Ref No.: NWSDB/SBD/CIVIL/Ver 5

**REVISED ON 20-02-2018** 

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

#### MINISTRY OF CITY PLANNING & WATER SUPPLY

NATIONAL WATER SUPPLY AND DRAINAGE BOARD

WATER SUPPLY/ SEWERAGE SCHEME
BID FOR
(BUILDING & CIVIL WORKS)
CONTRACT No.:

**REVISED ON 20-02-2018** 

NATIONAL WATER SUPPLY AND DRAINAGE BOARD GALLE ROAD,

RATMALANA.

**MONTH & YEAR** 

### PREFACE TO THE FORTH REVISION DOCUMENT NWSDB/SBD/CIVIL/Ver 5

This Civil works Bidding document was revised in August 2011 by the Standard Bidding Document Review Committee appointed by the General Manager and approved for implementation on 31<sup>st</sup> August 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)

<u>DOCUMENT ISSUANCE CERTIFICATE</u>
(To be filled at the time of issue by the authorized issuing officer)

1.	STAN	NDARD DOCUMEN	r referi	ENCE	NUMBER: NWSDB/SBD/CIVIL/Ver 5
2.	CON	TRACT NUMBER	:	• • • • • • •	
3.	a)	ISSUED TO	:		
	b)	ADDRESS	:		
	c)	TELEPHONE NUM	MBER	:	
	d)	FACSIMILE NUM	BER	:	
4.	a)	TENDER FEE		:	Rs RECEIVED/NOT RECEIVED IN CASH/BANK DRAFT
	b)	RECEIPT/BANK I	DRAFT N	UMBE	R :
5.	NUM	BER OF COPIES IS	SUED	:	
6.	NUM	BER OF CANCELL	ED COPIE	ES ISS	UED :
7.		CELLED COPY FEE EIVED (IN CASH			RECEIVED/NOT
8	BUSI	NESS REGISTRATI	ON NUM	BER	:
9.	a)	ISSUING OFFICE	R	:	
	b)	DESIGNATION		:	
	c)	SIGNATURE		:	
10.	PLAC	CE OF ISSUE		:	
11.	SEAL	· :			
12.	DATI	E :			TIME :

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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

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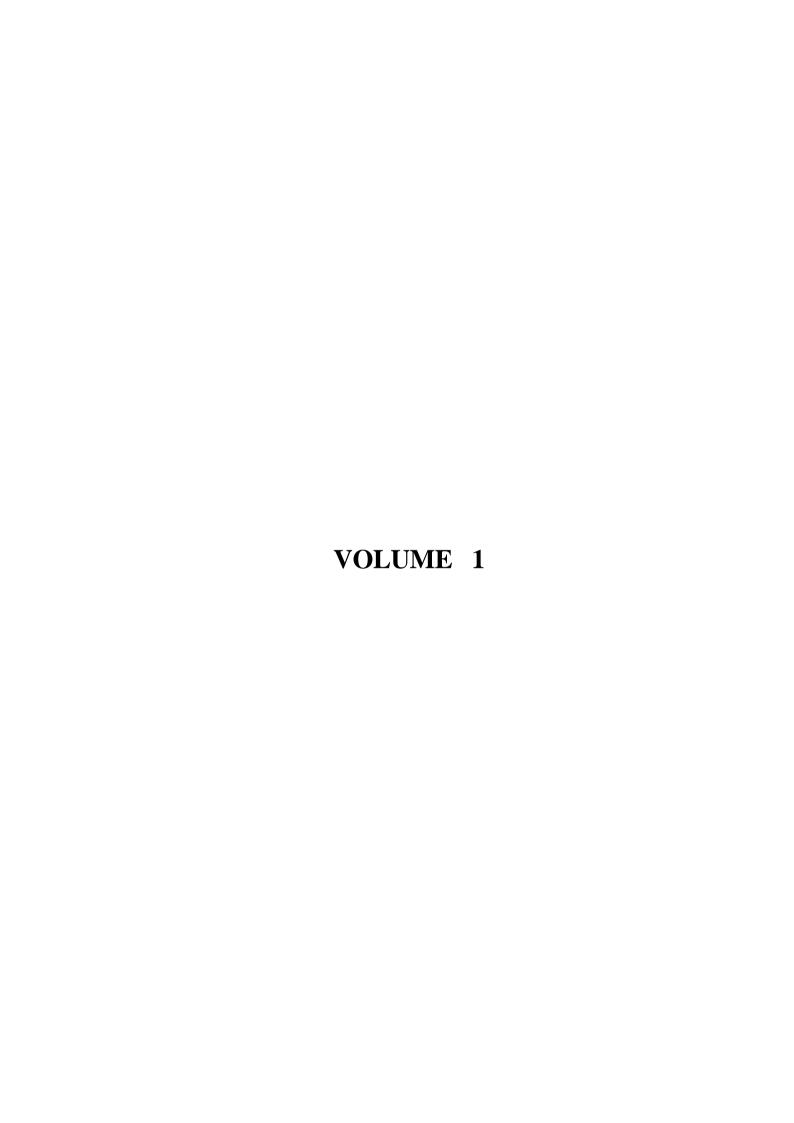
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### CHECK LIST BEFORE SUBMISSION OF BIDS

Bidders are advised to fill the following table:

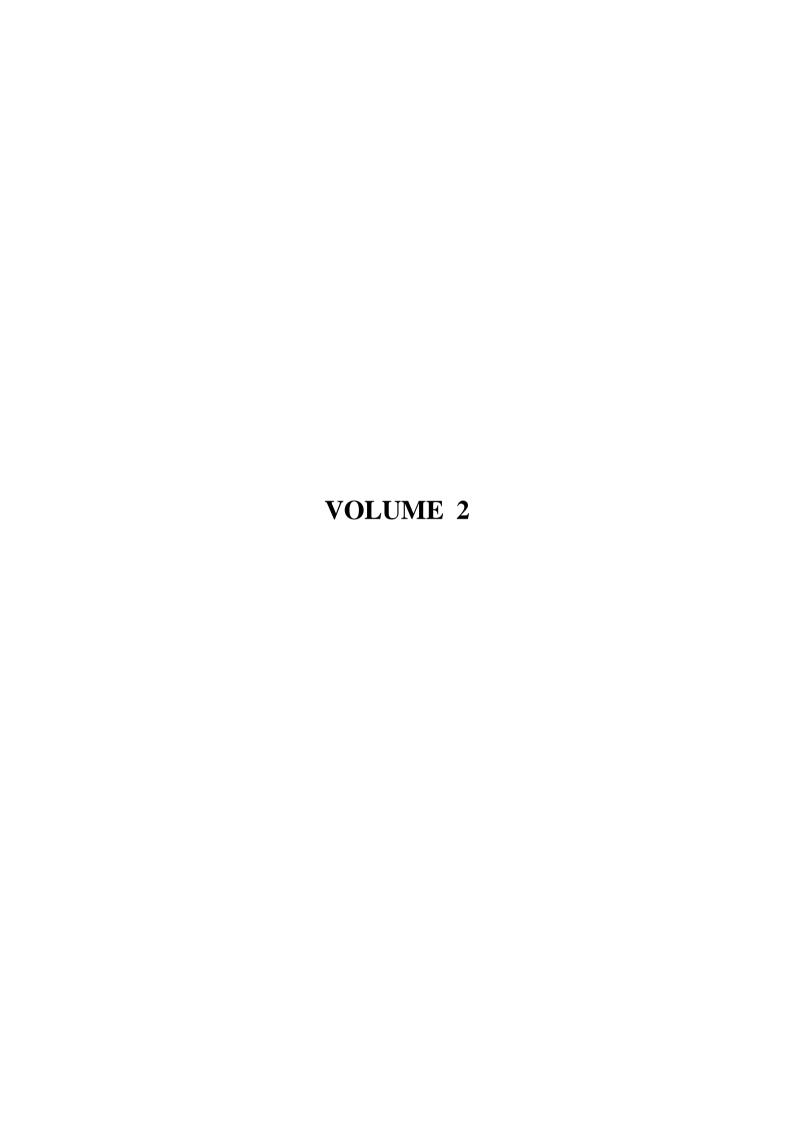
Bidders are advised to fill the following tab.	REFERENCE	REMARKS
ITEM	REFERENCE	KEMAKKS
Documentary evidence to establish	1.1	
eligibility of bidder.		
Signatory to the BID		
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enclosed?		
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data		
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Signed?	4	
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taken in		
to account?		
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12		
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NWSDB/SBD/CIVIL : Check List for Bidders DPC : RPC :PPC :- July 2014 - Version 5



Standard Bidding Document, Procurement of works ICTAD/SBD/01 Second Edition, - January 2007 with 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, Wejerama Mawatha, Colombo 7.





### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY

### NATIONAL WATER SUPPLY AND DRAINAGE BOARD CONTRACT No.: ..... Bid For ..... **INVITATION FOR BIDS (IFB)** 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 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 ..... or above at the time of the submission of the bid. the construction period is ...... Days 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. 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 and the Certificate of Registration of the Bidder as per the Act No. 3 of 1987 with the Registrar of Public Contract to the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, working days upon payment of a non refundable tender fee Rs..... |= Plus applicable VAT in cash. 8. Bids shall be delivered to the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road. Ratmalana at or before .....hrs .....Late Bids will be rejected. Bids will be opened soon after closing in the presence of the bidders' representatives who choose to attend. the form given in the bidding document. Bid security shall be valid up to ......

#### Chairman

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

## THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

	NATIONAL WATER SUPPLY AND DRAINAGE BOARD CONTRACT No.:
	Water Supply Scheme
	Bid For
1	INVITATION FOR BIDS (IFB)  The Chairman, Regional Procurement Committee ( <i>Name of the RSC</i> ), National Water Supply and Drainage Board (NWSDB),
	National Water Supply and Drainage Board (NWSDB) now invites sealed bids from eligible and qualified bidders for
	ofWater Supply 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
5	The estimated cost for this Bid is Rs
6	Interested bidders may obtain further information from
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 and the certificate of Registration of the Bidder as per the Act No. 3 of 1987 with the Registrar of Public Contract to the
8.	Bids shall be delivered in duplicate to the
9	All Bids shall be accompanied by a bid security of Rupees
	Chairman Regional Procurement Committee, National Water Supply & Drainage Board

### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

	NATIONAL WATER SUPPLY AND DRAINAGE BOARD CONTRACT No.:
	Water Supply Scheme
	Bid For
1	INVITATION FOR BIDS (IFB)  The Chairman, Project Procurement Committee (Name of the Project), National Water Supply and Drainage Board (NWSDB),
	Water Supply and Drainage Board (NWSDB) now invites sealed bids from eligible and qualified bidders for.
	Supply Project. Water
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
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
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 and the certificate of Registration of the Bidder as per the act No. 3 of 1987 with the Registrar of Public Contract to the
8.	Bids shall be delivered in duplicate to the
9	All Bids shall be accompanied by a bid security of Rupees
	Chairman Project Procurement Committee, National Water Supply & Drainage Board

NWSDB/SBD/CIVIL: Invitation for Bids PPC: – July 2014 – Version 5

# 4. FORM OF BID AND QUALIFICATION INFORMATION

### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

	NATIONAL WATER SUPPLY AND DRAINAGE BOARD
	BID FOR
	CONTRACT No.:
	FORM OF BID
	To: The Chairman, Department Procurement Committee National Water Supply & Drainage Board, Galle Road, Ratmalana.
Gentle	nan,
1.	Having examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition, January 2007 with addendum thereafter] and Volume II including Procurement of Works 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
2.	We acknowledge that the Contract Data forms part of our Bid.
3.	We 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 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 accept that the Dispute Adjudication Board shall be appointed when need arises.
7.	We understand that you are not bound to accept the lowest or any Bid you may receive.
	his day of
<b>G</b> :	
	re :
Design	ation:
Addres	S :
Witnes	Signature

Name

.....

Address

# THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

		BID FOR CONTRACT No.:
		FORM OF BID
	To:	The Chairman, Regional Procurement Committee National Water Supply & Drainage Board
		[Insert Relevant address]
Gentle	man,	
1.	January Biddin Quanti undersi conform Drawin	examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition, y 2007 with addendum thereafter] and Volume II including Procurement of Works g data, Contract data, Condition of Contract, Specifications, Drawings and Bills of ties etc and Addenda for the execution of the above-named Works, we the igned, offer to execute and complete such Works and remedy any defect therein in mity with the aforesaid Contract data, Conditions of Contract, Specifications, ags, Bills of Quantities and addenda for the sum of Sri Lankan Rupees
2.	We ack	knowledge that the Contract Data forms part of our Bid.
3.	Contra	dertake, if our Bid is accepted, to commence the Works as stipulated in the ct Data, and to complete the whole of the Works comprised in the Contract within e stated in the Contract Data.
4.	for rec	ree to abide by this Bid for the period of Ninety one (91) Days from the date fixed eiving or any extended period and it shall remain binding upon us and may be ed at any time before the expiration of that period.
5.		and until a formal Agreement is prepared and executed, this Bid, together with ritten acceptance thereof, shall constitute a binding contract between us.
6.	We acc	cept that the Dispute Adjudication Board shall be appointed when need arises.
7.	We und	derstand that you are not bound to accept the lowest or any Bid you may receive.
		day of
_		
_		
Addres		
Witnes	ss :	
	~.	ure
	Name	
	Addres	S

NWSDB/SBD/CIVIL : Form of Bid RPC :- July 2014 - Version 5

# THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING AND WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

		CONTRACT No.:
	То:	FORM OF BID The Chairman,
	10.	Project Procurement Committee
		National Water Supply & Drainage Board
Gentle	eman,	
1.	Janua Biddi Quant under confo Draw	g examined the Bidding Document Volume I [ICTAD/SBD/01 - Second Edition ry 2007 with addendum thereafter] and Volume II including Procurement of Works and data, Contract data, Condition of Contract, Specifications, Drawings and Bills of tities etc and Addenda for the execution of the above-named Works, we the signed, offer to execute and complete such Works and remedy any defect therein in rmity with the aforesaid Contract data, Conditions of Contract, Specifications, ings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees.
2.	We ac	cknowledge that the Contract Data forms part of our Bid.
3.	We 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.	for re	gree to abide by this Bid for the period of Ninety one (91) Days from the date fixed ceiving or any extended period and it shall remain binding upon us and may be ted at any time before the expiration of that period.
5.		s and until a formal Agreement is prepared and executed, this Bid, together with written acceptance thereof, shall constitute a binding contract between us.
6.	We ac	ecept that the Dispute Adjudication Board shall be appointed when need arises.
7.	We u	nderstand that you are not bound to accept the lowest or any Bid you may receive.
		day of
Name Desig	e: gnation ess : .	· · · · · · · · · · · · · · · · · · ·
Witne	Signa Name	ature

NWSDB/SBD/CIVIL : Form of Bid PPC :- July 2014 - Version 5

### QUALIFICATION AND GENERAL INFORMATION

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

1. Qualification Information

CIDA Registration	
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).
<b>Blacklisted Contractors</b>	
•	ted contractor by NPA or any other Agency?
IF yes provide details	
VAT Registration Number	
<b>Construction Program</b>	( attach as annex) – Appendix 5
Legal status	(attach relevant certified copies of registration)
Value of Construction works performed in last 5 years	(attach copies of Certificate of Completion etc. and other documents such as profit-loss and income expenditure statement)
Year	Complete details in Appendix 1B
Year	
Year	
Year	
Year	
Value of similar works completed in last 05 years (indicate only the three largest projects)	Complete details in Appendix 1A  1. Value Year
Major items of construction equipment proposed	Complete details in Appendix 3 & 3A
Qualification and experience of key staff – Site & Head Office (Permanent, Contract basis & Consultants)	Complete details in Appendix 2
Financial Capabilities	(attach copies of Audited financial statements of last 3 years) Complete details in Appendix 4.
Other information requested under ITB Clause 4	Any other details in support of the bid.
Manufacturer of DI pipes	Complete Appendix 9, 10, 11
fittings & accessories supplier  Manufacturer valve supplier	Complete Appendix 9, 10, 11
Warranty requirements	Complete Appendix 7, 10, 11  Complete Appendix 7 & 11
,, arrancy requirements	See Clause 72 of Contract Data
Written power of attorney of	Provide original or certified copy of the power of
the signatory to the Bid	attorney attested by a Notary and label as attachment to Appendix 6

### 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 supercede 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.)

### G. Bidding Data

(Please note that the clause numbers given here under are that of Instruction to Bidder)

Instructions to Bide Clause Reference	ders
(1.1)	The Employer is
	Name: National Water Supply and Drainage Board
	Address: Galle Road, Ratmalana
	The Works consist of _(Specify the scope of work with Sufficient
	details)
	located at
(1.2)	Intended Completion Date is Days from the Start Date.
(1.3)	The office for collection of bid forms is  Assistant General Manager (Tenders & Contracts)  Tenders & Contract Section,  NWSDB, Galle Road,  Ratmalana.
	The non-refundable fee is Rupees Plus VAT, payable in cash.
	The Bid forms will be issued until

**(2.1)** 

The source of funds is \_\_\_\_\_

(4.2)	The registration required
	Specialty
	Grade

(4.3) The following Qualification information shall be provided in Section 4:

\* CIDA Registration;

Registration number Grade

Speciality Expiry Date

- \* Authorization to sign the bid on behalf of the Bidder
- \* VAT Registration number
- \* Construction Programme (Format is given in Appendix 5)
- \* Legal Status (Sole proprietor, Partnership, Company etc. copy of the Article of Incorporation and other relevant documents shall be provided)
- \* Total monetary value of construction work performed for each contract during the last five years; (Format is given in Appendix 1C)
- \* Details of Works Completed within the Last Five Years and Ongoing Similar Ones (Specialised work); (Format is given in Appendix 1A)
- \* Details of Works (excluding similar works) Completed within the Last Five Years and Ongoing Ones; (Format is given in Appendix 1B)
- \* Details of Works Completed within the Last Five Years; (Format is given in Appendix 1C)
- \* Major items of construction equipment proposed to carry out the Contract; (Format is given in Appendix 3 & 3A)
- \* Qualifications and experience of key Technical staff and Construction Management Services proposed for the Contract; (Format is given in Appendix 2)
- \* Bidder's financial statement for last 3 years (format is given in Appendix 4 and 4A)
- \* Bidder's Work Programme (Appendix 5)
- \* Method Statement (Appendix 5A)
- \* Name of the Manufacturer of DI pipes, fittings & specials. State whether this Manufacturer is from the NWSDB pre-qualified list of Manufacturers (Format is given in Appendix 13).
- \* Name and address of the local agent of the DI pipes & fittings Manufacturer (*Format is given in Appendix 17*).
- \* Provide Quality Management System Certificates (ISO 9001:2008/2015) for pipes, fittings and specials Manufacturing factor.

- Provide Product Conformity Certificate for DI pipes, fittings & specials.
- Name of Manufacturer of DI/CI valves.
- Name and address of the Local Agent of the Valve Manufacturer.
- Quality Management System ISO 9001:2008/2015 Certificate for the Valve Manufacturing factory.
- Product Conformity Certificate of the DI/CI Valves.
- Quality Management System ISO 9001:2008/2015 Certificate for the rubber rings Manufacturing factory.
- Product Conformity Certificate of the rubber rings.
- \* Functional Guarantees for the leak proof pipeline by the pipe manufacturer, fittings manufacturer and rubber ring manufacturer (Formats are given in Appendix 15A, 15B)
- \* The bidder shall provide a certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for PE Pipes &fittings.
- \* Certificate of Registration of the Bidder as per the Act No. 3 of 1987 with the Registrar of Public.
- \* Any other
- Minimum qualification to qualify for the award of the Contract (4.4)
  - (a) (Specify the appropriate works based on the scope of the contract)

Over the last five years

[Guideline for T/plant – Water retaining structures of a corresponding value:

For Water Tower -

- 1. Below 300 m<sup>3</sup> capacity—Any type of Water Tower
- 2. Above 300 m<sup>3</sup> and below 1000 m<sup>3</sup> capacity Similar type Water
- 3. Above  $1000 \text{ m}^3$  capacity Similar type but min. of  $1000 \text{ m}^3$ capacity.

For Reservoirs – above 450 m<sup>3</sup> capacity – minimum of 450 m<sup>3</sup> capacity reservoir below 450 m³ capacity – same capacity reservoir

For Pipe laying- Range of diameter and length of laying (50% or 10 km which ever is less) (aggregate of pipe lengths under different contract should be considered)

- "Laying" means Laying of Pipes according to the Specifications, testing, backfilling, compaction, disinfection and handing over.
- "Construction" means construction according to the specification, testing, cleaning, disinfection and handing over.

For DI/CI piping:

Product Conformity Certificate, Quality Management System Certificate

5 - 3

(ISO 9001:2008 2015) for DI/CI pipes, fittings, specials & rubber rings/gaskets.

