. …………. …………………

2.3.5 Coating :…………………..

2.3.6 Lifting arrangements:

Manhole Covers :………………

Surface Boxes :……………………

2.3.7 Name and Address of Supplier’s agent (if any) in Sri Lanka :……………………….

2.3.8 Port of Shipment:……………………………

2.3.9 Time of Delivery of Material at port of shipment:………………………….

2.3.10 Deviations from Specification (if any):…………………………..

3. DI/CI VALVES AND ACCESSORIES

3.1 GATE/SLUICE VALVES

3.1.0 Name of the Manufacturer : ………………………

3.1.1 Country of Manufacture : …………………………………………..

3.1.2 Manufacturer’s Address: …………………………………

3.1.3 Date of Manufacture: ………………………………………………..

3.1.4 3.1.4.1 Standards to which valves conform …………………………………

3.1.4.2 No of Shipments proposed by the Contractor : ………………………

3.1.5 Is certificate for conformity to standards from relevant Standards Institution provided to the factory/ factories …………………………….

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3.1.6 Is ISO 9001:2015 Quality Management System Certificate provided to the factory/ Factories ……………………….

3.1.7 Material

Body : ………………………………………………………

Spindle : …………………………………………………….

Metal faces and seal: ………………………………………….

3.1.8 Length between flanges (mm):…………..

3.1.9 End flanges - Pressure Rating: …………………………

Dimensions (mm): ………………………

Bolt Circle dia. (mm): …………………………

3.1.10 Whether gearing arrangement Provided : ……………………….

Gear Ratio

Unbalanced head: ………………..bars

Seat test pressure: ………………. bars

Body test pressure: ……………… bars

3.1.11 Internal protection : ………………………………………………………..

3.1.12 External protective finish: ………………………………………………………..

3.1.13 Weight of the valve …………….. kgs ………………………………

3.1.14 Packing and protection of valves in transit: ……………………………

3.1.15 Reference of the catalogues, technical literature and drawing provided with the Bid:

3.1.16 Port of shipment: ………………………………………..

3.1.17 Time of delivery of valves at the port of shipment: ……………………………………

3.1.18 Name and Address of Supplier’s accredited agent in Sri Lanka: ………………

3.1.19 Deviations from Specifications (if any):

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3.2 BUTTERFLY VALVES

3.2.0 Name of the Manufacturer : ………………………

3.2.1 Country of Manufacture ……………………..

3.2.2 Manufacturer’s Address: …………………………………………………

.…………………………………………………...

3.2.3 Date of Manufacture:…………………….

3.2.4 3.2.4.1 Standard to which valves conform: …………………………………….

3.2.4.2 No of Shipments proposed by the Contractor : ……………………….

3.2.5 Is certificate for conformity to Standards from relevant Standard Institution provided to the factory/ factories. ………………….

3.2.6 Is ISO 9001:2015 Quality Management System Certificate provided to the factory/ factories. ………………………………….

3.2.7 Material

Valve body:

Valve disc:

Valve seat:

Shaft:

Shaft seals:

3.2.8 Valve body : Whether Rubber lined ? if so material : …………………….

3.2.8.1 Standards to which gaskets conforms: ………………………………

3.2.8.2 Is certificate for conformity to Standards from relevant Standard Institution provided to gaskets :. ………………….

3.2.8.3 Face to face dimensions of the valves (mm) :…………….

3.2.8.4 End Flanges

Pressure rating:…………

Dimensions (mm):…………..

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Bolt circle dia. (mm):………………….

3.2.8.5 Standard to which nuts and bolts conform and the material:……………………..

3.2.8.6 The type of operating gear for the valve:……………………………..

3.2.8.7 Operating method of the valve (hand wheel/Tee key):…………………………….

3.2.8.8 Whether Gearing arrangement is provided : ……………….

Gear ratio of gearing:……………

Unbalanced head: ……………. Bars

Seat test pressure : …………………… Bars

Body test pressure ……………. Bars

3.2.8.9 Internal protective finish:

Material : ……………….

Thickness : ……………..

3.2.8.10 External protective finish:

Material : ………………….

Thickness : …………………

3.2.8.11 Weight of the valve: …………………. Kg

3.2.8.12 Packing and Protection of valves in transit: …………..

3.2.8.13 Reference of the catalogues, technical literature and drawings provided with the Bid:

……………………………………………………………………………………

3.2.8.14 Port of shipment: .………………………

3.3.8.15 Time of delivery of valves at port of shipment: ……………..

3.2.8.16 Name and Address of supplier’s agent (if any) in Sri Lanka: ………………………

…………………………………………………………………………………………

3.2.8.17 Deviations from specifications (if any) :…………………………….

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3.3 AIR VALVES

3.3.0 Name of the Manufacturer : ………………………

3.3.1 Country of Manufacture : …………………………

3.3.2 Manufacturer’s Address: ……………………………………………………

………………………………………………………………………………………….

3.3.3 Date of Manufacture: ………………….

3.3.4 Is ISO 9001:2015 Quality Management System Certificate provided to the factory / Factories : …………………………………….

3.3.5 Type of Valve (single orifice/double orifice): ………………………………….

3.3.6 For large orifice air valves;

|  |  |
| --- | --- |
| Orifice dia.  …………… mm | Minimum air outflow at 0.5 bar differential pressure ………………… m3 /min |
| Minimum air inflow at 0.2 bar differential pressure ………………… m3 /min |

3.3.7 For large orifice and Double orifice air valves; whether isolating valve has mitre

gearing for making it Tee key operated: ………………….

3.3.8 Make of material of Ball (Stainless Steel or Plastic):………………………….

3.3.9 Flanges (if applicable)

Pressure rating : …………..

Standard :………………….

Dimensions (mm) :………..

Bolt circle dia. (mm):………

3.3.10 Seat test pressure : …………………. bars

3.3.11 Body test pressure : ………………… bars

3.3.12 Internal protective finish: ………….

3.3.13 External protective finish:………….

3.3.14 Weight of the valve :…………………… kg

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3.3.15 Packing and protection of valves in transit: ………………..

3.3.16 Reference of the catalogues, technical literature and drawings provided with the Bid:

………………………………………………………………………………………..

3.3.17 Port of shipment: …………………………………….

3.3.18 Time of delivery of valves at port of shipment:…………………………

3.3.19 Name and Address of supplier’s agent (if any) in Sri Lanka: ………………………...

…………………………………………………………………………………………

3.3.20 Deviations from specifications (if any):………………………….

3.4 CHECK VALVES

3.4.0 Name of the Manufacturer : ………………………

3.4.1 Country of Manufacture : ………………………….

3.4.2 Manufacturer’s Address: …………………………………………………

…………………………………………………………………………………….

3.4.3 Date of Manufacture:………………………..

3.4.4 Standard to which valves conform: …………………………………………..

3.4.5 Is ISO 9001:2015 Quality Management System provided to the factory/

factories:………

3.4.6 3.4.6.1 Is product conformity certificate from relevant Standard Institution provided

to the Factory / factories :……………………

3.4.6.2 No of Shipments proposed by the Contractor: ………………………………

3.4.7 Is this Vertical Installation or Horizontal Installation :……………………..

3.4.8 Is this non Slam :………….

3.4.9 Is this Spring loaded : …………..

3.4.10 Material

Valve body: ……………….

Hinge pin and bushes:…………..

Disc:……………

Disc encapsulating material:…………..

3.4.11 End Flanges

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Pressure rating:………….

Dimensions (mm):………

Bolt circle dia. (mm):……..

Standard :…………………..

3.4.12 Face to face dimensions of the valve (mm) :…………

3.4.13 Seat test pressure : …………………… bars

3.4.14 Body test pressure ……………. bars

* + 1. Internal protective finish:………………

3.4.16 External protective finish:………………..

3.4.17 Weight of the valve: …………………. Kg

3.4.18 Packing and Protection of valves in transit:………………….

3.4.19 Reference of the catalogues, technical literature and drawings provided with the Bid:

……………………………………………………..

3.4.20 Port of shipment:…………………..

3.4.21 Time of delivery of valves at port of shipment:……………………….

3.4.22 Name and Address of supplier’s agent (if any) in Sri Lanka:………..

3.4.23 Deviations from specifications (if any):…………….

3.5 PRESSURE REDUCING VALVES

3.5.0 Name of the Manufacturer : ………………………

3.5.1 Country of Manufacture : ……………………………….

3.5.2 Manufacturer’s Address: ……………………………………………...

…………………………………………………………………………………….

3.5.3 Date of Manufacture:…………….

3.5.4 Is ISO 9001:2015 Quality Management System provided to the factory/

factories: ………...………………………………………….

3.5.5 3.5.5.1 Is product conformity certificate from relevant Standard Institution provided

to the factory/ factories:……………………

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3.5.5.2 No of Shipments proposed by the Contractor: ………………………………

3.5.6 Material

Main valve:……………..

Body:……………………

Internal valve:…………….

Indicator rod:……………..

Relay Valve

Body:…………………..

Spindle:…………………..

Diaphragm:………………….

Spring:……………………..

3.5.7 Length between flanges (mm):…………

3.5.8 End Flanges

Pressure rating:……………

Dimensions (mm):………..

Bolt circle dia. (mm):…………

Standard :………………………

* + 1. Minimum running pressure difference: …………………… bars
    2. Minimum control pressure ……………. Bars
    3. Internal protective finish:………………..
    4. External protective finish:………………….
    5. Weight of the valve: …………………. kg
    6. Packing and Protection of valves in transit:…………

3.5.15 Reference of the catalogues, technical literature and drawings provided with the Bid: …...……………………………………………………………………..

* + 1. Port of shipment:………………………..
    2. Time of delivery of valves at port of shipment:…………………..

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* + 1. Name and Address of supplier’s agent (if any) in Sri Lanka:…………………………
    2. Deviations from specifications (if any):………………………………….
  1. PRESSURE SUSTAINING/RELIEF VALVES

3.6.0 Name of the Manufacturer : ………………………

* + 1. Country of Manufacture :………………………………………………..
    2. Manufacturer’s Address:………………………………………………
    3. Date of Manufacture:………………………..
    4. Is ISO 9001:2015 Quality Management System provided to the factory/ factories …………………………
    5. 3.6.5.1 Is product conformity certificate from relevant Standard Institution provided

to the factory/ factories:……………………

3.6.5.2 No of Shipments proposed by the Contractor : …………………………….

* + 1. Material

Main valve:…………..

Body:……………………

Internal valve:…………

Indicator rod:……………..

Relay Valve

Body:…………………..

Spindle:…………………..

Diaphragm:………………

Spring:…………………….

* + 1. Length between flanges (mm):…………
    2. End Flanges

Pressure rating:………………

Dimensions (mm):………………..

Bolt circle dia. (mm):…………….

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Standard :……………………….

* + 1. Internal protective finish:………………
    2. External protective finish:………………..
    3. Weight of the valve: …………………. kg
    4. Packing and Protection of valves in transit:………………….
    5. Reference of the catalogues, technical literature and drawings provided with the Bid:

………………………………………………………………

* + 1. Port of shipment:…………………………
    2. Time of delivery of valves at port of shipment:………………………….
    3. Name and Address of supplier’s agent (if any) in Sri Lanka:…………………………
    4. Deviations from specifications (if any):………………..
  1. FLOW CONTROL VALVES

3.7.0 Name of the Manufacturer : ………………………

* + 1. Country of Manufacture :……………………………
    2. Manufacturer’s Address:…………………….
    3. Date of Manufacture:…………………………
    4. Is ISO 9001:2015 Quality Management System provided to the factory/ factories: …………………………

* + 1. 3.7.5.1 Is Product Conformity Certificate from relevant Standard Institution provided to the factory/ factories:……………………

3.7.5.2 No or Shipments proposed by the Contractor : …………………………….

* + 1. Material

Main valve:………………….

Body:………………………..

Internal valve:………………..

Indicator rod:………………….

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Relay Valve

Body:…………………..

Spindle:………………..

Diaphragm:……………

Spring:…………………

* + 1. Length between flanges (mm):……………………..
    2. End Flanges

Pressure rating:………………

Dimensions (mm):……………

Bolt circle dia. (mm):……………

Standard :………………………

* + 1. Minimum flow :…………………….
    2. Constant flow:………………….
    3. Internal protective finish:…………….
    4. External protective finish:………………….
    5. Weight of the valve: …………………. kg
    6. Packing and Protection of valves in transit:………………………
    7. Reference of the catalogues, technical literature and drawings provided with the Bid:
    8. Port of shipment:…………………….
    9. Time of delivery of valves at port of shipment:…………………..
    10. Name and Address of supplier’s agent (if any) in Sri Lanka:………………….
    11. Deviations from specifications (if any):……………………………………………..

3.8 ALTITUDE VALVES

3.8.0 Name of the Manufacturer : ………………………

3.8.1 Country of Manufacture :…………………

3.8.2 Manufacturer’s Address:…………………………………………………

…………………………………………………………………………………………

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3.8.3 Date of Manufacture:………………………..

3.8.4 Is ISO 9001:2015 Quality Management System provided to the factory/

factories ……………………

3.8.5 3.8.5.1 Is Product Conformity Certificate from relevant Standard Institution provided

to the factory/ factories……………………

3.8.5.2 No of Shipments proposed by the Contractor : ………………………………

* + 1. Material

Main valve:…………..

Body:……………………

Internal valve:…………….

Indicator rod:………………

Relay Valve

Body:……………..

Spindle:……………

Diaphragm:………….

Spring:………………..

* + 1. Length between flanges (mm):……………
    2. End Flanges

Pressure rating:……………….

Dimensions (mm):…………….

Bolt circle dia. (mm):…………

Standard :…………………………

* + 1. Minimum head required at valve inlet:…………………
    2. Internal protective finish:…………………
    3. External protective finish:………………….
    4. Weight of the valve: …………………. kg
    5. Packing and Protection of valves in transit:…………………….
    6. Reference of the catalogues, technical literature and drawings provided with the Bid:

…………………………………………………………..

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* + 1. Port of shipment:…………………………
    2. Time of delivery of valves at port of shipment:…………………….
    3. Name and Address of supplier’s agent (if any) in Sri Lanka:………………………
    4. Deviations from specifications (if any):…………………………………

3.9 BALL FLOAT VALVES

3.9.0 Name of the Manufacturer : ………………………

3.9.1 Country of Manufacture :…………………………….

3.9.2 Manufacturer’s address : ………………………………………………

3.9.3 Date of Manufacture:……………………..

3.9.4 Is ISO 9001 :2015 Quality Management System provided to the factory/

factories ……………………….

3.9.5 3.9.5.1 Is product conformity certificate from relevant Standard Institution provided

to the factory/ factories……………………

3.9.5.2 No of Shipments proposed by the Contractor : ………………………………

* + 1. Body test pressure:……………….
    2. End Flanges

Pressure rating:…………………..

Dimensions (mm):………………..

Bolt circle dia. (mm):……………..

Standard:…………………………………

* + 1. Material

Valve Body:……………………

Float:………………………….

Lever and links:…………………..

* + 1. Body test pressure: ……………… bars

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* + 1. Close assembly test pressure ………………… bars
    2. Weight of the valve: …………………. kg
    3. Packing and Protection of valves in transit:……………………………….
    4. Reference of the catalogues, technical literature and drawings provided with the Bid:

……………………………………………..

* + 1. Port of shipment:………………………………
    2. Time of delivery of valves at port of shipment:………………………….
    3. Name and Address of supplier’s agent (if any) in Sri Lanka:………………………..
    4. Deviations from specifications (if any):………………………………..
  1. FLAP VALVES

3.10.0 Name of the Manufacturer : ………………………

* + 1. Country of Manufacture :……………………….
    2. Manufacturer’s Address:……………………………………………………
    3. Date of Manufacture:…………………………

3.10.4 Is ISO 9001:2015 Quality Management System provided to the factory/ factories ……………………

3.10.5 3.10.5.1 Is product conformity certificate from relevant Standard Institution provided to the factory/ factories……………………

3.10.5.2 No of Shipments proposed by the Contractor : …………………………

* + 1. Material

Frame and door:…………………

Sealing:………………..

Hinge pin:…………….

Links:………………….

* + 1. Flanges

Pressure rating:………

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Dimensions (mm):………….

Bolt circle dia. (mm):…………..

Standard :……………………

* + 1. Weight of the valve: …………………. kg
    2. Packing and Protection of valves in transit:………………
    3. Reference of the catalogues, technical literature and drawings provided with the

Bid:…………………………..

* + 1. Port of shipment:…………………………
    2. Time of delivery of valves at port of shipment:…………………….
    3. Name and Address of supplier’s agent (if any) in Sri Lanka:………………….
    4. Deviations from specifications (if any)…………………………..
  1. FIRE HYDRANTS
     1. Name of the Manufacturer : ………………………
     2. Country of Origin:…………………………
     3. Manufacturer’s Address:………………………………
     4. Is this Pillar type or Underground type: ……………
     5. Screw down type

3.11.5 Is ISO 9001:2015 Quality Management System provided to the factory/ factories: …………………………………….

* + 1. 3.11.6.1 Is product conformity certificate from relevant Standard Institution provided to the factory/ factories…………………………….

3.11.6.2 No of Shipments proposed by the Contractor : …………………………

* + 1. Date of Manufacture:…………………
    2. Standard to which it conform:……………….
    3. Inlet Flanges

Pressure rating:……………

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Dimensions (mm):……………

Bolt circle dia. (mm):……………….

Standard:……………………….

Standard of facing and drilling:…………………………..

* + 1. The direction of closing of the hydrant valve:……………..
    2. Body test pressure:……………. Bars
    3. Valve and seat test pressure : ……………… bars
    4. Internal protective finish:………………
    5. External protective finish:……………………
    6. Weight of the hydrant: ……………………… kg
    7. Packing and protection of hydrants in transit:………………
    8. Reference of the catalogues, technical literature and drawings provided with the Bid:.....................................................................................................................................
    9. Time of delivery of hydrants at port of shipment:……………………
    10. Name and address of supplier’s agent (if any) in Sri Lanka:…………………………
    11. Deviations from specifications (if any):………………………
  1. Fire Hydrants - Dry Barrel Type

3.12.0 Name of the Manufacturer : ………………………

* + 1. Country of Manufacture :……………………
    2. Manufacturer’s Address:………………………………………………
    3. Date of Manufacture:……………………………….
    4. Is ISO 9001:2015 Quality Management System provided to the factory/ factories ………………………………………………………………………………
    5. 3.12.5.1 Is product conformity certificate from relevant Standard Institution provided to the factory/ factories……………………

3.12.5.2 No of Shipments proposed by the Contractor : …………………………

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* + 1. Standard to which it conform:……………………….
    2. Burried length of hydrant: ……………….. m
    3. Number of outlet nozzles nominal diameter and standard:

No. of outlet nozzles:………………….

Nominal diameter (mm):……………………

Standard:……………………..

* + 1. Inlet Flange

Pressure rating:………………..

Dimensions (mm):……………

Bolt circle dia. (mm):………….

Standard:………………………

* + 1. Material, Hardness range and standard

Material Hardness range Standard

Gaskets: ……………….… ………………. …………….

Nuts and Bolts: …………….. ………………… …………..

* + 1. The direction of closing of the hydrant valve:………………………………….
    2. Colour of the finish paint above ground line:
    3. Weight of the hydrant: ……………………… kg
    4. Packing and protection of hydrants in transit:
    5. Reference of the catalogues, technical literature and drawings provided with the tender:
    6. Port of shipment:
    7. Time of delivery of hydrants at port of shipment:
    8. Name and address of supplier’s agent (if any) in Sri Lanka:
    9. Deviations from specifications (if any):

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1. HDPE PIPES AND FITTINGS

4.0 Name of the Manufacturer : (1) Pipes ……………………………………………………

(2) Fittings…………………………………………………

* 1. No of shipments proposed by the Contractor : …………………………………
  2. Country of Manufacture:

Pipes: ……………………….

Fittings: ………………………

* 1. Manufacturer’s Address and the intended Date of Manufacture:

Address Intended Date of Manufacture

Pipes: ………………….. ………………………………

Fittings: …………………. ………………………………

* 1. Colour of the product :

Pipes: ……………………….

