# श्यामा प्रसाद मुखर्जी पत्तन, कोलकाता हल्दिया गोदी परिसर

सं. आईएंडसीएफ/आईजेडएंडआर/टी/408/ 634

दिनांक- 12.02.2024

एन-आई-टी। लघु निविदा सूचना

हल्दिया डॉक कॉम्प्लेक्स में निम्नलिखित कार्य के लिए निविदा दस्तावेज में निर्धारित पूर्व योग्यता मानदंड के अनुसार सिंगल स्टेज टू पार्ट सिस्टम (तकनीकी-वाणिज्यिक बोली और मुल्य बोली) के तहत ई-निविदा आमंत्रित की जाती है।

कार्य का नाम		हल्दिया गोदी परिसर के डॉक जोन के उत्तरी तरफ विंडस्क्रीन (चरण-॥) के साथ सीमा दीवार का निर्माण और पश्चिमी तरफ चिनाई वाली सीमा दीवार का निर्माण।
ई-निविदा संख्या	:	आईएंडसीएफ/आईजेडएंडआर/टी/408
अनुमानित लागत	:	Rs. 16,85,84,090.93 (सोलह करोड़ पचासी लाख चौरासी हजार नब्बे रुपया और पैसे तिरानबे मात्र)
ई-निविदा जमा करने की अंतिम तिथि	1	11-03-2024 (अपराह्र 15:00 बजे तक जमा की जाएगी)

निविदा और निविदा दस्तावेज की विस्तृत जानकारी वेबसाईट (www.kolkataporttrust.gov.in) पर उपलब्ध है एवं केवल उनके इस वेबसाईट https://kopt.enivida.in के माध्यम से बोली प्रक्रिया में भाग ले सकते हैं । इच्छुक ठेकेदार pkmani.hdc@kolkataporttrust.gov.in वेबसाईट पर सम्पर्क कर सकते हैं।

महाप्रबंधक (अभि.) हल्दिया गोदी परिसर

FLAG-A

No. 1&CF/IZ&R/T/408/634

Date: /2 .02.2024

# SHORT TENDER NOTICE

E-Tender under Single stage two part system (Techno-Commercial Bid and Price Bid) are invited as per Prequalification criteria stipulated in Tender Document for the following work at Haldia Dock Complex.

Name of work:	CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.
> E-Tender No.:	I&CF/IZ&R/T/408
> Estimated Cost :	Rs. 16,85,84,090.93 (Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only)
Last date of submission of e-tender:	11-03-2024 Submission Up to 15:00 hrs.

Details of the Tender & Tender Documents are available in website (www.kolkataporttrust.gov.in) and have to participate in bidding process through their website https://kopt.enivida.in only. Interested bidders may contact at <a href="mailto:pkmani.hdc@kolkataporttrust.gov.in">pkmani.hdc@kolkataporttrust.gov.in</a>.

General Manager (Engg.) Haldia Dock Complex

# **NOTICE INVITING TENDER**

WORK TITLE: - E- TENDER FOR "CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA."

# 3.1 TENDER NO : I&CF/IZ&R/T/408

E-Tender under single stage two part system (Techno-Commercial Bid and Price Bid) are invited from resourceful, experienced and bonafide agencies with sound technical and financial capabilities on fulfilling the following Pre-qualification Criteria;

# 3.2 PRE-QUALIFICATION CRITERIA FOR BIDDERS: -

- i) Average Annual Financial Turnover during the last three years, ending on 31-03-2023, should be at least Rs. 5,05,75,227.28.
- ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -
- a. Three similar completed works costing not less than Rs. 6,74,33,636.37 for each work.

or.

b. Two similar completed works costing not less than Rs. 8,42,92,045.47 for each work.

or.

- c. One similar completed work costing not less than Rs. 13,48,67,272.74.
- iii) Similar works means: -
- i) Civil Engineering construction works including structural steel works and Reinforced Cement Concrete works but excluding any type of roads/pavement works (of concrete/bituminous/paver block/other materials)/embankment works/river regulatory works.