For DI Valves: Product Conformity Certificate, Quality Management system certificate (ISO 9001:2008/2015) for DI Valves & gaskets

- (b) Average of the annual volume of construction work
  - (i) If contract period is less than one year, the value of the Engineers estimate,
  - (ii) 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 estimateContract duration in months

#### \* Financial Capacity for Works Contract

Working Capital\*<sup>1</sup> + present available credit facilities for the company\*<sup>2</sup> + credit facilities exclusively for this contract - 0.1 x current work commitments\*<sup>3</sup> > Rs......\*<sup>4</sup>

- \* Working Capital = Current Assets Current Liabilities
- \*2 A letter to prove the credit facilities by a Bank shall be issued 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

- \* 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 3 & 3A.
- \* Details of Key Technical Staff and Managerial Services shall be listed in Appendix 2
- **4.4 (c)** DI pipes, fittings, specials and DI/CI valves shall be from the NWSDB pre-qualified manufacturers. Lists of those manufacturers are given in Appendix 18.
- (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 and Contracts),

Tenders and Contract Section,

National Water Supply and Drainage Board,

Galle Road, Ratmalana.

Fax . 011 – 2635885 Tel:011-2635885

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

- (13.3) 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 Summary of the Bills.
- (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.
- (13.5) If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. This rate is applicable for all extra works to complete the works in the Contract.
- (14.1) Bidders are not allowed to bid in foreign currencies.
- (15.1) The Bid shall be valid for 91 days from the date of closing of the bids (excluding closing date).
- (16.1) Bid shall include a Bid Security in the form included in Section 12.
- (16.2) Bid Security shall be:
  - for an amount .....
  - Valid until .......(give a Date)
    And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12. Standard Forms.
    - (a) Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.
    - (b) Fixed deposit or a pass book of a bank operating in Sri Lanka,
    - (c) deposits made in the name of the National Water Supply and Drainage Board.
    - (d) 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).
    - (e) Certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.
    - (f) 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		
	Pre Bid meeting - venue Date Time		
(19.2) a	The Employer's address for the purpose of Bid submission is		
	Asst. General Manager (Tenders & Contracts) National Water Supply and Drainage Board, Galle Road, Ratmalana.		
(10.2) k	Contract name:		
(19.2) b	Contract no.		
(20.1) & (23.0)	The deadline for submission and opening of Bids shall be as specified in the IFB.		
(26.1)	Add Clause 26.1 (e)		
(33.7)	26.1 (e). Meets the qualification criteria given in the clause 4.4 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.  If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum 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.		
(34.0)	The amount of Performance Security is 5% of the Initial Contract Price.		
	And issued by an agency stipulated under the Clause 52.1 of <b>Contract Data.</b>		
(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)	Clause 36 deleted & insert the following.		
	Refer clause 25 of General Conditions of Contract.		

### G. Bidding Data

(Please note that the clause numbers given here under are that of Instruction to Bidder)

Instructions to Bid Clause Reference	ders
(1.1)	The Employer is
	Name: National Water Supply and Drainage Board
	Address: Galle Road, Ratmalana
	The Works consist of _(Specify the scope of work with Sufficient
	details)
	located at
(1.2)	Intended Completion Date is Days from the Start Date.
(1.3)	The office for collection of bid forms is
	The non-refundable fee is Rupees Plus VAT, payable in cash.
	The Bid forms will be issued until

**(2.1)** 

The source of funds is \_\_\_\_\_

(4.2)	The registration required	
	Specialty	
	Grade	

(4.3) The following Qualification information shall be provided in Section 4:

\* CIDA Registration;

Registration number

Grade

Speciality

**Expiry Date** 

- \* Authorization to sign the bid on behalf of the Bidder
- \* VAT Registration number
- \* Construction Programme (Format is given in Appendix 5)
- \* Legal Status (Sole proprietor, Partnership, Company etc. copy of the Article of Incorporation and other relevant documents shall be provided)
- \* Total monetary value of construction work performed for each contract during the last five years;

  (Format is given in Appendix 1C)
- \* Bidder shall have the authorization form the manufacturer to sign and negotiate in the bidding on behalf of the manufacturer.
- \* Details of Works Completed within the Last Five Years and Ongoing Similar Ones (Specialised work); (Format is given in Appendix 1A)
- \* Details of Works (excluding similar works) Completed within the Last Five Years and Ongoing Ones; (Format is given in Appendix 1B)
- \* Details of Works Completed within the Last Five Years; (Format is given in Appendix 1C)
- \* Major items of construction equipment proposed to carry out the Contract; (Format is given in Appendix 3 & 3A)
- \* Qualifications and experience of key Technical staff and Construction Management Services proposed for the Contract; (Format is given in Appendix 2)
- \* Bidder's financial statement for last 3 years (format is given in Appendix 4 and 4A)
- \* Bidder's Work Programme (Appendix 5)
- \* Method Statement (Appendix 5A)
- \* Name of the Manufacturer of DI pipes, fittings & specials. State whether this Manufacturer is from the NWSDB pre-qualified list of Manufacturers (Format is given in Appendix 13).
- \* Name and address of the local agent of the DI pipes & fittings Manufacturer (Format is given in Appendix 17).
- \* Provide Quality Management System Certificates (ISO 9001:2008 /2015) for pipes, fittings and specials Manufacturing factor.

- Bidder shall provide with bid a valid bid security for the amount and valid up to the date specified in the Bidding Document.
- Bidder shall duly filled and signed in the Form of Bid.
- Provide Product Conformity Certificate for DI pipes, fittings & specials.
- Name of Manufacturer of DI/CI valves.
- \* Name and address of the Local Agent of the Valve Manufacturer.
- Ouality Management System ISO 9001:2008/2015 Certificate for the Valve Manufacturing factory.
- Product Conformity Certificate of the DI/CI Valves.
- Ouality Management System ISO 9001:2008/2015 Certificate for the rubber rings Manufacturing factory.
- Product Conformity Certificate of the rubber rings.
- \* The bidder shall provide a certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for PE Pipes &fittings.
- \* Functional Guarantees for the leak proof pipeline by the pipe manufacturer, fittings manufacturer and rubber ring manufacturer (Formats are given in Appendix 14A, 14B, 14C)
- \* Certificate of Registration of the Bidder as per the Act No. 3 of 1987 with the Registrar of Public
- Any other
- Minimum qualification to qualify for the award of the Contract (4.4)
  - (a) (Specify the appropriate works based on the scope of the contract)

Over the last five years

[Guideline for T/ plant - Water retaining structures of a corresponding value:

For Water Tower -

- 1. Below 300 m<sup>3</sup> capacity—Any type of Water Tower
- 2. Above 300 m<sup>3</sup> and below 1000 m<sup>3</sup> capacity Similar type Water Tower
- 3. Above 1000 m<sup>3</sup> capacity Similar type but min. of 1000 m<sup>3</sup> capacity.

For Reservoirs – above 450 m<sup>3</sup> capacity – minimum of 450 m<sup>3</sup> capacity reservoir

below 450 m<sup>3</sup> capacity – same capacity reservoir

For Pipe laying- Range of diameter and length of laying (50% or 10 km which ever is less) (aggregate of pipe lengths under different contract should be considered)

"Laying" means Laying of Pipes according to the Specifications, testing, backfilling, compaction, disinfection and handing over.

"Construction" means construction according to the specification, testing, cleaning, disinfection and handing over.

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Product Conformity Certificate, Quality Management System Certificate (ISO 9001:2008/2015) for DI/CI pipes, fittings, specials & rubber rings/gaskets.

For DI Valves: Product Conformity Certificate, Quality Management system certificate (ISO 9001:2008/2015) for DI Valves & gaskets.

- (b) Average of the annual volume of construction work is Rs.....
  - (iii) If contract period is less than one year, the value of the Engineers estimate,
  - (iv) 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
- \* Financial Capacity for Works Contract

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.....\* $^4$ 

- \* Working Capital = Current Assets Current Liabilities
- \*<sup>2</sup> A letter to prove the credit facilities by a Bank shall be issued within a month prior to date of closing of Bids.
- \*3 current work commitment = work remaining uncompleted
- \*<sup>4</sup> (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

- \* 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 3 & 3A.
- \* Details of Key Technical Staff and Managerial Services shall be listed in Appendix 2
- (5.1) Add to the clause Joint Venture shall not be accepted.

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

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

- 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 Summary of the Bills.
- (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.
- (13.5) If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. This rate is applicable for all extra works to complete the works in the Contract.
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- (15.1) The Bid shall be valid for 91 days from the date of closing of the bids (excluding closing date).
- (16.1) Bid shall include a Bid Security in the form included in Section 12.
- (16.2) Bid Security shall be:
  - for an amount .....
  - Valid until ......(give a Date)
    And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12. Standard Forms.
    - (a) Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.
    - (b) A Fixed deposit or a pass book of a bank operating in Sri Lanka, deposits made in the name of the National Water Supply and Drainage Board.
    - (c) 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).
    - (d) Certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.
    - (e) 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.

<b>(17.0)</b>	Pre Bid meeting will /will not be held
	Pre Bid meeting - venue Revised on 22-11-2016  Date Time
(19.2) a	The Employer's address for the purpose of Bid submission is
(_, , , , , , , , , , , , , , , , , , ,	
	Contract name:
(19.2) b	Contract no
(20.1) & (23.0)	The deadline for submission and opening of Bids shall be as specified in the IFB.
(26.1)	Add Clause 26.1 (e)
	26.1 (e). Meets the qualification criteria given in the clause 4.4 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.
(33.7)	If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum 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.
(34.0)	The amount of Performance Security is 5% of the Initial Contract Price.
	And issued by an agency stipulated under the Clause 52.1 of <b>Contract Data.</b>
(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)	Clause 36 deleted & insert the following.
	Refer clause 25 of General Conditions of Contract.

### G. Bidding Data

(Please note that the clause numbers given here under are that of Instruction to Bidder)

Instructions to Bid Clause Reference	ders
(1.1)	The Employer is
	Name: National Water Supply and Drainage Board
	Address: Galle Road, Ratmalana
	The Works consist of _(Specify the scope of work with Sufficient
	details)
	located at
(1.2)	Intended Completion Date is Days from the Start Date.
(1.3)	The office for collection of bid forms is
	The non-refundable fee is Rupees Plus VAT, payable in cash.
	The Bid forms will be issued until

**(2.1)** 

The source of funds is \_\_\_\_\_

(4.2)	The registration required	
	Specialty	

The following Qualification information shall be provided in Section 4:

\* CIDA Registration;

Registration number

Grade

**Speciality** 

**Expiry Date** 

- \* Authorization to sign the bid on behalf of the Bidder
- \* VAT Registration number
- \* Construction Programme (Format is given in Appendix 5)
- \* Legal Status (Sole proprietor, Partnership, Company etc. copy of the Article of Incorporation and other relevant documents shall be provided)
- \* Total monetary value of construction work performed for each contract during the last five years; (Format is given in Appendix 1C)
- \* Bidder shall have the authorization form the manufacturer to sign and negotiate in the bidding on behalf of the manufacturer.
- \* Details of Works Completed within the Last Five Years and Ongoing Similar Ones (Specialised work); (Format is given in Appendix 1A)
- \* Details of Works (excluding similar works) Completed within the Last Five Years and Ongoing Ones; (Format is given in Appendix 1B)
- \* Details of Works Completed within the Last Five Years; (Format is given in Appendix 1C)
- \* Major items of construction equipment proposed to carry out the Contract; (Format is given in Appendix 3 & 3A)
- \* Qualifications and experience of key Technical staff and Construction Management Services proposed for the Contract; (Format is given in Appendix 2)
- \* Bidder's financial statement for last 3 years (format is given in Appendix 4 and 4A)
- \* Bidder's Work Programme (Appendix 5)
- \* Method Statement (Appendix 5A)
- \* Name of the Manufacturer of DI pipes, fittings & specials. State whether this Manufacturer is from the NWSDB pre-qualified list of Manufacturers (Format is given in Appendix 13).
- \* Name and address of the local agent of the DI pipes & fittings Manufacturer (*Format is given in Appendix 17*).
- \* Provide Quality Management System Certificates (ISO 9001:2008/2015) for pipes, fittings and specials Manufacturing factor.

- Bidder shall provide with bid a valid bid security for the amount and valid up to the date specified in the Bidding Document.
- Bidder shall duly filled and signed in the Form of Bid.
- Provide Product Conformity Certificate for DI pipes, fittings & specials.
- Name of Manufacturer of DI/CI valves.
- Name and address of the Local Agent of the Valve Manufacturer.
- Quality Management System ISO 9001:2008/2015 Certificate for the Valve Manufacturing factory.
- \* Product Conformity Certificate of the DI/CI Valves.
- Quality Management System ISO 9001:2008/2015 Certificate for the rubber rings Manufacturing factory.
- Product Conformity Certificate of the rubber rings.
- Functional Guarantees for the leak proof pipeline by the pipe manufacturer, fittings manufacturer and rubber ring manufacturer (Formats are given in Appendix 14A, 14B, 14C)
- The bidder shall provide a certificate for the confirmation from WRAS (UK) or NSF International laboratories for the suitability for the drinking water purposes for PE Pipes &fittings.
- Certificate of Registration of the Bidder as per the Act No. 3 of 1987 with the Registrar of Public
- Any other
- Minimum qualification to qualify for the award of the Contract (4.4)
  - (a) (Specify the appropriate works based on the scope of the contract)

Over the last five years

[Guideline for T/plant - Water retaining structures of a corresponding value:

For Water Tower -

- 1. Below 300 m<sup>3</sup> capacity—Any type of Water Tower
- 2. Above 300 m<sup>3</sup> and below 1000 m<sup>3</sup> capacity Similar type Water
- 3. Above 1000 m<sup>3</sup> capacity Similar type but min. of 1000 m<sup>3</sup> capacity.

For Reservoirs – above 450 m<sup>3</sup> capacity – minimum of 450 m<sup>3</sup> capacity reservoir

below  $450 \, m^3$  capacity – same capacity reservoir

For Pipe laying- Range of diameter and length of laying (50% or 10 km which ever is less) (aggregate of pipe lengths under different contract should be considered)

"Laying" means Laying of Pipes according to the Specifications, testing, backfilling, compaction, disinfection and handing over.

"Construction" means construction according to the specification, testing, cleaning, disinfection and handing over.

NWSDB/SBD/CIVIL: Bidding Data PPC:- July 2014 - Version 5

•	DIAT		
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1 01		piping	•

Product Conformity Certificate, Quality Management System Certificate (ISO 9001:2008/2015) for DI/CI pipes, fittings, specials & rubber rings/gaskets.

For DI Valves: Product Conformity Certificate, Quality Management system certificate (ISO 9001:2008/2015) for DI Valves & gaskets.

- (b) Average of the annual volume of construction work is Rs.....
  - (v) If contract period is less than one year, the value of the Engineers estimate,
  - (vi) 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
- \* Financial Capacity for Works Contract

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.....\* $^4$ 

- \* Working Capital = Current Assets Current Liabilities
- \*2 A letter to prove the credit facilities by a Bank shall be issued within a month prior to date of closing of Bids.
- \*3 current work commitment = work remaining uncompleted
- \*<sup>4</sup> (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

- \* 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 3 & 3A.
- \* Details of Key Technical Staff and Managerial Services shall be listed in Appendix 2
- (5.1) Add to the clause

  Joint Venture shall not be accepted.

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

- 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 Summary of the Bills.
- (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.
- (13.5) If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum in the Bills of Quantities by adjusting the rates in the Bills of Quantities by the percentage of discount offered. This rate is applicable for all extra works to complete the works in the Contract.
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- (15.1) The Bid shall be valid for 91 days from the date of closing of the bids (excluding closing date).
- (16.1) Bid shall include a Bid Security in the form included in Section 12.
- (16.2) Bid Security shall be:
  - for an amount .....
  - Valid until .....(give a Date)

And issued by an agency stipulated below using the Form for Bid security (unconditional guarantee) included in Section 12, Standard Forms.

- a) Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka.
- b) fixed deposit or a pass book of a bank operating in Sri Lanka, deposits made in the name of the National Water Supply and Drainage Board.
- c) 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).
- d) Certified cheque issued by a Bank operating in Sri Lanka in favour of National Water Supply and Drainage Board.
- e) A Bank guarantee issued by a Bank based in another country but

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.

.

<b>(17.0)</b>	Pre Bid meeting will /will not be held
	Pre Bid meeting - venue
	Date Time
(19.2) a	The Employer's address for the purpose of Bid submission is
(19.2) b	Contract name:
	Contract no
(20.1) & (23.0)	The deadline for submission and opening of Bids shall be as specified in the IFB.
(26.1)	Add Clause 26.1 (e)
	26.1 (e). Meets the qualification criteria given in the clause 4.4 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.
(33.7)	If a Bidder has given a discount of his bid price, the discount shall be distributed to each and every item excluding provisional sum 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.
(34.0)	The amount of Performance Security is 5% of the Initial Contract Price.
	And issued by an agency stipulated under the Clause 52.1 of <b>Contract Data.</b>
(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)	Clause 36 deleted & insert the following.
	Refer clause 25 of General Conditions of Contract.

# **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.)

# **Contract Data**

Contract Data is a part of condition of contact and shall be read together. If any discrepancy is founds 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)

The Emp	loyer is	
Name:	National Water Supp	ply and Drainage Board,
Address:	Galle Road, Ratmala	nna
Authorize	d Representative:	The Chairman, National Water Supply & Drainage Board,
The Engi	General Manager	r, Supply and Drainage Board,
	Galle Road, Ratr	nalana.
Engineer	's Representative :	<del></del>
(Fill the l	Name of PD / DGM of 1	relevant RSC and Designation)
The Work	s consists of	
	s located at	
The Site is		
• • • • • • • • • • • • • • • • • • • •		
The Start	Date shall be 14 Days f	from the Letter of Acceptance.
Replace th	ne content with the follo	owings;
•		ract shall be interpreted in the following order of
1. Ag	greement	
	tter of Acceptance,	1. (C. NA.11. 1
	emorandum of understa greement	anding (if any)/Addenda prior to signing the
_	ontractor's Bid,	
	ontract Data,	
	onditions of Contract	
-	· •	ions given in this document supersedes the CIDA
	ecifications). rawings	
	lls of Quantities	
	hedule of Particulars	
11. Ar	ny other document (if an	ny)

Any other document listed in the Contract Data as forming part of the Contract. The following documents also form part of the Contract.

1.	Appendix 2	09. Appendix 11
2.	Appendix 3	10. Appendix 12
_		

3. Appendix 3A4. Appendix 511. Appendix 1312. Appendix 14

5. Appendix 7 13. Appendix 14A, 14B,14C

6. Appendix 8 14. Appendix 15A, 15B

7. Appendix 98. Appendix 1015. Appendix 19

# Clause 4. Engineer's Decision

Add following sub clauses

- 4.1 The 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 setout in this Conditions of Contract.
- 4.3 The 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

# Clause 5 Delete Sub Clause 5.2 and add following sub clauses

# **Duties and Powers of Engineer's Representative**

- The 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 The 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;
  - a) 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.

- b) 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.
- c) The 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.
- d) The 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.
- The Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in carrying out of his duties under sub clause 5.4. He shall notify the Contractor 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.
- (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		
(b)	Managerial	P lease refer Appendix	2)

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 skilled/semi skilled labour force at any time possess National Trade Test Certificates. In the alternative, the Contractor shall 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.

# 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 Sub Contractors, agents or Employees.

# 9.6 Arms and Ammunition

The 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

The 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.

# 9.11 Observance by sub Contractors

The Contractor shall be responsible for observance by his Sub Contractor 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 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 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

The office shall be of timber construction with boarded floor well lighted, lockable and fully weather proof. A covered parking space for one vehicle should be provided.

The office shall have two rooms with a total floor area of at least 30 square metres. The office shall have overhanging eaves and be provided with windows with lockable shutters for security. The door should be of substantial construction and shall be fitted with a mortice lock. At least two keys shall be provided for each lock 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, air condition facilities, toilet facilities, potable drinking water facilities and the following furniture to the office.

	Item	Required No	
1.	Table 0.9m x 1.5m with four lockable drawers	01	
2.	Table 0.9m x 1.5m with one lockable drawer	01	
3.	Chairs	04	
4.	Chairs with arm rest	02	
5.	Lockable four drawer steel filing cabinet	02	
6.	5. Set of shelving 1.2m high by 0.9m long with shelves for		
	keeping the drawings	02	
7.	Domestic water filter	02	
8.	Photocopy + Printing machine	01	
9.	Computer & required items + softwares	02	
10.	Binding machine	01	

And all ancillary items to permit the efficient functioning of the office. The Contractor shall maintain the building and fittings in good condition, provide all proper attendance and clear away on completion of the Contract, as directed by the Engineer.

# 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 Equipment 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 Bidding Documents. Such personnel whether listed in the Bidding Document or not should be approved by the Engineer. The cost of these will be borne by the Contractor. If the Contractor wishes to obtain a specialized service which is essential for the execution of the Contract, during the Works are ongoing he shall notify this to the Employer and obtain this service from a recognized/qualified institutions/persons with the approval of the Engineer and 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.