Fittings: ………………………

* 1. Port of Shipment :
  2. 4.6.1 Standards to which pipes and fittings conform:

Pipes: ……………………….

Fittings: ………………………

4.6.2 No of Shipments proposed by the Contractor : ……………………………

* 1. Is Certificate of product conformity from a relevant standards Institution provided :

Pipes ………………….. (attach a copy)

Fittings ………………. (attach a copy)

* 1. Nominal sizes and pressure ratings of Pipes & Fittings:

Nominal Dia. Pressure Rating SDR

Pipes: ……………. ………………. ………

Fittings: …………… ……………….. ………

* 1. Make of compression fittings, Gaskets/ rubber rings, inserts, clamps

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Make/material Intended Date of Manufacture

Body of Compression fittings …………………. ……………………..

Inserts ………………….. ……………………..

Rubber ring/Gasket ………………….. ……………………..

* 1. Characteristics of HDPE compound as granules

1. Compound Density : …………………
2. Carbon black content

(black compound % by mass) …………

1. Carbon black dispersion

(black compound specify the grade range) ……………

* 1. Mechanical characteristics

1. Hydrostatic strength at 200C
2. For pipes …………………
3. For fittings ……………….
4. Hydrostatic strength at 800C
5. For pipes …………………
6. For fittings ……………….
   1. Packing and protection in transit :

Pipes ……………. (specify in detail)

Fittings ……………… (specify in detail)

* 1. Time of delivery:

|  |  |  |
| --- | --- | --- |
|  | FOB | At Site |
| Pipes |  |  |
| Fittings |  |  |

* 1. Reference of the catalogues, technical literature, drawing provided with the tender:

Pipes : ……………………….

Fittings : ……………………

* 1. Name and address of the Supplier’s agent in Sri Lanka: …………………… ………………………………………………………………………………………………………………………….………………………………………………………………………………………………………….

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* 1. Whether ISO 9001 : 2015 quality assurance certificate is available for

manufacturing factory:

(i) (a) For Pipes ……………………………(i) (b) If yes, attach a copy …………

(ii) (a) For Fittings …………………………………(ii) (b) If yes, attach a copy

5. GALVANIZED IRON PIPES & FITTINGS

5.0 Name of the Manufacturer : ………………………

5.1 Country of Manufacturer : ………………………………

5.2 Address of the manufacturer : ……………………………………..

5.3 Manufacturing Process : ……………………………………..

5.4 Thickness of external galvanized coating : ……………………………………..

5.5 Protection of pipes and pipe ends in transit :

Pipes and plain ends :

Flanges :

5.6 Details of Flanges :

|  |  |  |
| --- | --- | --- |
| Pipe Diameter | Bolts & Nuts  Dia. Length No. off | Material |
| …………………  …………………  ………………… | …………………………  …………………………  ………………………… | …………………  …………………  ………………… |

Specify the standards to which the GI pipes and fittings to be supplied under this

Contract comply with :

Is certificate from relevant Institution Provided :

5.7 Specify the duty (Heavy/Medium/Light) :

5.8 Pressure rating of pipes :

5.9 Indicate whether the manufacturing process of the items offered comply with

ISO 9001:2015 Quality Management System Standard.

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Is certificate from relevant Institution provided :

6.0 PUMPS

6.1 MOTOR DRIVEN SELF LUBRICATED VERTICAL TURBINE PUMPING SETS AND ACCESSORIES

6.1.1 Pump

6.1.1.0 Name of the Manufacturer :

6.1.1.1 Make and country of origin:

6.1.1.2 Type :

6.1.1.3 Model :

6.1.1.4 Number of stages :

6.1.1.5 Speed (RPM) :

6.1.1.6 Capacity at specified head (m3/hr) :

6.1.1.7 Efficiency at duty point :

6.1.1.8 Minimum submergence required :

6.1.1.9 Pump casing materials :

6.1.1.10 Impeller material :

6.1.1.11 Pump shaft material :

6.1.1.12 Wear ring material :

6.1.1.13 Column pipe material :

6.1.1.14 Column shaft (Drive shaft) material :

6.1.1.15 Spider bush material :

6.1.1.16 Type of column pipe joint :

6.1.1.17 Type of coupling:

6.1.1.18 Type of thrust bearing:

6.1.1.19 Silt handling capacity:

6.1.1.20 Shut off head :

6.1.1.21 Max. power absorbed by the pump:

6.1.2Motor

6.1.2.0 Name of the Manufacturer :

6.1.2.1 Make and Country of Origin:

6.1.2.2 Model:

6.1.2.3 Type:

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6.1.2.4 Nominal Supply voltage, frequency and number of phases:

6.1.2.5 Allowable voltage fluctuations:

6.1.2.6 Synchronous speed;

6.1.2.7 Full load output power:

6.1.2.8 Full load current ;

6.1.2.9 Power factor at 100% :

at 75% :

at 50% :

Of full load

6.1.2.10 Class of insulation :

6.1.2.11 Enclosure protection class (IP No.) :

6.1.2.12 Motor operation rating :

6.1.2.13 Motor Bearing No. :

1. Drive end :
2. Non drive end :

6.1.2.14 Design life of bearings :

6.1.2.15 Motor efficiency at 100% ;

at 75% :

at 50% :

6.1.2.16 Overall efficiency of pumping set at duty point :

6.1.2.17 Temperature rise after 6 hrs.at 400 V. :

6.1.3 L.T. Panel and Starters :

6.1.3.0 Name of the Manufacturer :

6.1.3.1 Make and country of origin :

6.3.3.2 Make of Main MCCB :

Whether earth fault trip available :

Whether adjustable thermal trip available :

6.1.3.3 Rating of Main MCCB :

6.1.3.4 Make of MCBB :

6.1.3.5 Rating of MCBB :

6.1.3.6 Make of supply voltage monitor :

Whether U/V or O/V adjustable ;

Whether supply imbalance protection available :

Whether phase reversal protection available :

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6.1.3.7 Make of surge diverters :

6.1.3.8 Rated voltage of surge diverters :

6.1.3.9 Type of starter :

6.1.3.10 Make of starter :

6.1.3.11 AC3 rating of contactors :

1.

2.

3.

6.1.3.12 Make of water level switch :

6.1.3.13 Type/Operation of water level switch :

6.1.3.14 Rating of Auto Transformers (if applicable) :

6.1.4 Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.1.4.1 | CEB to change over |  |  |  |  |  |
| 6.1.4.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.1.4.3 | Change over to incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.1.4.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.1.4.5 | Incoming to LT panel |  |  |  |  |  |
| 6.1.4.6 | LT panel to motor starter |  |  |  |  |  |
| 6.1.4.7 | Motor starter to motors |  |  |  |  |  |
| 6.1.4.8 | Control cables in LT panel |  |  |  |  |  |

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6.2 BOREHOLE TYPE SUBMERSIBLE PUMPING SETS AND ACCESSORIES

6.2.1 Pump

6.2.1.0 Name of the Manufacturer :

6.2.1.1 Make and country of origin :

6.2.1.2 Type :

6.2.1.3 Model :

6.2.1.5 Speed (RPM) :

6.2.1.6 Capacity at specified head (m3/hr) :

6.2.1.7 Efficiency at duty point :

6.2.1.8 Number of stages :

6.2.1.9 Overall efficiency :

6.2.1.10 Pump casing materials :

6.2.1.11 Impeller material :

6.2.1.12 Pump shaft material :

6.2.1.13 Casing wearing material :

6.2.1.14 Max. external diameter of pump assembly :

6.2.1.15 Impeller wearing material :

6.2.1.16 Impeller diameter (mm) :

6.2.1.17 Max. impeller diameter (mm) :

6.2.1.18 Shut – off head (m) :

6.2.1.19 Pump bearing nos.

a) Drive end :

6.2.1.20 Designed life of pump bearings :

6.2.1.21 Power absorbed by the pump at duty point :

6.2.1.22 Max. power absorbed by the pump :

6.2.1.23 Shaft Intermediate Bearing Nos. :

6.2.1.24 Type of the Drive Shaft Bearings :

6.2.1.25 Designed life of Drive Shaft Bearings :

6.2.1.26 Critical Speed of Drive Shaft :

6.2 .2 Motor

6.2.2.0 Name of the Manufacturer :

6.2.2.1 Make and Country of Origin :

6.2.2.2 Model :

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6.2.2.3 Type :

6.2.2.4 Nominal Supply voltage, frequency and number of phases :

6.2.2.5 Allowable voltage fluctuations :

6.2.2.6 Synchronous speed ;

6.2.2.7 Full load output power :

6.2.2.8 Full load current ;

6.2.2.9 Power factor at 100% :

at 75% :

at 50% :

Of full load

6.2.2.10 Class of insulation :

6.2.2.11 Enclosure protection class (IP No.) :

6.2.2.12 Motor operation rating :

6.2.2.13 Motor Bearing No. :

Drive end :

Non drive end :

6.2.2.14 Design life of bearings :

6.2.2.15 Motor efficiency at 100% ;

at 75% :

at 50% :

6.2.2.16 Overall efficiency of pumping set at duty point :

6.2.2.17 Temperature rise after 6 hrs.at 400 V. :

6.2.3L.T. Panel and Starters :

6.2.3.0 Name of the Manufacturer :

6.2.3.1 Make and country of origin :

6.2.3.2 Make of Main MCCB :

Whether earth fault trip available :

Whether adjustable thermal trip available :

6.2.3.3 Rating of Main MCCB :

6.2.3.4 Make of MCB’s :

6.2.3.5 Rating of MCB’s :

6.2.3.6 Make of supply voltage monitor :

Whether U/V or O/V adjustable ;

Whether supply imbalance protection available :

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Whether phase reversal protection available :

6.2.3.7 Make of surge diverters :

6.2.3.8 Rated voltage of surge diverters :

6.2.3.9 Type of starter :

6.2.3.10 Make of starter :

6.2.3.11 AC3 rating of contactors :

1.

2.

3.

6.2.3.12 Make of water level switch :

6.2.3.13 Type/Operation of water level switch :

6.2.3.14 Rating of Auto Transformers (if applicable) :

6.2.4. Water level guard

6.2.4.0 Name of the Manufacturer :

6.2.4.1 Make and country of origin :

6.2.4.2 type :

6.2.5 Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.2.5.1 | CEB to change over |  |  |  |  |  |
| 6.2.5.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.2.5.3 | Change over to incoming MCCB(if applicable) |  |  |  |  |  |
| 6.2.5.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.2.5.5 | Incoming to LT panel |  |  |  |  |  |
| 6.2.5.6 | LT panel to motor starter |  |  |  |  |  |
| 6.2.5.7 | Motor starter to motors |  |  |  |  |  |
| 6.2.5.8 | Control cables in LT panel |  |  |  |  |  |

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6.3 HORIZONTAL SHAFT DRIVEN DOUBLE SUCTION PUMPING SETS AND ACCESSORIES

6.3.1 Pump

6.3.1.0 Name of the Manufacturer :

6.3.1.1 Make and country of origin :

6.3.1.2 Type :

6.3.1.3 Model :

6.3.1.4 Number of stages :

6.3.1.5 Speed (RPM) :

6.3.1.6 Capacity at specified head (m3/hr) :

6.3.1.7 Efficiency at duty point :

6.3.1.8 NPSH required at duty point(m) :

6.3.1.9 Safety margin required for over and above NPSHR (m) :

6.3.1.10 Pump casing materials :

6.3.1.11 Impeller material :

6.3.1.12 Pump shaft material :

6.3.1.13 Shaft sleeve material :

6.3.1.14 Casing wearing material :

6.3.1.15 Impeller wearing material :

6.3.1.16 Impeller diameter (mm) :

6.3.1.17 Max. impeller diameter (mm) :

6.3.1.18 Shut – off head (m) :

6.3.1.19 Pump bearing nos.

a) Drive end :

6.3.1.20 Designed life of pump bearings :

6.3.1.21 Power absorbed by the pump at duty point :

6.3.1.22 Max. power absorbed by the pump :

6.3.1.23 Shaft Intermediate Bearing Nos. :

6.3.1.24 Type of the Drive Shaft Bearings :

6.3.1.25 Designed life of Drive Shaft Bearings :

6.3.1.26 Critical Speed of Drive Shaft :

6.3.2 Motor

6.3.2.0 Name of the Manufacturer :

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6.3.2.1 Make and Country of Origin :

6.3.2.2 Model :

6.3.2.3 Type :

6.3.2.4 Nominal Supply voltage, frequency and number of phases :

6.3.2.5 Allowable voltage fluctuations :

6.3.2.6 Synchronous speed ;

6.3.2.7 Full load output power :

6.3.2.8 Full load current ;

6.3.2.9 Power factor at 100% :

at 75% :

at 50% :

Of full load

6.3.2.10 Class of insulation :

6.3.2.11 Enclosure protection class (IP No.) :

6.3.2.12 Motor operation rating :

6.3.2.13 Motor Bearing No. :

Drive end :

Non drive end :

6.3.2.14 Design life of bearings :

6.3.2.15 Motor efficiency at 100% ;

at 75% :

at 50% :

6.3.2.16 Overall efficiency of pumping set at duty point :

6.3.2.17 Temperature rise after 6 hrs.at 400 V. :

6.3.3 L.T. Panel and Starters :

6.3.3.0 Name of the Manufacturer :

6.3.3.1 Make and country of origin :

6.3.3.2 Make of Main MCCB :

Whether earth fault trip available :

Whether adjustable thermal trip available :

6.3.3.3 Rating of Main MCCB :

6.3.3.4 Make of MCB’s :

6.3.3.5 Rating of MCB’s :

6.3.3.6 Make of supply voltage monitor :

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Whether U/V or O/V adjustable ;

Whether supply imbalance protection available :

Whether phase reversal protection available :

6.3.3.7 Make of surge diverters :

6.3.3.8 Rated voltage of surge diverters :

6.3.3.9 Type of starter :

6.3.3.10 Make of starter :

6.3.3.11 AC3 rating of Contactors :

1.

2.

3.

6.3.3.12 Make of water level switch :

6.3.3.13 Type/Operation of water level switch :

6.3.3.14 Rating of Auto Transformers (if applicable) :

6.3.4. Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.3.4.1 | CEB to change over |  |  |  |  |  |
| 6.3.4.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.3.4.3 | Change over to incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.3.4.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.3.4.5 | Incoming to LT panel |  |  |  |  |  |
| 6.3.4.6 | LT panel to motor starter |  |  |  |  |  |
| 6.3.4.7 | Motor starter to motors |  |  |  |  |  |
| 6.3.4.8 | Control cables in LT panel |  |  |  |  |  |

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6.4 END SUCTION VERTICAL DELIVERY BACK PULL – OUT CENTRIFUGAL PUMPING SETS AND ACCESSORIES

6.4.1 Pump

6.4.1.0 Name of the Manufacturer :

6.4.1.1 Make and country of origin :

6.4.1.2 Type :

6.4.1.3 Model :

6.4.1.4 Number of stages :

6.4.1.5 Speed (RPM) :

6.4.1.6 Capacity at specified head (m3/hr) :

6.4.1.7 Efficiency at duty point :

6.4.1.8 NPSH required at duty point (m) :

6.4.1.9 Safety margin required for over and above NPSHR (m) :

6.4.1.10 Pump casing materials :

6.4.1.11 Impeller material :

6.4.1.12 Pump shaft material :

6.4.1.13 Shaft sleeve material :

6.4.1.14 Casing wearing material :

6.4.1.15 Impeller wearing material :

6.4.1.16 Impeller diameter (mm) :

6.4.1.17 Max. impeller diameter (mm) :

6.4.1.18 Shut – off head (m) :

6.4.1.19 Pump bearing nos.

a) Drive end :

6.4.1.20 Designed life of pump bearings :

6.4.1.21 Power absorbed by the pump at duty point :

6.4.1.22 Max. power absorbed by the pump :

6.4.1.23 Shaft Intermediate Bearing Nos. :

6.4.1.24 Type of the Drive Shaft Bearings :

6.4.1.25 Designed life of Drive Shaft Bearings :

6.4.1.26 Critical Speed of Drive Shaft :

6.4.2 Motor

6.4.2.0 Name of the Manufacturer :

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6.4.2.1 Make and Country of Origin :

6.4.2.2 Model :

6.4.2.3 Type :

6.4.2.4 Nominal Supply voltage, frequency and number of phases :

6.4.2.5 Allowable voltage fluctuations :

6.4.2.6 Synchronous speed ;

6.4.2.7 Full load output power :

6.4.2.8 Full load current ;

6.4.2.9 Power factor at 100% :

at 75% :

at 50% :

Of full load

6.4.2.10 Class of insulation :

6.4.2.11 Enclosure protection class (IP No.) :

6.4.2.12 Motor operation rating :

6.4.2.13 Motor Bearing No. :

Drive end :

Non drive end :

6.4.2.14 Design life of bearings :

6.4.2.15 Motor efficiency at 100% ;

at 75% :

at 50% :

6.4.2.16 Overall efficiency of pumping set at duty point :

6.4.2.17 Temperature rise after 6 hrs.at 400 V. :

6.4.3 L.T. Panel and Starters :

6.4.3.0 Name of the Manufacturer :

6.4.3.1 Make and country of origin :

6.4.3.2 Make of Main MCCB :

Whether earth fault trip available :

Whether adjustable thermal trip available :

6.4.3.3 Rating of Main MCCB :

6.4.3.4 Make of MCB’s :

6.4.3.5 Rating of MCB’s :

6.4.3.6 Make of supply voltage monitor :

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Whether U/V or O/V adjustable ;

Whether supply imbalance protection available :

Whether phase reversal protection available :

6.4.3.7 Make of surge diverters :

6.4.3.8 Rated voltage of surge diverters :

6.4.3.9 Type of starter :

6.4.3.10 Make of starter :

6.4.3.11 AC3 rating of contactors :

1.

2.

3.

6.4.3.12 Make of water level switch :

6.4.3.13 Type/Operation of water level switch :

6.4.3.14 Rating of Auto Transformers (if applicable) :

6.4.4 Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.4.4.1 | CEB to change over |  |  |  |  |  |
| 6.4.4.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.4.4.3 | Change over to incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.4.4.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.4.5.5 | Incoming to LT panel |  |  |  |  |  |
| 6.4.5.6 | LT panel to motor starter |  |  |  |  |  |
| 6.4.5.7 | Motor starter to motors |  |  |  |  |  |
| 6.4.5.8 | Control cables in LT panel |  |  |  |  |  |

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6.5 VERTICAL SHAFT DRIVEN DOUBLE SUCTION CENTRIFUGAL PUMPING SETS AND ACCESSORIES

6.5.1 Pump and Drive Shafts

6.5.1.0 Name of the Manufacturer :

6.5.1.1 Make and Country of Origin:‑

6.5.1.2 Type:‑

6.5.1.3 Model:‑

6.5.1.4 Number of stages:‑

6.5.1.5 Speed (RPM):‑

6.5.1.6 Capacity at specified head (m3/hr):‑

6.5.1.7 Efficiency at duty point (%):‑

6.5.1.8 NPSH required at duty point (m) :‑

6.5.1.9 Safety margin required for over and above NPSHR (m) :-

6.5.1.10 Pump casing material:‑

6.5.1.11 Impeller material:‑

6.5.1.12 Pump shaft material:‑

6.5.1.13 Shaft sleeve material:‑

6.5.1.14 Casing wearing material :-

6.5.1.15 Impeller wearing material:-

6.5.1.16 Impeller diameter (mm):‑

6.5.1.17 Max. Impeller diameter (mm):-

6.5.1.18 Shut-off head (m):‑

6.5.1.19 Pump Bearing Nos.

a) Drive end:‑

b) Non drive end:‑

6.5.1.20 Designed life of pump bearings:-

6.5.1.21 Power absorbed by the pump at duty point :-

6.5.1.22 Max. Power absorbed by the pump :-

6.5.1.23 Make and country of origin of drive shaft:-

6.5.1.24 Length of each drive shaft:-

6.5.1.25 Drive shaft intermediate bearing Nos. :-

6.5.1.26 Type of the drive shaft bearings :-

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6.5.1.27 Designed life of drive shaft bearings :-

6.5.1.28 Critical speed of drive shaft :-

6.5.1.29 Length of drive shafts :-

6.5.1.30 Total Number of drive shafts :-

6.5.2 Motor:‑

6.5.2.0 Name of the Manufacturer :

6.5.2.1 Make and country of origin:‑

6.5.2.2 Model:‑

6.5.2.3 Type:‑

6.5.2.4 Nominal supply voltage frequency and number of phase:‑

6.5.2.5 Allowable voltage fluctuation:‑

6.5.2.6 Synchronous speed:‑

6.5.2.7 Full load output power:‑

6.5.2.8 Full load current:‑

6.5.2.9 Power factor at 100% :-

at 75% :-

at 50% :-

Full Load.