OR

ii) (a) Civil Engineering construction works excluding any type of roads/pavement works (of concrete/bituminous/paver block/other materials)/embankment works/river regulatory works.

and

ii) (b) Any one Structural steel work having a minimum value of Rs. 2,00,00,000.00.

# **TENDER AUTHORITY:-**

General Manager (Engineering), Haldia Dock Complex, Jawahar Tower Complex, Haldia Township, Dist. Purba Medinipur – 721 607, E-mail id: aganesan.hdc@kolkataporttrust.gov.in

Due Date	11-03-2024	Time	UPTO 15:00 hrs.	Date of Opening of Tender	11-03-2024	Time	15:30 hrs. onwards.
Bid Document will be available on SMP Kolkata website (www.kolkataporttrust.gov.in) Bidde will have to participate in bidding process through website https://kopt.enivida.in only.  Date and Time for Pre-bid Meeting on 28.02.2024 at 11:00 hours at the office of Generative bid meeting & Manager (Engineering), HDC, at Jawahar Tower Building followed by s							office of Genera
Cost Docum	of Tender nent (Non-	visit. Rs. 2,9 18% G		es Two Thou	sand Nine Hu	ndred Fift	y only) includin

Earnest Money Deposit	Rs. 26,85,850.00 (Rupees Twenty Six Lakhs Eighty Five Thousand Eight Hundred and Fifty only).
Time of Completion	Part - A: 12 months from the date of placement of order Part - B: 24 months from the date of placement of order
Estimated Cost Of Work	Rs. 16,85,84,090.93 (Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only)8

#### 3.4 OTHER INSTRUCTIONS:-

- 3.4.1 E-Tender under single stage two part system (Techno-Commercial Bid and Price Bid) from resourceful, experienced and bonafide bidders with sound technical and financial capabilities for the above mentioned work at Haldia Dock Complex.
- 3.4.2 Details of the Tender Documents and Notification of any Addendum / Corrigendum to the tender Documents are available in web site from KoPT website (www.kolkataporttrust.gov.in) and have to participate in bidding process through their website <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> only.
- 3.4.3 E-Tender Document shall neither be issued by post nor sold.
- 3.4.4 E-Tenderers are not permitted to alter/change/delete/modify any clause of the tender Document down loaded from the website. If any deviation / discrepancy is found after submission of tender, the submitted offer will be summarily rejected.
- 3.4.5 Bidders shall submit the Bid Document as stipulated in the "Instructions to Bidders" of the e-tender Document. Trustees reserve the right to verify the submitted copies of Documents / credentials with the original Documents.
- 3.4.6 The successful tenderer will be required to comply with the relevant provisions of BOCW (RECS) Act, 1996, West Bengal BOCW (RECS) Act, 2004 and BOCW Welfare Cess Act, 1996 and the rules framed there under. An amount of cess as per prevalent rate (presently @ 1% of the billed amount) shall be progressively recovered from all the bills of the contractor for onward transmission of the same to the appropriate authority.
- 3.4.7 E-Tenderers will be received through <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> up to 15:00 hrs. on the last date of submission and opening of tender specified above.
- 3.4.8 Techno Commercial Part & Price Part of the e-Tender will be opened shortly after 3.30 p.m. on the stipulated date.
- 3.4.9 In case of unscheduled Holiday / Bandh on the date of opening of E-Tender, the same will be opened on the next working day.
- 3.4.10 It is stated here that the subject tender may not be extended further.

3.4.11 SMP, KOLKATA reserves the right to reject any or all offers or to accept the offer in whole or in part without assigning any reason whatsoever thereof.