#### Clause 12 Contractor's Risks

Add following sub clause.

# 12.2 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, machinery 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) The minimum insurance covers shall be:

- (a) The minimum cover for insurance of the Works and of Plant and Materials is 110% of the Initial Contract Price.
  - The maximum deductible for insurance of the Works and of Plant and Materials is 5% of the each claim.
- (b) The minimum cover for loss or damage to Equipment is the replacement cost of equipment
  - The maximum deductible for insurance of Equipment is 5% of the replacement cost of each 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 reinstatement of the same) Rs. ..... per event. Number of events are unlimited.
  - The maximum deductible for insurance of other property (other than the Site) is 5% of the each claim.
- (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
- (e). Minimum cover for loss of business and loss of revenue is Rs. 1,000,000.00 No. of events 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 (a) The minimum cover for personal injury or death,
  - For the Contractor's workmen is Rs 1,000,000 per event, number of events are unlimited.
  - Contractor's employees other than workmen is Rs 1,000,000 per event, number of events are unlimited.
  - Employer's Employees and Consultant's Employees is Rs.1,000,000/= per event, number of events are unlimited.

# 13.7 Add the following Sub Clause 13.7

All Insurance shall be issued by a reputed insurance Company/Corporation registered under the Insurance Board of Sri Lanka.

# **13.8** Add the following Sub Clause 13.8

Contractor shall bear all costs in connection with the damages to the Works, his labourers, employers staff and adjacent properties and pay any compensation to them. Contractor shall pay any loss of revenue to third party due to closure of roadways, and blockages of road ways or access to all business premise due to the implementation of the Works of the Contract.

Contractor shall indemnify the Employer for any losses or damages or any compensation due to cause of the works under the contract.

14.1 The following site investigation reports are annexed as Appendices.

Appendix	
Appendix	
[State the title of reports Eg: Contour Plan, So	oil Investigation Report. etc.]

#### Clause 16 Contractor to Construct the Works.

Add following sub clauses

# 16.2 Setting out

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

# **6.3** 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.

# 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 Defect Liability Period such Materials, Contractor's Equipment and Temporary Works as required by him for the purpose of fulfilling his obligation during Defect Liability 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

# 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 & Works Supplied/carried out under the contract shall confirm to the Standards mentioned in the specifications, preamble notes on BOQ and BOQ. When no applicable standards is mentioned, the Goods supplied out shall conform to the authoritative standards 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 start date.

## Clause 19 Safety

Add following sub clauses

# 19.2 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 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 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 Sub-Contractors 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 and bridges.

# 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 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 or Bridge 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 clause 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:

- (a) comply with all applicable safety regulations;
- (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.

#### 20 Discoveries

Add sub Clause 20.2

- 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.
- 21.1 The Site Possession Date shall be 13 Days from Letter of Acceptance

# **24** Dispute Resolution

Delete clause 24
Delete clause 25
Add the following sub clauses

#### 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 19.3 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 Dispute Adjudication Board (DAB)

# 25.1 Appointment of the Dispute Adjudication Board (DAB)

Any dispute of whatever nature arising out of or in relation to this agreement shall be referred to a "Dispute Adjudication Board (DAB) for decision The Parties shall appoint a DAB.

The DAB shall comprise, three suitably qualified persons ("the members"), who shall be professionals experienced in the type of Works and with the interpretation of contractual documents, one of whom shall serve as chairman.

Each of the Parties shall appoint one member to serve on the Dispute Adjudication board (DAB). The Parties shall consult both these members and shall agree upon the third member, who shall be appointed to act as the chairman.

The agreement between the Parties and each of the three members shall incorporate

by reference the General Conditions of Dispute Adjudication Agreement contained in the Appendix to these Contract Data, with such amendments as are agreed between them.

The terms of the remuneration of the three members, including the remuneration of any expert whom the DAB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration.

If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DAB (including each member) shall expire when the Issuing Final Acceptance Certificate.

# 25.2 Failure to Agree on the Composition of the Dispute Adjudication Board

If any of the following conditions apply, namely:

- (a) either Party fails to nominate a member of a DAB by such date,
- (b) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DAB by such date, or
- (c) The Parties fail to agree upon the appointment of a replacement person within 42 Days after the date on which the one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment.

Then Construction Industry Development Authority (CIDA) shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DAB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the expenses / disbursements incurred by (CIDA).

# 25.3 Obtaining Dispute Adjudication Board's Decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the dispute in writing to the DAB for its decision, with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause.

The DAB shall be deemed to have received such reference on the date when it is received by the chairman of the DAB.

Both Parties shall promptly make available to the DAB all such additional information, further access to the Site, and appropriate facilities, as the DAB may require for the purposes of making a decision on such dispute. The DAB shall be deemed to be not acting as arbitrators(s).

Within 84 Days after receiving such reference, or within such other period as may be proposed by the DAB and approved by both Parties, the DAB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either Party is dissatisfied with the DAB's decision, then either Party may, within 28 Days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the DAB fails to give its decision within the period of 84 Days (or as otherwise approved) after receiving such reference, then either Party may, within 28 Days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration.

In either event, this notice of dissatisfaction shall state that it is given under this Sup-Clause, and shall set out the matter in dispute and the reasons(s) for dissatisfaction. Except as stated in Sub-Clause 25.4 [Failure to Comply with Dispute Adjudication Board's Decision] and Sub-Clause 25.5 [Expiry of Dispute Adjudication Board's Appointment], neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause.

If the DAB has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party within 28 Days after it received the DAB's decision, then the decision shall become final and binding upon both Parties.

# 25.4 Failure to Comply with Dispute Adjudication Board's Decision

In the event that a Party fails to comply with a DAB decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub-Clause 25.6 [Arbitration]. Sub-Clause 25.3 [Obtaining Dispute Adjudication Board's Decision] shall not apply to this reference.

#### 25.5 Expiry of Dispute Adjudication Board's Appointment

If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DAB in place, whether by reason of the expiry of the DAB's appointment or otherwise:

(a) Sub-Clause 25.3 [Obtaining Dispute Adjudication Board's Decision] shall not apply, and

(b) the dispute may be referred directly to arbitration under Sub-Clause 25.6 [Arbitration]

### 25.6 Arbitration

(a) 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,

Venue & Language: The venue of arbitration shall be in Colombo, Sri Lanka and the proceedings shall be conducted and the award shall be rendered in English language.

# 27 Program

- 27.1 The Contractor shall submit a programme for the Works within 07 Days of delivery of the Letter of Acceptance.
- 27.3 The period between Programme update is within the quarter of the Contract period.
- 27.4 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**

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, Saturdays 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.

# 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.

Progress meeting shall be held at least once a month and progress report shall be submit by the Contractor.

# 33 Identifying Defects

#### Add to Clause 33

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.

# Clause 34 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

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.

#### 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 34.3 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 Employer, but in any other case all costs 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.

- (a) 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.
- (b) the substitution of proper and suitable materials and
- (c) 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
- The Defects Liability Period is **365 Days** from the date of certificate of Completion of the Works
- Any goods supplied under the contract shall have a warranty period as below:
  Pipes & Fittings one year
  M&E equipment two years
  Any other equipment (please specify)

# Clause 38 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 fulfilment 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. Work shall be measured as net quantities of the work.

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.

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 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.

# Clause 39 Variations

Engineer may order variations up to a total cumulative value of not exceeding the amount of money allocated for contingencies in the Summary of Bills.

Add the following sub clauses.

39.7 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.

#### Clause 42 **Payment certificates**

#### 42.2 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.

Clause 44 44.1	Compensation Events The following events shall also be Compensation Events: (If required, Engineer shall fill)  1	
	Add following sub clauses	
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.	
Clause 47 47.1	Price Adjustments The Contract Price is /is not 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 element are given in Appendix A.	
Clause 48	Retention	
48.1	The retention from each payment shall be 10% percent of the certified work done.	
48.2	The limit of retention shall be 5% percent of the Initial Contract Price.	
Clause 49	Liquidated Damages	
49.1	The liquidated damages for the whole of the Works shall be Rs per Day.	

10 percent of the Initial Contract Price

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The maximum amount of liquidated damages for the whole of the Works shall be

#### Clause 51 **Advance Payment**

#### 51.0

Add to the clause

Bank guarantee for Advance payment shall be issued by a recognized Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka using the Form for Advance payment Security included in Section 12- Standard Forms – Volume II.

Advance payment Guarantee shall be obtained at the contractor's cost.

#### Clause 52 Securities

#### (52.1)Add to the clause

The Performance Security shall be 5% percent 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) Fixed deposit or a pass book of a reputed Bank operating in Sri Lanka, approved by the Central Bank of Sri Lanka, deposits made in the name of the National Water Supply and Drainage Board.
- (c) Sri Lanka rupee cash deposit to the National Water Supply and Drainage Board.
- (d) 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.

Add to the clause

52.2 Performance Security shall be provided at the Contractor's cost.

#### Clause 53 **Day Work**

- 53.4 The Contractor shall be paid for such work under the conditions set out in the Day work Schedule included in the Contract and at the rates and prices affixed thereto in his Bid.
- 53.5 In respect of all work executed on a Daywork 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.

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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.

# Clause 55 Completion

# 55.2 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.

# **Clause 58** Operation and Maintenance Manuals

- (58.1) The operation and maintenance manuals and as built drawings shall be provided within 28 days of completion date.
- (58.2) The Engineer shall withhold 5 % of the Initial Contract Price.

# Clause 60 Payment upon Termination

(60.1) Add the following Sub clause

The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 25% of the value of remaining works.

Add following clauses (Clause 65-71) given below

#### Clause 65 Taxation

Add following sub clauses

# 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

# 65.2 Compliance with statutes, Regulations etc.

a) 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

- a) 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.
- b) 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.

# 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.

## Clause 66 Completion of outstanding works and remedying defects

- In order to that the works and contractor's documents and each section, shall be in the condition required by the contract (fair wear & tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the contractor shall;
  - a) Complete any work which is outstanding on the date stated in a Taking-over Certificate, within such reasonable time as is instructed by the Engineer; and
  - b) Execute all work required to remedy defects or damage, as may be Notification Period for the works or section (as the case may be). If a defect appears or damage occurs, the contractor shall be notified accurse, the contractor shall be notified accordingly, by (or on behalf of) the Employer.
  - c) Within the Defect Notification Period as may be notified in-writing by the Engineer or within 14 days after Defects Liability Period as a result of an inspection made by the Engineer or his Representative at the completion of the Defect Notification Period in-writing.

# 66.2 Cost of Execution of Work of Repair etc.

All such work shall be carried out by the Contractor at his own expense and risk, 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 was an additional work

### Clause 67 Joint Ventures

Joint Venture shall not be accepted

#### 68 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 authorise 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 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.

# 69.2 Unfulfilled Obligations

Notwithstanding the issue of the Final Certificate, the Contractor and subject to sub clause 69.1, 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 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 machinery, plant and equipment, material and any other thing which shall be required for the proper completion of construction of works

#### Clause 71 Miscellaneous

# 71.1 Employees Trust Funds

The Contractor shall make contribution to the Employee's Provident Fund (EPF), Employee's Trust Funds (ETF), Gratuity Etc as required by the governing Law of the Democratic Socialist Republic of Sri Lanka.

# 71.2 Bribes

If the Contractor or any of his sub contractors, 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.

# Clause 72 Warranty (for DI pipes, fittings, rubber rings & accessories and all mechanical and Electrical Equipment)

The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and incorporate 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 in so far 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.

This warranty shall remain valid for 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 unless specified otherwise in the **Contract Data**.

The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

Upon receipt of such notice, the Supplier 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/goods supplied by him for 36 months in the form given in Appendix 11.

#### Clause 73 Inspections and Tests

#### **Testing and Inspection Agencies**

- (a) 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 Purchaser requires not specified any where and where they are to be conducted. The Purchaser shall notify the Supplier in writing of the identity of any representatives retained for these purposes.
- (b) 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 Purchaser.

- (c) Should any inspected or tested Goods fail to conform to the specifications, the Purchaser 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 Purchaser.
- (d) The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Purchaser's stores shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the delivery of Goods or Goods' shipment from the country of origin, in case of importing.
- (e) The Employer requires the goods to be supplied under this contract shall conform to the requirements given in Section 6. The Supplier shall obtain the Certificates of Inspection for the specific requirement of this contract document carried out by one of the following inspection agencies acceptable to the Purchaser.
  - M/s Lloyds Register, Lloyds Register Industrial Division, Register House, 29 Wallesley Road, Croydon DRO-2AJ, U.K.
  - M/s Crown Agents,
     Quality assurance & Inspection Service
     Townend House, Walsall WSI INT
     U.K.
  - M/s Societe Generale de Surveillance S.A.,
     Place des Alpes,
     Case Postale 898, CH-1211 Geneva 1,
     Switzerland.
  - 4. Bureau of Veritas, Cedex 44, 92077 Paris Le Defense, France.

The selected inspection authority's name and cost to same has to be given in summary of price schedule. On the acceptance of the bid, the Purchaser shall inform directly to the selected inspection authority with a copy to Supplier, the specific requirements for testing including deviations accepted by the purchaser, if any, to be tested. However, the payment to the Inspection Authority has to be made directly by the Supplier on production of test reports.

- (f) Nothing in clause 73 shall in any way release the Supplier from any warranty or other obligations under this Contract.
- (g) The Supplier 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.

(g) Nominated Inspection Agency shall carryout inspection and testing during Manufacturing process, after Manufacturing and at any time prior to shipping and shall confirm that goods 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 Inspection Agency which is included in the contract document as Appendix – 12.

# 21.3 Pre-shipment Inspection by National Water Supply & Drainage Board (NWSDB) Engineers

The Contractor shall arrange for 2 NWSDB Engineers for pre-shipment inspection visit to country of manufacture before dispatching the DI/PE Pipes, fittings, Valves, Specials and Accessories etc. and Treatment Plant equipment.

Each shipment should be inspected by 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.

- (a) The duration of inspection for Pre-shipment Inspection by NWSDB Engineers shall be worked out based on following guidelines.
  - (i) If DI pipes and fittings are manufactured in same premises, duration of the inspection shall not be less than Eight (8) days.
  - (ii) If DI pipes and fittings are manufactured in different premises, duration of the inspection shall not be less than Ten (10) days.
  - (iii) If PE pipes and fittings, duration of the inspection shall not be less than Ten (10) days
  - (iv) DI/CI valves Eight (8) days.

(v) For Pumps and other Equipments 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	8 days
Additional 02 pumps	1 days
01 Generator	1 day + Travelling to factory
Additional 01 Generator	1 day
01 Chlorinator	1 day + Travelling to factory
Additional 01 Chlorinator	1 day
01 Air blower	1 day + Travelling to factory
Additional 01 Air blower	1 day
De-oderization system	
01 unit	1 day + Travelling to factory
Additional 01 unit	1 day
Chemical mixers	01 day + Travelling to factory
Electrical Panels	01 day + Travelling to factory
Chemical feeding pumps	01 day + Travelling to factory
For SCADA system	10 days
For water meters	Eight (08) 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 NWSDB Engineers shall be guided by experienced engineers and quality controllers who are also competent in English language.
- (e) Each NWSDB Engineer shall be paid a per diem to include combined allowances, the allowance the amount specified in the Appendix 25 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 NWSDB Engineers for booking accommodation if requested.
- (g) The NWSDB Engineers shall be provided Terms of Reference (TOR) 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 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 Programe in detail with the inspection team and shall be agreed with the Pre-shipment Inspection team prior to departure.
- (i) Contractor shall assist for obtaining visa for the inspection from the relevant Embassy/ High commission for NWSDB Engineers.
- (j) NWSDB Engineers shall inspect and test DI /PE pipes, fittings, specials, accessories and valves etc. as per the attached check list for pre shipment as given in Appendix 13 &13A respectively. Manufacturers should perform any other tests which may be required by the NWSDB Engineers.
- (k) Nominated inspection agency shall be present during pre-shipment inspection by the NWSDB Engineers and shall assist the NWSDB Engineers for the testing and inspection
- (l) Any inspections carried out by Inspection Agencies or NWSDB shall not relieve the Contractor of his obligations under the Contract.
- (m) Contractor/Manufacturer shall not ship/deliver by plane materials from the manufacturers Factory or Stores without approval of the Engineer.

#### DISPUTE ADJUDICATION AGREEMENT

[for each member of a three - person DAB]

Name and details of Contract Name and address of Employer Name and address of Contractor Name and address of Member

Whereas the Employer and the Contractor have entered into the Contract and desire jointly to appoint the Member to act as one of the three persons who are jointly called the Dispute Adjudication Board (DAB) [and desire the Member to act as chairman of the DAB]

# The Employer, Contractor and Member jointly agree as follows:

- 1. The conditions of this Dispute Adjudication Agreement comprise the "General Conditions of Dispute Adjudication Agreement" which is appended to the General Conditions of the "Standard Bidding Document, Procurement of Works, Major Contracts Second Edition, January 2007" and the following provisions. In these provisions, which include amendments and additions to the General Conditions of Dispute Adjudication Agreement, words and expressions shall have the same meanings as are assigned to them in the General Conditions of Dispute Adjudication Agreement.
- [Details of amendments to the General Conditions of Dispute Adjudication Agreement, if any For example: In the procedural rules annexed to the General Conditions of Dispute Adjudication Agreement, Rule\_\_\_\_\_ is deleted and replaced by: "....."] In accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement the Member shall be paid as follows: A retainer fee of \_\_\_\_\_\_ per calendar month, plus a daily fee of \_\_\_\_\_\_ per day. In consideration of these fees and other payments to be made by the Employer and the Contractor in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement, the Member undertakes to serve, as described in this Dispute Adjudication Agreement, as one of the three persons who are jointly to act as the DAB. The Employer and the Contractor jointly and severally undertake to pay the Member, in consideration of the carrying out of these services, in accordance with Clause 6 of the General Conditions of Dispute Adjudication Agreement. This Dispute Adjudication Agreement shall be governed by the law of SIGNED by:\_\_\_\_\_ SIGNED by: SIGNED by:\_\_\_\_ for and on behalf of the employer for and on behalf of the Contractor the Member in the presence of in the presence of in the presence of Witness : \_\_\_\_\_ Witness:\_\_\_\_\_ Witness: Name: \_\_\_\_\_ Name : \_\_\_\_\_ Address:\_\_\_\_\_ Address: Address : \_\_\_\_\_\_

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Date:

Date:

#### for Contract Data

# 47.1 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			

#### 47.1 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/PE/GI/Steel/GRP Pipes, Fittin Specials and Valves and any other items which does not belong to the categories of Inplisted above).	uts
(State if there are any others)	
	• • •

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# 6. SPECIFICATIONS

•	SPECIFICATIONS FOR CIVIL ENGINEERING CONSTRUCTION	6a-1	
•	SPECIFICATIONS FOR SERVICE CONNECTION	6c-1	6c-4
•	SPECIFICATIONS FOR TRENCH EXCAVATION, BACKFILLING & ROAD REINSTATEMENT	6d-1	6d-18
•	SPECIFICATION FOR TIMBER	6g-1	6g-2
•	SPECIFICATION FOR DI PIPES AND FITTINGS FOR WATER SUPPLY APPLICATIONS	6h-1	6h-15
•	SPECIFICATIONS FOR uPVC PIPES & FITTINGS	6i-1	6i-20
•	SPECIFICATIONS FOR POLYETHYLENE (PE) PIPES & FITTINGS FOR WATER SUPPLY APPLICATIONS	6j-1	6j-31
•	SPECIFICATION FOR STEEL PIPES AND FITTINGS	6k-1	6k-16
•	SPECIFICATION FOR GALVANIZED IRON PIPES AND FITTINGS	6l-1	61-7
•	SPECIFICATION FOR VALVES, HYDRANTS, SURFACE BOXES & MANHOLE COVERS FOR WATER SUPPLY APPLICATIONS	6m-1	6m-27
•	SPECIFICATION FOR MECHANICAL COUPLINGS, REPAIR CLAMPS & FLANGE ADAPTORS	6n-1	6n-44
•	SPECIFICATION FOR FLOW METERS & WASTE METERS	6u-1	6u-5
•	SPECIFICATION FOR PENSTOCKS & HEADSTOCKS	6w-1	6w-4
•	SPECIFICATION FOR DI PIPES & FITTINGS AND SPECIALS FOR SEWERAGE APPLICATIONS	6bb-1	6bb-15

•	SPECIFICATIONS FOR PIPELINE MAKER TAPE	6bc-1	6bc-2
•	SPECIFICATION FOR POLYETHYLENE (PE) PIPES, FITTINGS, SPECIALS & ACCESSORIES FOR DRAINAGE & SEWERAGE APPLICATIONS	6bd-1	6bd-34
•	SPECIFICATION FOR MASTIC MATERIALS	6bj-1	6bj-2
•	SPECIFICATION FOR PRESSURE TESTING OF DI, CI & PVC PIPE LINES	6bk-1	6bk-3