6.5.2.10 Class of insulation:‑

6.5.2.11 Enclosure protection class (IP No):‑

6.5.2.12 Motor operation rating :-

6.5.2.13 Motor bearing No: :‑

a) Drive end:‑

b) Non drive end:‑

6.5.2.14 Designed life of bearings :-

6.5.2.15 Motor efficiency at 100% :-

at 75% :-

at 50% :-

Full Load.

6.5.2.16 Overall efficiency of pumping set at duty point:‑

6.5.2.17 Temperature rise after 6 Hrs. at 400V :-

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6.5.3 L.T Panel and Starters:‑

6.5.3.0 Name of the Manufacturer :

6.5.3.1 Make and Country of Origin:‑

6.5.3.2 Make of main MCCB:‑

6.5.3.3 Indicate

Whether earth fault trip is available:-

(b) Whether adjustable thermal trip is available:-

6.5.3.4 Rating of Main MCCB:-

6.5.3.5 Rating of starter MCCB :-

6.5.3.6 Make of MCB’s :-

6.5.3.7 Rating’s of MCBs :-

6.5.3.8 Make of supply voltage monitor :-

6.5.3.9 Indicate whether U/V or O/V and adjustable :-

6.5.3.10 Indicate whether supply Imbalance protection is available :-

6.5.3.11 Indicate whether phase reversal protection is available :-

6.5.3.12 Make of surge diverters :-

6.5.3.13 Rated Voltage of surge diverters :-

6.5.3.14 Type of starter :-

6.5.3.15 Make of starter :-

6.5.3.16 AC-3 Rating of Contactors :-

1.

2.

3.

6.5.3.17 Make of water level switch :-

6.5.3.18 Type/Operation of water level switch :-

6.5.3.19 Rating of Auto transformers (if applicable) :-

6.5.3.20 Indicate whether thermal sensors provided in the auto transformer :-

6.5.3.21 Indicate whether all control wires in the starter and LT panel

are lugged and connected :-

6.5.3.22 Indicate whether all control wires are lugged and connected :-

6.5.3.23 Indicate whether power factor correction capacitors are mounted :-

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6.5.4 Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.5.4.1 | CEB to change over |  |  |  |  |  |
| 6.5.4.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.5.4.3 | Change over to incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.5.4.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.5.4.5 | Incoming to LT panel |  |  |  |  |  |
| 6.5.4.6 | LT panel to motor starter |  |  |  |  |  |
| 6.5.4.7 | Motor starter to motors |  |  |  |  |  |
| 6.5.4.8 | Control cables in LT panel |  |  |  |  |  |

6.6 VERTICALLY/HORIZONTALLY MOUNTED IN LINE BOOSTER PUMPING SETS AND ACCESSORIES

6.6.1 Pump

6.6.1.0 Name of the Manufacturer :

6.6.1.1 Make and country of origin :

6.6.1.2 Type :

6.6.1.3 Model :

6.6.1.4 Number of stages :

6.6.1.5 Speed (RPM) :

6.6.1.6 Capacity at specified head (m3/hr) :

6.6.1.7 Efficiency at duty point :

6.6.1.8 NPSH required at duty point(m) :

6.6.1.9 Safety margin required for over and above NPSHR (m) :

6.6.1.10 Pump casing materials :

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6.6.1.11 Impeller material :

6.6.1.12 Pump shaft material :

6.6.1.13 Shaft sleeve material :

6.6.1.14 Casing wearing material :

6.6.1.15 Impeller wearing material :

6.6.1.16 Impeller diameter (mm) :

6.6.1.17 Max. impeller diameter (mm) :

6.6.1.18 Shut – off head (m) :

6.6.1.19 Pump bearing nos.

a) Drive end :

6.6.1.20 Designed life of pump bearings :

6.6.1.21 Power absorbed by the pump at duty point :

6.6.1.22 Max. power absorbed by the pump :

6.6.1.23 Shaft Intermediate Bearing Nos. :

6.6.1.24 Type of the Drive Shaft Bearings :

6.6.1.25 Designed life of Drive Shaft Bearings :

6.6.1.26 Critical Speed of Drive Shaft :

6.6.2 Motor

6.6.2.0 Name of the Manufacturer :

6.6.2.1 Make and Country of Origin :

6.6.2.2 Model :

6.6.2.3 Type :

6.6.2.4 Nominal Supply voltage, frequency and number of phases :

6.6.2.5 Allowable voltage fluctuations :

6.6.2.6 Synchronous speed ;

6.6.2.7 Full load output power :

6.6.2.8 Full load current ;

6.6.2.9 Power factor at 100% :

at 75% :

at 50% :

Of full load

6.6.2.10 Class of insulation :

6.6.2.11 Enclosure protection class (IP No.) :

6.6.2.12 Motor operation rating :

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6.6.2.13 Motor Bearing No. :

Drive end :

Non drive end :

6.6.2.14 Design life of bearings :

6.6.2.15 Motor efficiency at 100% ;

at 75% :

at 50% :

6.6.2.16 Overall efficiency of pumping set at duty point :

6.6.2.17 Temperature rise after 6 hrs.at 400 V. :

6.6.3 L.T. Panel and Starters :

6.6.3.0 Name of the Manufacturer :

6.6.3.1 Make and country of origin :

6.6.3.2 Make of Main MCCB :

Whether earth fault trip available :

Whether adjustable thermal trip available :

6.6.3.3 Rating of Main MCCB :

6.6.3.4 Make of MCB’s :

6.6.3.5 Rating of MCB’s :

6.6.3.6 Make of supply voltage monitor :

Whether U/V or O/V adjustable ;

Whether supply imbalance protection available :

Whether phase reversal protection available :

6.6.3.7 Make of surge diverters :

6.6.3.8 Rated voltage of surge diverters :

6.6.3.9 Type of starter :

6.6.3.10 Make of starter :

6.6.3.11 AC3 rating of contactors :

1.

2.

3.

6.6.3.12 Make of water level switch :

6.6.3.13 Type/Operation of water level switch :

6.6.3.14 Rating of Auto Transformers (if applicable) :

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Revised on 15-12-2021

6.6.4 Cables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cables | Make | Size | Type | Material | Length |
| 6.6.4.1 | CEB to change over |  |  |  |  |  |
| 6.6.4.2 | Generator to change over  (if applicable) |  |  |  |  |  |
| 6.6.4.3 | Change over to incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.6.4.4 | CEB to Incoming MCCB  (if applicable) |  |  |  |  |  |
| 6.6.4.5 | Incoming to LT panel |  |  |  |  |  |
| 6.6.4.6 | LT panel to motor starter |  |  |  |  |  |
| 6.6.4.7 | Motor starter to motors |  |  |  |  |  |
| 6.6.4.8 | Control cables in LT panel |  |  |  |  |  |

7.0 JOINT PROTECTION MATERIAL

1. Country of manufacture:

(1) Mastic Primer………………………………………………

(2) Mastic Paste……………………………………………………….

(3) Mastic Tape……………………………………………………….

1. Manufacturers’ name and Address:
2. Mastic Primer…………………………………………………………

……………………………………….

1. Mastic Paste……………………………………………………….

………………………………..

1. Mastic Tape…………………………………………………
   1. Volatile Organic Compound Content……………………………….
   2. Self-Supporting…………………………….

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* 1. Cracking…………………………..
  2. Moisture and state limit……………………………………..
  3. Resistivity to;

1. Mineral Acid………………………………
2. Alkalis……………………………..
3. Salts……………………………….
   1. Suitability Climate…………………………………………….
4. Internal protection : ………………………………………………………..
5. External protection ………………………………………………………..
6. Weight of the packs …………….. kgs ………………………………
7. Reference of the catalogues, technical literature and drawings provided with the Bid:
8. Port of shipment: ………………………………………..
9. Time of delivery of the materials at port of shipment: ……………………………………
10. Name and Address of Supplier’s accredited agent in Sri Lanka: ………………
11. Deviations from Specifications (if any):

8.0 GAS CHLORINATORS AND ACCESSORIES

8.1 CHLORINATORS

1. Make and Country of Manufacture: ..........................................................................

2. Model :....................................................................................................

3. Type :....................................................................................................

4. Availability of ISO 9001:2015……………………………………………………

5. 5.1 Port of shipment ………………………………………………………..

5.2 No of shipment proposed by the Contractor ………………………………

6. What is the feed range and control possible: ....................................................

7. Is the Feed Range manually adjustable: ...........................................................

8. Type of Chlorine flow indicator: .........................................................................

9. Accuracy of chlorine flow indicator: ....................................................................

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10. What is the maximum Operating Water Pressure: ............................................

11. What is the solution Discharge Pressure: .........................................................

12. The operating temperature range: .....................................................................

13. Is a Chlorine Pressure Gauge provided: ............................................................

14. If so, type and size of dial: ................................................................................

15. Is an operating water pressure Gauge provided: ................................................

16. If so, type and size of dial: ..............................................................................…

17. Chlorinator diaphragm material: .........................................................................

18. Seat material: ....................................................................................................

19. Is corrosion resistance material used for the chlorinator: ....................................

20. Are two check valves provided to prevent ingress of water to chlorinator:............

..................................................................................................……………………

21. The type of valves provided: .............................................................................

22. Is chlorine supply status indicated on the chlorinator: ........................................

23. The type of piping and connections used for chlorine supply line from cylinder:

.........................................................................................................................…….

24. The type of piping used for vacuum and vent pipes and connections:......................................

25. Type of "Y" strainers provided: .................................................................................................

26. Does a loss in operating water pressure automatically shut-off the chlorine gas flow?...................................................................................................................

27. The type and make of cabinet: ...................................................………………...

28. Type of Diffuser: ...............................................................................................

29. Specific spares provided for the chlorinator unit ……………………………….

8.2 BOOSTER PUMPING SETS AND ACCESSORIES

8.2.1 PUMP

1. Make and Country of Manufacture:‑

2 Port of shipment

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3 Type:‑

4 Model:‑

5 Stagers:-

6 R.P.M.:-

7 Capacity at duty point m3/hr: -

8.2.2 MOTORS

1. Make and Country of Manufacture:‑
2. Port of shipment

3 Model:‑

4 Nr. of Poles :-

5 Voltage :-

6 Class of Insulation :-

7 Rated output in kW :-

8 Current approximate in Amps at rated output :-

9 Speed in R.P.M. at rated output:-

8.2.3 STARTERS

1 Make and Country of Manufacture:‑

2 Whether push button operated:‑

8.2.4 EXTRACTOR (Exhauster)

1 Make and Country of Manufacture:‑

2 Model: ‑

3 Capacity:-m3/hr:-

4 Noise level at 1m (dB): -

5 Size (Diameter mm): -

Revised on 11-01-2022

8.2.5 WEIGHING SCALES

1 Make and Country of Manufacture: ‑

2 Model: ‑

3 Type of Operation: -

8.2.6 CHLORINE LEAK DETECTOR

1 Make and Country of Manufacture: ‑

2 Model: ‑

3 Type of Operation: -

8.2.7 OTHERS

1. Is chlorine measuring scale provided to measure the weight of chlorine in cylinders?

2. What is the type of safety equipment provided? :-

3. The type and make or Residual Chlorine test kit provided:-

4. Whether available ex-stock : -

5. Otherwise, approximate date of delivery:-

8.3 CHEMICAL CARRYING TROLLEY

1. Make and Country of Manufacture: ‑
2. Type: ‑
3. Model: ‑
4. Capacity: -
5. Material: -
6. No of cylinders, this can carry.
7. Whether it suitable for chlorine rich environment.

Revised on 15-12-2021

Revised on 11-01-2022

8.4 CHLORINE CYLINDER CARRYING TROLLEY

1. Make and Country of Manufacture: ‑
2. Type: ‑
3. Model: ‑
4. Capacity: -
5. Material: -
6. No of cylinders, this can carry.
7. Whether it suitable for chlorine rich environment.

8.5 HOISTING EQUIPMENT FOR CHEMICALS

1. Make and Country of Manufacture: ‑
2. Type: ‑
3. Model: ‑
4. Capacity: -
5. Motor power: -
6. Full load current: -
7. Nominal supply voltage, frequency and number of phase: -
8. Allowable voltage fluctuation: -
9. Details of similar works carried out in the past 3 years :-
10. Details of similar facilities available

(a). Machinery

(b). Location of workshop

1. Details of technical staff to be deputed to carry out the installation work: -

8.6 HOISTING EQUIPMENT FOR TONNERS

1. Make and Country of Manufacture: ‑
2. Type: ‑

Revised on 11-01-2022

1. Model: ‑
2. Capacity: -
3. Motor power: -
4. Full load current: -
5. Nominal supply voltage, frequency and number of phase: -
6. Allowable voltage fluctuation: -
7. Details of similar works carried out in the past 3 years :-
8. Details of similar facilities available

(a). Machinery

(b). Location of workshop

1. Details of technical staff to be deputed to carry out the installation work: -

8.7 DIAPHRAGM TYPE ALUM/ POLY ALUMINIUM CHLORIDE DOSING PUMP & ACCESSORIES

8.7.1 PUMPS

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
|  | Pump: - | Alum/Poly aluminium chloride |
|  | Make and Country of Origin :- |  |
|  | Type :- |  |
|  | Model No. :- |  |
|  | Maximum Capacity L/hr :- |  |
|  | Capacity at specified head, Is characteristic curve provided :- |  |
|  | Inlet diameter/outlet diameter mm :- |  |
|  | Pump Casing Material :- |  |
|  | Diaphragm Material :- |  |
|  | Type of Bearings :- |  |
|  | No. of Strokes/Min :- |  |
|  | Make, model and type of the pressure relief valve :- |  |
|  | Make, model and type of the pressure retention valve :- |  |

8.7.2 MOTOR

|  |  |  |
| --- | --- | --- |
|  | Motor: - | Alum/Poly aluminium chloride |
|  | Make and Country of Origin :- |  |
|  | Model/Type No. :- |  |
|  | Model No :- |  |
|  | Nominal Supply voltage (V) :- |  |
|  | Allowable voltage fluctuation % :- |  |
|  | Synchronous speed (RPM) :- |  |
|  | Full load power factor :- |  |
|  | Insulation Class :- |  |
|  | Enclosure protection class (IP No):- |  |

8.7.3 TANK

|  |  |  |
| --- | --- | --- |
|  |  | Alum/Poly aluminium chloride |
|  | Country of origin: |  |
|  | Name and Address of the Manufacture:- |  |
|  | Tank capacity:- |  |
|  | Material of construction:- |  |
|  | Material Thickness:- |  |
|  | Coating Material and Thickness:- |  |
|  | Whether coating material is food quality:- |  |
|  | Warranty certificate for the coating:- |  |
|  | Whether it provide suitable provision to put chemical easily:- |  |
|  | Other :- |  |

Revised on 11-01-2022

8.7.4 STIRRER

|  |  |  |
| --- | --- | --- |
|  |  | Alum/Poly aluminium chloride |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Model: ‑ |  |
|  | Type: ‑ |  |
|  | Material of construction of the Impeller and Shaft |  |
|  | Number of blades in the Impeller and diameter of the shaft: - |  |
|  | Rotating Speed: - |  |
|  | Whether speed reduction Gear box provided: - |  |
|  | If yes, Mentioned the Gear ratio: - |  |
|  | Nominal supply voltage frequency and number of phase: ‑ |  |
|  | Allowable voltage fluctuation: ‑ |  |
|  | Full load output power: ‑ |  |
|  | Full load current: ‑ |  |
|  | Power factor at full load: - |  |
|  | Class of insulation: ‑ |  |
|  | Enclosure protection class (IP No): ‑ |  |
|  | Motor Efficiency: - |  |

8.7.5 SCRUBBER/DUST EXTRACTOR FOR POLY ALUMINIUM CHLORIDE

* 1. Method of extraction
  2. Country of origin
  3. Model No
  4. Made of material

Revised on 11-01-2022

8.7.6 CONTROL PANEL FOR ALUM/ POLY ALUMINIUM CHLORIDE STIRRER

|  |  |  |
| --- | --- | --- |
|  |  | Alum/Poly aluminium chloride |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Country of Manufacture: - |  |
|  | Make of MCB: - |  |
|  | Rating’s of MCB: - |  |
|  | Type of Starter: - |  |
|  | Make of Starter: - |  |
|  | Make of water level switch: - |  |
|  | Type/Operation of water level switch:- |  |
|  | Whether dry running protection is provided:- |  |
|  | Whether all control wires in the starter and LT Panel are lugged and connected:- |  |
|  | Whether all control wires are numbered: - |  |

8.7.7 CONTROL PANEL FOR ALUM DOSING PUMP

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
|  |  | Alum/Poly aluminium chloride |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Country of Manufacture: - |  |
|  | Make of MCB: - |  |
|  | Rating’s of MCB: - |  |
|  | Type of Starter: - |  |
|  | Make of Starter: - |  |
|  | Make of water level switch: - |  |
|  | Type/Operation of water level switch:- |  |
|  | Whether dry running protection is provided:- |  |
|  | Whether all control wires in the starter and LT Panel are lugged and connected:- |  |
|  | Whether all control wires are numbered: - |  |
|  |  |  |

* 1. DIAPHRAGM TYPE LIME DOSING PUMPS& ACCESSORIES

8.8.1 PUMP

|  |  |  |
| --- | --- | --- |
|  | Pump: - | Lime |
|  | Make and Country of Origin :- |  |
|  | Type :- |  |
|  | Model No. :- |  |
|  | Maximum Capacity L/hr :- |  |
|  | Capacity at specified head, Is characteristic curve provided :- |  |
|  | Inlet diameter/outlet diameter mm :- |  |
|  | Pump Casing Material :- |  |
|  | Diaphragm Material :- |  |
|  | Type of Bearings :- |  |
|  | No. of Strokes/Min :- |  |
|  | Make, model and type of the pressure relief valve :- |  |
|  | Make, model and type of the pressure retention valve :- |  |

8.8.2 MOTOR

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
|  | Motor: - | Lime |
|  | Make and Country of Origin :- |  |
|  | Model/Type No. :- |  |
|  | Model No :- |  |
|  | Nominal Supply voltage (V) :- |  |
|  | Allowable voltage fluctuation % :- |  |
|  | Synchronous speed (RPM) :- |  |
|  | Full load power factor :- |  |
|  | Insulation Class :- |  |
|  | Enclosure protection class (IP No):- |  |

8.8.3 TANK

|  |  |  |
| --- | --- | --- |
|  |  | Lime |
|  | Country of origin: |  |
|  | Name and Address of the Manufacture:- |  |
|  | Tank capacity:- |  |
|  | Material of construction:- |  |
|  | Material Thickness:- |  |
|  | Coating Material and Thickness:- |  |
|  | Whether coating material is food quality:- |  |
|  | Warranty certificate for the coating:- |  |
|  | Whether it provide suitable provision to put chemical easily:- |  |
|  | Other :- |  |

8.8.4 STIRRER

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
|  |  | Lime |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Model: ‑ |  |
|  | Type: ‑ |  |
|  | Material of construction of the Impeller and Shaft |  |
|  | Number of blades in the Impeller and diameter of the shaft: - |  |
|  | Rotating Speed: - |  |
|  | Whether speed reduction Gear box provided: - |  |
|  | If yes, Mentioned the Gear ratio: - |  |
|  | Nominal supply voltage frequency and number of phase: ‑ |  |
|  | Allowable voltage fluctuation: ‑ |  |
|  | Full load output power: ‑ |  |
|  | Full load current: ‑ |  |
|  | Power factor at full load: - |  |
|  | Class of insulation: ‑ |  |
|  | Enclosure protection class (IP No): ‑ |  |
|  | Motor Efficiency: - |  |

8.8.5 CONTROL PANEL FOR LIME STIRRER

|  |  |  |
| --- | --- | --- |
|  |  | Lime |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Country of Manufacture: - |  |
|  | Make of MCB: - |  |
|  | Rating’s of MCB: - |  |
|  | Type of Starter: - |  |
|  | Make of Starter: - |  |
|  | Make of water level switch: - |  |
|  | Type/Operation of water level switch:- |  |
|  | Whether dry running protection is provided:- |  |
|  | Whether all control wires in the starter and LT Panel are lugged and connected:- |  |
|  | Whether all control wires are numbered: - |  |

Revised on 11-01-2022

8.8.6 CONTROL PANEL FOR LIME DOSING PUMP

|  |  |  |
| --- | --- | --- |
|  |  | Lime |
|  | Name and Address of the Manufacture:- |  |
|  | Make: ‑ |  |
|  | Country of Manufacture: - |  |
|  | Make of MCB: - |  |
|  | Rating’s of MCB: - |  |
|  | Type of Starter: - |  |
|  | Make of Starter: - |  |
|  | Make of water level switch: - |  |
|  | Type/Operation of water level switch:- |  |
|  | Whether dry running protection is provided:- |  |
|  | Whether all control wires in the starter and LT Panel are lugged and connected:- |  |
|  | Whether all control wires are numbered: - |  |

Revised on 11-01-2022

**8. DEVIATIONS FROM SPECIFICATIONS**

**DEVIATIONS FROM SPECIFICATIONS**

**Preamble**

The Bidder is required to list any deviations of materials workmanship etc. from the Specifications including such information as has already been given elsewhere in the Tender Documents. The information shall be in sufficient detail to enable the Engineer to make a realistic assessment of the effect of such deviations on the performance or life of the materials to be supplied and also such deviation if any shall be subject to Clause 26.2 (a) of Instructions to Bidders.