General Manager (Engg.) Haldia Dock Complex

# SYAMA PRASAD MOOKERJEE PORT, KOLKATA श्यामा प्रसाद मुखर्जी पत्तन, कोलकाता

# HALDIA DOCK COMPLEX हल्दिया गोदी परिसर

I&CF DIVISION
BIDDING DOCUMENTS

(E-TENDER)
[TENDER NO.: I&CF/IZ&R/T/408]

**FOR** 

CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

हिल्दिया गोदी परिसर के डॉक जोन के उत्तरी तरफ विंडस्क्रीन (चरण-॥) के साथ सीमा दीवार का निर्माण और पश्चिमी तरफ चिनाई वाली सीमा दीवार का निर्माण।



February, 2024 फ़रवरी, २०२४

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# 1. SCHEDULE OF TENDER (SOT)

E-Tender under single stage two part system (Techno-Commercial Bid and Price Bid) are invited from reliable, bonafide & experienced agency with required experience as per Prequalification criteria stipulated in Tender Document for "CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA." as per Bill of Quantities to Haldia Dock Complex. Bid Document may be seen from the RailTel Portal (https://kopt.enivida.in). Corrigenda or clarifications, if any, shall be hoisted on the above mentioned website only. The tender is also published on SMP, Kolkata website (www.kolkataporttrust.gov.in).

a. E-TENDER NO.	I&CF/IZ&R/T/408
b. MODE OF TENDER	e-Procurement System (Online through RailTel Portal (https://kopt.enivida.in). The intending bidders are required to submit their offers electronically through e-tendering portal. No physical tender is acceptable by Haldia Dock Complex, Haldia.
c. i) Date of NIT available to parties to download	19.02.2024 to 11.03.2024
ii) Date & Time of pre-bid meeting and site visit	Pre-bid Meeting on <b>28.02.2024 at 11.00</b> hours at the office of General Manager (Engineering), HDC, at Jawahar Tower Building followed by site visit.
d. i) Estimated Cost of Work	Rs. 16,85,84,090.93 (Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only)
ii) Bid Document fee	The intending bidders should submit Bid Document Fee of <b>Rs. 2,950.00</b> (Rupees Two Thousand Nine Hundred and Fifty only) including 18% GST.  Mode of Payment: - E-payment only through Debit / Credit Card or Net Banking/eWallet/UPI.  Bidder has to select the payment option as "e-payment" to pay the tender fee as applicable and enter details of the instrument.
iii) Earnest Money Deposit (EMD)  e. Transaction Fee for bidding in RailTel Portal.	The intending bidders should submit Earnest Money of Rs. 26,85,850.00 (Rupees Twenty Six Lakhs Eighty Five Thousand Eight Hundred and Fifty only).  Mode of Payment: - E-payment only through Debit / Credit Card or Net Banking/eWallet/UPI.  Bidder has to select the payment option as "e-payment" to pay the tender fee as applicable and enter details of the instrument  Rs. 8,850.00 (Rupees Eight Thousand Eight Hundred
	Fifty only). (Including GST) (non-refundable) by netbanking / Debit / Credit card at RailTel Portal only.
g. Date of starting of online e-tender for submission of Techno-Commercial Bid & Price Bid	19.02.2024
h. Date of closing of online e-tender for submission of Techno-Commercial Bid	11.03.2024 upto 15.00 hours
i. Date & time of opening of the subject tender (Techno Commercial Part). Price bid will be opened subsequently at a later date.	11.03.2024 after 15.30 hours

# 2. SHORT TENDER NOTICE

२.लघु निविदा सूचना

E-Tender under Single stage two part system (Techno-Commercial Bid and Price Bid) are invited as per Prequalification criteria stipulated in Tender Document for the following work at Haldia Dock Complex.

हल्दिया डॉक कॉम्प्लेक्स में निम्नलिखित कार्य के लिए निविदा दस्तावेज में निर्धारित पूर्व योग्यता मानदंड के अनुसार सिंगल स्टेज टू पार्ट सिस्टम (तकनीकी-वाणिज्यिक बोली और मूल्य बोली) के तहत ई-निविदा आमंत्रित की जाती है।