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 accompany 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 9001:2008/2015 Quality 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
- 3. DI/CI 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
- 4. Polyethylene (PE) pipes and fittings
- 5. Galvanized Iron pipes and fittings

## SCHEDULE OF PARTICULARS

## 1. PVC PIPES AND FITTINGS

1.1	Address of Manufacturer's Factory:	Pipes –					
		Fittings -					
1.2	Standards to which pipes and fittings c	onform: Pipes –					
		Fittings -					
	Is Certificate of relevant Standards Ins	titute Provided?					
1.3	Whether fittings (except bends) provid	led are:					
	a) Moulded						
	b) Fabricated						
1.4	Whether bends provided are:						
	a) Single cast						
	b) Fabricated						
1.5	Year of manufacture of pipes & fitt	ings:					
1.6	Quantity of solvent cement required	per joint :					
	<u>Pipe Dia</u>	Quantity of solvent cement required per joint					
	15 mm						
	63 mm						
1.7	For PVC pipes and fittings of dia. 90 n	nm or greater :					
1.7.1	Joint Rings for mechanical joints:						

NWSDB/SBD/CIVIL : Schedule of Particulars DPC : RPC : PPC :- July 2014 - Version 5

Material : Class :

Standard to which it conforms:

1.7.2 Make of Lubricant for mechanical joints for safety in water supply : To confirm whether it complies :

Quantity of lubricant required per joint

<u>Pipe Dia</u>	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 9001:2008 /2015 Quality Management System Standard.
- 1.8 FLANGES
- 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	
225 mm.	
160 mm	
110 mm	
90 mm	
63 mm	

1.8.5 Material: Gaskets:

Nuts & Bolts:

1.9	SADDLE STRA	PS
1.9.1	Country of Manu	facture:
1.9.2	Manufacturer and	l Address :
1.9.3	Make:	
		which saddle straps conform:
1.9.4	Material - St	traps:
	Jo	oint Rings:
	В	olts & Nuts :
1.9.5		the manufacturing process of the items offered comply with /2015 Quality Management System Standard
	Is certificate of re	elevant Standard Institutions Provided:
2.	DUCTILE IR	ON (DI)
2.1	PIPES AND FIT	TTINGS
2.1.1	Country of manu	facture: (1) Pipes
2.1.2	Manufacturers' r	name and Address: (1) Pipes
		(A) F1
		(2) Fittings
2.1.3	(1	s to which pipes and fittings conform:  ) Pipes
		ipments proposed by the Contractor:
2.1.4		conformity to standards from relevant standards Institution provided etories: (1) Pipes
2.1.5	Is ISO 9001:20 factory/factories	08/2015 Quality Management System Certificate provided to the : (1) Pipes

2.1.6	Class of Pipes and fi	ttings :	Class
	S/S Pipes Pipes with integral c Pipes with factory w Pipes with screwed t Tees Bends & Other Fittin	relded flanges flanges	
2.1.7	Whether factory wel	ded flange pipes	s tested for each flanged joint?
2.1.8	Whether Pipes & Fit	ttings are from sa	ame Manufacturer ?
2.1.9	Gaskets, Joint rings	s and Lubricant	:
2.1.10	Standard to which C	Gaskets, Joint rin	gs conforms:
2.1.11	Is Certificate for corto the factory/factor		ards from relevant standards Institution provided
2.1.12	Is ISO 9001:2008/20 factory/factories :	- •	agement System Certificate provided to the
2.1.13	Make of Gaskets,	Joint rings and l	Lubricant :
		Make	
	Gaskets		
	Joint rings		
	Lubricant		
2.1.14	Material of Gaskets	, Joint rings and	Lubricant :
	Gaskets		
	Joint rings		
	Lubricant		
2.1.15	Hardness range of G	askets and Joint Hardness Range	=
	Gaskets		
	Joint Rings		
2.1.16	Standard to which F	Flanges conform	:

2.1.17	Whether Flanges are integrally casted or Factory welded?						
2.1.18	3 Type of external coating and grade :						
2.1.19	Standard to which external coating conform:						
2.1.20	Type of inter	nal coating/lining	g and standard:				
2.1.21	1 Standard to which nuts and bolts, washers conform and the type of material:						
	Standard						
	Materi	al		•••••			
2.1.22	Standard to w	hich polyethylen	e sleeving con	form and the co	blour		
	Standa	nrd					
	Colour	r					
2.1.23	Quantity of jo recommendati	1	nterials require	d per flanged jo	pint as per manufacturer's		
	Diameter outer	Mastic	Paste	Tape	uPVC/Polyethylene		
	(mm)	/Primer (litres)	(kg)	(m)	wrapping (m)		
	150						
	200						
2.1.24	Port of shipme	ent:					
2.1.25	Packing and p	protection in trans	sit :				
2.1.26	26 Time of delivery:						
2.1.27	27 Reference of the catalogues, technical literature, drawing provided with the Bid:						
2.1.28	Name and add	ress of the Suppl	ier's accredited	d agent in Sri L	anka:		
2 1 20	29 Deviations from specifications (if any):						

2.2	MECHANICAL COUPLINGS AND FLANGE ADAPTERS						
2.2.1	Country of manufacture :						
2.2.2	Manufacturers' Name and Address:						
2.2.3	3 2.2.3.1 Make, Material, Hardness Range and Standard:						
		Make	Material	Hardness Range	Standard	Date of Manufacture	
	Sleeve:			N/A			
	Flange:			N/A			
	Gaskets:						
	Joint Rings:						
	2.2.3.2 No o	of Shipments	proposed by	y the Contract	or:		
2.2.4	Type of exte	ernal coating	and thickne	ess:			
2.2.5	Type of inte	ernal 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: 2008/2015 Quality Management System Certificate provided to the Factory						
2.3	SURFACE	BOXES AN	D MANHO	LE COVERS	\$		
2.3.1	Country of I	Manufacture	:				
2.3.2	Manufacturer's name and Address:						
2.3.3	Material:						

		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	f Supplier's age	ent (if any) in Si	ri Lanka :		
2.3.8	Port of Shipment:					
2.3.9	Time of Delivery of I	Material at port	of shipment:			
2.3.10	Deviations from Spec	cification (if an	y):			
3.	DI/CI VALVES ANI	D ACCESSOR	RIES			
3.1	GATE/SLUICE VA	LVES				
3.1.1	Country of Manuface	ture :				
3.1.2	Manufacturer's Name	e and Address:				
3.1.3	Date of Manufacture:			• • • • • • • • • • • • • • • • • • • •		
3.1.4	3.1.4.1 Standards to	which valves o	conform			
	3.1.4.2 No of Shipm	ents proposed	by the Contract	or:	• • • • • • • • • • • • • • • • • • • •	
3.1.5	Is certificate for conf to the factory/ factori				Institution	provided
3.1.6	Is ISO 9001 : 2008/ factory/ Factories		-	ystem Certifica	ate provid	ed to the
3.1.7	Spindle:				••••	

2.3.4 Class, Make, Standard and Date of Manufacture

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 valvekgs
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):
3.2	BUTTERFLY VALVES
3.2.1	Country of Manufacture
3.2.2	Manufacturer's name and 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 : 2008/2015 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	Is ISO 9001 : 2008/2015 Quality Management System Certificate provided to the factory/ factories.		
3.2.8.4	Face to face dimensions of the valves (mm) :		
3.2.8.5	End Flanges		
	Pressure rating:		
	Dimensions (mm):		
	Bolt circle dia (mm):		
3.2.8.6	Standard to which nuts and bolts conform and the material:		
3.2.8.7	The type of operating gear for the valve:		
3.2.8.8	Operating method of the valve (hand wheel/Tee key):		

3.2.8.	9 Whether Gearing arrangement is provided:
	Gear ratio of gearing:
	Unbalanced head: Bars
	Seat test pressure: Bars
	Body test pressure Bars
3.2.8.	10 Internal protective finish:
	Material:
	Thickness:
3.2.8.	11 External protective finish:
	Material:
	Thickness:
3.2.8.	12 Weight of the valve: Kg
3.2.8.	13 Packing and Protection of valves in transit:
3.2.8.	14 Reference of the catalogues, technical literature and drawings provided with the Bid:
3.2.8.	15 Port of shipment:
3.3.8.	16 Time of delivery of valves at port of shipment:
3.2.8.	17 Name and Address of supplier's agent (if any) in Sri Lanka:
3.2.8.	18 Deviations from specifications (if any):
3.3	AIR VALVES
3.3	AIR VALVES
3.3.1	Country of Manufacture:
3.3.2	Manufacturer's name and Address:
3.3.3	Date of Manufacture:
3.3.4	Is ISO 9001 : 2008 /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	Minimum air outflow at 0.5 bar differential pressure
mm	m <sup>3</sup> /min
	Minimum air inflow at 0.2 bar differential pressure
	m <sup>3</sup> /min

	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
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):

# 3.4.2 Manufacturer's name and Address: 3.4.3 Date of Manufacture: 3.4.4 Standard to which valves conform: ..... 3.4.5 Is ISO 9001 : 2008 /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 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 3.4.15 Internal protective finish:..... 3.4.16 External protective finish:..... Weight of the valve: ..... Kg 3.4.17 3.4.18 Packing and Protection of valves in transit:.....

3.4

CHECK VALVES

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	
3.5.1	Country of Manufacture :	
3.5.2	Manufacturers' Name and Address:	
3.5.3	Date of Manufacture:	
3.5.4	Is ISO 9001:2008/2015 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:	
	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:
3.5.9	Minimum running pressure difference: bars
3.5.10	Minimum control pressure Bars
3.5.11	Internal protective finish:
3.5.12	External protective finish:
3.5.13	Weight of the valve: kg
3.5.14	Packing and Protection of valves in transit:
3.5.15	Reference of the catalogues, technical literature and drawings provided with the Bid:
3.5.15	Port of shipment:
3.5.16	Time of delivery of valves at port of shipment:
3.5.17	Name and Address of supplier's agent (if any) in Sri Lanka:
3.5.18	Deviations from specifications (if any):
3.6	PRESSURE SUSTAINING/RELIEF VALVES
3.6.1	Country of Manufacture :
3.6.2	Manufacturer's name and Address:
3.6.3	Date of Manufacture:
3.6.4	Is ISO 9001 : 2008 /2015 Quality Management System provided to the factory/factories
3.6.5	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:

3.6.6	Main valve:
	Body:
	Internal valve:
	Indicator rod:
	Relay Valve Body:
	Spindle:
	Diaphragm:
	Spring:
3.6.7	Length between flanges (mm):
3.6.8	End Flanges
	Pressure rating:
	Dimensions (mm):
	Bolt circle dia (mm):
	Standard:
3.6.9	Internal protective finish:
3.6.10	External protective finish:
3.6.11	Weight of the valve: kg
3.6.12	Packing and Protection of valves in transit:
3.6.13	Reference of the catalogues, technical literature and drawings provided with the Bid:
3.6.14	Port of shipment:
3.6.15	Time of delivery of valves at port of shipment:
3.6.16	Name and Address of supplier's agent (if any) in Sri Lanka:
3.6.17	Deviations from specifications (if any):

## 3.7 FLOW CONTROL VALVES

3.7.1	Country of Manufacture :
3.7.2	Manufacturer's name and Address:
3.7.3	Date of Manufacture:
3.7.4	Is ISO 9001 : 2008/2015 Quality Management System provided to the factory/factories:
3.7.5	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 :
3.7.6	Material Main valve:
	Body:
	Internal valve:
	Indicator rod:
	Relay Valve Body:
	Spindle:
	Diaphragm:
	Spring:
3.7.7	Length between flanges (mm):
3.7.8	End Flanges Pressure rating: Dimensions (mm): Bolt circle dia (mm): Standard:
3.7.9	Minimum flow:
3.7.10	Constant flow:
3.7.11	Internal protective finish:
3.7.12	External protective finish:

3.7.1	13 Weight of the valve: kg
3.7.1	14 Packing and Protection of valves in transit:
3.7.1	15 Reference of the catalogues, technical literature and drawings provided with the Bid:
3.7.1	16 Port of shipment:
3.7.1	7 Time of delivery of valves at port of shipment:
3.7.1	18 Name and Address of supplier's agent (if any) in Sri Lanka:
3.7.1	19 Deviations from specifications (if any):
27,13	2 · 2 · 2 · 2 · 2 · 2 · 2 · 2 · 2 · 2 ·
3.8	ALTITUDE VALVES
3.8.1	Country of Manufacture :
3.8.2	Manufacturer's name and Address:
3.8.3	Date of Manufacture:
3.8.4	Is ISO 9001 : 2008/2015 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:
3.8.6	Material Main valve:
	Body:
	Internal valve:
	Indicator rod:
	Relay Valve Body:
	Spindle:
	Diaphragm:
	Spring:
3.8.7	Length between flanges (mm):

3.8.8	End Flanges Pressure rating:
	Dimensions (mm):
	Bolt circle dia (mm):
	Standard:
3.8.9	Minimum head required at valve inlet:
3.8.10	Internal protective finish:
3.8.11	External protective finish:
3.8.12	Weight of the valve: kg
3.8.13	Packing and Protection of valves in transit:
3.8.14	Reference of the catalogues, technical literature and drawings provided with the Bid:
3.8.15	Port of shipment:
3.8.16	Time of delivery of valves at port of shipment:
3.8.17	Name and Address of supplier's agent (if any) in Sri Lanka:
3.8.18	Deviations from specifications (if any):
3.9	BALL FLOAT VALVES
3.9.1	Country of Manufacture :
3.9.2	Manufacturer's name and address:
3.9.3	Date of Manufacture:
3.9.4	Is ISO 9001 : 2008/2015 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 :
3.9.6	Body test pressure:

3.9.7	End Flanges			
	Pressure rating:			
	Dimensions (mm):			
	Bolt circle dia (mm):			
	Standard:			
3.9.8	Material			
	Valve Body:			
	Float:			
	Lever and links:			
3.9.9	Body test pressure: bars			
3.9.10	Close assembly test pressure bars			
3.9.11	Weight of the valve: kg			
3.9.12	Packing and Protection of valves in transit:			
3.9.13	Reference of the catalogues, technical literature and drawings provided with the Bid:			
3.9.14	Port of shipment:			
3.9.15	Time of delivery of valves at port of shipment:			
3.9.16	Name and Address of supplier's agent (if any) in Sri Lanka:			
3.9.17	Deviations from specifications (if any):			
3.10	FLAP VALVES			
3.10.1	Country of Manufacture :			
3.10.2	Manufacturer's name and Address:			
3.10.3	Date of Manufacture:			
3.10.4	Is ISO 9001: 2008/2015 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:
3.10.6 Material Frame and door:
Sealing:
Hinge pin:
Links:
3.10.7 Flanges
Pressure rating:
Dimensions (mm):
Bolt circle dia (mm):
Standard:
3.10.8 Weight of the valve: kg
3.10.9 Packing and Protection of valves in transit:
3.10.10 Reference of the catalogues, technical literature and drawings provided with the Bid:
3.10.11 Port of shipment:
3.10.12 Time of delivery of valves at port of shipment:
3.10.13 Name and Address of supplier's agent (if any) in Sri Lanka:
3.10.14 Deviations from specifications (if any)
3.11 FIRE HYDRANTS
3.11.1 Is this Pillar type or Underground type:
3.11.2 Screw down type
3.11.3 Country of Origin:
3.11.4 Manufacturer's name and Address:

3.11.5 Is ISO 9001 : 2008/2015 Quality Management System provided to the factory/ factories:
3.11.6 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:
3.11.7 Date of Manufacture:
3.11.8 Standard to which it conform:
3.11.9 Inlet Flanges Pressure rating:
Dimensions (mm):
Bolt circle dia(mm):
Standard:
Standard of facing and drilling:
3.11.10 The direction of closing of the hydrant valve:
3.11.11 Body test pressure: Bars
3.11.12 Valve and seat test pressure : bars
3.11.13 Internal protective finish:
3.11.14 External protective finish:
3.11.15 Weight of the hydrant: kg
3.11.16 Packing and protection of hydrants in transit:
3.11.17 Reference of the catalogues, technical literature and drawings provided with the Bid:
3.11.18 Time of delivery of hydrants at port of shipment:
3.11.19 Name and address of supplier's agent (if any) in Sri Lanka:
3.11.20 Deviations from specifications (if any):

3.12	Fire Hydrants - Dry Barrel Type				
3.12.1	Country of Manufacture :				
3.12.2	2 Manufacturer's name and Address:				
3.12.3	Date of Manufacture:				
3.12.4	Is ISO 9001 : 2008/2015 Quality Management System provided to the factory factories				
3.12.5	3.12.5.1 Is product conformity cert to the factory/ factories		Institution provided		
	3.12.5.2 No of Shipments proposed	l by the Contractor:			
3.12.6	Standard to which it conform:				
3.12.7	Burried length of hydrant:	m			
	No. of outlet nozzles:  Nominal diameter (mm):  Standard:				
3.12.9	Inlet Flange				
	Pressure rating:				
	Dimensions (mm):				
	Bolt circle dia(mm):  Standard:				
	Standard				
3.12.10	0 Material, Hardness range and standa	ard			
	Material	Hardness range	Standard		
	Gaskets:				
	Nuts and Bolts:				
3.12.1	1 The direction of closing of the hydr	ant valve:			
3.12.12	2 Colour of the finish paint above gro	ound line:			
3.12.13	3 Weight of the hydrant:	kg			
3.12.14	4 Packing and protection of hydrants	in transit:			

3.12	2.15 Reference o tender:	f the catalog	gues, technical litera	ature and drawings provided with the
3.12	2.16 Port of ship	ment:		
3.12	2.17 Time of deli	very of hydra	ants at port of shipme	ent:
3.12	2.18 Name and ac	ldress of supp	plier's agent (if any)	in Sri Lanka:
3.12	2.19 Deviations fi	rom specifica	tions (if any):	
4.	PE PIPES A	ND FITTIN	CS .	
			the contractor	
4.2	Country of Man	ufacture:		
		Pipes:		
		Fittings:		
4.3	Manufacturer's	Address and	the intended Date of	Manufacture:
		Ado	dress	Intended Date of Manufacture
	Pipes:	••••		
	Fittings:			
4.4	Colour of the pro	oduct : Pipes:		
		Fittings:		
4.5	Port of Shipmer	ıt:		
4.6	4.6.1 Standard	s to which pi	pes and fittings confe	orm:
		Pipes:		
		· ·		
	4.6.2 No of Sh	ipments prop	oosed by the Contrcat	tor:
4.7	Is Certificate of	-	Formity from a releva	ant standards Institution provided :
		Fittings	(attach	a copy)

4.8 T	nomina	i sizes and pre	ssure ratings of F	ripes & Fittings:			
			Nominal Dia	Pres	sure Rating	<u>SDR</u>	
	P	ipes:					
	F	ittings:					
4.9 N	Make of	compression	fittings, Gaskets/	rubber rings, inserts	, clamps		
	Make/material			Intended Date of Manufacture			
	<b>Body of Compression fittings</b>						
	Inserts Rubber ring/Gasket						
4.10	Chara	cteristics of P	E compound as g	granules			
	i.	Compound l	Density:				
	ii.	Carbon blac (black comp	k content ound % by mass	)			
	iii.	Carbon blac (black comp	-	grade range)			
4.11	4.11 Mechanical characteristics						
	i.	-	strength at 20°C				
			s ngs				
	ii.	Hydrostatic	strength at 80°C				
		(a) For pipe	s				
		(b) For fittir	ngs	•••			
4.12	Packing and protection in transit:						
		-	(specify i	•			
4.13	4.13 Time of delivery:						
				FOB		At Site	
		Pipes					
		Fittings					

4.14	Reference of the catalogues, technical literature, drawing provided with the tender:				
	Pipes:				
	Fittings:				
4.15 	Name and address of the Supplier's agent in Sri Lanka:				
 4.16	Whether ISO 9001 : 2008/2015 quality assurance certificate is available for manufacturing factory:				
	(i) (a) For Pipes				
5.	GALVANIZED IRON PIPES & FITTINGS				
5.1	Country of Manufacturer:				
5.2	Name & 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:				
	Bolts & Nuts Pipe Diameter 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 9001:2008 /2015 Quality Management System Standard.

Is certificate from relevant Institution provided:

•

# 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:

Additional sheets should be attached as necessary

NWSDB/SBD/CIVIL : Deviation from Specification DPC : RPC : PPC:- July 2014 - Version 5

# 9. SCHEDULE OF DAY WORKS

- PREAMBLE NOTES ON DAYWORKS SCHEDULES
- SCHEDULE OF DAYWORK RATES FOR LABOUR
- SCHEDULE OF DAYWORK RATES FOR MATERIALS
- SCHEDULE OF DAYWORK 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 daywork basis except by written order of the Engineer. The rates specifies shall apply to any quantities of daywork ordered by the Engineer. Daywork rates are exclusive of VAT.

The daywork 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 daywork rate to cover overhead and profit as specified in each section below.