The list shall also include deviations from the Specifications relating to the mode of operation and/or control of any item of equipment, and any deviations from the specified design requirements for plant components.

**Deviations**

Note:

1. Bidder shall submit a detailed technical comparison (Specified Vs Supplied) if their products deviate from performance criteria manifested in the Specifications.
2. Additional sheets should be attached as necessary.

Revised on 11-01-2022

**9. SCHEDULE OF DAYWORKS**

* **PREAMBLE NOTES ON DAYWORKS SCHEDULES**
* **SCHEDULE OF DAYWORKS RATES FOR LABOUR**
* **SCHEDULE OF DAYWORKS RATES FOR MATERIALS**
* **SCHEDULE OF DAYWORKS RATES FOR CONSTRUCTIONAL PLANT**

# SCHEDULES OF DAYWORKS

**PREAMBLE NOTES ON DAYWORK SCHEDULES**

**General**

Reference should be made to Clause 53 of the Conditions of Contract. Work shall not be executed on day work basis except by written order of the Engineer. The rates specifies shall apply to any quantities of day work ordered by the Engineer. Day work rates are exclusive of VAT.

The day work rates for labour, material and Contractor’s Equipment do not include percentages to cover contractor’s overhead and profit. Contractor may add maximum percentage over and above the day work rate to cover overhead and profit as specified in each section below.

**Labour for day work**

Only the time of different classes of labour directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing the work with the gangs will also be measured but not the time of foreman or other supervisory personnel.

The day work rates for labour shall cover all direct costs to the contractor, including the amounts of wages paid to such labour, transporting time, subsistence allowances and any sums paid to or in on behalf of such labour for social benefits in accordance with Sri Lankan Law.

The overhead and profit component, maximum of 15% of daywork rates to cover the contractor’s profit, overhead, superintendence, liabilities and insurance and allowances to labour, time keeping, clerical and office work, the use of consumable stores, utilities, the cost of using, repairing and maintaining the tools necessary to each class of workman.

**Material for day work**

The basic rates for material is based on the invoice price, freight, insurance, handling expenses, damages, losses, wastages etc. and shall provide and delivery to site as directed by the Engineer. The contractor shall be entitled to payment in respect of materials used for day work at the maximum of 6% of day work to cover the overhead and profit.

**Contractor’s Equipment for daywork**

The contractor shall be entitled to payment in respect of Contractor’s Equipment employed on daywork. The rates include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricants and other consumables. Contractor may add a maximum of 10% overhead and profit component to the day work rates to cover his profit, overhead, superintendence, administrative costs related to use such equipment, liabilities, time keeping and any other allied works.

Revised on 20-02-2018

In calculating the payment due to the Contractor for Contractor’s Equipment employed on day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the site where the Contractor’s Equipment was located when ordered by the Engineer to be employed on day work and the time of return journey there to shall be considered for payment.

Revised on 04-10-2017

**SCHEDULE OF DAYWORKS RATES**

**FOR LABOUR**

*Note : Rates shall be taken from latest available rate book and it’s revision.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTION | | UNIT | RATE  LKR |
| 1 | Unskilled Labour |  | day | *Rates shall be taken from latest available rate book and it’s revision.* |
| 2 | Helper |  | day |
| 3 | Pipe Layer |  | day |
| 4 | Fitter |  | day |
| 5 | Mason |  | day |
| 6 | Carpenter and Joiner |  | day |
| 7 | Steel Work Erector |  | day |
| 8 | Tool Operator |  | day |
| 9 | Tiller |  | day |
| 10 | Plumber |  | day |
| 11 | Welder |  | day |
| 12 | Painter |  | day |
| 13 | Electrician |  | day |
| 14 | Mechanic |  | day |
| 15 | Bar Bender |  | day |
| 16 | Operator (Heavy Machine) |  | day |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Note : | VAT not included. |  |  |  |
|  | Contractor's markup included. |  |  |  |
| Source: | ………………………………. |  |  |  |
|  |  |  |  |  |

**SCHEDULE OF DAYWORKS RATES**

Revised on 02-09-2022

**FOR MATERIALS**

*Note : Rates shall be taken from latest available rate book and it’s revision.*

Revised on 02-09-2022

|  |  |  |  |
| --- | --- | --- | --- |
| Item  No. | Description | Unit | Basic Rate  LKR |
| 1.1 | Portland Cement - Local | 50 kg bag | *Rates shall be taken from latest available rate book and it’s revision.* |
| 1.2 | Portland Cement - Imported | 50 kg bag |
| 2.1 | Mild steel / Tor steel (Sanstha) | kg |
| 2.2 | Mild steel / Tor steel (Other SLS) | kg |
| 3.1 | 6mm mild steel (coil) | kg |
| 3.2 | Binding Wire (gauge 18 & 16) | kg |
| 4. | Fine aggregate as specified in Clause 1.6.1 of the  ICTAD specification (SCA/4/1) for Building Works –  Volume 1 |  |
| 4.1 | Fine Sand | m3 |
| 4.2 | Coarse Sand | m3 |
| 4.3 | Sea sand (wash & unseived) | m3 |
| 5. | Quarry Dust | m3 |
| 6. | Coarse aggregate for concrete as specified in Clause 30.2 of the General Specification for Civil Engineering construction of size; |  |
| 6.1 | ½” (Chips) | m3 |
| 6.2 | ¾” (Metal) | m3 |
| 6.3 | 1” (Metal) | m3 |
| 6.4 | 1½” (Metal) | m3 |
| 6.5 | 2” (Metal) | m3 |
| 6.6 | ABC | m3 |
| 6.7 | Gravel | m3 |
| 7. | Shuttering planks( ¾”) | m2 |
| 8. | **Timber for Members** |  |
|  | Jack |  |
| 8.1 | Jack Timber 4”x3” | m |
| 8.2 | Jack Timber planks 1 1/8” thick | m2 |
|  |  |  |
|  | Kempus / Tulang |  |
| 8.3 | Class I Timber 2”x1” | m |
| 8.4 | Class I Timber 2”x2” | m |
| 8.5 | Class I Timber 4”x2” | m |
| 8.6 | Class I Timber 4”x3” | m |
| 8.7 | Class I Timber 5”x2” | m |
| 8.8 | Class I Timber 3”x5” | m |
| 8.9 | Class I Timber 2”x6” | m |
| 8.10 | Class I Timber 3”x6” | m |
|  |  |  |
|  | Other |  |
| 8.11 | Valance Board 9”x 1” (Ginisapu) | m |
| 8.12 | Ceiling Planks ¾” (Lunimudella) | m2 |
| Item  No. | Description | Unit | Basic Rate  LKR |
| 9. | Bricks Standard size (size – 8” x 3.5” x 2.5’’) | nr. | *Rates shall be taken from latest available rate book and it’s revision.* |
| 10. | Rubble |  |
| 10.1 | 6” x 9” | m3 |
| 10.2 | 6” x 4” | m3 |
|  |  |  |

Note : 1. VAT not included.

2. Contractor’s markup included.

Source :-

…………………………………

Revised on 12-11-2020

Revised on 02-09-2022

**RATES FOR DAYWORKS SCHEDULES**

**CONSTRUCTIONAL EQUIPMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTION | CAPACITY | UNIT | RATE  LKR |
|  | **Air Handling Equipment** |  |  | *Rates shall be taken from latest available rate book and it’s revision.* |
|  | Engine driven |  |  |
| 1 | Air Compressor (including tools breakers etc.:)\* | 1000 CFM | hr |
| 2 | Air Compressor (including tools breakers etc.:)\* | 500 CFM | hr |
| 3 | Air Compressor (including tools breakers etc.:)\* | 300 CFM | hr |
| 4 | Air Compressor (including tools breakers etc.:)\* | 200 CFM | hr |
|  | Electrical operated |  |  |
| 5 | Air Compressor (including tools breakers etc.:)\* | 300 CFM | hr |
| 6 | Air Compressor (including tools breakers etc.:)\* | 200 CFM | hr |
| 7 | Air Compressor (baby) | 10 1 | day |
| 8 | Blower |  | day |
| 9 | Vacuum Cleaner |  | day |
|  | **Breaking / Cutting Equipment** |  |  |
| 10 | Angle Grinder (4''- 6") – Electrical |  | day |
| 11 | Angle Grinder (7" & above) - Electrical |  | day |
| 12 | Asphalt cutter \* |  | hr |
| 13 | Breaker Machine – Electric (heavy duty – large) |  | day |
| 14 | Breaker Machine - Air (not included compressor) \* |  | day |
| 15 | Grinder (large) - Electrical |  | day |
| 16 | Grinder (medium) - Electrical |  | day |
| 17 | Tile cutter (2'-0'' length) |  | day |
| 18 | Tile cutter (3'-0'' length) |  | day |
|  | **Compacting Equipment** |  |  |
| 19 | Hand Rammers \*\* | 60kg | day |
| 20 | Hand Rammers \*\* | 80kg | day |
| 21 | Plate Compactor Mechanical \*\* | 90kg | day |
| 22 | Pneumatic Roller \* | 8 - 10 t | hr |
| 23 | Pneumatic Roller \* | 10 - 12 t | hr |
| 24 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 01 t | hr |
| 25 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 05 t | hr |
| 26 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 07 t | hr |
| 27 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 10 t | hr |
| 28 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 20 t | hr |
| 29 | Soil compactor -Vibrating Roller \*(Min.4hrs/day) | 26 t | hr |
|  | **Concrete Work Related** |  |  |
| 30 | Concrete mixer complete with scales etc. (Electrical) | 0.25m3 | day |
| 31 | Concrete mixer complete with scales etc. (Electrical) | 0.5m3 | day |
| 32 | Concrete mixer complete with scales etc. \* | 0.25m3 | day |
| 33 | Concrete mixer complete with scales etc. \* | 0.5m3 | day |
| 34 | Porker vibrator (Electric) | 25mm dia. | day |

*Note : Rates shall be taken from latest available rate book and it’s revision.*

Revised on 02-09-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTION | CAPACITY | UNIT | RATE  LKR |
|  | **Concrete Work Related** |  |  | *Rates shall be taken from latest available rate book and it’s revision* |
| 35 | Porker vibrator (Electric) | 32mm dia. | day |
| 36 | Porker vibrator (with engine) \* | 25mm dia. | day |
| 37 | Porker vibrator (with engine)\* | 32mm dia. | day |
| 38 | Porker vibrator (with engine)\* | 38mm dia. | day |
|  |  |  |  |
|  | For Supply of Ready Mix Concrete (Colombo Area) |  |  |
| 39 | Pump Cars -( Minimum 30 m3) - 21m length of boom\* |  | m3 |
| 40 | Pump Cars -( Minimum 40 m3) - 32m length of boom\* |  | m3 |
| 41 | Pump Cars -( Minimum 50 m3) - 37m length of boom\* |  | m3 |
|  |  |  |  |
|  | **Earth Work Related Equipment** |  |  |
| 42 | Backhoe loader \* | 0.10 m3 | hr |
| 43 | Backhoe loader \* | 0.25 m3 | hr |
| 44 | Bob Cat \* (Min.4hrs/day) |  | hr |
| 45 | Bulldozer (Crawler Tractor) \* (Min.4hrs/day) | 85 hp | hr |
| 46 | Bulldozer (Crawler Tractor) \* (Min.4hrs/day) | 120 hp | hr |
| 47 | Excavator (Long Arm)\* | 0.4 m3 | hr |
| 48 | Excavator (Long Arm)\* | 0.5 m3 | hr |
| 49 | Excavator (Long Arm)\* | 0.9 m3 | hr |
| 50 | Excavator \* | 0.18 m3 | hr |
| 51 | Excavator \* | 0.35 m3 | hr |
| 52 | Excavator \* | 0.45 m3 | hr |
| 53 | Excavator \* | 0.7 m3 | hr |
| 54 | Excavator \* | 0.9 m3 | hr |
| 55 | Backhoe Loader – Large Heavy - Belt \* | 130 hp | hr |
| 56 | Motor Grader \* | 3.1 m | hr |
| 57 | Motor Grader \* | 4.2 m | hr |
| 58 | Wheel Loader \* | 0.1 m3 | hr |
| 59 | Wheel Loader \* | 1.4 m3 | hr |
| 60 | Wheel Loader \* | 2.0 m3 | hr |
|  |  |  |  |
|  | **Hoisting Equipment** |  |  |
| 61 | Chain Block 5T |  | day |
| 62 | Hoist Machine (300/500kg)\* |  | day |
| 63 | Crane Truck (80 km/day) \* crane charge Rs.2500/hrs | 5 t | km |
| 64 | Crane Truck (80 km/day) \* crane charge Rs.2500/hrs | 17 t | km |
| 65 | Crane Truck (80 km/day) \* crane charge Rs.2500/hrs | 20 t | km |
| 66 | Crawler Crane \* | 35 t | hr |
| 67 | Crawler Crane \* | 50 t | hr |

Revised on 02-09-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTION | CAPACITY | UNIT | RATE  LKR |
|  | **Hoisting Equipment** |  |  | *Rates shall be taken from latest available rate book and it’s revision* |
| 68 | Fork lift \* (Min.4hrs/day) | 3 t | hr |
| 69 | Fork lift \* (Min.4hrs/day) | 5 t | hr |
| 70 | Hydraulic Crane \* | 20 t | hr |
| 71 | Hydraulic Crane \* | 15 t | hr |
| 72 | Tower crane \* (without mobilization & demobilization) | 10 t | hr |
| 73 | Tower crane \*(without mobilization & demobilization) | 12 t | hr |
|  |  |  |  |
|  | **Miscellaneous Equipment** |  |  |
|  |  |  |  |
| 74 | Welding Generator | 16 KVA | day |
| 75 | Welding Plant (3 phase) | 3 - Phase 400A | day |
| 76 | Domestic Floor Polisher |  | day |
| 77 | Jig Saw |  | day |
|  |  |  |  |
|  | **Power Generating Equipment** |  |  |
|  |  |  |  |
| 78 | Generating set (operation with fuel ) | 3, 5, 7 kVA | hr |
| 79 | Generating set (operation with fuel ) | 25 - 45 kVA | hr |
| 80 | Generating set (operation with fuel ) | 60 - 90 kVA | hr |
| 81 | Generating set (operation with fuel ) | 150 kVA | hr |
| 82 | Generating set (operation with fuel ) | 210 kVA | hr |
|  |  |  |  |
|  | **Pumping Equipment** |  |  |
| 83 | Pressure Pump (Electric domestic type - without operator) |  | day |
| 84 | Sludge pump 4'' dia. (without fuel & operator) |  | hr |
| 85 | Water Pump 2" dia.(Electrical - without operator) |  | day |
| 86 | Water Pump 2" dia.(without fuel & operator) |  | day |
| 87 | Water Pump 4" dia. (without fuel & operator) |  | hr |
|  |  |  |  |
|  | **Special Equipment** |  |  |
| 88 | Butt fusion Machine with all necessary equipment - Electrical \* |  | month |
|  |  |  |  |
|  | **Transportation / Moving** |  |  |
|  |  |  |  |
| 89 | Baby Dumper \* |  | day |
| 90 | Container-Transport Trucks - 20 ft (up to 32km from Colombo Port)  Additional transport (for night park add. Rs. 5000.00/day) |  | sum  km |
|  |  |  |  |

Revised on 02-09-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTION | CAPACITY | UNIT | RATE  LKR |
| 91 | Container-Transport Trucks - 30 ft (up to 32km from Colombo Port)  Additional transport (for night park add. Rs. 5000.00/day) |  | sum  km | *Rates shall be taken from latest available rate book and it’s revision* |
| 92 | Container-Transport Trucks - 40 ft (up to 32km from Colombo Port)  Additional transport (for night park add. Rs. 5000.00/day) |  |  |
| 93 | Crew cab (with driver & fuel) \* |  | km |
| 94 | Double cab (with driver & fuel) \* |  | km |
| 95 | Lorry \* (80 km/day) | 12 t | km |
| 96 | Low loader truck \* | 30 - 40 km | km |
| 97 | Ordinary truck (100 km/day) \* | 6 t | day |
| 98 | Ordinary truck (100 km/day) \* | 12 t | day |
| 99 | Tractor with Tailor | 0.75 cu | day |
| 100 | Truck with Boom \* | 3 t | day |
| 101 | Truck with Boom \* | 3.5 t | day |
| 102 | Truck with Boom \* | 4 t | day |
| 103 | Truck with tipper \* | 10 t /5 cu | km |
| 104 | Van (15 Sheet) or similar utility Vehicle \* |  | km |
| 105 | Water Bowser (80 km/day) \* | 7000 lts. | km |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| Note : | 1. VAT not included. | |
|  | 2. \* Cost of Operator / Driver and fuel (if applicable) are included in rates. | |
|  | 3. \*\* Cost of fuel (if applicable) include in rates. | |
|  | 4. Contractor’s markup (percentage adjustment) included. | |
| Source: | ………………………………………. |

Revised on 02-09-2022

**10. LIST OF DRAWING**

**LIST OF DRAWINGS**

|  |  |
| --- | --- |
| **Drg. No.** | Description |
|  |  |

1. **BILLS OF QUANTITIES**

* **PREAMBLE NOTES ON BILLS OF QUANTITIES**
* **BILLS OF QUANTITIES**
* **SUMMARY OF BILLS**
* **PREAMBLE NOTES**

**Note: Allow for all costs and expenses for complying with the General Condition of Contract, Specification and Preamble Notes.**

*Select and Add*

*relevant preamble notes from*

***“Preamble Notes for BOQQ”***

*in NWSDB web*

### *(under the “Restrict Links”)*

* **Preamble Notes for Civil Engineering Works (Based on CESMM3)**
* **Preamble Notes for Building Works (based on SLS 573)**
* **Preamble Notes for Supply and Delivery DI/HDPE Pipes & Fittings, Specials, Accessories, DI Valves and DI Manhole Covers**
* **Preamble Notes for Supply and delivery uPVC Pipes, Fittings and Specials**
* **Preamble Notes for M & E Works**

Revised on 11-01-2022

**BILLS OF QUANTITIES**

### *Add General Bill and Other Bills using*

### *“Sample Bill of Quantities”*

### *form NWSDB web*

### *(under the “Restrict Links”)*

***as per the***

***requirement of the work.***

**NATIONAL WATER SUPPLY AND DRAINAGE BOARD**

**CONTRACT FOR ………………………………………………**

**………………………..…………….. WATER SUPPLY/SEWERAGE SCHEME**

**CONTRACT NO: ……………………………………..**

**SUMMARY OF BILLS**

|  |  |  |
| --- | --- | --- |
| Bill No. | Description | Amount  LKR |
| 01 | General | …………….. |
| 02 | …………………………………………….. | …………….. |
| 03 | ……………………………………………. | …………….. |
| 04  05 | …………………………………………….  …………………………………………….. | ……..………  ………..…… |
|  |  |  |
| A | **Sub Total (1)** |  |
| B | Less : Provisional Sums |  |
| C | **Sub Total 2 (A-B)** |  |
| D | Less Discounts (*if any) …………….* |  |
| E | **Sub Total 3 (C-D)** |  |
| F | Add : Contingencies 10% (for Sub Total 3) |  |
| G | **Sub Total 4 (E+F)** |  |
| H | Add : Provisional Sum |  |
|  | **Grand Total (G+H) carried to Form of Bid (excluding VAT) in page 4 -1** |  |

VAT (applicable rate………. %) Rs. ……………………………………..