Name of work कार्य का नाम	:	CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA. हल्दिया गोदी परिसर के डॉक जोन के उत्तरी तरफ विंडस्क्रीन (चरण-II) के साथ सीमा दीवार का निर्माण और पश्चिमी तरफ चिनाई वाली सीमा दीवार का निर्माण।
E-Tender No ई-निविदा संख्या	:	I&CF/IZ&R/T/408 आई एंड सीएफ/आईजेड एंड आर/एसडीएम/टी /408
Estimated Cost अनुमानित लागत	:	Rs. 16,85,84,090.93 (Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only) (सोलह करोड़ पचासी लाख चौरासी हजार नब्बे रुपया और पैसे तिरानबे मात्र)
Date and Time for Pre-bid Meeting and Site Visit प्री बिड बैठक और साइट विजिट करने की तारीख एवं समय	:	Pre-bid Meeting on 28.02.2024 at 11.00 hours at the office of General Manager (Engineering), HDC, at Jawahar Tower Building followed by site visit दिनांक 28.02.2024 को 11.०० बजे हल्दिया गोदी परिसर के जवाहर टावर बिल्डिंग में महाप्रबंधक (अभियंता) के कार्यालय में प्रीबिड बैठक एवं उसके पश्चात साइट का दौरा किया जाएगा-
Last date of submission of e-tender ई-निविदा जमा करने की अंतिम दिनांक	:	11.03.2024 upto 15.00 hours 11.03.2024 अपरान्ह ३.०० बजे तक जमा की जाएगी

Details of the Tender & Tender Documents are available in website (www.kolkataporttrust.gov.in) and have to participate in bidding process through their website https://kopt.enivida.in only. Interested bidders may contact at pkmani.hdc@kolkataporttrust.gov.in.

निविदा और निविदा दस्तावेज की विस्तृत जानकारी वेबसाईट (<u>www.kolkataporttrust.gov.in</u>) पर उपलब्ध है एवं केवल उनके इस वेबसाईट <u>https://kopt.enivida.in</u> के माध्यम से बोली प्रक्रिया में भाग ले सकते हैं । इच्छुक ठेकेदार <u>pkmani.hdc@kolkataporttrust.gov.in</u> वेबसाईट पर सम्पर्क कर सकते हैं ।

# 3. NOTICE INVITING TENDER

WORK TITLE: CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE

AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

कार्य शीर्षक: हल्दिया गोदी परिसर के डॉक जोन के उत्तरी तरफ विंडस्क्रीन (चरण-॥) के साथ सीमा दीवार

का निर्माण और पश्चिमी तरफ चिनाई वाली सीमा दीवार का निर्माण।

#### 3.1 E-TENDER NO: I&CF/IZ&R/SDM/T/408

E-Tender under single stage two part system (Techno-Commercial Bid and Price Bid) are invited from resourceful, experienced and bonafide agencies with sound technical and financial capabilities on fulfilling the following Pre-qualification Criteria;

#### 3.2 PRE-QUALIFICATION CRITERIA FOR BIDDERS

- i) Average Annual Financial Turnover during the last three years, ending on 31-03-2023, should be at least Rs. 5,05,75,227.28.
- ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -
- a. Three similar completed works costing not less than Rs. 6,74,33,636.37 for each work.

or,

b. Two similar completed works costing not less than Rs. 8,42,92,045.47 for each work.

or

- c. One similar completed work costing not less than Rs. 13,48,67,272.74.
- iii) Similar works means: -
- i) Civil Engineering construction works including structural steel works and Reinforced Cement Concrete works but excluding any type of roads/pavement works (of concrete/bituminous/paver block/other materials)/embankment works/river regulatory works.

OR

ii) (a) Civil Engineering construction works excluding any type of roads/pavement works (of concrete/bituminous/paver block/other materials)/embankment works/river regulatory works.

and

- ii) (b) Any one Structural steel work having a minimum value of Rs. 2,00,00,000.00.
- iv) (a) The Bidder for pre-qualification may be a single entity or a group of entities (Joint Venture / consortium), coming together to implement the Project. However, no bidder applying individually or as a member of a Consortium, as the case may be, can be member of another Bidder. The term Bidder used herein would apply to both a single entity and a Joint Venture / consortium.
- (b) Guidelines for participation of a single entity who had previously participated in any work of similar nature as one of the members of a Joint venture.