#### Labour for daywork

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 daywork 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 daywork

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 daywork at the maximum of 6% of daywork 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 daywork rates to cover his profit, overhead, superintendence, administrative costs related to use such equipment, liabilities, time keeping and any other allied works.

In calculating the payment due to the Contractor for Contractor's Equipment employed on daywork, 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 daywork and the time of return journey there to shall be considered for payment.

NWSDB/SBD/CIVIL: Schedule of Dayworks DPC: RPC: PPC:- July 2014 - Version 5

## SCHEDULE OF DAYWORK RATES FOR LABOUR

ITEM NO	DESCRIPTION	UNIT	RATE Rs.
1	Unskilled Labour	day	1100.00
2	Pipe Layer	day	1600.00
3	Helper	day	1250.00
4	Mason	day	1400.00
5	Carpenter and Joiner	day	1500.00
6	Steel Work Erector	day	1500.00
7	Tool Operator	day	1300.00
8	Fitter	day	1600.00
9	Tiller	day	1600.00
10	Plumber	day	1550.00
11	Welder	day	1600.00
12	Painter	day	1500.00
13	Electrician	day	1600.00
14	Mechanic	day	1600.00
15	Bar Bender	day	1600.00
16	Operator (Heavy Machine)	day	1600.00

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**Note:** VAT not included

Contractor's O/H & P not included.

**Source:** Market prices April 2017

## SCHEDULE OF DAYWORK RATES FOR MATERIALS

Item No.	Description	Unit	Basic Rate
			(===)
1.	Cement, ordinary Portland or equivalent in bags	kg	16.20
2.	Tor Steel reinforcing bar	kg	113.00
3.	Mild steel	kg	104.00
4.	Fine aggregate as specified in clause 1.6.1 of the ICTAD specification (SCA/4/1) for Building Works – Volume 1	ĸġ	104.00
	Fine Sand	cu	13,500.00
	Coarse Sand	cu	12,500.00
	Sea sand (wash)	cu	6,500.00
_	Quarry Dust	cu	6,800.00
5.	Coarse aggregate for concrete as specified in Clause 302 of the General Specification for		
	Civil Engineering construction of size ½" (Chips)	cu	6,900.00
	3/4"	cu	6,900.00
	1"	cu	6,750.00
	1½"	cu	6,250.00
	2"	cu	5,200.00
6.	Timber for Planks (form work) 1"x 9"	$m^2$	4,300.00
7.	Shuttering planks	$m^2$	323.00
8.	Timber for Members		
	<u>Jack</u>		
	Timber 4"x3"	m	1,805.00
	Timber planks 1 1/8"	$m^2$	5,918.00
	Hora/ Liyan		
	Timber 2"x1"	m	33.00
	Timber 2"x2"	m	98.00
	Timber 4"x2"	m	443.00
	Timber 4"x3"	m	755.00
	Timber 5"x3"	m	902.00
	Timber 6"x2"	m	902.00
	Timber 4"x4"	m	1,394.00
	Timber 4"x6"	m	1,886.00
	Timber planks 1"	$m^2$	4,300.00
	Valance Board 9"x1" Ginisapu	$\frac{\mathrm{m}}{\mathrm{m}^2}$	476.00
	Lunumidella Ceiling Planks 6"x3/4"	III	1,076.00

Item No.	Description	Unit	Basic Rate (Rs)
Kemp	v <u>as</u>		(==)
	Class 1 Timber 2"x1"	m	115.00
	Class 1 Timber 2"x2"	m	213.00
	Class 1 Timber 2"x4"	m	623.00
	Class 1 Timber 3"x4"	m	984.00
	Class 1 Timber 2"x5"	m	853.00
	Class 1 Timber 3"x5"	m	1,279.00
	Class 1 Timber 2"x6"	m	1,017.00
	Class 1 Timber 3"x6"	m	1,509.00
	Class 1 Timber 4"x6"	m	2,460.00
	Class 1 Timber 1"x9"	m	1,181.00
9.	Bricks Standard size	nr.	15.00
10.	Rubble		
	6" x 9"	$m^3$	5,500.00
	6" x 4"	$m^3$	5,600.00

Note: 1. Contractor's overhead not included

2. VAT not included

#### Source :-

1. Market prices April 2017.

## SCHEDULE OF DAYWORK RATES FOR CONSTRUCTIONAL PLANT

ITEM NO	DESCRIPTION	CAPACITY	UNIT	RATE (Rs.)
1	Asphalt cutter *		hr	1,150.00
2	Excavator *	$0.18m^{3}$	hr	2,400.00
3	Excavator *	$0.35 \text{m}^3$	hr	2,700.00
4	Excavator *	$0.45 \text{m}^3$	hr	2,800.00
5	Excavator *	0.7m <sup>3</sup>	hr	3,100.00
6	Excavator *	0.9m <sup>3</sup>	hr	3,300.00
7	Excavator (Long Arm)*	0.4m <sup>3</sup>	hr	3,750.00
8	Excavator (Long Arm)*	0.5m <sup>3</sup>	hr	4,250.00
9	Excavator (Long Arm)*	0.9m <sup>3</sup>	hr	7,000.00
10	Excavator with backhoe *	130hp	hr	4,500.00
11	Wheel Loader *	$0.9m^{3}$	hr	1,900.00
12	Wheel Loader *	1.4m <sup>3</sup>	hr	2,000.00
13	Wheel Loader *	2.0m <sup>3</sup>	hr	2,500.00
14	Backhoe loader *	101hp	hr	2,300.00
15	Backhoe loader *	90hp	hr	2,350.00
16	Bulldozer (Crawler Tractor) *	95 hp	hr	4,100.00
17	Bulldozer (Crawler Tractor) *	165 hp	hr	4,300.00
18	Bulldozer (Crawler Tractor) *	355 hp	hr	6,400.00
19	Motar Grader *	3.1 m	hr	3,500.00
20	Motar Grader *	4.2 m	hr	5,200.00
21	Baby Dumper *		day	5,000.00
22	Bob Cat		day	6,000.00
23	Hand Rammers *	60kg	day	4,000.00
24	Plate Compactor Machanical *	90kg	day	3,600.00
25	Soil compactor - Vibrating Roller *	01 t	hr	1,100.00
26	Soil compactor - Vibrating Roller *	04 t	hr	2,400.00
27	Soil compactor - Vibrating Roller *	07 t	hr	2,850.00
24	Soil compactor - Vibrating Roller *	10 t	hr	3,400.00

## FOR CONSTRUCTIONAL PLANT (Cont.)

ITEM NO	DESCRIPTION	CAPACITY	UNIT	RATE
25	Soil compactor - Vibrating Roller *	20 t	hr	4,250.00
26	Soil compactor - Vibrating Roller *	26 t	hr	4,750.00
27	Pneumatic Roller *	8 - 10 t	hr	3,800.00
28	Pneumatic Roller *	10 - 12 t	hr	4,500.00
29	Concrete mixer complete with scales etc. *	$0.25 \text{m}^3$	hr	500.00
30	Concrete mixer complete with scales etc. *	$0.5$ m $^3$	hr	700.00
31	Concrete vibrator *	38 mm dia.	day	3,500.00
32	Dump Truck (80 km/day) *	3 t	day	4,800.00
33	Dump Truck (80 km/day) *	12 t	day	8,900.00
34	Dump Truck (80 km/day) *	20 t	day	12,100.00
35	Crawler Crane *	35 t	hr	4,200.00
36	Crawler Crane *	50 t	hr	5,600.00
37	Hydraulic Crane *	20 t	hr	7,500.00
38	Hydraulic Crane *	15t	hr	5,800.00
39	Tower crane *	10 t	hr	3,700.00
40	Tower crane *	12 t	hr	5,200.00
41	Boom Truck *	3 t	day	12,800.00
42	Boom Truck *	3.5 t	day	13,900.00
43	Boom Truck *	4 t	day	17,300.00
44	Water Bowser (80 km/day) *	6000lts.	day	4,900.00
45	Water Bowser (80 km/day) *	8000lts.	day	7,500.00
46	Water Bowser (80 km/day) *	13200lts.	day	8,700.00
47	Water Pump 4" dia. (with fuel & without operator)		hr	1,100.00
48	Water Pump 2" dia.(with fuel & without operator)		hr	350.00
49	Water Pump 2" dia.(Electrical - without operator)		day	700.00
50	Sludge pump 4" dia. (with fuel & without operator)		hr	1,100.00
51	Double cab (with driver & fuel) *		km	60.00
52	Crew cab (with driver & fuel) *		km	70.00
53	Lorry *	(20-30 t)	km	110.00

ITEM NO	DESCRIPTION	CAPACITY	UNIT	RATE
54	Van (15 Sheet) or similar utility Vehical *		km	55.00
55	Ordinary truck (100 km/day) *	6 t	day	8,700.00
56	Ordinary truck (100 km/day) *	12 t	day	11,500.00
57	Truck with tipper *	3 - 8 t	km	110.00
58	Low loader truck *	30 - 40 km	km	140.00
59	Tractor & trailor (3 ton) (80 km/day)		day	6,000.00
60	Fork lift (Minimum 5 hrs.) *	2.5 t	5 hrs	5,250.00
61	Fork lift (Minimum 5 hrs.) *	3 t	5 hrs	6,300.00
62	Fork lift (Minimum 5 hrs.) *	3.5 t	5 hrs	8,100.00
63	Fork lift (Minimum 5 hrs.) *	6 t	5 hrs	11,550.00
64	Fork lift (Minimum 6 hrs.) *	10 t	6 hrs	19,100.00
65	Fork lift (Minimum 6 hrs.) *	15 t	6 hrs	27,700.00
66	Air Compressor (including tools breakers etc:)*	750 CFM	hr	4,600.00
67	Air Compressor (including tools breakers etc:)*	250 CFM	hr	1,700.00
68	Air Compressor (including tools breakers etc:)*	125 CFM	hr	1,200.00
69	Air Compressor (including tools breakers etc:)*	175 CFM	hr	1,400.00
70	Air Compressor (baby) *		hr	75.00
71	Generating set (with fuel )	30kVA	hr	1,500.00
72	Generating set (with fuel )	35kVA	hr	1,750.00
73	Generating set (with fuel )	45kVA	hr	2,200.00
74	Generating set (with fuel )	125kVA	hr	4,600.00
75	Tile cutter (up to 2'-0" length - with operator)		day	475.00
76	Tile cutter (2'-0" length - with operator)		day	600.00
77	Breaker Machene (with operator)		day	5,200.00
78	Grinder (large) - Electrical (with operator)		day	1,450.00

## FOR CONSTRUCTIONAL PLANT (Cont.)

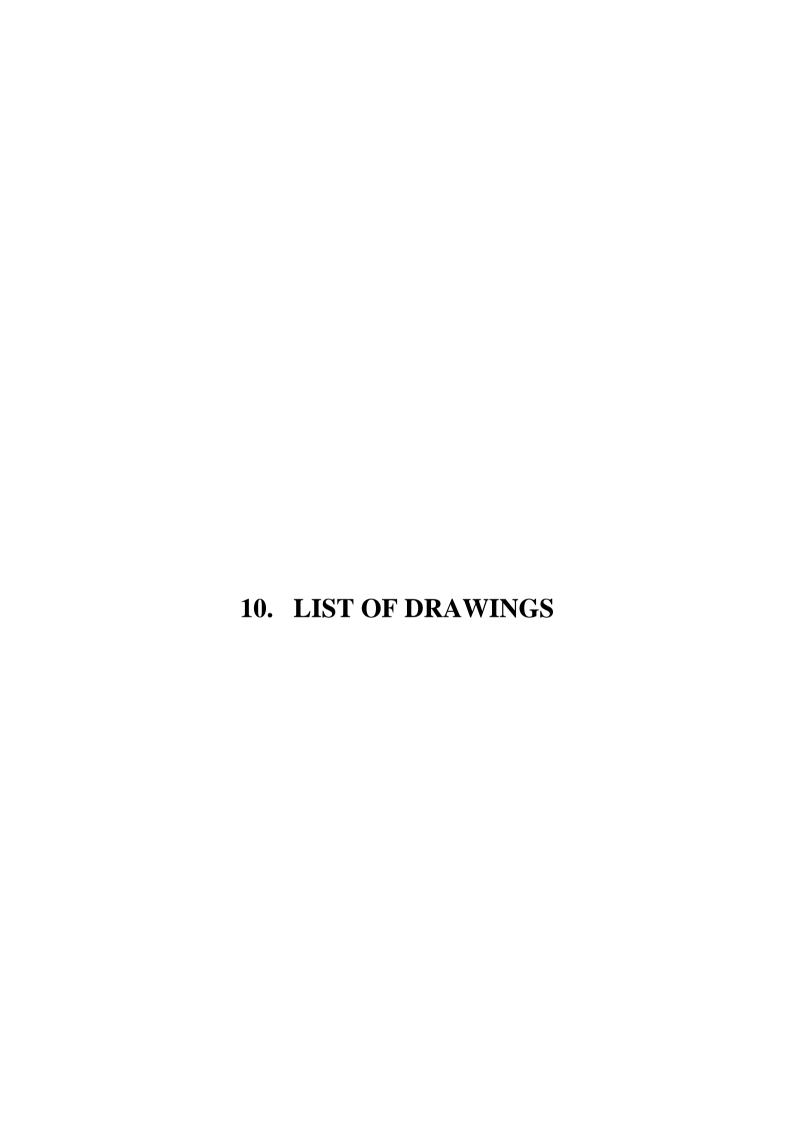
ITEM NO	DESCRIPTION	CAPACITY	UNIT	RATE
79	Grinder (midium) - Electrical (with operator )		day	950.00
80	Angle Grinder (06",04") - Electrical (with operator)		day	200.00
81	Angle Grinder (7") - Electrical (with operator)		day	500.00
82	Butt fusion Machine with all necessary equipment - Electrical *		month	26,000.00
83	Pressure Pump (Electric domestic type - with operator )		day	1,500.00
84	Welding Transformer		day	300.00
85	Chain Block		day	600.00
86	Floor Polisher		day	900.00
87	Vacum Cleaner		day	550.00
88	Blower		day	350.00
89	Jig Saw		day	250.00
	For Supply of Ready Mix Concrete (Colombo Area)			
90	Pump Cars -( Minimum 30 m <sup>3</sup> ) - 21m length of pump car *		$m^3$	700.00
91	Pump Cars -( Minimum 40 m <sup>3</sup> ) - 32 m length of pump car *		m <sup>3</sup>	800.00
92	Pump Cars -( Minimum 50 m <sup>3</sup> ) - 37 m length of pump car *		m <sup>3</sup>	900.00

#### Note:-

- 1. VAT not included
- 2. \* Cost of Operator / Driver and fuel are included in rates.
- 3. Contractors O/H & P not included.

#### Source :-

2. Market prices April 2017.



### LIST OF DRAWINGS

Drg. No.	Description

NWSDB/SBD/CIVIL : List of Drawings DPC :RPC :PPC :- July 2014 - Version 5

## 11. BILLS OF QUANTITIES

- PREAMBLE NOTES ON BILLS OF QUANTITIES
- BILLS OF QUANTITIES
- SUMMARY OF BILLS

BILLS OF QUANTITIES	
CONTRACT FOR	

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

#### CONTRACT No. .....

### **BILL NO: 01 - GENERAL ITEMS**

Item No	CESMM3 Code	Description	Unit	Qty.	Rate Rs: Cts:	Amount Rs: Cts:
		Allow for all costs and expenses for complying with the General Conditions of contract and Specification.  Note: Any Services not specially provided for will deemed to be included in the rates of items in the Bill of Quantities.				
		CLASS A : GENERAL ITEMS				
1.01	A 120/ A 130	Provision for all insurances under the contract.	Provisi onal sum			xxx,xxx.xx
1.02	A 211	Allow for establishment, maintenance and removal at completion of Engineers Office and equipment, as specified in the sub clauses 9.12.13 of conditions of contract.	sum			
1.03	A 271	Night lighting and all associated work. (This item is provided where pipe laying works during night are to be done only.)	month			
1.04	A 271	Traffic diversion and such charges associated with and all measures for the maintenance of traffic flows and access during construction period as directed by the Engineer. (This item is provided where pipe laying as main roads to be done only)	month			
1.05	A 279	Safety of contractor's employees, Engineer's staff (Helmets, Gumboots, dust filters etc.) and site safety barricades including open trench round up with barricades and luminous tape, danger sign boards etc.	sum			
		Total of Page No. 11/46 carried to Summary in Page No. 11/48				

NWSDB/SBD/CIVIL :: Bills of Quantities DPC : RPC : PPC :- August 2011 – Version 5

Item	CESMM3	Description			Rate	Amount
No	Code		Unit	Qty.	Rs: Cts:	Rs: Cts:
1.06	A 320	Provision for electricity, water, telephone facilities and security services for Engineer's office.	sum			
1.07	A 380	Provision for keeping the site clean during the construction period and removal debris at the completion to the satisfaction of Engineer.	sum			
1.08	A 420	Provision for providing two sets of hard copy and a soft copy of the as built drawings on the completion of contract.	sum			
1.09	A 420	Allow for Construction Management Services as specified in the Condition of Contract. (Only for specialized services during contract period - See Annex 1)	provisi onal sum			xxx,xxx.xx
1.10	A 900	Allow for carrying out trial pits in order to determine the underground utilities etc ((This item is provided where pipe laying as main roads to be done only)	nr			
1.11	A 900	Provision for cleaning and applying all exposed pipes and specials with two coats of black colour enamel paint after completion of laying.	sum			
1.12	A 900	Provision for price escalation	provisi onal sum			xxx,xxx.xx
		Total of Page No. 11/47 carried to Summary in Page No. 11/48				

Page Number	Amount Rs. Cts.
Page No. 11 - 46	
Page No. 11 - 47	
Total of Bill No 1 Carried to Summary in page 11 – 73	

#### CONTRACT NO; ..... SUPPLY AND DELIVERY OF uPVC PIPES, FITTINGS & SPECIALS FOR

## ..... WATER SUPPLY SCHEME

Bill No. 02 - Supply of PVC Pipes, Fittings & Specials

**Note:** 1. All the uPVC fittings shall be injection moulded type except for bends.

- 2. Joint rings shall be of EPDM
- 3. Flanges shall be of PN 10 for type PN<sub>T</sub>7 (or equivalent) fittings and PN16 for type PN<sub>T</sub>11 (or equivalent) fittings
- 4. For PN<sub>T</sub>7 uPVC Fittings

If fittings are imported, they shall be of PN 8 as per ISO 1452 and as per the specification

- 5. For PN<sub>T</sub>11 uPVC Fittings
  - If fittings are imported, they shall be of PN 12.5 as per ISO 1452 and as per the specification
- 6. If DI fittings are offered in lieu of PVC fittings the additional fittings required to join DI to PVC shall be supplied and all the items shall conform to the specifications.
- 7. All rates & prices shall be exclusive of VAT, which should only be shown separately in the summary. As for the Bid evaluation purposes these rates & prices will be considered to be exclusive of VAT.