VAT Registration Number : ………..……………….

(A copy of the VAT Registration form should be annexed).

Note: - The NWSDB VAT Registration No :- 4090 31820 7000.

Revised on 02-11-2022

## 12. STANDARD FORMS

* **Bid Security**
* **Letter of Acceptance**
* **Agreement**
* **Performance Security**
* **Advance Payment Security**
* **Retention Money Guarantee**

FORM OF BID SECURITY

*-------------------------------------------------------------------------------------------------------*

*-------------------------------------------------------------------------------------------------------*

*[insert issuing agency’s name, and address of issuing branch or office]*

**Beneficiary:** The Chairman, National Water Supply & Drainage Board,

Galle Road, Ratmalana, Sri Lanka

**Date:** ---------------------------- *[insert (by issuing agency) date]*

**BID SECURITY No.:** -------------------------- *[insert (by issuing agency) number]*

We have been informed that --------------------------------------------------------------------------------------- *[name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated ---------------*[ date]* (hereinafter called "the Bid") for the execution of ………………………………………………

*………………………………………….[insert name of Contract]* under Contract No. -----------------------

Furthermore, we understand that, according to your conditions, Bids must be accompanied by a Bid Security.

At the request of the Bidder, we ----------------------------------------------- *[insert name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ------------------- *[insert amount in figures]*  -------------------------------------------------------------- ---------------------------------------------------------------- *[insert amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of bid validity specified; or

(b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter “the ITB”) or

(c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Security shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to ---------------- *(insert date)*

Consequently, any demand for payment under this Security must be received by us at the office on or before that date.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*[signature(s) of authorized representative(s)]*

Revised on 23-09-2019

**LETTER OF ACCEPTANCE**

*[Letter heading paper of the Employer]*

…………… *[Date]*

To: ……………………………………………………………………………………………

*[Name of the Contractor]*

………………………………………………………………………………………………

*[Address of the Contractor]*

This is to notify you that your bid dated ………………………….*[insert date]* for construction and remedying defects of the …………………………….…………………..………………..*[name of the Contract and Contract number]*for the Contractor price of…………………………………………... ……………………………………………………..........................*[amount in figures and words, if multiple currencies are involved, indicate amounts under each currency separated by the word “and” between them]* as corrected in accordance with Instructions to Bidders and/or modified by a Memorandum of Understanding, is hereby accepted.

Applicable VAT will be payable on production of Tax Invoice. The Registered No. for NWSDB for VAT is 409031820700.

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

The commencement date shall be : ………………………………….*(fill the date as per Conditions of Contract).*

Contract Period is …… days from the commencement date.

Liquidated Damages shall be Rs. …………… /day up to the limit of 10% of the Contract price.

The Amount of Performance Security is : ………………………

The Performance Security shall be submitted on or before ………………………………*(fill the date as per Conditions of Contract)*. Failing to submit the performance guarantee will be a breach of Contract and actions shall be taken as per Clause 34 of the Instruction to Bidders.

Please acknowledge the receipt of this letter by return fax and make arrangements to sign the agreement by prior appointment with the Asst. General Manager (Tenders &Contracts) within ….. days.

Please contact PD/DGM ( )/AGM ( ), Engineer’s Representative of this Contract, whose telephone number is ………………………. for further action on this Contract.

…………………………….

General Manager

National Water Supply & Drainage Board

THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Revised on 11-03-2022

**MINISTRY OF …………………………………**

## NATIONAL WATER SUPPLY AND DRAINAGE BOARD

**BID FOR …………………………………………….**

**CONTRACT No.: …………………………………..**

**AGREEMENT**

**This AGREEMENT**, is made and entered into on this ……………. Day of……… Two Thousand and ……………..by and between National Water Supply and Drainage Board, a corporate body duly established under the provisions of the National Water Supply and Drainage Board Act No.2 of 1974 and having its Head Office at Ratmalana in Sri Lanka (hereinafter called “the Employer” or “the Board”) of the one part and Messrs .………………………………………………………………… …………………………………………………………………………………………… (Hereinafter called “the Contractor”) of the other part.

WHEREAS the Employer desires that the Contractor execute ………..………………………….., ………………………………………………………………………………………………………

…………………………………………………………….. [name and identification number of Contract] (hereinafter called “the Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.

2. The documents forming the Contract shall be interpreted in the following order of priority:

(1) Agreement,

(2) Letter of Acceptance,

(3) Memorandum of understanding (if any)

(4) Form of Bid,

(5) Contract Data,

(6) Conditions of Contract,

(7) Specifications,

(8) Drawings,

(9) Bills of Quantities,

(10) Any other document listed in the Contract Data as forming part of the Contract.

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year aforementioned in accordance with the laws of Sri Lanka.

Revised on 12-11-2020

Signed by the said …………………………………………. Chairman, National Water Supply and Drainage Board and ……………………………………………. Board Member of the National Water Supply and Drainage Board at …………………………………… on the …………. day of ………………………….. Two Thousand and ……………….. in the presence of the following Witnesses..

Chairman …………………………………

Board Member ……………………………

NATIONAL WATER SUPPLY AND DRAINAGE BOARD

Witnesses

1. Signature ……………………. 2. Signature : ………………………

Name : ……………………. Name : ………………………

Address : ……………………. Address : ………………………

……………………. ………………………

……………………. ………………………

For and on behalf of the Contractor : signed by the said ……………………………………in the capacity of …………………………………………………………………………. and/or duly authorized to sign this Contract agreement for and on behalf of …………………...……..

…………………………………………………………………………………………………..

……………………………………………………………… (Block Letters)

Witnesses

1. Signature ……………………. 2. Signature : ………………………

Name : ……………………. Name : ………………………

Address : ……………………. Address : ………………………

……………………. ………………………

……………………. ………………………

**PERFORMANCE SECURITY**

**(Unconditional)**

……………………………………………………………………………………………………… *[Issuing Agency’s Name and address of Issuing Branch or Office]*

**Beneficiary : ……………………………………………………………………………………**

*[Name and Address of Employer]*

**Date : ………………………………………………………**

**PERFORMANCE SECURITY NO.: ………………………………………**

We have been informed that …………………………………………………………………….

*[Name of Contractor](hereafter called “the Contractor”)* has entered into Contract No. *………………………………[reference number of the Contract]* dated …………………………with you, for the …………………………………………………………………………*[insert “Construction”]* of ……………………………………………………………………………….

*[name of Contract and brief description of Works] (hereinafter called “ the Contract”).*

Furthermore, we understand that, according to the conditions of the Contract, a performance security is required.

At the request of the Contractor, we ……………………………………………………………………

*[name of Agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ………………………………………..…………………………………*[amount in figures]* (………………………………….……………………………………………………………………………………………………………) *[amount in words],* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This security shall expire, no later than the ………… day of …………. 20……. *[insert date, 28 days beyond the Defects Notification Period]* and any demand for payment under it must be received by us at this office on or before that date.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract document which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice or any such change, addition or modification.

……………........................................................ …….….

[Signature(s)] of the Guarantor Seal

Capacity …………………………..

**FORM OF ADVANCE PAYMENT SECURITY**

…………………………………………………………………………………………………………………………………………………. *[Name and address of Agency, and Address of Issuing Branch or Office]*

**Beneficiary :** ………………………………………………..………………………………………...

…………………………………………… *[Name and Address of Employer]*

**Date :……………………………………………**

**ADVANCE PAYMENT SECURITY No.:………………………….**

We have been informed that ……………………………………………..…………………….. *[name of Contractor]* (hereinafter called “the Contractor”) has entered into Contract No…………………………. *[reference number of the Contract]* dated ………………….. with you, for the …………………….. construction of ………………………………. *[name of Contract and brief description]* (hereinafter called “the Contract”).

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum ……………………………………………………..……..………………*[amount in figures]* ………………………..……………………..…………………………………….)

*[amount in words]* is to be made against an advance payment security.

At the request of the Contractor, we ………………………………………………………

…………….*.[name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ……….…………………………………*.[amount in figures]* (……………………………………………………………………..) *[amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation in repayment of the Advance payment under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

The maximum amount of this security shall be progressively reduced by the amount of the advance payment repaid by the Contractor.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract document which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice or any such change, addition or modification.

This guarantee shall be remained valid and in full effect from the date of the advance payment under the Contract until National Water Supply and Drainage Board, receives full repayment of the same amount from the Contractor.

Consequently, any demand for payment under this security must be received by us at this office on or before that date.

……………........................................................ …….….

[Signature(s)] of the Guarantor Seal

Capacity …………………………..

Witness Signature ……………………………………….

Name & Address ……………………………….

Capacity …………………………………..

Revised on 23-09-2019

**FORM OF RETENTION MONEY GUARANTEE**

………………………………………………………………………………………….

[ Issuing Agency’s Name, and Address of Issuing Branch or Office]

Beneficiary : ………………………………………………………………………………..

……………………………………………[Name and Address of Employer]

Date : ………………..

RETENTION MONEY GUARANTEE No.: ………………………………………

We have been informed that …………………………………………………………….

[name of Contractor] (hereinafter called “the Contractor”) has entered into Contract No……………………………………………………………………... [reference number of the contract] dated …………………………… with you, for the execution of …………………………….

……………………………………………………………………….. [name of contract and brief description of Works] (hereinafter called “the Contract”).

Furthermore, we understand that, according to the Conditions of the Contract, when the works have been taken over and the first half of the Retention Money has been certified for payment, payment of the second half of the Retention Money may be made against a Retention Money guarantee.

At the request of the Contractor, we ……………………………………………………………………

[name of agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of …………………………………………………………………..……[amount in figures] (…………………………………………………………………………………..[amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor has not attended to the defects in accordance with the Contract.

This guarantee shall expire, at the latest, …………………………………….[insert 28 Days after the end of the Defects Notification Period]. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

…………….........................

[Signature(s)]

Revised on 23-09-2019

**13. APPENDICES**

**APPENDIX 1 – GENERAL INFORMATION**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *(i)* | *If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.* | | | | |
| **ITB**  **Clause reference** | | **Description** | **Information**  ***(to be filled by the Bidder)*** | | **Remarks** |
| **4.3** | | **Legal Status** |  | | *Provide certified copies of*  *Registration* |
|  | | Written power of attorney of the signatory to the Bid | *Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to Clause 4.3* | | |
|  | | Place of registration |
|  | | Principle place of business |
|  | | VAT Registration Number |  | | |
| **4.2** | | **CIDA Registration** |  | *Provide certified copies and label as attachment to Clause 4.2* | |
|  | | Registration number |  |
|  | | Grade |  |
|  | | Specialty |  |
|  | | Expiry Date |  |

Revised on 11-01-2022

**APPENDIX 2A - FINANCIAL STATEMENT**

Summary of assets and liabilities based on the audited financial statements for the any consecutive three financial years (Current statement may be unaudited) within last five (05) years together with the Financial Performance as indicated in the following schedule shall be submitted.

If the business has not been in operation for three years following schedule shall be submitted for the period that the business has been in operation together with the aforesaid financial statements.

Bidders whose financial capability is marginally less to undertake this bid may show credit facilities available to them from Banks.

# Financial performance for the any three consecutive financial years within last five (05) years

|  |  |  |  |
| --- | --- | --- | --- |
| Year | xxxx | xxxx | xxxx |
| Turnover from Contracting |  |  |  |
| Fixed Assets (FA) |  |  |  |
| Current Assets (CA) |  |  |  |
| Current Liabilities (CL) |  |  |  |
| Long Term Liabilities (LL) |  |  |  |
| Net Worth = Total Assets – Total Liabilities |  |  |  |
| Current Ratio = Current Assets Current Liability |  |  |  |
| Liquidity Ratio = Current Assets (except stock) Current Liability |  |  |  |
| Gearing Ratio = Debt Capital x 100 Total Capital Employed |  |  |  |
| Turnover x 100  Total Operating Assets |  |  |  |
| Net Profit x 100  Total Assets |  |  |  |

Note: Above details shall be supported with Audited Financial Statements.

Revised on 11-01-2022

**APPENDIX 2B – REVOLVING CREDIT LINE FACILITY**

Date : ………..

Name of Bidder : …………………………………..

Details of Commercial Banks providing revolving line of credit facilities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the**  **Bank** | **Amount of**  **Credit Line**  **(Rs.ML)** | **Address** | **Contact**  **Telephone**  **No.** | **Contact Name**  **and Title** |
|  |  |  |  |  |

Note : Attach original letters issued from commercial banks addressed to the NWSDB,

confirming the revolving line of credit facilities given to the Bidder.

If prequalification is done, bidders are required to include information subsequent to that submitted with the prequalification application

………………………………….

Signature of Bidder/Authorized Representative

Company Seal :

Revised on 11-01-2022

**APPENDIX 2C - Authorization to obtain References from Bankers**

**BIDDER SHALL FILL THIS FORM AND PROVIDE WITH THE BID**

…….………… *[Bidder’s Name]*

…………………......... *[Address]*

………………………………….

..……………………………….

Manager ……………………... *[Name of Bank]*

………………..………………. *[Address]*

…………………………………………

…………………………………………

Dear Sir,

I hereby Authorize the National Water Supply & Drainage Board, on behalf of the Procurement Committee, to seek references of Bank details in order to evaluate the financial statues of our company M/s ……………………………………………………………………

*……………………………………………………………………….[Bidders Name & Address]* in connections with the ……………………………………………………… *[Contract Name & Contract Number]* bid, submitted by us.

Yours faithfully,

………………………………..

………………………………..

Authorized officer of the Bidder.

Note: If there are more than one bank given, separate letters should be submitted for each Bank.

Revised on 11-01-2022

**APPENDIX 3A - DETAILS OF ONGOING WORKS for last TEN years (FOR CIVIL WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Contract Price | Contract Period | Date of award | Current progress | | Annual value of work done  Rs. | % Time lapsed from date of commence-ment | Remarks |
| Physical % | Financial (Rs.) |
| **Contracts under NWS&DB** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Contracts with Other Organizations** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

**Note: Bidder shall submit awarding letters and other certificates from clients for ongoing works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

Revised on 11-01-2022

**APPENDIX 3B - DETAILS OF SIMILAR WORKS COMPLETED WITHIN THE LAST TEN YEARS (FOR CIVIL WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Main or Sub contractor | Contract  value | Contract Period | Date of award | Annual value of work done  Rs. | Complete date | | Reasons for delay |
| original | actual |
| **Contracts under NWS&DB** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Contracts with Other Organizations** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

**Note: Bidder shall submit awarding letters, end user certificates, completion certificates and other certificates from clients for completed works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

Revised on 11-01-2022

**APPENDIX 3C - DETAILS OF ONGOING OTHER WORKS (EXCLUDING SIMILAR WORKS) WITHIN THE LAST**

**TEN YEARS (FOR CIVIL WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Contract Price | Contract Period | Date of award | Current progress | | Annual value of work done  Rs. | % Time lapsed from date of commence-ment | Remarks |
| Physical % | Financial (Rs.) |
| **Contracts under NWSDB** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Contracts with Other Organizations** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
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**Note: Bidder shall submit awarding letters and other certificates from clients for ongoing works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

**APPENDIX 3D - DETAILS OF OTHER WORKS (EXCLUDING SIMILAR WORKS) COMPLETED WITHIN THE LAST**

Revised on 11-01-2022

**TEN YEARS (FOR CIVIL WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Main or Sub-contractor | Contract  value | Contract Period | Date of award | Annual value of work done  Rs. | Complete date | | Reasons for delay |
| original | actual |
| **Contracts under NWS&DB** | | | | | | | | | | |
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| **Contracts with Other Organizations** | | | | | | | | | | |
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**Note: Bidder shall submit awarding letters, end user certificates, completion certificates and other certificates from clients for completion works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

Revised on 11-01-2022

**APPENDIX 3E - DETAILS OF ONGOING WORKSfor last TEN years (FOR M & E WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Contract Price | Contract Period | Date of award | Current progress | | Annual value of work done  Rs. | % Time lapsed from date of commence-ment | Remarks |
| Physical % | Financial (Rs.) |
|  |  |  |  |  |  |  |  |  |  |  |
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**Note: 1. Bidder shall submit the relevant details for this annexure for the proposed M & E Manufacturers quoted for this Bid.**

**2. Bidder shall submit awarding letters and other certificates from clients for ongoing works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

Revised on 11-01-2022

**APPENDIX 3F - DETAILS OF SIMILAR WORKS COMPLETED WITHIN THE LAST TEN YEARS (FOR M & E WORKS)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Name and Address of Employer | Name and details of Contract | Main or Sub-contractor | Contract  value | Contract Period | Date of award | Annual value of work done  Rs. | Complete date | | Reasons for delay |
| original | actual |
|  |  |  |  |  |  |  |  |  |  |  |
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**Note: 1. Bidder shall submit the relevant details for this annexure for the proposed M & E Manufacturers quoted for this Bid.**

**2. Bidder shall submit awarding letters, completion certificates, end user certificates and other certificates from clients for completed works for the proof of above furnished details.**

**Separate sheets for each year shall be used.**

Revised on 11-01-2022

**APPENDIX 4A - DETAILS OF CONTRACT MANAGEMENT AND KEY TECHNICAL STAFF**

Note:

1. In case of Engineers and Technical officers Bio-data should be submitted.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Category** | **Name and**  **Qualifications** | **Experience in years** | **No. proposed** | |
| **By NWSDB** | **By Contract** |
| 1.  2.  3.  4.  5.  6.  7. | Contract Manager / Site Manager  Planning Engineer  QA/QC Engineer  Engineer (Civil)  Engineer (Mechanical)  Engineer (Electrical)  Quantity Surveyor |  |  |  |  |
| 8. | Technical Officers |  |  |  |  |
| 9. | Any Other services required by the Contractor for the Contract  1. Specialist Services  2.  3.  4. |  |  |  |  |

Revised on 11-01-2022

Revised on 06-11-2020

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| **APPENDIX 4B – TIME SCHEDULE FOR KEY STAFF** | | | | | | | | | | | | | | | | | | |
|  |  |  | Months (in the form of a Bar Chart) | | | | | | | | | | | | | | | |
| **Name** | **Position** | **Activities** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **Number of Months** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Full-time: Part-time: …………….