When the bidder is a single entity, who had previously participated in any work of similar nature as one of the members of a Joint venture, uses the credential of that particular work to justify his/her technical eligibility criteria for the instant tender, then the value of the completed work shall be reckoned only to the extent of the concerned member's share in that JV firm for the purpose of satisfying his/her compliance to the technical eligibility criteria in the instant tender.

- v) Two or more bidders may form a "Joint Venture / consortium" among themselves or by including some other firms having required expertise/ experience and submit the offer in the name of "Joint Venture / consortium". If the offer is made in the name of "Joint Venture/ consortium" the details and composition shall be clearly spelt out in the technical bid. If a joint venture firm/ consortium is pre-qualified, the responsibility for execution of works and operations and maintenance shall be in accordance with the Joint Venture/consortium agreement and no deviation from the terms of the JV / consortium agreement will be permitted without prior approval of the Engineer. Tenders submitted by a joint venture / consortium of two or more firms, as partners shall comply with the following requirements:
- a) Companies/contractors may jointly undertake the contract. Each entity would be jointly and severally responsible for completing the task as per the contract, however declaration of Lead member to be indicated by the bidders in their MOU.
- i) The firms with at least 26% equity holding each be allowed to jointly meet the eligibility criteria.
- ii) Maximum number of partners in JV shall be limited to three.

#### b) Prequalification of JV

JV members are "jointly and severally responsible and liable" for the contract. For pre-qualification, the JV should fulfil the criteria specified in the pre-qualification document. The attributes to be evaluated will be the same as for individual contractors. However, certain parameters up to the specified limits have to be essentially met by them collectively, some by the lead partner, and some by the other partner, as briefly described below:

- 1. Qualifying factors to be met collectively (i) Average annual turnover, (ii) Experience of having successfully completed similar work.
- 2. Qualifying factors for lead partner (i) Average Annual Turnover (ii) Experience of having successfully completed similar work not less than of 50 (fifty) percent of the respective limits prescribed in case of individual contractors.
- 3. Qualifying factors for the other partner: Same as for lead partner except for Average Annual Turnover as mentioned in 2 (i) above shall not be less than 25% percent of the respective limits prescribed in case of individual contractors.
- c) The tender, and in case of a successful tender, the Form of Agreement, shall be signed so as to be legally binding on all partners.
- d) One of the partners shall be nominated as being In-charge (Lead Partner); and this authorization shall be evidenced by submitting a Power of Attorney signed by legally authorised signatories of all the partners:
- e) The partner In-charge (Lead Partner) shall be authorised to incur liabilities and receive instructions for and on behalf of any or all of the partners of the joint venture and the entire execution of the contract including payment shall be done exclusively with the partner in charge:
- f) All partners of a joint venture shall be jointly and severally liable for execution of the contract in accordance with the contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Tender Form and the Form of Agreement (in case of a successful tender); and
- g) A certified copy of the agreement entered into by the members of the joint venture/consortium shall be submitted with the tender.
- h) Value of a completed work done by a Member in an earlier JV Firm shall be reckoned only to the extent of the concerned member's share in that JV firm for the purpose of satisfying his/her compliance to the abovementioned technical eligibility criteria in the tender under consideration, if applied as a JV / consortium for this particular work.

#### **TENDER AUTHORITY**

General Manager (Engineering), Haldia Dock Complex, Jawahar Tower Complex, Haldia Township, Dist. Purba Medinipur – 721 607, E-mail id: <a href="mailto:aganesan.hdc@kolkataporttrust.gov.in">aganesan.hdc@kolkataporttrust.gov.in</a>