Item	Description	Qty	Unit	Rate	Amount
No.	•			Rs. Cts.	Rs. Cts.
1.	uPVC Pressure class of PN <sub>T</sub> socket and spigot, 4m long straight pipes with sockets suitable for solvent cemented joints.  20 mm		m		
2.	uPVC Pressure class of PN <sub>T</sub> socket and spigot, 4m long straight pipes with sockets suitable for solvent cemented joints.  25 mm		m		
			111		
3.	32 mm		m		
4.	40 mm		m		
	uPVC Pressure class of PN <sub>T</sub> socket and spigot 6m long straight pipes with sockets suitable for mechanical joints (excluding joints rings & lubricant).				
5.	63 mm dia				
6.	90mm dia.		m		
7.	110mm dia.		m		
8.	140mm dia.		m		
9.	160mm dia.		m		
10.	225mm dia.		m		
11.	EPDM Joint rings for mechanical jointing of the above pipes (includes 10% extra).  90mm dia.		nr		
	Total of page No 11 - 49 carried to Summary in page 11 – 56				

Itom	Description	Qty	Unit	Rate	Amount
Item No.				Rs. Cts.	Rs. Cts.
12.	110mm dia.		nr		
13.	140mm dia.		nr		
14.	160mm dia.		nr		
15.	225mm dia.		nr		
	uPVC Pressure class of PN <sub>T</sub> socketed bends suitable for solvent cemented joints.				
16.	63mm dia. 90 deg.		nr		
17.	63mm dia. 45 deg.		nr		
18.	63mm dia. 22 ½ deg.		nr		
19.	63mm dia. 11 ¼ deg.		nr		
20.	75mm dia. 90 deg.		nr		
21.	75mm dia. 45 deg.		nr		
22.	75mm dia. 22 ½ deg.		nr		
23.	75mm dia. 11 ¼ deg.		nr		
	uPVC, Pressure class of PN <sub>T</sub> socketed bends suitable for mechanical joints (excluding joint rings & lubricant)				
24.	90mm dia. 90 deg.		nr		
25.	90mm dia. 45 deg.		nr		
26.	90mm dia. 22 ½ deg.		nr		
27.	90mm dia. 11 ¼ deg.		nr		
28.	110mm dia. 90 deg.		nr		
29.	110mm dia. 45 deg.		nr		
30.	110mm dia. 22 ½ deg.		nr		
31.	110mm dia. 11 ¼ deg.		nr		
32.	140mm dia. 90 deg.		nr		
	Total of page No. 11-50 carried to Summary in page 11 – 56				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
33.	140mm dia. 45 deg.		nr	1450 0450	1130 0430
34.	140mm dia. 22 ½ deg.		nr		
35.	140mm dia. 11 ¼ deg.		nr		
36.	160mm dia. 90 deg.		nr		
37.	160mm dia. 45 deg.		nr		
38.	160mm dia. 22 ½ deg.		nr		
39.	160mm dia. 11 ¼ deg.		nr		
40.	225mm dia. 90 deg.		nr		
41.	225mm dia. 45 deg.		nr		
42.	225mm dia. 22 ½ deg.		nr		
43.	225mm dia. 11 ¼ deg.		nr		
44.	EPDM Joint rings for mechanical jointing of the above bends (includes 10% extra). 90mm dia.		nr		
45.	110mm dia.		nr		
46.	140mm dia.		nr		
47.	160mm dia.		nr		
48.	225mm dia.		nr		
	uPVC, Pressure class of PN <sub>T</sub> , socketed tees suitable for solvent cement joints.		111		
49.	63mm x 63mm dia.		nr		
	uPVC Pressure class of PN <sub>T</sub> (or classif imported), All Socket Tees suitable for mechanical joints (excluding joint rings & lubricant).				
50.	90 x 90mm dia.		nr		
	Total of page No. 11 – 51 carried to Summary in page 11 – 56				

Item	Description	Qty	Unit	Rate	Amount
No.	00 = 62 = 4:			Rs.	Rs.
51.	90 x 63mm dia.		nr		
52.	110 x 110mm dia.		nr		
53.	110 x 90mm dia.		nr		
54.	110 x 63mm dia.		nr		
55.	140 x 140mm dia.		nr		
56.	140 x 110mm dia.		nr		
57.	140 x 90mm dia.		nr		
58.	140 x 63mm dia.		nr		
59.	160 x 160mm dia.		nr		
60.	160 x 110mm dia.		nr		
61.	160 x 90mm dia.		nr		
62.	160 x 63mm dia.		nr		
63.	225 x 225mm dia.		nr		
64.	225 x 160mm dia.		nr		
65.	225 x 110mm dia.		nr		
66.	225 x 90mm dia.		nr		
	EPDM Joint rings for mechanical jointing of the above tees (includes 10% extra).				
67.	90mm dia.		nr		
68.	110mm dia.		nr		
69.	140mm dia.		nr		
70.	160mm dia.		nr		
71.	225mm dia.		nr		
	Total of page No. 11 – 52 carried to				
	Summary in page 11 – 56				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	uPVC, Pressure class of PN <sub>T</sub> (or classif imported) Socketed Reducers suitable for mechanical joints (excluding joint rings & lubricant).				
72.	90 – 63mm dia.		nr		
73.	110 – 90mm dia.		nr		
74.	140 – 110mm dia.		nr		
75.	160 – 110mm dia.		nr		
76.	160 – 90mm dia.		nr		
77.	225 – 160mm dia.		nr		
78.	225 – 110mm dia.		nr		
79.	EPDM Joint rings for mechanical jointing of the above reducers (includes 10% extra). 90mm dia.		nr		
80.	110mm dia.		nr		
81.	140mm dia.		nr		
82.	160mm dia.		nr		
83.	225mm dia.		nr		
84.	uPVC, Pressure class of PN <sub>T</sub> (or class if imported), Flanged Sockets with sockets suitable for mechanical joints and flanges comply with BS 4504; 1974, complete with loose flange assembly, gaskets, nuts and bolts.  90mm dia.				
85.	110mm dia.		nr nr		
86.	140mm dia.		nr		
87.	160mm dia.		nr		
88.	225mm dia.		nr		
	Total of page No. 11–53 carried to Summary in page 11 – 56				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
89.	90mm dia.		nr		
90.	110mm dia.		nr		
91.	140mm dia.		nr		
92.	160mm dia.		nr		
93.	225mm dia.		nr		
	uPVC end caps suitable for solvent cement joints.				
94.	63mm dia.		nr		
95.	75mm dia.		nr		
96.	90mm dia.		nr		
97.	110mm dia.		nr		
98.	140mm dia.		nr		
99.	160mm dia.		nr		
100.	225mm dia.		nr		
	uPVC saddle straps (moulded type) with 32mm dia. Branch.				
101.	63mm dia.		nr		
102.	75mm dia.		nr		
103.	90mm dia.		nr		
104.	110mm dia.		nr		
105.	140mm dia.		nr		
106.	160mm dia.		nr		
	Total of page No. 11 – 54 carried to Summary In page 11 – 56				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
107.	225mm dia.		nr		
108.	Lubricant for jointing above pipes and fittings (including 10% extra)		kg		
109.	Black net which protects pipes from sunlight as well as allows passing water through the net as specified in clause 1.7 of the specification.		Item		
110.	Solvent Cement for jointing above pipes and fittings.		Item		
	Total of page No. 11 – 55 carried to Summary in page 11 - 56				

Page Number	Amount Rs. Cts.
Page No. 11 – 49	
Page No. 11 – 50	
Page No. 11 – 51	
Page No. 11 – 52	
Page No. 11 – 53	
Page No. 11 – 54	
Page No. 11 – 55	
Total of Dill No 02 Coming to	
Total of Bill No 02 Carried to Summary in Page 11 – 73	

#### 

#### BILL No. 03

**Note:** (1) All spigot and socket pipes shall be of class C 40.

- (2) All flange pipes shall be of class C 40.
- (3) All fittings except tees & crosses shall be of class C 40.
- (4) All tees and crosses shall be of class C 40.
- (5) All flanges shall be PN 16 unless otherwise stated.

Item	Description	Qty	Unit	Rate	Amount
No.				Rs. Cts.	Rs. Cts
01	CLASS C 40; SPIGOT & SOCKET PIPES Spigot and Socket Straight Pipes (excluding joint rings & lubricant) 250 mm dia.		m		
02	EPDM Joint Rings for above spigot & socket pipes (including 10% extra) 250 mm dia.				
03	Lubricant for above spigot & socket pipes (including 10% extra)		nr		
	CLASS C 40; FLANGED PIPES & FITTINGS DI Double Flanged Straight Pipes (excluding gaskets, nuts & bolts)		kg		
			m		
04	250mm dia.(4000mm long)		m		
05	250mm dia.(1500 mm long)		m		
06	250mm dia.(3000mm long)				
	Sets of Nuts and Bolts including two Washers for each nut for above double flanged pipes				
07	250mm dia.(4000mm long)		Sets		
08	250mm dia.(1500 mm long)		Sets		
09	250mm dia.(3000mm long)		Sets		
	Total of page No. 11- 57 carried to Summary in page 11 – 66				

NWSDB/SBD/CIVIL :: Bills of Quantities 11 - 57

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	EPDM Gaskets for above double				
10	flange pipes				
10 11	250mm dia.(4000mm long)		nr		
12	250mm dia.(1500 mm long) 250mm dia.(3000mm long)		nr nr		
12	230mm dia.(3000mm long)		111		
	CLASS C 40; FLANGED PIPES &				
	FITTINGS				
	DI Double Flanged Straight Pipes				
	(excluding gaskets, nuts & bolts)				
	a. 80 mm dia.		m		
14	100 mm dia.		m		
15	150 mm dia.		m		
16	200 mm dia.		m		
17			m		
18					
19					
20 21 22 23 24 25 26	Sets of Nuts and Bolts including two Washers for each nut for above double flanged pipes 80 mm dia. 100 mm dia. 150 mm dia. 200 mm dia.		Sets Sets Sets Sets		
	EPDM Gaskets for above double				
	flange pipes				
27	80 mm dia.		nr		
28	100 mm dia.		nr		
29	150 mm dia.		nr		
30	200 mm dia.		nr		
31					
32 33					
55					
	Total of page No. 11- 58 carried to				
	Summary in page 11 – 66				

Item No.	Description	Qty.	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	DI Flanged and Plain Ended Straight				
34	Pipes (excluding gasket, nuts & bolts) 80 mm dia. (		nr		
35	100 mm dia.(		nr		
36	150 mm dia.(		nr		
37	200 mm dia.(		nr		
38			nr		
	Sets of Nuts and Bolts including two				
	Washers for each nut for above flanged				
	and plain ended pipes				
39	80 mm dia.		Sets		
40	100 mm dia.		Sets		
41	150 mm dia.		Sets		
42	200 mm dia.		Sets		
43					
44					
45					
	EPDM Gaskets for above flanged and				
	plain ended pipes				
46	80 mm dia.		nr		
47	100 mm dia.		nr		
48	150 mm dia.		nr		
49	200 mm dia.		nr		
50			nr		
51 52					
32					
	DI Double Socketed Bends (excluding				
	joint rings and lubricant)		nr		
53	80 mm dia. 90 deg.		nr		
54	80 mm dia. 45 deg.		nr		
55	80 mm dia. 22½ deg.		nr		
56 57	80 mm dia. 11 <sup>1</sup> / <sub>4</sub> deg.		nr		
57 58	100 mm dia. 90 deg.		nr		
58 59	100 mm dia. 45 deg. 100 mm dia. 22½ deg.		nr nr		
3)	100 IIIII dia. 22/2 deg.		111		
	Total of page No. 11, 50 corried to				
	Total of page No. 11- 59 carried to Summary in page 11 – 66				
	Summary in page 11 - 00	<u> </u>			

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
60	100 mm dia. 11¼ deg.				
61	100 mm dia. 11/4 deg.				
62					
63	EPDM Joint Rings for above bends (including 10% extra) 80 mm dia.				
64	100 mm dia.				
65	150 mm dia.				
66	200 mm dia.				
67					
68					
69	Lubricant for above bends (including 10% extra)				
70 71 72 73 74 75 76 77 78 79 80 81	DI Double Flanged Bends (excluding gaskets, nuts & bolts)           80 mm dia. 90 deg.           80 mm dia. 45 deg.           80 mm dia. 22½ deg.           80 mm dia. 11¼ deg.				
92	Sets of Nuts & Bolts, including two Washers for each nut for above double flanged bends				
82	80 mm dia. 100 mm dia.				
83 84	150 mm dia. 150 mm dia.				
85	200 mm dia.				
86	200 iiiii dia.				
87					
88					
	Total of page No. 11- 60 carried to Summary in page 11 – 66				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	EPDM Gaskets for above bends				
88	80 mm dia.		nr		
89	100 mm dia.		nr		
90	150 mm dia.		nr		
91	200 mm dia.		nr		
92			nr		
93			nr		
94					
	DI All Socket Concentric Tapers complete with EPDM Joint Rings and				
	Lubricant				
95	200 - 80 mm dia.		nr		
96	400 - 100 mm dia.		nr		
97			nr		
98			nr		
99	•••••		nr		
100			nr		
	DI All Flanged Concentric Tapers complete with EPDM Gaskets, Nuts & Bolts				
101	200 - 80 mm dia.		nr		
102	400 - 100 mm dia.		nr		
103			nr		
104			nr		
	DI All Flanged Level Invert Tapers complete with EPDM Gaskets, Nuts & Bolts				
105	200 - 80 mm dia.		nr		
106	400 - 100 mm dia.		nr		
107			nr		
108	•••••		nr		
	DI Bell mouth complete with EPDM Gaskets, Nuts & Bolts				
109	80 mm dia.		nr		
110	100 mm dia.		nr		
111	150 mm dia.		nr		
112	200 mm dia.		nr		
113			nr		
114			nr		
	Total of page No. 11- 61 carried to				
	Summary in page 11 – 66				

Item	Description	Qty	Unit	Ra	ite	Am	ount
No.				Rs.	Cts.	Rs.	Cts.
	DI All Socketed Duck Foot Bends						
	complete with EPDM Joint Rings and						
115	Lubricant						
115	80 mm dia.		nr				
116	100 mm dia.		nr				
117	150 mm dia.		nr				
118	•••••		nr				
119	•••••		nr				
120							
	DI All Flanged Duck Foot Bends						
	complete with EPDM Gaskets, Nuts						
	& Bolts						
121	80 mm dia.		nr				
122	100 mm dia.		nr				
123	150 mm dia.		nr				
124			nr				
125			nr				
126			nr				
	DI Flange Adaptors complete with						
	Fastners and Sealing Rings						
127	80 mm dia.		nr				
138	100 mm dia		nr				
139	150 mm dia.		nr				
140			nr				
	DI Couplings complete with Fastners						
	and Sealing Rings						
141	80 mm dia.		nr				
142	100 mm dia.		nr				
143	150 mm dia.		nr				
144			nr				
145			nr				
146			nr				
	Total of page No. 11- 62 carried to						
	Summary in page 11 – 66						

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
147	DI Stepped Coupling complete with Sealing Rings and Fastners suitable for connecting DI pipes to CI pipes 100 dia. DI - 200 dia CI				
148	150 dia. DI - 250 dia. CI		nr		
149			nr		
150			nr		
151			nr		
			nr		
	DI Blank Flange complete with EPDM Gaskets, Nuts & Bolts				
152	50 mm dia.				
153	80 mm dia.		nr		
154	100 mm dia.		nr		
155			nr		
156			nr		
157			nr		
158			nr		
	CLASS C 40; TEES		nr		
	DI All Socketed Tees complete with				
150	<b>EPDM Joint Rings and Lubricant</b> 80 x 100 mm dia.				
159 160	80 x 100 mm dia.		nr		
161	100 x 150 mm dia.		nr nr		
162	100 x 200 mm dia.		nr		
163			nr		
164					
165					
	DI All Flanged Tees complete with EPDM Gaskets, Nuts & Bolts				
166	80 x 100 mm dia.		nr		
167	80 x 150 mm dia.		nr		
168	100 x 150 mm dia.		nr		
169	250 x 350 mm dia.		nr		
170			nr		
	Total of page No. 11- 63 carried to				
	Summary in page 11 – 66				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	DI All Flanged Reducing Tees				
	complete with EPDM Gaskets, Nuts				
172	<b>&amp; Bolts</b> 80 x 100 mm dia.		nr		
172	100 x 150 mm dia.		nr nr		
173	150 x 200 mm dia.		nr		
175	250 x 350 mm dia.		nr		
176			nr		
177					
	Socketed Tees with Flanged branch				
	complete with EPDM Gaskets, Joint				
	Rings, Nuts & Bolts and Lubricant.				
178	80 x 100 mm dia.		nr		
179	80 x 150 mm dia.		nr		
180	100 x 150 mm dia.		nr		
181	100 x 200 mm dia.		nr		
182			nr		
183					
	DI All Flanged Level Invert Tees complete with EPDM Gaskets, Nuts and Bolts				
184	80 x 100 mm dia.		nr		
185	80 x 150 mm dia.		nr		
186	100 x 150 mm dia		nr		
187			nr		
188					
	DI Level Invert Socketed Tees with				
	Flanged branch complete with EPDM				
	Gaskets, Joint Rings, Nuts and Bolts				
	and Lubricants.		nr		
189	80 x 100 mm dia.		nr		
190	80 x 150 mm dia.		nr		
191	100 x 150 mm dia.		nr		
192 193					
1/3					
	Total of page No. 11- 64 carried to Summary in page 11 – 66				

Item No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	Class D, DI Manhole Cover complete with Frame with clear opening				
194	mm dia.		nr		
195	mm dia.		nr		
196	mm dia.		nr		
197 198	Class D, DI Surface Box with clear opening         mm x         mm		nr nr		
	A sufficient quantity of profiling mastic material, tape and primer compound for protecting all flanged joints and couplings described in Bill No. 01 (Catalogue or printed literature to be furnished with the offer to justify the quality and quantity of the product. A sample should be provided with the offer. Tape overlap shall be 55%.				
	(No of quantity calculation sheet for				
100	each dia. Joint shall be submitted)				
199	80 mm dia. (		Lump sum		
200	100 mm dia. (No. of joints)		Lump		
201	150 mm dia. (No. of joints)		Lump sum		
202	joints) (No. of				
	Width of tape provided				
	Length of tape provided				
	Total of page No. 11- 65 carried to				
	Summary in page 11 – 66				

Page Number	Amount Rs. Cts.
1 ugo i (umboi	
Total of Page No. 11 – 57	
Total of Page No. 11 – 58	
Total of Page No. 11 – 59	
Total of Page No. 11 – 60	
Total of Page No. 11 – 61	
Total of Page No. 11 – 62	
Total of Page No. 11 – 63	
Total of Page No. 11 – 64	
Total of Page No. 11 – 65	
Incidental allowance and Combined Allowances for Pre- shipment Inspection for two Engineers by Employer as per Clause No.21.3 of Conditions of Contract.  No.of Pre-shipment inspection	
Cost of Inspection and Testing by Independent Agency as per the Conditions of Contract.	
Summary of Bill No. 03 Carried to the Page No. 11-73	

Name	of the Inspection	on Authority	:		
		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 
• • • • • • • •	•••••				

# SUPPLY AND DELIVERY OF DI PIPES, FITTINGS, SPECIALS, ACCESSORIES, DI/CI VALVES, MANHOLE COVERS AND SURFACE BOXES

•••••	WATER SUPPLY SCHEME
CONTRACT No	• • • • • • • • • • • • • • • • • • • •

### Bill No. 04 - Supply of DI/CI Valves, Accessories, Manhole Covers & Surface Boxes

Note: 1. All Valves shall be suitable for operation with a Valve Key unless otherwise stated.

2. All Flanges shall be of PN 16

Item No.	Description	Qty.	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	Y/A Y Y/DG			113. Cts.	Ks. Cts.
	VALVES Sluice Valves				
	CI/DI Double Flanged Sluice Valves suitable for Valve Key operation, complete with Gaskets and Nuts & Bolts.				
01	80 mm dia. (depth of installation is m below Ground level . and maximum unbalanced pressure is bars)		nr		
02	100 mm dia. (depth of installation is m below Ground level . and maximum unbalanced pressure is bars )		nr		
03	150 mm dia (depth of installation is m below Ground level and maximum unbalanced pressure is bars)		nr		
04	DI Double Flanged Sluice Valves suitable for Valve Key Operation 200 mm dia. (depth of installation is m below Ground level and maximum unbalanced pressure is bars)		nr		
05	250 mm dia. (depth of installation is m below Ground level and maximum unbalanced pressure is bars)		nr		
06	300 mm dia. (depth of installation is m below Ground level . and maximum unbalanced pressure is bars)		nr		
07	mm dia. (depth of installation is m below Ground level . and maximum unbalanced pressure is bars)		nr		
	Total of page No. 11 - 67 carried to Summary in page 11 – 70				

NWSDB/SBD/CIVIL :: Bills of Quantities DPC : RPC : PPC :- August 2011 – Version 5

Ite m	Description	Qty.	Unit	Rate Rs. Cts.	Amount Rs. Cts.
No.					
	AIR VALVES				
08	25 mm dia. Single Orifice Screw Down type Air Valve with Isolating Cock.				
	25 mm dia. Single Orifice Flanged type Air Valve complete with Isolating Cock, Gaskets, Nuts & Bolts to suit branch dia;		nr		
09	80 mm branch dia.		nr		
10	100 mm branch dia.		nr		
	Double Orifice Flanged type Air Valve complete with Double Flanged Isolating Gate Valve (key operated), Gaskets, Nuts & Bolts to suit branchdia				
11	80 mm branch dia.		nr		
12	100 mm branch dia.		nr		
13 14 15 16	Fire Hydrant Assemblies Screw Down (Type 2: BS 750) for DI Pipes 80 mm dia 100 mm dia		nr nr nr nr		
	Total of page No. 11 – 68 carried to				
	Summary in page 11 – 45				

Ite m No.	Description	Qty	Unit	Rate Rs. Cts.	Amount Rs. Cts.
	A sufficient quantity of profiling mastic material, tape and primer compound for protecting all flanged joints and couplings described in Bill No. 01 (Catalogue or printed literature to be furnished with the offer to justify the quality and quantity of the product. A sample should be provided with the offer. Tape overlap shall be 55%.				
	(No of quantity calculation sheet for each dia. Joint shall be submitted)				
26 27	80 mm dia. (		nr		
28 29	100 mm dia. (No. of joints)		nr		
30	150 mm dia. (No. of joints)		nr		
31	joints) (No. of		nr		
32	joints) No. of		nr		
33	Width of tape provided				
34	Length of tape provided				
	Total of page No. 11 – 69 carried to Summary in page 11 – 70				

	Amount
`Page Number	Rs. Cts.
Total of Page No. 11 - 67	
Total of Page No. 11 - 68	
Total of Page No. 11 - 69	
Incidental allowance and Combined Allowances for Pre- shipment Inspection for two Engineers by Employer as per Clause No.21.3 of Conditions of Contract.	
No.of Pre-shipment inspection (to be filled by the bidder).	
Cost of Inspection and Testing by Independent Agency as per the Conditions of Contract.	
Summary of Bill No. 04 Carried to the Page No. 11 – 73	