Revised on 11-01-2022

APPENDIX 5A - SCHEDULE OF CONTRACTOR’S EQUIPMENT PROPOSED

**FOR PIPE LAYING**

Note:

1. The Bidder should declare the actual Plant and Equipment that he proposes to use for the execution of the works. These Plant and Equipment should be in usage for not more than five years after their first purchase/use.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Description** | **Minimum**  **No. Provide by the Contractor** | **Minimum Period Proposed** | **Remarks (hired/own)** |
| 1. | Excavator/ Loader 1-2 m3 |  |  |  |
| 2. | Hand Rammers |  |  |  |
| 3. | Soil Compactor – Mechanical ½ ton |  |  |  |
| 4. | Hand Roller 2 – 3 ton |  |  |  |
| 5 | Dumper minimum capacity 1 m3 |  |  |  |
| 6. | Concrete mixer complete with scales etc. 0.25 – 0.5 m3 |  |  |  |
| 7 | Concrete vibrator 38mm dia. |  |  |  |
| 8. | Portable Air compressor complete with hose and pneumatic tools minimum capacity 2.83 m3 (100 cu.ft) per minute and pressure 70 kg/cm2 (100 psi) |  |  |  |
| 9.  10. | Mobile crane up to 5 ton  Portable welding set 500 A capacity complete with welding accessories. |  |  |  |
| 11. | Generating Set up to 4 kw |  |  |  |
| 12. | Bitumen sprayer up to 6 ton |  |  |  |
| 13 | Water Tanker 4 – 6 m3 |  |  |  |

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Description** | **Minimum**  **No. Provide by the Contractor** | **Minimum Period Proposed** | **Remarks (hired/own)** |
| 14 | Water Pump (complete with hoses etc.) 100 ft3/min |  |  |  |
| 15 | Rubber Roller up to 5 ton |  |  |  |
| 16 | Truck with Tipper 3 – 8 ton |  |  |  |
| 17. | Bar bending Equipment. |  |  |  |
| 18. | Engineer’s Level |  |  |  |
| 19. | Theodolite. |  |  |  |
| 20. | Shoring |  |  |  |
| 21. | Pressure testing Equipment |  |  |  |
| 22.  ….  ….  …. | Asphalt Cutter  ...........................  ..............................  .............................. |  |  |  |

Note:

1.The Bidder shall submit a documentary evidence for machinery to be

hired/lease for the Contract.

Revised on 11-01-2022

APPENDIX 5B - SCHEDULE OF CONTRACTOR’S EQUIPMENT PROPOSED

**FOR CIVIL CONSTRUCTION**

**Note:**

1. Bidder should declare the actual Plant and Equipment that he proposes to use for the execution of the works. These Plant and Equipment should be in usage for not more than five years after their first purchase/use.

Revised on 11-01-2022

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Description** | | **Minimum**  **No. Provide by the Contractor** | | **Minimum Period Proposed** | | **Remarks (hired/own)** | |
| 1. | Excavator/ Loader 1-2 m3 | |  | |  | |  | |
| 2. | Hand Rammers | |  | |  | |  | |
| 3. | Soil Compactor – Mechanical ½ ton | |  | |  | |  | |
| 4. | Hand Roller 2 – 3 ton | |  | |  | |  | |
| 5 | Dumper minimum capacity 1 m3 | |  | |  | |  | |
| 6 | Steel Wheel Roller up to 4 ton | |  | |  | |  | |
| 7. | Concrete mixer complete with scales up to 0.25 | |  | |  | |  | |
| 8 | Concrete mixer complete with scales etc. 0.25 - 0.5 m3 | |  | |  | |  | |
| 9 | Concrete mixer complete with scales over 0.5 m3 | |  | |  | |  | |
| 10 | Concrete vibrator 38mm dia. | |  | |  | |  | |
| 11 | Portable Air compressor complete with hose and pneumatic tools minimum capacity 2.83 m3 (100 cu.ft) per minute and pressure 70 kg/cm2 (100 psi) | |  | |  | |  | |
| 12  13  14 | Mobile crane up to 2 ton  Mobile crane up to 5 ton  Lorry / Truck 5 ton capacity | |  | |  | |  | |
| **Item** | | **Description** | | **Minimum**  **No. Provide by the Contractor** | | **Minimum Period Proposed** | | **Remarks (hired/own)** | |
| 15 | | Portable welding set 500 A capacity complete with welding accessories. | |  | |  | |  | |
| 16 | | Generating Set up to 4 kw | |  | |  | |  | |
| 17. | | Bitumen sprayer up to 6 ton | |  | |  | |  | |
| 18 | | Road Roller 6 –10 ton | |  | |  | |  | |
| 19 | | Water Tanker 4 – 6 m3 | |  | |  | |  | |
| 20 | | Water Pump (complete with hoses etc.) 100 ft3/min | |  | |  | |  | |
| 21 | | Rubber Roller up to 5 ton | |  | |  | |  | |
| 22 | | Pneumatic Roller 10 ton | |  | |  | |  | |
| 23 | | Truck with Tipper 3 – 8 ton | |  | |  | |  | |
| 24 | | Bar-bending Equipment | |  | |  | |  | |
| 25 | | Engineer’s Level | |  | |  | |  | |
| 26  27 | | Theodolite.  Welding Plant | |  | |  | |  | |
|  | | 1m x 1m x 1 m scaffolding units with diagonal ties, bends, base plates, connecting couplings, clamps etc. made of 48 mm dia. DI tubes or scaffolding units equivalent to above | |  | |  | |  | |
| 28  29  30  31  32  …. | | Shoring  Power Analyzer  Insulation Resistance Tester  Earth Resistance Tester  Lugging Tool  ................. | |  | |  | |  | |

**Note:**

1. The Bidder shall submit a documentary evidence for machinery to be hired/lease for the Contract

Revised on 11-01-2022

**APPENDIX 6 - WORK PROGRAMME PROPOSED BY THE CONTRACTOR**

Scheme : *(To be filled the design Engineer)*

Contract No : *(To be filled the design Engineer)*

Contractor :

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Construction Activity** | **Programme (Months)**  ***(1st ,2nd, etc. are months from the start date)*** | | | | | | | |
| **1st** | **2nd** | **3rd** | **4th** | **5th** | **6th** | **7th** | **8th** |
| *Design Engineer should provide major*  *components of the scheme.* |  |  |  |  |  |  |  |  |

Note : Contractor shall submit the predicted cash flow based on the work programme.

Revised on 11-01-2022

**APPENDIX 6A** **– METHOD STATEMENT**

The bidder is required to prepare a method statement not exceeding 20 pages including charts and tables, which describes the approaches to be adopted in the construction, commissioning and hand over of the works.

Revised on 11-01-2022

**APPENDIX 7 - BIDDER’s Authorization to sign the Contract**

[The Bidder shall require to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letter head of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. The bidder shall include it in its bid].

Date : *[insert date (as day, month and year) of Bid Submission]*

No. : *[insert Contract number]*

Chairman,

National Water Supply & Drainage Board,

Galle Road,

Ratmalana, Sri Lanka.

**For ……………………………………………... of Water Supply Scheme**

**Contract No. …………………………………...**

We …………………………………………*[insert complete name of the Bidder]*, of ……………………………………….…………*[insert full address of Bidder],* do hereby authorize …………….………………………….. *[insert complete name of Bidders authorize officer who signs the Contract]* to submit a bid on behalf of our company and to subsequently negotiate and sign the Contract.

Specimen Signature of the Authorized officer to sign the Contract…………………………………. ………………………………………………………

Signed : …………………………………*[insert signature(s) of authorized representative(s) of the Bidder]*

Name : ………………………………………………………..*[insert complete name(s) of authorized representative(s) of the Bidder]*

Title : …………………………………….. *[insert title]*

Duly authorized to sign this Authorization on behalf of : ……………………………*[insert complete name of Bidder]*

This is to certify that the seal and signatures of legal representative and authorized person affixed to power of attorney attached hereto are found to be authentic.

………………………………

Signature of Attorney at Law

……………………………..

Seal of Attorney at Law

In the place of (……………………………………………………………………………... address)

Date ……………………

# APPENDIX 8 - LIST OF MANUFACTURERS DETAILS FOR MATERIALS TO SUPPLY TO

Revised on 11-01-2022

# THIS CONTRACT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Name of the Material (item/s) | Manufacturer’s Name | Manufacturer’s **Address** | NWSDB PQ item or not | Remarks |
|  |  |  |  |  |  |
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Revised on 11-01-2022

# APPENDIX 9 – FUNCTIONAL GUARANTEE FOR DI/HDPE PIPES, FITTINGS, SPECIALS, RUBBER RINGS AND ACCESSORIES

[Address of the Manufacturer]

…………………………………

…………………………………

…………………………………

Chairman,

National Water Supply & Drainage Board,

Galle Road,

Ratmalana, Sri Lanka.

**For ……………………………………………... of Water Supply Scheme**

**Contract No. …………………………………...**

We ……………………………………………………………………………………… *(Complete Name & Address of the PE/DI pipe manufacturer)* hereby guarantee that,

1. The Supply of Pipes for the above Contract shall be manufactured at the manufacturing factory at ……………………………………………………………... ……………………………………………… *(Address of the manufacturing factory)*.

2. The Supply of Pipe Fittings for the above Contract shall be manufactured at the manufacturing factory at …………………………………………………………... …………………………………………...…… *(Address of the manufacturing factory)*.

3. The Supply of Rubber Rings for the above Contract shall be manufactured at the manufacturing factory at ……………………………………………………………... …………………………………………...… *(Address of the manufacturing factory)*.

4. The Supply of Couplings for the above Contract shall be manufactured at the manufacturing factory at ……………………………………………………………... ………………………………………………... *(Address of the manufacturing factory)*.

5. The Supply of Restraint Joints shall be manufactured at the manufacturing factory at …………………………………………………………………………………………... ……………………………………………... *(Address of the manufacturing factory)*.

We, Manufacturer of DI/PE pipes, hereby guarantee that,

1. DI/HDPE pipes, fittings and rubber rings supplied under the Contract shall fit properly and adequately to ensure leak proof pipeline installations under all working conditions.
2. We will unconditionally undertake to replace any Material rejected by the Engineer within the time period as agreed with the Engineer during implementation stage at no additional cost to NWSDB ensuring the timely implementation of the project.

Revised on 11-01-2022

1. We will unconditionally undertake that the Nominated Inspection Agency issues a certificate ensuring that DI/HDPE pipes, fittings and rubber rings inspected shall fit properly and adequately to ensure leak proof pipeline installations under all working conditions upon shipment.

…………………………….

Signature of the Authorised

Officer on behalf of the Pipe manufacturer

Name : ……………………………………………………….

Capacity : ……………………………………………………….

Witness :

1 Signature : ……………………………………………………………

Name : ……………………………………………………………

Capacity : ……………………………………………………………

Address : ……………………………………………………………

2 Signature : ……………………………………………………………

Name : ……………………………………………………………

Capacity : ……………………………………………………………

Address : ……………………………………………………………

Revised on 11-01-2022

**APPENDIX 10 - Manufacturer’s Authorization to sign the Contract AND CONFIRMATION OF CAPABILITY OF PRODUCTION of MATERIALS & Supply of MATERIALs according to Delivery Schedule**

[Address of the Manufacturer]

…………………………………………..

………………………………………….

Chairman, …………………. Procurement Committee,

…………………………………………,

………………………………………....,

………………………………………….

**For ……………………………………………... of Water Supply Scheme**

**Contract No. …………………………………...**

We ………………………………………… [*insert complete name and address of Manufacturer*], who are official manufacturers of …………………………. [*insert relevant Materials and Accessories*] having factories at ……………………………… *[insert full address of Manufacturer’s factories],* do hereby authorize …………….…………………. *[insert complete name of Bidder]* to supply to this Contract the purpose of which is to provide ………………………………. [*insert relevant Materials and Accessories*] manufactured by us and to subsequently negotiate and sign the Contract.

We, confirm that we have sufficient production capacity to produce the quantity of aforesaid Materials to supply to this Contract and shall deliver them according to the delivery schedule indicated in the bid.

We hereby extend our full guarantee and warranty in accordance with Clause 76.0 of the General Conditions of Contract, with respect to the …………………………. [*insert relevant Materials and Accessories*] offered by the above firm.

Signed : …………………………………*[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name : ………………………………………………………..*[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title : …………………………………….. *[insert title]*

Duly authorized to sign this Contract on behalf of : ……………………………*[insert complete name of Manufacturer]*

……………………………..

Seal of the Company.

Revised on 02-09-2022

**APPENDIX 11 - Manufacturer’s awareness of the TOR FOR Independent Inspection Agency**

[Address of the Manufacturer]

…………………………………………..

………………………………………….

………………………………………….

Chairman, …………………… Procurement Committee,

National Water Supply & Drainage Board,

Galle Road,

Ratmalana, Sri Lanka.

**For ……………………………………………... of Water Supply Scheme**

**Contract No. …………………………………...**

We, …………………………………………………………………….[*name of manufacturer*] of ……………………………………………………...…………………………………………………………….……………………………………………………….*[address of manufacturer]*confirm that we have noticed that

a) Appendix 13 – TOR for Independent Inspection Agency.

b) Clause 34.6.2 of Contract Data in Volume 2.

……………………………................... ………………………….

Authorized Officer of the Manufacturer. Seal of the Company.

Name : …………………………………

**APPENDIX 12 - Manufacturer’s Warranty for the MATERIALs supplied**

Revised on 11-03-2022

**under the Contract**

[Address of the Manufacturer]

…………………………………………..

………………………………………….

Chairman,

National Water Supply & Drainage Board,

Galle Road,

Ratmalana, Sri Lanka.

**For ……………………………………………... of Water Supply Scheme**

**Contract No. …………………………………...**

We, ……………………………………………………………….[*name of manufacturer*] of ………………………………………………………………………………………………………………….…………………………………..…….*[address of manufacturer]*warrant that the ………………………………………. [*insert the Materials and accessories*] supplied under this Contract are new, unused, of the most recent or current models and have incorporated all recent improvements, and no defects arising out of the design, material or workmanship from any act that may be develop under normal use of the supplied Materials.

If there is any defect during the warranty period specified in the Clause 76.0 of the General Conditions of Contract, we shall attend to repair or replace the defective Materials with all reasonable speed without any cost to the Purchaser.

………………………………………… ..…………….………

Authorized Officer of the Manufacturer. Seal of the Company.

Name : …………………………………… Date : …………………..

In the capacity of …………………………

This is to certify that the seal and signatures of authorized officer of the manufacturer affixed to Manufacturer’s warranty, are found to be authentic.

………………………………

Signature of Attorney at Law

……………………………..

Seal of Attorney at Law

In the place of (……………………………………………………………………………. address)

Date ……………………

Revised on 11-03-2022

**Appendix 13A - TOR FOR INDEPENDENT INSPECTION AGENCY for DI pipes & fittings**

**(Appendix 13A - 1 of 6)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **1.**  **1.1** | **Physical Proportion**  **Socket & Spigot Pipes**  Pipe wall thickness  External Diameter  Internal Diameter  Length of Pipe  Socket Length  Chamfering of Spigot end  C - Class  Grooves in the Socket.  Thickness of Internal Cement lining  Smoothness of Internal Cement lining.  External Zinc Coating.  Thickness & Weight of external Zinc Coating.  Compressive Strength of the Cement Lining.  Curing period of Pipes after Cement Lining.  Smoothness of external Bitumen Coating. |  |  |  |

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **(Appendix 13A - 2of 6)** | | | | |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **1.2**  **1.3** | **Flanged Pipes**  Flange thickness  Flange diameters  No. of bolt holes  Length of pipe  Wall Thickness of Pipe  C – Class of Pipe  Cleanliness of Flange  Raised Face or Flat Face  Smoothness of Raised Face/Flat Face  Integrally casted or Factory Welded  Condition of weld if welded.  Thickness of Internal Cement lining  Smoothness of Internal Cement Lining.  External Zinc Coating.  Thickness & Weight of external Zinc Coating  Method of Application of Bitumen Coating.  Compressive Strength of the Cement Lining  Curing period of Pipes after Cement Lining.  Smoothness of external Bitumen Coating  **Socketed Bends**  Socket Diameter  Length of Bend  C -Class of Bend  Wall Thickness of bend  Grooves in the Socket.  Revised on 11-01-2022 |  |  |  |

**(Appendix 13A - 3 of 6)**

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **1.4** | Thickness of Internal Cement lining  Smoothness of Internal Cement lining  External Zinc Coating  Thickness & Weight of external cement coating  Method of Application of Bitumen Coating  Compressive Strength of the Cement Lining  Curing period of Bends after Cement Lining  Smoothness of external Bitumen Coating.  **Flanged Bends**  Flange Diameter  Length of Bend  Thickness of Flange  No. of Bolt holes  Wall Thickness of Pipe  Raised Face or Flat Face  Smoothness of Raise Face/ Flat Face  Integrally Casted / Factory welded condition of  Weld if welded  C – class  Thickness of Internal Cement lining  Smoothness of Internal Cement lining  External Zinc Coating  Thickness & Weight of External Coating  Compressive Strength of the Cement Lining. |  |  |  |

**(Appendix 13A - 4 of 6)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **1.5** | Method of Application of Bitumen Coating  Compressive Strength of the Cement Lining  Curing period of Bends after Cement  Smoothness of external Bitumen Coating.  **Tees**  Socketed Tees  Length of Tees  Length of Branch  Diameter of Tee (all faces)  Wall Thickness of Tees  Wall Thickness of Branch  Condition of grooves in socket  C – Class  Thickness of Internal Cement lining  Smoothness of Internal Cement lining.  External Zinc Coating  Thickness & Weight of External Zinc Coating  Method of Application of Bitumen Coating  Compressive Strength of the Cement Lining  Curing period of Tees after Cement Lining  Smoothness of external Bitumen coating. |  |  |  |

Revised on 11-01-2022

**(Appendix 13A - 5 of 6)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **1.6** | **Flanged Tees**  Length of Tee  Length of Branch  Diameter of Tee (all Branches)  Wall Thickness of Tee  Diameter of Flanges (All faces)  No of Bolt holes  Flange thickness  Integrally Casted or Factory Welded  Condition of weld if welded  Flanges of Raised Face or Flat Face  Smoothness of Raised Face/ Flat Face  C – Class  Thickness of Internal Cement lining  Smoothness of Internal Cement lining.  External Zinc Coating  Thickness & Weight of external Zinc Coating  Method of Application of Bitumen Coating  Compressive Strength of the Cement Lining  Smoothness of external Bitumen coating. |  |  |  |

Revised on 11-01-2022

**(Appendix 13A - 6 of 6)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per Specification** |
| **2.**  **2.1** | **Strength &Metallurgical Properties**  **DI Pipes & Fittings**  1. Method of Casting Metallurgical Properties  ……………. Tensile Strength  Hardness minimum Elongation Positive  Internal Hydrostatic Pressure Negative  Internal Pressure  2. Manufacturing Standards of Pipes &  Fittings.  3. Lubricant make & seal type of designation  of lubricant.  4. Manufacturing of lubricant  5. Manufacturing Standard of lubricant  Joint Rings/ Gaskets  6. Materials of Joint Ring/ Gasket  7. Manufacturing Standards of Joint Ring/  Gasket  8. Hardness of materials of Joint Ring/  Gasket.  9. Seal Type designation of Joint Ring/  Gasket Nuts & Bolts.  10. Materials of Nuts & Bolts Washers  11. Manufacturing Standard of Nuts & Bolts  12. Number of Washers/ Bolt. |  |  |  |

Revised on 11-01-2022

**APPENDIX 13B - TOR FOR INDEPENDENT INSPECTION AGENCY FOR HDPE PIPES & FITTINGS**

**(Appendix 13B - 1 of 4)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per specification** |
| **1.** | **Physical Proportion/properties** |  |  |  |
| **1.1** | **Socket & Spigot Pipes** |  |  |  |
|  | Pipe wall thickness  External Diameter  Length of Pipe  SDR category  PE designation  Elongation at Break for e <5 m  5m < e <12 mm  e >12 m  Melt Mass flow rate (MFR)  Oxidation Induction time  Ovalty  Density  Effect on water quality |  |  |  |
| **1.2** | **Flanges** |  |  |  |
|  | Flange thickness  Flange diameters  No. of bolt holes  Cleanliness of Flange  Raised Face or Flat Face  Smoothness of Raised Face/Flat Face  Integrally casted or Factory Welded  Condition of weld if welded  Elongation at Break for e <5 m  5m < e <12 mm  e >12 m  Ovalty  Melt Mass flow rate (MFR)  Oxidation Induction time  Density  Effect on water quality |  |  |  |