Due	11.03.2024	Time	Upto	Date	of	11.03.2024	Time	15:30 hrs.
Date			15:00 hrs.	Opening	of			onwards
				Tender				
Bid docu	Bid document will be available on website (www.kolkataporttrust.gov.in) Bidders will have t						will have to	
participat	e in bidding pro	cess throu	gh website <u>h</u>	ttps://kopt	.eniv	<u>/ida.in</u> only.		
Date and	Time for pre-	Pre-bid N	leeting on 2	28.02.2024	at	11.00 hours a	at the office	e of General
bid meetii	ng & site visit.	Manager	(Engineering	), HDC, at	Jaw	ahar Tower B	Building foll	lowed by site
		visit.						
Cost	of Tender	Rs. 2,950.	00 (Rupees T	wo Thousa	nd N	ine Hundred F	ifty only)	
document	İ							
(Non-refu	ndable)							
Time of Co	ompletion	Part - A:	12 months fro	m the date	of p	lacement of or	der	
		Part - B:	24 months fro	m the date	of p	lacement of or	der	
Estimated	Cost of Work	Rs. 16,85	,84,090.93 (	Rupees Six	teer	Crore Eighty	Five Lak	n Eighty Four
		Thousand	Ninety and F	Paisa Ninet	y Thi	ree only).		- 3
Transactio	n Fee for	Rs. 8,850.	00 (Rupees E	ight Thousa	and E	ight Hundred	Fifty only).	
bidding in	RailTel		· •	=		-		

#### 3.4 OTHER INSTRUCTIONS

- 3.4.1 E-Tenderers are invited on two Cover basis (Techno Commercial Part & Price Part) from resourceful, experienced and bonafide bidders with sound technical and financial capabilities for the above mentioned work at Haldia Dock Complex.
- 3.4.2 Details of the Tender Documents and Notification of any Addendum / Corrigendum to the tender documents are available in web site from website (www.kolkataporttrust.gov.in) and have to participate in bidding process through website <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> only.
- 3.4.3 E-Tender Document shall neither be issued by post nor sold.
- 3.4.4 E-Tenderers are not permitted to alter/change/delete/modify any clause of the tender document down loaded from the website. If any deviation / discrepancy is found after submission of tender, the submitted offer will be summarily rejected.
- 3.4.5 Bidders shall submit the Bid Document as stipulated in the "Instructions To Bidders" of the e-tender document. Trustees reserve the right to verify the submitted copies of documents / credentials with the original documents.
- 3.4.6 The successful tenderer will be required to comply with the relevant provisions of BOCW (RECS) Act, 1996, West Bengal BOCW (RECS) Act, 2004 and BOCW Welfare Cess Act, 1996 and the rules framed there under. An amount of cess as per prevalent rate (presently @ 1% of the billed amount) shall be progressively recovered from all the bills of the contractor for onward transmission of the same to the appropriate authority.
- 3.4.7 E-Tenderers will be received through <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> up to 15:00 hours on the last date of submission and opening of tender specified above.
- 3.4.8 The E-Tender will be opened shortly after 3.30 p.m. on the stipulated date.
- 3.4.9 In case of unscheduled Holiday / Bandh on the date of opening of E-Tender, the same will be opened on the next working day.
- 3.4.10 It is stated here that the subject tender may not be extended further.
- 3.4.11 SMP, Kolkata reserves the right to reject any or all offers or to accept the offer in whole or in part without assigning any reason whatsoever thereof.

# 4. IMPORTANT INSTRUCTIONS FOR E-PROCUREMENT

Bidders are requested to use internet Browsers Firefox version below 50 / Internet Explorer version 8 or above, and Java 8 Update 151 or 161.