Name of the Inspection Agency:	

SUPPLY & DI	ELIVERY OF POLYETHYLENE (PE)
PIPES, FITTI	NGS, SPECIALS AND ACCESSORIES
FOR	WATER SUPPLY SCHEME

#### BILL NO. 05

Note: 1. PE Pipes & fittings shall be in blue colour
2. PE Pipes & fittings shall be manufactured in vergin materials in blue colour

Item	Description	Qty.	Unit	Rate	Amount
No.	Description	Qıy.	Omi	Rs. Cts.	Rs. Cts.
110.				NS. Cts.	NS. Cts.
	DE 400 CDD 45 DE DYDEC (44				
	<u>PE 100, SDR 17 PE PIPES (12 m</u>				
	LONG STRAIGHT LENGTHS)				
	SUITABLE FOR BUTT FUSION				
	WELDING JOINTS				
1.	450 mm dia.		m		
	PE 100, SDR 17 PE INJECTION				
	MOULDED OR FABRICATED				
	BENDS, SUITABLE FOR BUTT				
	FUSION WELDING JOINTS				
2.	450 mm dia. 11 ¼ deg.		nr		
3.	450 mm dia. 22 ½ deg.		nr		
4.	450 mm dia. 45 deg.		nr		
5.	450 mm dia. 90 deg.		nr		
	_				
	PE 100, SDR 17 PE SLIM/STUB				
	FLANGE ASSEMBLY				
	COMPRISING WITH SLIM/STUB				
	FLANGE, GALVANIZED MILD				
	STEEL BACKING RING,				
	GASKETTES AND NUT & BOLTS				
	TO CONNECT 400mm PN16				
	DUCTILE IRON FLANGE				
6.	450 mm x 400mm PN16		nr		
	STAINLESS STEEL PIPE				
	COUPLINGS COMPRISING WITH				
	STAINLESS STEEL INSERTS,				
	EPDM/SBR RUBBER RINGS, NUTS				
	& BOLTS TO SUIT PE100, SDR17,				
	PE PIPES				
7.	For 450mm dia PE pipes		nr		
/ .	1 of 130mm did 1 L pipes		111		
	Total of Page No. 11/71 Carried to				
	Summary in Page No. 11/72				
1	, ,			1	

NWSDB/SBD/CIVIL :: Bills of Quantities DPC : RPC : PPC :- August 2011 – Version 5

### Summary of Bill No. 05

Page Number	Amount Rs. Cts.
Page No.11/71	
Incidental allowance and Combined Allowances for Pre- shipment Inspection for two Engineers by Employer as per	
Clause No.21.3 of Conditions of Contract.  No.of Pre-shipment inspection	
Cost of Inspection and Testing by Independent Agency as per the Conditions of Contract.	
Summary of Bill No. 05 Carried to the Page No. 11 – 73	

Name	of th	ie Inspe	ection A	uthority	<i>/</i> :				
• • • • • • • •					• • • • • • •	 • • • • • • • • • •	• • • • • • • • • •	 • • • • • • • • • • •	
• • • • • • • • •	• • • • • • •		• • • • • •						

#### NATIONAL WATER SUPPLY AND DRAINAGE BOARD

CONTRACT FOR	
• • • • • • • • • • • • • • • • • • • •	WATER SUPPLY/SEWERAGE SCHEME
<b>CONTRACT NO:</b>	•••••

### SUMMARY OF BILLS

D:11	From	Description	Amount		
Bill No.	page No.	Description	Rs.	Cts.	
01		General			
02		PVC Pipes, Fittings & Specials			
03		DI Pipes, Fittings, Specials, Accessories			
04		DI/CI Valves, Accessories, Manhole Covers & Surface Boxes			
05		PE Pipes, Fittings, Specials and Accessories			
		Sub Total (1)			
		Less Discount (if any)			
		Sub Total (2)			
		Add Contingencies 10%			
		Total of Bid carried to Form of Bid (excluding VAT) in page 4-1			

VAT Registration Number :
(A copy of the VAT registration certificate shall be annexed.)

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

NWSDB/SBD/Civil-Major : Summary of Bills DPC : RPC : PPC :- August 2011 – Version 5

## 12. STANDARD FORMS

- BID SECURITY
- LETTER OF ACCEPTANCE
- AGREEMENT
- PERFORMANCE SECURITY
- ADVANCE PAYMENT SECURITY
- RETENTION MONEY GUARANTEE

# THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY

	NATIONAL WATER SUPPLY AND DRAINAGE BOARD BID FOR CONTRACT NO.:					
	FORM OF BID SECURITY					
	issuing agency's name, and address of issuing branch or office]					
Benefi	ciary: The Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana					
Date:	[insert (by issuing agency) date]					
BID S	ECURITY No.:[insert (by issuing agency) number]					
[name [ date] 	ve been informed that					
agency	request of the Bidder, we [insert name of issuing of least place of the Bidder, we [insert name of issuing of least place of the Bidder, we [insert name of issuing of least place of the Bidder, we [insert name of issuing of least place of the Bidder, we [insert name of issuing of least place of the Bidder, we					
your fi	rst demand in writing accompanied by a written statement stating that the Bidder is in breach of gation(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.					
Contra the Bio	ecurity shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the ct signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if dder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the mance security, otherwise it will remain in force up to (insert date)					
	quently, any demand for payment under this Security must be received by us at the office on or that date.					
	[signature(s) of authorized representative(s)]					

# THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

BID FOR .....

CONTRACT NO.:					
LETTER OF ACCEPTANCE [Letter heading paper of the Employer]					
				[Date]	
To: [Name of the Cont	ractor]				
[Address of the Con			•••••	•••••	
This is to notify you that your bid datedremedying defects of the	for	the	Contractor	.[name of price	the
[amount in figures and words] as corrected in accomodified by a Memorandum of Understanding, is hereby	rdance w	ith Ins			l/or
The adjudicator shall be appointed when necessity as	rises.				
You are hereby instructed to proceed with the exe with the Contract documents.	ecution o	of the s	aid Works i	n accordar	ıce
The Start Date shall be:	Ì	_			t).
The Amount of Performance Security is:	re performa	nce gua	arantee will b		
Please acknowledge the receipt of this letter by return agreement by prior appointment with the Asst. Cowithin days.					
Please contact PD/DGM ( )/AGM ( ), E Telephone No			sentative of th	is contract,	on
General Manager National Water Supply & Drainage Board					

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

## MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

		BID FOR				
	CONTRACT NO.:					
	AGREEMENT					
establ	ished unaving its	MENT, is made and entered into on this				
Here	inafter c	alled "the Contractor") of the other part.				
		the Employer is desires that the Contractor execute,				
Contr	act] (her					
NOW	THIS A	AGREEMENT WITNESSETH as follows:				
1.	assign	s Agreement, words and expressions shall have the same meanings as are respectively ned to them in the Conditions of Contract hereinafter referred to, and they shall be ed to form and be read and construed as part of this Agreement.				
2.	The d	ocuments forming the Contract shall be interpreted in the following order of priority:				
	(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)	Agreement, Letter of Acceptance, Memorandum of understanding (if any) Contractor's Bid, Contract Data, Conditions of Contract, Specifications, Drawings, Bills of Quantities, Any other document listed in the Contract Data as forming part of the Contract.				
3.	menti	nsideration of the payments to be made by the Employer to the Contractor as hereinafter oned, the Contractor hereby covenants with the Employer to execute and complete the s and remedy any defects therein in conformity in all respects with the provisions of the act.				

completion of the Works and the remedying of defects wherein the Contract Price or such

The Employer hereby covenants to pay the Contractor in consideration of the execution and

4.

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.

Drain Supp	Signed by the said							
Chai	irman							
Boaı	rd Member							
NAT	ΓΙΟΝΑL WATER SUPPLY AND DRAIN	NAGE BOARD						
Wit	nesses							
1.	Signature 2.	Signature:						
	Name :	Name:						
	Address:	Address:						
For	and on behalf of the Contractor: signed by	the saidin						
the c	capacity of	and/or						
duly	authorized to sign this contract agreement	for and on behalf of						
Wit	nesses							
1.	Signature 2.	Signature:						
	Name :	Name:						
	Address:	Address:						

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

# MINISTRY OF CITY PLANNING & WATER SUPPLY NATIONAL WATER SUPPLY AND DRAINAGE BOARD

BID FOR				
CONTRACT NO.:				
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				
"Construction"] of				
Furthermore, we understand that, according to the conditions of the Contract, a performance security is required.				
At the request of the Contractor, we				
This guarantee shall expire, no later than the day of				

the Works to be performed there under or of any of the Contract docume between you and the Contractor shall in any way release us from any liability we hereby waive notice or any such change, addition or modification.	2
[Signature(s)] of the Guarantor	Seal
Capacity	Scai

We further agree that no change or addition to or other modification of the terms of the Contract or of

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

#### MINISTRY OF CITY PLANNING & WATER SUPPLY

#### NATIONAL WATER SUPPLY AND DRAINAGE BOARD

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 thereunder 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 security shall be remain 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 guarantee must be received by us at this

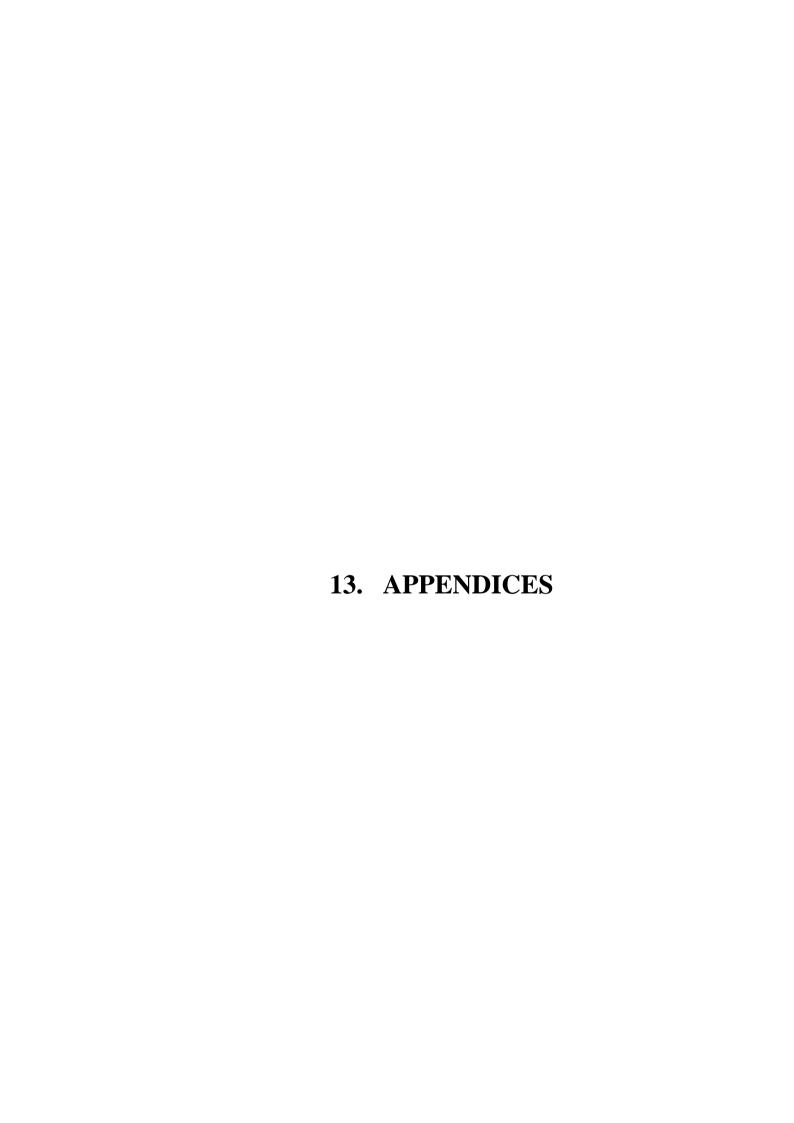
office on or	before that date.	•
	of the Guarantor	Seal
Capacity		
Witness	Signature  Name & Address  Capacity	

# THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF CITY PLANNING & WATER SUPPLY

#### NATIONAL WATER SUPPLY AND DRAINAGE BOARD

BID FOR
CONTRACT NO.:
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
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 being 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
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,
[Signature(s)]

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# APPENDIX 1 A - DETAILS OF SIMILAR WORKS COMPLETED WITHIN THE LAST FIVE YEARS AND ONGOING SIMILAR ONES (SPECIALIZED WORK)

Note Separate sheets for each year may be used.

Year	Name and Address of Employer	Name and details of Contract	Main or Sub Contractor	Value of Contract	Period of Contract	Remarks (Completed /ongoing etc.)	Value of work remaining incomplete
Total mo	netary value of construction works p	performed in yea	r				
Total mo	netary value of construction works	performed in yea	r				
Total mo	netary value of construction works I	performed in yea	r				
Total mo	Total monetary value of construction works performed in year						
Total mo	netary value of construction works I	performed in yea	r				

Note: Contractor's shall submit completion certificates for completed works and awarding letters and relevant cliental certificates for on going works for the proof of above furnished details.

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Revised on 20-02-2018

# APPENDIX 1 B - DETAILS OF WORKS (EXCLUDING SIMILAR WORKS) COMPLETED WITHIN THE LAST FIVE YEARS AND ONGOING ONES

Note Separate sheets for each year may be used.

Year	Name and Address of Employer	Name and details of Contract	Main or Sub Contractor	Value of Contract	Period of Contract	Remarks (Completed /ongoing etc.)	Value of work remaining incomplete
Total mor	netary value of construction works I	performed in yea	r				
Total mo	netary value of construction works	performed in yea	r				
Total mor	netary value of construction works I	performed in yea	r				
Total monetary value of construction works performed in year							
Total mo	netary value of construction works I	performed in yea	r				

Note: Contractor's shall submit completion certificates for completed works and awarding letters and relevant cliental certificates for on going works for the proof of above furnished details.

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# APPENDIX 2 - DETAILS OF KEY TECHNICAL STAFF & CONSTRUCTION MANAGEMENT SERVICES

### Note:

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

Item	Category	Qualification	Experience	No. p	roposed
			in years	By	By
				NWSDB	Contractor
1.	Engineers / Site Manager				
2.	Technical Officers				
3.	Any Other services required by the contractor for the contract  1. Specialist Services 2. 3. 4.				

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# APPENDIX 3 - SCHEDULE OF PLANT AND EQUIPMENT PROPOSED FOR PIPE LAYING

#### Note:

1. The categories indicated below are only the minimum requirement proposed by NWSDB for information. 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. Proposed by NWSDB	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
1.	Excavator/ Loader 1-2 m <sup>3</sup>	01			
2.	Hand Rammers	01			
3.	Soil Compactor – Mechanical ½ ton	01			
4.	Hand Roller 2 – 3 ton	01			
5	Dumper minimum capacity 1 m <sup>3</sup>	01			
6.	Concrete mixer complete with scales etc. $0.25 - 0.5 \text{ m}^3$	01			
7	Concrete vibrator 38mm dia.	02			
8.	Portable Air compressor complete with hose and pneumatic tools minimum capacity 2.83 m <sup>3</sup> (100 cu.ft) per minute and pressure 70 kg/cm <sup>2</sup> (100 psi)	01			
9.	Mobile crane up to 5 ton	01			
10.	Portable welding set 500 A capacity complete with welding accessories.	02			
11.	Generating Set up to 4 kw	01			
12.	Bitumen sprayer up to 6 ton	01			
13	Water Tanker 4 – 6 m <sup>3</sup>	01			

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Item	Description	Minimum No.	Minimum No.	Minimum	
	r	Proposed	Provide by	Period	Remarks
		by	the	Proposed	(hired/own)
		NWSDB	contractor		
14	Water Pump (complete with hoses	Sufficient			
	etc.) 100 ft <sup>3</sup> /min	number			
15	Rubber Roller up to 5 ton				
16	Truck with Tipper 3 – 8 ton				
17.	Barbending Equipment.				
18.	Engineer's Level				
19.	Theodolite.				
20.	Shoring	Sufficient			
21.	Pressure testing equipment	quantity 02			
22.	Asphalt Cutter				

#### Note:

- 1. This is a typical format and has to be amended to suit the requirement of the contract by the user department.
- 2. The Bidder shall submit a documentary evidence for machinery to be hired/lease for the contract.

# APPENDIX 3 A - SCHEDULE OF CONTRACTOR'S EQUIPMENT PROPOSED FOR CIVIL CONSTRUCTION

#### Note:

1. The categories indicated below are only the minimum requirement proposed by NWSDB for information. 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. Proposed by	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
1.	Excavator/ Loader 1-2 m <sup>3</sup>	NWSDB 02			
2.	Hand Rammers	01			
3.	Soil Compactor – Mechanical ½ ton	01			
4.	Hand Roller 2 – 3 ton	01			
5	Dumper minimum capacity 1 m <sup>3</sup>	01			
6	Steel Wheel Roller up to 4 ton				
7.	Concrete mixer complete with scales up to 0.25	01			
8	Concrete mixer complete with scales etc 0.25 - 0.5 m <sup>3</sup>	01			
9	Concrete mixer complete with scales over 0.5 m <sup>3</sup>	02			
10	Concrete vibrator 38mm dia.	06			
11	Portable Air compressor complete with hose and pneumatic tools minimum capacity 2.83 m <sup>3</sup> (100 cu.ft) per minute and pressure 70 kg/cm <sup>2</sup> (100 psi)	01			
12	Mobile crane up to 2 ton	01			
13	Mobile crane up to 5 ton	01			
14	Lorry / Truck 5 ton capacity	01			

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Item	Description	Minimum No. Proposed by NWSDB	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
15	Portable welding set 500 A capacity complete with welding	02			
16	accessories. Generating Set up to 4 kw	02			
17.	Bitumen sprayer up to 6 ton	01			
18	Road Roller 6 –10 ton	01			
19	Water Tanker 4 – 6 m <sup>3</sup>	01			
20	Water Pump (complete with hoses etc.) 100 ft <sup>3</sup> /min	Sufficient number			
21	Rubber Roller up to 5 ton	01			
22	Pneumatic Roller 10 ton	01			
23	Truck with Tipper 3 – 8 ton	01			
24.	Barbending Equipment.	01			
25	Engineer's Level	01			
26.	Theodolite.	01			
27	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	Shoring	Sufficient quantity			

#### Note:

- 1. The Bidder shall submit a documentary evidence for machinery to be hired/lease for the contract
- 2. This is a typical format and has to be amended to suit the requirement of the contract by the user department

#### **APPENDIX 4 - FINANCIAL STATEMENT**

Summary of assets and liabilities based on the audited financial statements for the last three financial years (Current statement may be unaudited) 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 a Banks.

#### Financial performance for the last 3 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 = <u>Debt Capital x 100</u> Total Capital Employed			
Turnover x 100 Total Operating Assets			
Net Profit x 100 Total Assets			

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### APPENDIX 4A – REVOLVING CREDIT LINE FACILITY

				Date :
Name of E	Bidder :			
Details of	Commercial Banks	s providing revolving	g line of credit faci	lities.
Name of the Bank	Amount of Credit Line (Rs. ML)	Address	Contact Telephone No.	Contact Name and Title
	iginal letters issued ng the revolving lin act.			
		Sigr	nature of Bidder/Au	uthorized Representative
		Con	npany Seal :	

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#### APPENDIX 4B - AUTHORIZATION TO OBTAIN REFERENCES FROM BANKERS.

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

	[Bidder's No	ess]
Manager[Name of Bank] [Address]		••••
Dear Sir,		
I hereby Authorize the National Water Supply Procurement Committee, to seek references of Bank statues of our company M/s	details in order to evaluate the finan	
with the submitted by us.		
Yours faithfully,		
Authorized officer of the Bidder.		

Note: If there are more than one bank given in the Appendix 4A, separate letters should be submitted for each Bank.

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#### APPENDIX 5 - WORK PROGRAMME PROPOSED BY THE CONTRACTOR FOR THE .....

Scheme (To be filled the design Engineer)

(To be filled the design Engineer) Contract No :

Contractor

Item No.	Description	Programme (Months)							
		1	2	3	4	5	6	7	8
	Design Engineer should provide major Components of the scheme.								

### APPENDIX 5A – METHOD OF 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.

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#### APPENDIX 6 - 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] To: Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka. For ...... of Water Supply/Sewerage Scheme Contract No. We ......[insert complete name of the Bidder], who signs the contract] to submit a bid on behalf of our company and to subsequently negotiate and sign the Contract. Specimen Signature ..... Signed: .....[insert signature(s) of authorized representative(s) of the Bidder] Name:.....[insert complete name(s) of *authorized representative(s) of the Bidder*] 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 Date .....