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per specification** |
| **1.3** | **Bends** |  |  |  |
|  | Diameter  Length of Bend  SDR  PE designation  Wall thickness of bend  Melt mass flow rate (MFR)  Oxidation induction time  Cohesive resistance  Tensile strength  Ovalty  Density  Effect on water quality |  |  |  |
| **1.4** | **Tees** |  |  |  |
|  | Length of tees  Length of Branch  Diameter of tee (all faces)  Wall thickness of Tees  Wall thickness of Branch  SDR  PE Designation  Melt mass flow rate (MFR)  Oxidation induction time  Density  Ovalty  Tensile strength  Effect on water quality  Cohesive resistance |  |  |  |
| **2.** | **Strength & Mechanical Properties** |  |  |  |
| **2.1** | **PE Pipes & Fittings** |  |  |  |
|  | Hydrostatic strength at 20 0C  Hydrostatic strength at 80 0C  Manufacturing Standards of Pipes & Fittings. |  |  |  |

**(Appendix 13B - 2 of 4)**

**(Appendix 13B - 3 of 4)**

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | | **Test Performed** | **Results** | **Acceptability as per specification** |
| **3.** | **Accessories** |  |  |  |
| **3.1** | Steel flange converter |  |  |  |
|  | Dimension  Physical appearance  Ovality |  |  |  |
| **3.2** | **Slim flange assembly** |  |  |  |
|  | Dimension  Physical appearance  Ovality |  |  |  |
| **3.3** | **Nuts & Bolts** |  |  |  |
|  | Dimensions  Tensile strength   * 1. yield stress or stress at permanent set limit of 0.2%   2. percentage elongation after fracture   3. stress under proof load   4. strength under wedge loading   5. hardness   thickness of galvanized coating  Ovality |  |  |  |
| **4.** | **Joint rings & Gaskets** |  |  |  |
|  | Appearance & finish  Tensile strength  Elongation of break  Compression hardness  Micro biological deterioration |  |  |  |
| **4.** | **Material Characteristics** |  |  |  |
|  | Compound Density  Carbon black content (black compound) % by mass  Carbon Black dispersion (black compound) grade range |  |  |  |
| **5.** | **Quality Assurance** |  |  |  |
| **5.1** | **Raw Materials (R/M)**  R/M received and kept separately in quarantine area on R/M test report received (Report Ref. No.) on |  |  |  |

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activity | | Test Performed | Results | Acceptability as per specification |
| **5.2** | **Manufacture**  Date and Time of commencement of batch  Date and Time of completion of batch  Date batch sent to quarantine area |  |  |  |
| **5.3** | **Physical/Mechanical Checkings (by In-House Q/A Department and Laboratory)**   1. Dimension and appearance checking 2. Heat reversion test 3. General test 4. Batch test 5. Tensile test |  |  |  |
| **5.4** | **Pipe sample sent for chemical test** |  |  |  |
| **5.5** | **Pipes passed by inspector for release to general storage area** |  |  |  |
| **5.6** | **General storage area for packing**  Wrapping/packing completed and labelled and separately stored, awaiting chemical test results for pipe. |  |  |  |
| **5.7** | **Verification of Quality**  Chemical tests results of pipe received. |  |  |  |
| **5.8** | **Separation of coils pipes not complying with BS** |  |  |  |
| **5.9** | **Test certificate submitted for inspection agent/NWSDB’s approval** |  |  |  |
| **5.10** | **Purchaser’s approval received for shipment** |  |  |  |
| **5.11** | **Containerisation & Final Approval**  Pipe stocks loading in to container & passed by Q/A Department & Inspection Agent |  |  |  |
| **5.12** | **Final approval for transport & shipment** |  |  |  |

**(Appendix 13B - 4 of 4)**

Revised on 11-01-2022

**APPENDIX 13C - TOR FOR INDEPENDENT INSPECTION AGENCY FOR DI VALVES, MANHOLE COVERS AND SURFACE BOXES**

**(Appendix 13C - 1 of 6)**

Revised on 11-01-2022

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Test performed | Results | Acceptability as per specification |
| 1. **GATE/SLUICE VALVES**    1. Performance test – 2. Operate Fully Closed to Fully Open – times 3. Operate Fully open to Fully close – times    1. Leakage test for internal pressure    2. Material   Body  Spindle  Metal faces and seal   * 1. Length between flanges   1.5 End flanges -  Pressure Rating  Dimensions  Bolt Circle dia.  1.6 Gear Ratio  Unbalanced head  Seat test pressure  Body test pressure   * 1. Internal protection coating   2. External protective finish coating  1. **BUTTERFLY VALVES**    1. Performance test – 2. Operate Fully Closed to Fully Open – times 3. Operate Fully open to Fully close – times    1. Leakage test for internal pressure    2. Leakage test for external pressure    3. Hydrostatic test    4. Seat tightness test   2.7 Material  Valve body  Valve disc  Valve seat  **(Appendix 13C - 2 of 6)**  Shaft  Shaft seals  2.8 Face to face dimensions of the valves  2.9 End Flanges  Pressure rating  Dimensions  Bolt circle dia.  2.10 Gear ratio of gearing  Unbalanced head  Seat test pressure  Body test pressure  2.11 Internal protective finish:  Material  Thickness  2.12 External protective finish:  Material  Thickness  **3. AIR VALVES**  3.1. Performance test –   1. Operate Fully Closed to Fully Open – times 2. Operate Fully open to Fully close – times   3.2. Body strength test  3.3. Leakage test  3.4. Material of Ball (Stainless Steel or Plastic)  3.5. Flanges (if applicable)  Pressure rating  Standard Dimensions  Bolt circle dia.  3.6 Seat test pressure  3.7 Body test pressure  3.8 Internal protective finish  3.9. External protective finish  **4 CHECK VALVES**  4.1. Performance test –   1. Operate Fully Closed to Fully Open – times   Revised on 11-01-2022   1. Operate Fully open to Fully close – times   **(Appendix 13C - 3 of 6)**  4.2 Is this non-Slam  4.3 Is this Spring loaded  4.4 Material  Valve body  Hinge pin and bushes  Disc  Disc encapsulating material  4.5. End Flanges  Pressure rating  Dimensions  Bolt circle dia.  4.6. Face to face dimensions of the valve  4.7. Seat test pressure  4.8. Body test pressure  4.9. Internal protective finish  4.10. External protective finish  **5. PRESSURE REDUCING VALVES**  5.1 Material  Main valve  Body  Internal valve  Indicator rod  Relay Valve  Body  Spindle  Diaphragm.  Spring  5.2 Length between flanges  5.3 End Flanges  Pressure rating  Dimensions  Bolt circle dia.  5.4 Minimum running pressure difference  5.5 Minimum control pressure  5.6 Internal protective finish  5.7 External protective finish  Revised on 11-01-2022  **(Appendix 13C - 4 of 6)**  **6. PRESSURE SUSTAINING/RELIEF VALVES**   * 1. Material   Main valve  Body  Internal valve  Indicator rod  Relay Valve  Body  Spindle  Diaphragm  Spring  6.2. Length between flanges  6.3 End Flanges  Pressure rating  Dimensions  Bolt circle dia.   * 1. Internal protective finish   2. External protective finish   **7. FLOW CONTROL VALVES**  7.1 Material  Main valve  Body  Internal valve  Indicator rod  Relay Valve  Body  Spindle  Diaphragm  Spring  7.2. Length between flanges   * 1. End Flanges   Pressure rating  Dimensions  Bolt circle dia.   * 1. Minimum flow   Revised on 11-01-2022   * 1. Constant flow   **(Appendix 13C - 5 of 6)**   * 1. Internal protective finish   2. External protective finish   **8. ALTITUDE VALVES**  8.1. Material  Main valve  Body  Internal valve  Indicator rod  Relay Valve  Body  Spindle  Diaphragm  Spring  8.2 Length between flanges  8.3 End Flanges  Pressure rating  Dimensions  Bolt circle dia.  8.4. Internal protective finish  8.5. External protective finish  **9. BALL FLOAT VALVES** 9.1. Body test pressure9.2 End FlangesPressure rating Dimensions  Bolt circle dia. 9.3 Material Valve Body  Float  Lever and links 9.4 Body test pressure9.5 Close assembly test pressure **10. FLAP VALVES**   Material Revised on 11-01-2022 Frame and door Sealing  Hinge pin  Links Flanges Pressure rating  Dimensions  Bolt circle dia. 11. FIRE HYDRANTS 11.1 Screw Down Type 11.1.1. Inlet Flanges Pressure rating  Dimensions  Bolt circle dia. 11.1.2 Body test pressure11.1.3 Valve and seat test pressure11.1.4. Internal protective finish11.1.5. External protective finish 11.2. Dry Barrel Type 11.2.1 No. of outlet nozzles 11.2.2. Nominal diameter 11.2.3 Inlet Flange Pressure rating  Dimensions  Bolt circle dia. 11.2.4. Material, Hardness range of Gaskets11.2.5. Material of Nuts and Bolts **12. SURFACE BOXES AND MANHOLE COVERS**   * 1. Material   2. Class   Manhole Covers  Surface Boxes  12.3. Coating |  |  |  |

Revised on 11-01-2022

**(Appendix 13C - 6 of 6)**

**APPENDIX 13D - TOR FOR INDEPENDENT INSPECTION AGENCY FOR joint protection Material**

**(Appendix 13D - 1 of 1)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item No** | **Description** | **Test Results** | **Measurement Value /**  **Observation Comments** |
|  | General |  |  |
| 1 | Volatile Organic Compound Content |  |  |
| 2 | Self-Supporting |  |  |
| 3 | Cracking |  |  |
| 4 | Moisture and state limit |  |  |
| 5 | Resistivity to;  Mineral Acid  Alkalis  Salts |  |  |
| 6 | Suitability Climate |  |  |
|  | Mastic Primer |  |  |
| 1 | Specific Gravity |  |  |
| 2 | Flash Point |  |  |
|  | Mastic Paste |  |  |
| 1 | Specific Gravity |  |  |
| 2 | Flash Point |  |  |
| 3 | Specific Volume |  |  |
| 4 | Maximum Service Temperature |  |  |
| 5 | Solid Content |  |  |
|  | Mastic Tape |  |  |
| 1 | Flash Point |  |  |
| 2 | Maximum Service Temperature |  |  |

Revised on 11-01-2022

**APPENDIX 13E - TOR FOR INDEPENDENT INSPECTION AGENCY FOR Pump MOtOr Assemblies**

**(Appendix 13E - 1 of 2)**

Revised on 11-01-2022

|  |  |  |
| --- | --- | --- |
|  | **Test** | **Measurement Value /**  **Observation Comments** |
| **01.** | **Visual Tests**  Casting, Machining, Welding,  Dimensions, finish data like fillets, corners etc.  Surface finish, surface preparation, painting.  Alignment of the whole assembly. |  |
| **02.** | **Test Set – up / facilities**  Suitability of the factory test set – up for the specified pump tests.  Suitability of the instrumentation for measurements, data transfer / storage / processing, report generation, including acceptable calibration. |  |
| **03.** | **Status of the tested Equipment, whole set –up,**  **Instrumentation etc. after running for an adequate time stabilization.**  Temperature at various points.  noises  Vibrations  Leakages  Distortions  Cavitations  Others |  |
| **04.** | **Measurements (General)**  Voltage  Currant  Power  Power Factor  Insulation Resistance  (others specific to the particular Contract) |  |

**(Appendix 13E - 2 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test** | **Measurement Value /**  **Observation Comments** |
| **05.** | **Operational Measurements**  Flow rate  Delivery pressure  Suction pressure  Power drawn by motor |  |
| **06.** | **Hydrostatic Test**  For pumps between 20 – 75 kw.  Test the components at 150% of the pump shut off head for 10 minutes.  For pumps larger than 75 kw.  Test the components at 150% of the pump shut off head for 30 minutes. |  |

Revised on 11-01-2022

**APPENDIX 13F - TOR FOR INDEPENDENT INSPECTION AGENCY FOR GAS CHLORINATORS, CHEMICAL EQUIPMENT & ACCESSORIES**

**(Appendix 13F - 1 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **01** | **Visual Tests**  Castings  Machining  Welding, fillets, corners and similar features  Surface finish and painting  Drillings, positioning etc.  Assembly |  |
| **02** | Operational status of the Equipment under test (after operation until stabilization)  Temperature at various points  Excessive noise emissions  Excessive shaking or vibration  Excessive leakages  Any distortions of parts  Possible cavitation  Measuring Equipment |  |

Revised on 11-01-2022

**(Appendix 13F - 2 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **03** | **Measurements (General)**  Voltage  Current  Power  Power factor  Insulation resistance |  |
| **04** | **Operational Measurements**  Flow rate  Delivery pressure  Suction pressure  Power drawn by motor |  |
| **05** | **Hydrostatic Test**  For pumps between 20 – 75 kw.  Test the components at 150% of the pump shut off head for 10 minutes.  For pumps larger than 75 kw.  Test the components at 150% of the pump shut off head for 30 minutes. |  |

Revised on 11-01-2022

**APPENDIX 14 - LOCAL ACCREDITED AGENT’S Confirmation of Supply OF MATERIALS according to WORK PROGRAMME**

*Note: This is to be typed on a company letter heading*

[Address of the Local Accredited Agent]

…………………………………………..

………………………………………….

………………………………………….

Chairman,

National Water Supply & Drainage Board,

Galle Road, Ratmalana.

Sri Lanka.

# Bid for ……………………………… Water Supply Scheme

Contract No…………………………………….

We, ………………….…………………………………………………………………[*name of the Local Accredited Agent*] of ……………………………………………………… …………………………………………….……………………………………………………………….…….*(address of the Local Accredited Agent)* confirm that we will Supply & Deliver………………………….. [insert the relevant Materials and accessories] to this Contract to the bidder M/s. ………………………………………………………. *(Name & Address of the bidder)* according to the Work programme.

…………………………….

Authorized Signatory Attested by the Attorney at Law

and the Company Seal

…………………………………..

Signature of the Attorney at Law

Name : ……….……………………………….

In the Capacity of : ……………………………… Seal ……………………………

In the place of …………………….…

……………………………... *(address)*

Witnesses :

1 Signature : ……………………………………………………………

Name : ……………………………………………………………

Capacity : ……………………………………………………………

Address : ……………………………………………………………

2 Signature : ……………………………………………………………

Name : ……………………………………………………………

Capacity : ……………………………………………………………

Address : ……………………………………………………………

Revised on 11-01-2022

**APPENDIX 15A - PRE - SHIPMENT INSPECTION OF DI PIPES & FITTINGS**

# BY THE EMPLOYER - CHECK LISTS

**(Appendix 15A – 1 of 13)**

Name & Location of the Factory

Pipe : - ………………………………………………………………………………

………………………………………………………………………………

Fittings : - ………………………………………………………………………………

….……………………………………………………………………………

Valves : -...………………………………………………………………………………

..………………………………………………………………………………

Couplings : - …………………………………………………………………………………

…………………………………………………………………………………

Adaptors : - …………………………………………………………………………………

…………………………………………………………………………………

Flanged Pipes : - …………………………………………………………………………………

…………………………………………………………………………………

(Requirement - Pipes and fittings should be manufactured by same manufacturer or manufacturing group.)

Applicable Standards

Manufacturing Standards : (ISO 2531:2009/BSEN 545: 2010) …………….

Of pipes & Fittings

Manufacturing Standards of

Joint Rings : (BSEN 681-1:1996/ISO 4633:2015) ………….

Quality Assurance Standards : (ISO 9001: 2015) ……………

Parameters to be checked

Markings to casted on, painted or cold stamped

Mechanical Properties, Hardness, Elongation,

Hydrostatic Pressure Tests

Wall Thickness

Length of straight pipes

Straightness

External Coating

Internal Coating

Testing of Welded Flanges

Chemical Composition of Pipes & Fittings (Composition of metals).

Condition of Pipes & Fittings

Warping or shrinkage

Surface or other defects detrimental to functionality : Satisfactory/Unsatisfactory

Handling of pipes, Fittings after production : Satisfactory/Unsatisfactory

Inspection Procedure

Witness testing a sample with Factory QC Team : Yes/No

Witness testing with Independent Inspection Agency : Yes/No

**(Appendix 15A – 2 of 13)**

Revised on 11-01-2022

**PRE - SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

Mark Yes or No in the Remarks Column as Appropriate Date of Inspection …………

Revised on 11-01-2022

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Technical**  **Specifications**  **Clause No.** | **Description** | | **Values as per**  **Specifications** | **Satisfactory/**  **Unsatisfactory** | | **Remarks** | |
| GENERAL | | | | | | | |
| Quality  Assurance | Availability of Valid Quality Standard  Certificates | | ISO 9001:2008/2015 |  | |  | |
| Independent  Inspection | Availability of Inspection Agency.  Certificate before Shipment | | - |  | |  | |
| Markings | Pipe Material (Ductile Iron) | | - |  | |  | |
|  | Year of Manufacture (Last Two Digits) | | - |  | |  | |
|  | Manufacturers Identification Mark/Name | | - |  | |  | |
|  | Nominal Diameter in mm | | - |  | |  | |
|  | Class Designation | | - |  | |  | |
|  | Quality Standard & Product Conformity certificate | | - |  | |  | |
|  | Client Identification | | - |  | |  | |
|  | Socket Penetration Lines (2 Lines) | | - |  | |  | |
|  | In case of Fittings, these marks shall appear on the body of each fitting together with its main characteristics such as angle of bend, pressure rating of flange etc. | | - |  | |  | |
| Material Characteristics | | | | | | | |
|  | Mechanical Properties |  | | |  | |  |
|  | Minimum Tensile Strength | 420 N/mm2 | | |  | |  |
|  | Minimum Bending Strength | Table B1 BSEN-545 2010 | | |  | |  |
|  | Modulus of Elasticity | 14- 18 N/mm2 | | |  | |  |
|  | Brinell hardness for pipes | 230HB | | |  | |  |
|  | Brinell hardness for fittings | 250 HB | | |  | |  |

**(Appendix 15A – 3 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Hydrostatic Test | | | | | | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : DI Pipes (SS/DF) Class : Dia. x Length :  Tech Spec Clause No: Reference Standard: BSEN545:2010 - Clause 6.5 & Table 14  ISO 2531:2009 - Clause 6.5 & Table 10 | | | | | | | | | | | | |
| Sample  No | Item of Testi- ng | Pressure class (“C” class)/  Test pressure | Test Condition | | | | | | Deviation | Tolerance  Allowed | Comply? | Remarks |
| Flexible joints | | Push-fit joints | | Flanges & flanged joints | |
| +ve int. pressure | -ve int. pressure | +ve ext. Pressure | Dynamic int. pressure | Flanged joints | Screwed & welded flanges |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | | | | | | |
| Name : 1. Name : 2. | | | | | | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | | | | | | |
| Date : | | | | | | | | | | | | |

Revised on 11-01-2022

**(Appendix 15A – 4 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Length of Straight Pipes and Fittings | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item: DI Pipes (SS/DF), Fittings Class: Dia. x Length:  Tech Spec Clause No: Reference Standard: BSEN545:2010 – Clause 4.2.3 & Table 3,4,5,6  ISO 2531 :2009 - Clause 4.2.3 & Tables 2,3,4,5 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

**(Appendix 15A - 5 of 13)**

Revised on 11-01-2022

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Straightness | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item: DI Pipes (SS/DF) Class : Dia. x Length :  Tech Spec Clause No: Reference Standard: BSEN545:2010 – Clause 4.2.4  ISO 2531 :2009 -Clause 4.2.4 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

Revised on 11-01-2022

**Appendix 15A – 6 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

Revised on 11-01-2022

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Internal & External Diameter of Pipes & Fittings | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : DI Pipes (SS/DF) , Fittings Class : Dia. x Length :  Tech Spec Clause No: Reference Standard : BSEN545:2010 – Clause 4.2.2  ISO 2531 :2009 - Clause 4.2.1 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

**(Appendix 15A - 7 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

Revised on 11-01-2022

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Wall Thickness of Pipes & Fittings | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : DI Pipes (SS/DF), Fittings Class : Dia. x Length :  Tech Spec Clause No: Reference Standard : BSEN545:2010 – clause 4.2.1  ISO 2531 :2009 - Clause 4.2.2 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

**(Appendix 15A – 8 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Internal Coating (Strength & Thickness) | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : DI Pipes (SS/DF) , Fittings Class : Dia. x Length :  Tech Spec Clause No: Reference Standard : BSEN545:2010 – Clause 4.4.3 & 4.5  ISO 2531 :2009 - Clause 4.4.2 & 4.5.2 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