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### APPENDIX 7 - GUARANTEE FOR DI PIPES, FITTINGS AND RUBBER RINGS

				[Address of the Manufacturer]
	nal Water Sup Road, Ratmal		Orainage Board,	
				of Water Supply/Sewerage Scheme 
We ,				
			( Name & Add	lress of the Pipe Manufacturer ) Manufacturer of DI
1		_	_	upplied under the contract shall fit properly and e installations under all working conditions.
2.	the time per	riod as	agreed with the Eng	replace any material rejected by the Engineer within gineer during implementation stage at no additional plementation of the project.
3.	certificate er	nsuring	that DI pipes, fitting	hat the Nominated Inspection Agency issues a gs and rubber rings inspected shall fit properly and ne installations under all working conditions upon
Officer	ure of the Auth on behalf of anufacturer	the		
Capaci	ty :			
Witnes	s:			
1	Signature	:		
	Name	:		
	Capacity	:		
	Address	:	•••••	
•	<b>a</b> :			
2	Signature	:		
	Name	:		
	Capacity	:		
	Address	:		

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#### APPENDIX 8 - CONFIRMATION OF CAPABILITY OF PRODUCTION AND SUPPLY ACCORDING TO DELIVERY SCHEDULE.

	[Address of the Manufacturer]
Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka.	
For Contract No.	of Water Supply/Sewerage Scheme
	[name of manufacturer] of
	[address of
manufacturer]confirm that we have sufficient pr	oduction capacity to produce the quantity of DI
Pipes, Fittings and Specials submitted in this bi	d and shall deliver them according to the Work
Programme indicated in the bid.	
Authorised Officer of the Manufacturer.	Seal of the Company.
Name :	

# APPENDIX 9 - MANUFACTURER'S AUTHORIZATION TO SIGN THE CONTRACT

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

Date : [insert date (as day, month and year) of Bid Submission] No. : [insert contract number]
To: Chairman, National Water Supply and Drainage Board, Galle Road, Ratmalana, Sri Lanka.
For of Water Supply/Sewerage Scheme Contract No.
We
We hereby extend our full guarantee and warranty in accordance with Clause 15 of the General Conditions of Contract, with respect to the Goods 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]
Dated on

### APPENDIX 10 - MANUFACTURER'S AWARENESS OF THE TOR FOR INDEPENDENT INSPECTION AGENCY

	[Addre	ess of the Manufactur	rer]
			. <b></b>
			••••
			••••
Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka.			
For of Wa Contract No.	ter Supply/Sewera	ge Scheme	
We,			
manufacturer]confirm that we have noticed that		[uuuress	of
<ul><li>a) Appendix 12 – TOR for Independent</li><li>b) Clause 73 of Contract Data</li></ul>	Inspection Agency		
Authorised Officer of the Manufacturer.	Seal of the Co	ompany.	
Name :			

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# APPENDIX 11 - MANUFACTURER'S WARRANTY FOR THE GOODS SUPPLIED UNDER THE CONTRACT

	[Address of the Manufacturer]
Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka.	
For o Contract No	f Water Supply/Sewerage Scheme
We,	
supplied under this contract are new, unused, o incorporated all recent improvements, and no workmanship from any act that may be develop un	faddress of manufacturer] warrant that the goods of the most recent or current models and have defects arising out of the design, material or
If there is any defects during the warranty period Conditions of Contract, we shall attend to repair of speed without any cost to the Purchaser.	_
Authorised Officer of the Manufacturer.	Seal of the Company.
Name :	Date :
In the capacity of	
This is to certify that the seal and signatures of a Manufacturer's warranty, are found to be authentic	
Signature of Attorney at Law	
Seal of Attorney at Law	
In the place of (	address)

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### APPENDIX 12 - TOR FOR INDEPENDENT INSPECTION AGENCY

### **DI Pipes & Fittings**

	Activity	Test Performed	Results	Acceptability as per Specification
1.	Physical Proportion			
1.1	Socket & Spigot Pipes			
	Pipe wall thickness			
	External Diameter			
	Internal Diameter			
	Length of Pipe			
	Socket Length			
	Chambering 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.			

	Activity	Test Performed	Results	Acceptability as per Specification
1.2	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.			
	Compresure Strength of the Cement Lining			
	Curing period of Pipes after Cement Lining.			
	Smoothness of external Bitumen Coating			
1.3	Socketed Bends			
	Socket Diameter			
	Length of Bend			
	C-Class of Bend			
	Wall Thickness of bend			
	Grooves in the Socket.			

	Activity	Test Performed	Results	Acceptability as per Specification
	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			
	Compresure Strength of the Cement Lining			
	Curing period of Bends after Cement Lining			
	Smoothness of external Bitumen Coating.			
1.4	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.			

	Activity	Test Performed	Results	Acceptability as per Specification
	Method of Application of Bitumen Coating			
	Compressive Strength of the Cement Lining			
	Curing period of Bends after Cement			
	Smoothness of external Bitumen Coating.			
1.5	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.			

	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.			

	Activity	Test Performed	Results	Acceptability as per Specification
2.	Strength & Metalogical Properties			
2.1	DI Pipes & Fittings			
	Method of Casting Metelogical Properties			
	<ol><li>Manufacturing Standards of Pipes &amp; Fittings.</li></ol>			
	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.			
	<ol> <li>Seal Type designation of Joint Ring/ Gasket Nuts &amp; Bolts.</li> </ol>			
	10. Materials of Nuts & Bolts Washers			
	11. Manufacturing Standard of Nuts & Bolts			
	12. Number of Washers/ Bolt.			

## APPENDIX 13 - PRE-SHIPMENT INSPECTION OF DI PIPES & FITTINGS

		BY NWSI	B ENG	INEERS - CHECK I	LIST	
Name & Lo	ocation of the	e Factory				
Pip	e	:				
-						
Fitt	ings	:				
Val	lves	:				
Cor	uplings	:				
						• • • • • • • • • • • • • • • • • • • •
Ada	aptors	:				
Fla	nged Pipes	:				
	equirement - nufacturing (	_	ngs should	d be manufactured by sar	ne manufacturer or	
Applicable	Standards					
	nufacturing pipes & Fitti		:	(ISO 2531 :2009/EN 54	5: 2010)	
	nufacturing nt Rings	Standards of	:	(BSEN 681-1/ISO4633	:2002)	
Qua	ality Assuraı	nce Standards	:	(ISO 9001: 2008/2015)		
Parameters	to be checke	ed				
Me Hyd Wa Ler Stra Ext Inte Tes Cho	chanical Prodrostatic Preul Thickness agth of straigaightness armal Coating ernal Coating of Weldemical Comp	ght pipes g g ded Flanges	ess, Elong es & Fittii		als).	
		rping or shrink face or other d	-	rimental to functionality	: Satisfactory/Unsati	sfactory
	Haı	ndling of pipes	, Fittings	after production	: Satisfactory/Unsati	isfactory

Inspection Procedure Witness testing a sample with Factory QC Team Yes/No Witness testing with Independent Inspection Agency Yes/No

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### PRE-SHIPMENT INSPECTION OF DI 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 9001:2008/ 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 Conformi	ty -					
	certificate						
	Client Identification	-					
	Socket Penetration Lines (2 Lines)	-					
	In case of Fittings, these marks sha appear on the body of each fittin together with its main characteristics suc as angle of bend, pressure rating of flang etc.	eh					
Material Charact	eristics						
	Mechanical Properties						
	Minimum Tensile Strength	420 N/mm <sup>2</sup>					
	8 8	Table B1 EN-54 2010	.5				
		14- 18 N/mm <sup>2</sup>					
	Brinell hardness for pipes	230HB					
	Brinell hardness for fittings	250 HB					

#### PRE -SHIPMENT INSPECTION OF DI PIPES & FITTINGS

- CHECK LIST

												(3 of 13)
Test			Hydrostat	tic Test								
Bill No:			Item No. & Qty.					Sample size:				
Descripti	Description of Item: DI Pipes (SS/DF) Class: Dia s					Dia x Leng	gth:					
Tech Spe	Spec Clause No: Reference Standard: EN545:2010 - Clause 6.5 ISO 2531:2009 - Clause 6.5											
Sample No	Item of Testing	Pressure class			Test (	Test Condition			Deviation	Tolerance Allowed	Comply?	Remarks
110	resting	("C" class)/	Flexibl	le joints	Push-f	fit joints	Flanges & flanged joints			mowed		
		Test	+ve int.	-ve int.	+ve ext.	Dynamic	Flanged	Screwed				
		pressure	pressure	pressure	Pressure	int.	joints	& welded flanges				
1												
2												
3												
4												
5												
6												
7												
8												
9												
		g Witnesse	d by	1	I	1	1	1				
Name:							ame: 2.					
Signature	e: 1.					Si	enature: 2.					

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Date:

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 Cla	nuse No:		Reference St	Reference Standard: EN545:2010 – 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?	Remarks			
1									
2									
3									
4									
5									
6									
7									
8									
9									
	Testing Witnessed by	Į.		•					
Name: 1.				Name: 2.					
Signature: 1.  Date:				Signature: 2.					

Test		Straightness				
Bill No:		Item No. & Qty.			Sample size	:
Description	of Item: DI Pipes (SS/DF)	Class:	Class:			:
Tech Spec Clause No:		Reference Standard		) – Clause 4.2.4 09  -Clause 4.2		
Sample No	Item of testing	Physical/Measured Value	Deviation	Tolerance Allowed	Comply?	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
Inspection &	z Testing Witnessed by		l	1	1	
Name: 1.			Name: 2			
Signature: 1			Signature: 2			
Date:						

Test	Test Internal & External Diameter of Pipes & Fittings									
Bill No:			Iter	n No. & Qty.		Sample size:				
Descripti	on of Item: DI Pipes	s (SS/DF), Fittings	Class	:		Dia x Length:				
Tech Spec Clause No:  Reference Standard: EN545:2010 – Clause 4.2.2  ISO 2531:2009 - Clause 4.2.1										
Sample No	Item of testing	Physical/Measured Value	Deviation	Tolerance Allowed	Comply?	Remarks				
1										
2										
3										
4										
5										
6										
7										
8										
9										
Inspectio	n & Testing Witness	ed by								
Name:				Name						
Signature	e: 1.			Signat	ure: 2.					
Date:	Date :									

Test	Test Wall Thickness of Pipes & Fittings									
Bill No:	No:			& Qty.		Sample size:				
Descripti	on of Item: DI Pipes (SS	S/DF), Fittings	Class:			Dia x Length:				
Tech Spe	ec Clause No:		Reference	Standard: EN5- ISO 2.	45:2010 – claus 531 : 2009 - Cla					
Sample No	Item of testing	Physical/Measured Value	Deviation	Tolerance Allowed	Comply?	Remarks				
1										
2										
3										
4										
5										
6										
7										
8										
9										
Inspectio	on & Testing Witnessed by	y			ı					
	1.			Name: 2.						
Signature	e: 1.			Signature: 2.						
Date:										

Test		Internal Coatin	ng (Strength &	Thickness)			
Bill No:			Item No.	& Qty.		Sample size:	
Descripti	on of Item: DI Pipes (Sa	S/DF) , Fittings	Class:			Dia x Length:	
Tech Spe	ec Clause No:		Reference	e Standard: EN 545:2010 – 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?	Remarks	
1							
2							
3							
4							
5							
6							
7							
8							
9							
Inspectio	n & Testing Witnessed b	y					
Name:	1.			Name: 2.			
Signature	e: 1.			Signature: 2.			
Date:							

Test External Coating (Thickness of Zinc Mass & Paint coating)									
Bill No:			Item	No. & Qty.		Sample size:			
	on of Item: DI Pipes (SS/I g for fittings and Accessori		Class:			Dia x Length:			
Tech Spe	Tech Spec Clause No:  Reference Standard: EN 545:2010- 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?	Remarks			
1									
2									
3									
4									
5									
6									
7									
8									
9									
	n & Testing Witnessed by	1		1	•				
Name:				Name: 2.					
Signature	e: 1.		S	Signature: 2.					
Date:	Date:								

Test		Chemical Compos	ition						
Bill No: Item No. & Qty.			Sample size:						
Descripti	ion of Item: DI Pipes (SS/I	OF) Class:			]	Dia x Length:			
Tech Spec Clause No: Reference Standard: EN545:2010 & IS					ISO 2531 :2009				
Sample No	Item of testing	Physical/Measured Value	Deviation	Tolerance Allowed	Comply?	Remarks			
1									
2									
3									
4									
5									
6									
7									
8									
9									
Inspection	on & Testing Witnessed by			1					
Name :			Na	ame: 2.					
Signature	e: 1.		Sig	gnature: 2.					
Date:									

#### INSPECTION OF DI PIPES & FITTINGS

#### **CHECK LIST**

Technical Description Specifications Clause No.		Requirements as per Specifications	Satisfactory/ Unsatisfactory	Remarks	
HANDLING OF I	PIPES AND FITTINGS AFTER PRO	DDUCTION			
	Packing				
	Handling				
	Stacking				
	Inspection by Factory/Inspection Authority				
	Transport Arrangements within manufacturers Country				
	Shipping Arrangements				
	Freight Insurance Arrangements				
CONCLUSION A	T THE END OF THE INSPECTION	TOUR			
7	Total Process of Production, Testing, Packing, Handling, Insurance and Freight Arrangements Satisfactory				

**Observations**:

Signature 1 Signature 2

Name & Designation 1: Name & Designation 2:

#### **RUBBER RINGS / GASKETS**

## 

**:....** 

2. Shipping Arrangements

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Sample No	Diameter	Thickness mm	Hardness	Appearance	Deviation	Tolerance allowable	Whether Comply	Remarks

Product conformity certificate available acceptable :
ISO 9001;2008/2015 Quality Management System certificate available and acceptable:
(witness the original certificate)

## APPENDIX 14 A - CONFIRMATION FROM THE DI FITTINGS MANUFACTURER TO SUPPLY DI FITTINGS TO DI PIPE MANUFACTURER

Note: This is to be typed on a company letter heading

Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka.

			te & Address of the Pipe Manufacturer)		
***					
			) 1 C ( CDI : C''		
•			<i>ter</i> ), the manufacturer of DI pipe fittings ur above factory located at		
	• • • • • • • • • • • • • • • • • • • •	conforming to	o EN 545/ ISO 2531/ EN 598/ ISO 7186		
			(Name of the DI Pipe		
-			(brand of the pipe), pipes(Office		
		pe Manufacturer)			
	~~ •J ···· - •,	F			
	ed Signatory		Attested by the Attorney at Law		
and the C	ompany Sea	11			
			Signature of the Attorney at Law		
Name :			Ş		
In the Cap	pacity of:		Seal		
			In the place of		
			(address)		
Witnesses	s :				
1 S	ignature	:			
	lame	:			
	Capacity	:			
A	Address	:			
2 S	ignature	:			
	Vame	:			
	Capacity	:			
A	Address	:			

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## APPENDIX 14 B - CONFIRMATION FROM THE RUBBER RINGS MANUFACTURER TO SUPPLY RUBBER RINGS TO DI PIPE MANUFACTURER

Note: This is to be typed on a company letter heading

Chairman, National Water Supply & Drainage Board, Galle Road, Ratmalana. Sri Lanka.

(Nai	me & Address of rantee that, Rubb	f the Rubber Rin per Rings manufa	(Name & Address of the Pipe Manufacturer)  (Subber Rings Manufacturer), the manufacturer of Rubber Rings hereby ges manufactured at our above factory located at		
			•		
			=		
_	_				_
					• •
• • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	(Office & Addre	ress of the DI pipe fittings manufacturer).	
Auth	orised Signatory he Company Se	7		Attested by the Attorney at Law	
				Signature of the Attorney at Law	
Name	e :			••••	
In the	e Capacity of:		• • • • • • • • • • • • • • • • • • • •		
					•
Witne	esses ·		•	(daaress)	
1	Signature	:			
	Name				
	Capacity	:			
	Address	:			
2	Signature	:			
	_	•			
	Name				
	Name Capacity	:			

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# APPENDIX 15 A - LOCAL ACCREDITED AGENT'S CONFIRMATION OF SUPPLY OF DI PIPE FITTINGS & SPECIALS 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 DI Pipe Fittings and Specials submitted in this bid to the bidder M/s. ..... .....(Name & Address of the bidder) according to the work programme of the bidder, included in the bid. Authorised 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 Signature ...... Name ..... Capacity ..... Address ..... 2 Signature ..... Name ..... Capacity ..... Address .....

# APPENDIX 15 B - LOCAL ACCREDITED AGENT'S CONFIRMATION OF SUPPLY OF PE PIPES & FITTINGS ACCORDING TO WORK PROGRAMME.

Note: This is to be typed on a company letter heading

			[Address of the Local Accredited Agent]
Nati Gall	irman, onal Water Suppl e Road, Ratmalar Lanka.	ly & Drainage Board, na.	
			Vater Supply Scheme
[nar	ne of the Local .	Accredited Agent] of	f
Sup	ply & Deliver	[address o	f the Local Accredited Agent], confirm that we will ittings submitted in this bid to the bidder M/s(Name of the bidder) s bidder included in the bid.
	orised Signatory	y	Attested by the Attorney at Law
			Signature of the Attorney at Law
	1 ,		Seal
Witn	esses :		
1	Signature	:	
	Name	:	
	Capacity	:	
	Address	:	
2	Signature		
<i>_</i>	Name		
	Capacity	:	
	Address	:	
	11001000		

#### APPENDIX 16 - DETAILS OF LOCAL ACCREDITED AGENT

- Name of Local Accredited Agent
   Official Address
   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  $(m^2)$
  - 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.

### APPENDIX 17 – AFFIDAVIT BY THE BIDDER

I	of being solemnly sincerely and truly declared truly declar
	d 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:
or na co ha	The foregoing affidavit having been read over and explained to the affirmant above amed who having understood its nature ontent and context affirmed hereto and set is usual signature hereto in
	Justice of the Peace / Commissioner for oaths

# APPENDIX 18 – PRE-QUALIFICATION OF MANUFACTURERS FOR SUPPLY & DELIVERY OF DI PIPES, FITTINGS , DI /CI VALVES ,MANHOLE COVERS , PVC PIPES & FITTINGS

When Bidding Document is prepared please include updated list of prequalified manufactures under this Appendix

## APPENDIX 19 – ENTITLE ALLOWANCES ON FOREIGN TRAVELS & RELATED EXPENSES

### **Category of Countries**

Category No.	Countries					
1 <sup>st</sup> category	Afganistan Albania Algeria Azerbaijan Bahamas Balarus Barbados Belize Bhutan Bolivia Bosnia Botswana	Burundi Cambodia Canary Island Capevrde Cooks Island Domenica El Salvador Etihiyopiya Equatorial Gabon Gambia Gibraltar	Guam Kiribati Lao Peoples Dem.Rep. Lesothe Liechtenstein Nacedonia Rep. Malawi Malta Mauritania Mongolia Montenegro Myanmar	Nambia Nauru Netherlands Anti Nicaragua Palau Paraguay Samoa Sao Tome & Prince Serbia Sierra Leon Soloman Island Somalia	Tanzania Swaziland Tajikistan Tunisia Uganda Uzbekistan	US\$ 200 + US\$ 75
2 <sup>nd</sup> category	Antigue Barbuda Armenia Argentina Bulgaria Bangaldesh Brunei Cameroon Coted Ivoria Costa Rica	Ecuador Fiji French Guiana Guyana Grenada Gerogia Guatemala Greenland	Guinea Bissaw Hawai Haiti Honduras Ireland Iraq Jamaica Korea Dem.Rep.	Liberia Mexico Micronesia Fed. Monaco Mozambique Papua new Guinea Suriname Yeman Rep.	Yogoslavia Tahiti Tonga Vanuatu	US\$ 260 + US\$ 75
3 <sup>rd</sup> category	Baharain Chile Cyprus Egypt Arab Rep. Estonia Guinea Hungary Indinesia Iran Islamic Rep. Kenya	Kuwait Lithuania Madagascar Mauritius Malayasia Maldives Morocco Macedonia Rep Nepal Oman	Pakistan Panama Peru Pholippines Poland Quarter Romania Ruwada Saudi Arabia Solvenia	Sriyan Arab Rep. South Africa St.Lucia Sudan Thailand Togo Trinidad & Tobago Uruguay Ukrain Venezuela	Vietnam Zaire Zambia Zimbabwe	US\$ 330 + US\$ 75
4 <sup>th</sup> category	Belgium Benin Burkina Faso Comoros  Central African Rep. Colombia Congo	Croatia Cuba Czech Republic Dem.Rep.of Congo Djibouti Greece Iceland	India Ivory Coast Jordan Kazakhastan  Latvia Lebanon Luxemburg	Mali New Caledonia Nigeria Portugal Slovak Rep. Spain Taiwan	Turkey United Arab Emirates	US\$ 400 + US\$ 75
5 <sup>th</sup> category	Angola Australia Austria Brazil Canada Chad	China (Beijin) Denmark France Germany Finland Hongkong	Israel Italy Japan Libiya Netherland New Zealand	Niger Norway Russia Senagal Swedan Seychelles	Singapore South Korea Switzerland United Kingdom USA	US\$ 530 + US\$ 75