Revised on 11-01-2022

**(Appendix 15A – 9 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test External Coating (Thickness of Zinc Mass & Paint coating) | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : DI Pipes (SS/DF), Class : Dia. x Length :  & Coating for fittings and Accessories  Tech Spec Clause No: Reference Standard : BSEN545:2010- clause 4.4.2 & 4.5  ISO 2531 :2009 - clause 4.4.1 & 4.5.1 | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name : 1. Name : 2. | | | | | | | |
| Signature: 1. Signature: 2. | | | | | | | |
| Date : | | | | | | | |

Revised on 11-01-2022

**(Appendix 15A - 10 of 13)**

**PRE – SHIPMENT INSPECTION OF DI PIPES & FITTINGS - CHECK LIST**

Revised on 11-01-2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Chemical Composition | | | | |
| Bill No: Item No. & Qty. : Sample size:  Description of Item : Class : Dia. x Length :  Tech Spec Clause No: Reference Standard : BSEN545:2010& ISO 2531 :2009 | | | | |
| Sample  No | Item of testing | Name of the Metal | Available % | Remarks |
| 1 |  | Fe |  |  |
|  |  | C |  |  |
|  |  | Zn |  |  |
|  |  | Cr |  |  |
|  |  | …. |  |  |
|  |  | ….. |  |  |
|  | | | | |
| Microscopic Inspection of DI sample : % of DI | | | |  |
|  | | | | |
| Inspection & Testing Witnessed by | | | | |
| Name : 1. Name : 2. | | | | |
| Signature: 1. Signature: 2. | | | | |
| Date : | | | | |

**(Appendix 15A – 11 of 13)**

**INSPECTION OF DI PIPES & FITTINGS**

**CHECK LIST**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technical Specifications**  **Clause No.** | **Description** | **Requirements as per Specifications** | **Satisfactory/**  **Unsatisfactory** | **Remarks** |
| HANDLING OF PIPES AND FITTINGS AFTER PRODUCTION | | |  |  |
|  | Packing |  |  |  |
|  | Handling |  |  |  |
|  | Stacking |  |  |  |
|  | Inspection by Factory/Inspection Authority |  |  |  |
|  | Transport Arrangements within manufacturers Country |  |  |  |
|  | Shipping Arrangements |  |  |  |
|  | Freight Insurance Arrangements |  |  |  |
| CONCLUSION AT THE END OF THE INSPECTION TOUR | | |  |  |
| Total Process of Production, Testing, Packing,  Handling, Insurance and Freight  Arrangements Satisfactory | | |  |  |

Observations :

Signature 1 Signature 2

Name & Designation 1: Name & Designation 2:

Revised on 11-01-2022

**(Appendix 15A - 12 of 13)**

**Rubber rings / Gaskets**

Physical Parameter

1. Dimensions :…………………..
2. Diameter :…………………..
3. Hardness :………………….
4. Appearance :…………………..
5. Lot Numbers : ………………….

Quality

1. Product Conformity certificate
2. ISO 9001:2015 certificate

Packing Arrangements

1. Inspection by Independent Inspection Agency: ………….
2. Shipping Arrangements: …………….

Revised on 11-01-2022

**(Appendix 15A - 13 of 13)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample No** | **Diameter** | **Thickness mm** | **Hardness** | **Appearance** | **Deviation** | **Tolerance allowable** | **Whether Comply** | **Remarks** |
|  |  |  |  |  |  |  |  |  |

Product conformity certificate available acceptable : ……………….

(witness the original certificate)

ISO 9001: 2015 Quality Management System certificate available and acceptable: ……………...

(witness the original certificate)

Revised on 11-01-2022

**APPENDIX 15B - PRE - SHIPMENT/ PRE - delivery INSPECTION OF HDPE PIPES & FITTINGS BY THE EMPLOYER - CHECK LISTS**

**(Appendix 15B - 1 of 7)**

Name & Location of the Factory

Pipe : - …………………………………………………………………………………

…………………………………………………………………………………

Fittings : -…………………………………………………………………………………

…………………………………………………………………………………

(Requirement - Pipes and fittings should be manufactured by same manufacturer or manufacturing group.)

Applicable Standards

Manufacturing Standards : (ISO 4427:2019 EN12201-1 TO 5):2011

Of pipes & Fittings

Manufacturing Standards of

Joint Rings : (EN681-1):1996 …………….

Quality Management System : (ISO 9001: 2015) ……………

Parameters to be checked

Markings

Mechanical Properties

Hydrostatic Pressure Tests

Wall Thickness

Length of straight pipes

Straightness

Testing of Flanges

Joint Rings

Chemical Composition of Pipes & Fittings

Condition of HDPE Pipes & Fittings

Tolerances

Handling of pipes, Fittings after production : Satisfactory/Unsatisfactory

Inspection Procedure

Witness testing a sample with Factory QC Team : Yes/No

Witness testing with Independent Inspection Agency : Yes/No

Revised on 11-01-2022

**(Appendix 15B - 2 of 7)**

**PRE - SHIPMENT/ PRE - delivery INSPECTION OF HDPE PIPES & FITTINGS**

**CHECK LIST**

Mark Yes or No in the Remarks Column as Appropriate Date of Inspection…………

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technical**  **Specifications**  **Clause No.** | **Description** | **Values as per**  **Specifications** | **Satisfactory/**  **Unsatisfactory** | **Remarks** |
| GENERAL | | | | |
| Quality  Assurance | Availability of Valid Quality Standard Certificates | ISO 9001:2015 |  |  |
| Independent  Inspection | Availability of Inspection Agency.  Certificate before Shipment | - |  |  |
| Markings |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
|  |  | - |  |  |
| Material Characteristics | | | | |
|  | Mechanical Properties |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Revised on 11-01-2022

**(Appendix 15B - 3 of 7)**

**PRE – SHIPMENT/ PRE - delivery INSPECTION OF HDPE PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Hydrostatic Test | | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item :) Class: Dia. x Length:    Tech Spec Clause No: Reference Standard: | | | | | | | | |
| Sample  No | Item of Testing | Test results | | | Deviation | Tolerance  Allowed | Comply? | Remarks |
| 1 |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | | |
| Name | | | | | | | | |
| Signature : Date : | | | | | | | | |

Revised on 11-01-2022

**(Appendix 15B - 4 of 7)**

**PRE – SHIPMENT/ PRE - delivery INSPECTION OF HDPE PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Length of Straight Pipes and Fittings | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : HDPE Pipes (SS/DF) , Fittings Class : Dia. x Length :  Tech Spec Clause No: Reference Standard : | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name | | | | | | | |
| Signature Date | | | | | | | |

**(Appendix 15B - 5 of 7)**

Revised on 11-01-2022

**PRE – SHIPMENT/ PRE-delivery INSPECTION OF HDPE PIPES & FITTINGS - CHECK LIST**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Wall Thickness of Pipes & Fittings | | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : HDPE Pipes , Fittings SDR: Dia. x Length :  Tech Spec Clause No: Reference Standard | | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | | Deviation | Tolerance  Allowed | Comply?  (Yes/No?) | Remarks |
| Standard | Measured |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | | |
| Name | | | | | | | |
| Signature Date | | | | | | | |

**(Appendix 15B - 6 of 7)**

Revised on 11-01-2022

**PRE – SHIPMENT/ PRE - delivery INSPECTION OF HDPE PIPES & FITTINGS - CHECK LIST**

Revised on 11-01-2022

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Chemical Composition | | | | | | |
| Bill No: Item No. & Qty. Sample size:  Description of Item : HDPE Pipes SDR : Dia. x Length :  Tech Spec Clause No: Reference Standard | | | | | | |
| Sample  No | Item of testing | Physical/Measured  Value | Deviation | Tolerance  Allowed | Comply? | Remarks |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |
| Inspection & Testing Witnessed by | | | | | | |
| Name | | | | | | |
| Signature Date | | | | | | |

**(Appendix 15B - 7 of 7)**

**INSPECTION OF HDPE PIPES & FITTINGS**

**CHECK LIST**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technical Specifications**  **Clause No.** | **Description** | **Requirements as per Specifications** | **Satisfactory/**  **Unsatisfactory** | **Remarks** |
| HANDLING OF PIPES AND FITTINGS AFTER PRODUCTION | | |  |  |
|  | Handling |  |  |  |
|  | Stacking |  |  |  |
|  | Inspection by Factory/Inspection Authority |  |  |  |
|  | Transport Arrangements within manufacturers Country |  |  |  |
|  | Shipping Arrangements |  |  |  |
|  | Freight Insurance Arrangements |  |  |  |
| CONCLUSION AT THE END OF THE INSPECTION TOUR | | |  |  |
| Total Process of Production, Testing  Handling, Insurance and Freight  Arrangements Satisfactory | | |  |  |

Observations :

Signature 1 Signature 2

Name & Designation 1: Name & Designation 2:

Revised on 11-01-2022

**APPENDIX 15C – PRE - SHIPMENT Inspection of Pump AND Motor**

**Assemblies BY THE EPLOYER - CHECK LISTS**

**(Appendix 15C - 1 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **01** | **Visual Tests**  Comments on castings  Comments on machining  Comments on welding, fillets, corners and similar features  Comments on surface finish and painting  Comments all drillings, positioning etc.  Comments on assembly |  |
| **02** | **Operational status of the Equipment under test (after operation until stabilization)**  Observation on temperature at various points  Observations on excessive noise emissions  Observations on excessive shaking or vibration  Observations on excessive leakages  Observations of any distortions of parts  Observations of possible cavitation  Observations on the measuring Equipment |  |

Revised on 11-01-2022

**(Appendix 15C - 2 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **03** | **Measurements (General)**  Voltage  Current  Power  Power factor  Insulation resistance |  |
| **04** | **Operational Measurements**  Flow rate  Delivery pressure  Suction pressure  Power drawn by motor |  |
| **05** | **Hydrostatic Test**  For pumps between 20 – 75 kw.  Test the components at 150% of the pump shut off head for 10 minutes.  For pumps larger than 75 kw.  Test the components at 150% of the pump shut off head for 30 minutes. |  |

Revised on 11-01-2022

**APPENDIX 15D – PRE-SHIPMENT Inspection oF GAS chlorinators BYTHE EMPLOYER - CHECK LISTS**

**(Appendix 15D - 1 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **01** | **Visual Tests**  Comments on castings  Comments on machining  Comments on welding, fillets, corners and similar features  Comments on surface finish and painting  Comments all drillings, positioning etc.  Comments on assembly |  |
| **02** | **Operational status of the Equipment under test (after operation until stabilization)**  Observation on temperature at various points  Observations on excessive noise emissions  Observations on excessive shaking or vibration  Observations on excessive leakages  Observations of any distortions of parts  Observations of possible cavitation  Observations on the measuring Equipment |  |

Revised on 11-01-2022

**(Appendix 15D - 2 of 2)**

|  |  |  |
| --- | --- | --- |
|  | **Test/Activity** | **Measurement Value/Observations & Comments** |
| **03** | **Measurements (General)**  Voltage  Current  Power  Power factor  Insulation resistance |  |
| **04** | **Operational Measurements**  Flow rate  Delivery pressure  Suction pressure  Power drawn by motor |  |
| **05** | **Hydrostatic Test**  For pumps between 20 – 75 kw.  Test the components at 150% of the pump shut off head for 10 minutes.  For pumps larger than 75 kw.  Test the components at 150% of the pump shut off head for 30 minutes. |  |

Revised on 11-01-2022

**APPENDIX 15E – PRE - DELIVERY INSPECTION OF uPVC PIPES AND FITTINGS BY THE EMPLOYER - CHECK LISTS**

**(Appendix 15E - 1 of 2)**

1) Minimum wall thickness

|  |  |  |
| --- | --- | --- |
| dn | Minimum wall thickness | Satisfactory / not satisfactory |
| dn< 225 | …………………… | …………………… |
| 225 <dn< 315 | …………………… | …………………… |

2) Leak tightness of joints

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test** | **Test requirements** | | **Test conditions**  **uPVC Pipes** | **Satisfactory / not satisfactory** |
| Internal hydrostatic  Pressure | - test pressure  1.5 x PFA + 5 bar  - test duration: 2h  - no leakage during test  period. | | - joint of maximum annulus,  aligned withdrawn and  subjected to shear load  - temperature between 15ºC  and 25° C |  |
| - joint of maximum annulus,  deflected  - temperature between 15ºC  and 25° C |  |
| Negative  internal  pressure | - test pressure: 0.8 bar  - test duration: 2h  - maximum pressure  Change during test  period: 0.08 bar | | - joint of maximum annulus,  aligned, withdrawn, and  subjected to shear load  - temperature between 15ºC  and 25° C |  |
| - joint of maximum annulus,  deflected  - temperature between 15ºC  and 25° C |  |
| Cyclic internal hydraulic pressure: | - test pressure: between  0.5 PFA and PFA  - test period: 24 000  cycles | | - joint of maximum annulus,  aligned, withdrawn and  subjected to shear load  - temperature between 15ºC  and 25° C |  |
|  | |

PFA = Allowable Operating Pressure of the joint declares by the manufacture.

Revised on 11-01-2022

**(Appendix 15E - 2 of 2)**

3) Hydro-static pressure test : ……………………. (Satisfactory/ not satisfactory)

4) Hardness : ………………. (Satisfactory/ not satisfactory)

5) Tensile strength …………………………… (Satisfactory/ not satisfactory)

6) Colour …………………………

7) Dimension ……………………………

8) Ovalty ………………………. (Satisfactory / not satisfactory)

Recommendation …………………………………………………………………………...

………………………………………………………………………………………………

Authorized signatures of NWSDB representatives

i. Name : Name :

ii. Designation : Designation :

iii. Signature : Signature :

**APPENDIX 16 - Details of Local Accredited Agent**

Revised on 11-01-2022

1. Name of Local Accredited Agent:

2. Official Address:

3. Details of Local Accredited Agent’s Company

3.1 Names of Directors

3.2 Qualifications of Directors and their experience in business

3.3 Registration with the Registrar of companies

(a). Registration Number

(b). Date of Registration

3.4 Financial Capacity

(Prove with Audit Financial Statements for last 3 years)

3.5 Technical Competence

3.6 Supporting staff

(a) Name :

(b) Qualification:

(c ) Experience

3.7 Office area (m2)

3.8 Stores capacity :

(Indicate the area and location)

3.9 Yard capacity

(Indicate the area and location)

3.10 Past Experience and history of performance

Details of previous supplies to the NWSDB:

(Copies of the letters of Contract Awards and completion certificates shall be attached)

Revised on 11-01-2022

**APPENDIX 17A – NWSDB PRE-QUALIFIED MANUFACTURERS AND THEIR PRE - QUALIFIED ITEMS**

**Note:**

Pre-Qualified pipe manufacturer has been pre-qualified together with pipe fitting manufacturer and rubber ring manufacturer. Therefore, when selecting a pre - qualified pipe manufacturer, his relevant pipe fitting manufacturer and rubber ring manufacturer shall be selected.

*When Bidding Document is prepared please include updated list of* ***Pre - Qualified Manufactures lists*** *from NWSDB web*

### *(under the “Restrict Links”)*

* *PVC pipes, fittings & rubber rings*
* *HDPE pipes & fittings*
* *DI pipes, fittings & rubber rings*
* *DI Valves*
* *DI Manhole covers*
* *DI Couplings, Flange Adaptors, Stepped Couplings and Dismantling joints for DI. Asbestos, GRP, HDPE & PVC Connection*

Revised on 11-03-2022

**APPENDIX 17B – NWSDB RECOMMENDED M & E MANUFACTURERS AND**

**ITEMS**

*When Bidding Document is prepared please include updated Recommended list of Pre - Qualified M & E Manufactures list from NWSDB web*

### *(under the “Restrict Links”)*

* *Mechanical Plant & Equipment*
* *Electrical Plant & Equipment*
* *Instrumentation*
* *Process Systems*

Revised on 11-01-2022

**APPENDIX 18 - ENTITLED ALLOWANCES ON FOREIGN TRAVELS &**

**RELATED EXPENSES**



Revised on 11-01-2022

**APPENDIX 19 – AFFIDAVIT BY THE BIDDER**

I ………………………………………… of ………………………………………… being a ……………………… (Buddhist or any other religionist), do hereby solemnly sincerely and truly declare and affirm as follows.

01. I am the Affirmant above named.

02. I hereby declare that I have applied for the Contract of National Water Supply and Drainage Board bearing No: …………………………………….. and my spouse or dependent does not work in National Water Supply and Drainage Board on permanent, casual or Contract basis.

The foregoing affidavit having been read over and explained to the affirmant above named who having understood its nature content and context affirmed hereto and set his usual signature hereto in ……………... on this ………….……………… day of …………….……. 20...

Before me ……………………

Declarant

…………………………………

Justice of the Peace /

Commissioner for oaths

Revised on 11-01-2022

Revised on 08-08-2016

**Appendix 20 - List of employer’s stores**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Region** | **Address** | |
| 1. | RSC  (North) | Location 01 | NWSDB Stores, Pokkanai, Chunnakam, Jaffna. |
|  |  | Location 02 | 1st Lane, Thiunavatkulam, Vavuniya |
| 2. | RSC  (North Western) | Location 01 | O&M Stores (NWSDB), Kurunegala Road, Munneshwaram, Chilaw. |
|  |  | Location 02 | Construction Stores (NWSDB), Withikuliya,  Wannigama. |
|  |  | Location 03 | Regional Stores (NWSDB), Lake side, Kurunegala |
| 3. | RSC  (Central) | Location 01 | Regional Work Shop and Stores, Kundalagama, Kundasale |
| 4. | RSC  (North Central) | Location 01 | Regional Stores, Regional Support Centre (North Central), Godage Mawatha  Anuradhapura |
|  |  | Location 02 | Manager Office (Operation & Maintenance)  New Town, Polonnaruwa |
| 5. | RSC  (Uva) | Location 01 | Divithotawela, Welimada |
|  |  | Location 02 | Hulandawa, Monaragala |
| 6. | RSC (Sabaragamuwa) | Location 01 | Regional Stores, New Town, Rathnapura |
|  |  | Location 02 | Regional Stores (Kegalle), Hiriwadunna Water Treatment Plant, Hiriwadunna  Rambukkana |
| 7. | RSC  (East) | Location 01 | Regional Manager Office, Batticaloa,  Kallady |

Revised on 11-01-2022

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Region** | **Address** | |
| 8. | RSC  (Southern) | Location 01 | Region Stores (Matara Region), Atthudawa Road, Nadugala, Matara |
|  |  | Location 02 | Regional Stores (Galle Region),  Baddegama Water Treatment Plant, Hikkaduwa Road, Kiribathawilla  Baddegama. |
|  |  | Location 03 | Regional Stores (Hambanthota Region), Ambalanthota Water Treatment Plant,  Ridiyagama Road, Ambalanthota. |
| 9. | RSC  (Western South) | Location 01 | Manager (Dehiwala) Office, No. 151, Anagarika Dharmapala Mawatha  Dehiwala. |
|  |  | Location 02 | Regional Stores (NWSDB), Nagoda, Kalutara. |
|  |  | Location 03 | NWSDB Regional Stores (Panadura-Horana), Chandrasekara Road,  Horeithuduwa, Moratuwa. |
| 10. | RSC  (Western North) | Location 01 | Yakkala Production Water Supply Scheme, NWSDB, Kandy Road, Weediyawatte, Yakkala. |
|  |  | Location 02 | Aniyakanda Main Stores, NWSDB,  Aniyakanda, Ragama. |
| 11. | RSC  (Western Central) | Location 01 | WC stores, No.182, Sunil Mawatha, Pelawatta, Battharamulla. |
|  |  | Location 02 | Kotte Stores, Kurunduwatta Road,  Pita Kotte, Kotte. |
|  |  | Location 03 | Maligakanda stores, No 03, White Park, Maligakanda, Colombo 10. |
|  |  | Location 04 | Maharagama Stores,  Kulasevana Mw, Kottawa, Pannipitiya. |

Revised on 11-01-2022