Further, bidders are requested to go through the following information and instructions available on the RailTel Portal (https://kopt.enivida.in) before responding to this e-tender:

- > Bidders Manual Kit
- > Help for Contractors
- > FAQ

# Contact Persons (Haldia Dock Complex, SMP, Kolkata)

Sri P.K. Mani, Sr. Dy. Manager (IZ&R), I&CF Division, email: pkmani.hdc@kolkataporttrust.gov.in

1	Process of E-tender :
	THE TECHNICAL BID AND THE COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE AT <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> 1). Vendors are required to register themselves online with <a href="https://kopt.enivida.in">https://kopt.enivida.in</a>
	Contact person (Haldia Dock Complex):  1. Sri. P. K. Mani Sr. Dy. Manager (IZ&R), I&CF Division Haldia Dock Complex pkmani.hdc@kolkataporttrust.gov.in
	Contact persons (RailTel Portal):Mr. Navneet Mishra.Mr. Tariq AnwarMobile No.: + 91 9355030630Mobile No.: +91 9355030608E-mail: eprochelpdesk.17@gmail.comE-mail: eprochelpdesk.35@gmail.com
2	The Techno-commercial Bid and the Price Bid shall have to be submitted online at <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> Tenders will be opened electronically on specified date and time as given in the Tender.
3	All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.
4	Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their corporate email I.D. provided is valid and updated at the time of registration of vendor with <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> . Vendors are also requested to ensure validity of their DSC (Digital Signature Certificate).
5	E-tender cannot be accessed after the due date and time mentioned in NIT.
6	Bidding in e-tender:  a) Vendor(s) need to submit necessary EMD and Tender fees to be eligible to bid online in the e-tender. Tender fees are non-refundable. No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded by the tender inviting authority.  b) The process involves Electronic Bidding for submission of Technical and Commercial Bid.  c) In all cases, vendor should use their own ID and Password along with Digital Signature at the time of submission of their bid.  d) During the entire e-tender process, the vendors will remain completely anonymous to one
	<ul><li>another and also to everybody else.</li><li>e) The e-tender floor shall remain open from the pre-announced date &amp; time and for as much duration as mentioned above.</li><li>f) All electronic bids submitted during the e-tender process shall be legally binding on the</li></ul>

	<ul> <li>vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between Buyer and the Vendor for execution of supply.</li> <li>g) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.</li> <li>h) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.</li> <li>i) No deviation of the terms and conditions of the tender Document is acceptable. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms &amp; conditions for the tender.</li> </ul>
7	Any order resulting from this tender shall be governed by the terms and conditions mentioned therein.
8	No deviation to the technical and commercial terms & conditions are allowed.
9	The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.
10	Vendors are requested to read the vendor guide and see the video in the page <a href="https://kopt.enivida.in">https://kopt.enivida.in</a> to familiarize them with the system before bidding.
11	No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms & conditions for the tender.
12	The bidders must upload all the documents required as per terms of NIT. Any other document uploaded which is not required as per the terms of the NIT shall not be considered.
13	The bid will be evaluated based on the filled-in technical & commercial formats.
14	The documents uploaded by bidder(s) will be scrutinized. In case any of the information furnished by the bidder is found to be false during scrutiny, punitive action including suspension and banning of business can also be taken against defaulting bidders.
15	Necessary addendum/ corrigendum (if any) of tender would only be hosted in the e-tendering portal of CPP.

## **KOPT e-Nivida Special Instruction to Bidders**

e-Procurement is the complete process of e-Tendering from publishing of tenders online, inviting online bids, evaluation and award of contract using the system. You may keep a watch of the tenders floated under https://kopt.enivida.in. The link of e-procurement portal is also given on our official portal i.e. www. https://www.kolkataporttrust.gov.in/ under TENDER TAB.

These will invite for online Bids. Bidder Enrolment can be done using "Online Bidder Enrolment". The instructions given below are meant to assist the bidders in registering on the e-tender Portal, and submitting their bid online on the e-tendering portal as per uploaded bid.

More information useful for submitting online bids on the eNivida Portal may be obtained at: https://kopt.enivida.in

### **GUIDELINES FOR REGISTRATION:**

- 1. Bidders are required to enroll on the e-Procurement Portal (https://kopt.enivida.in/bidderRegistration/newRegistration) or click on the link "Bidder Enrolment" available on the home page of e-tender Portal by paying the Registration fee of Rs.2000/-+Applicable GST.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.
- 7. The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.
- 8. After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id **enividahelpdesk@gmail.com/**for activation of account.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.
- 2. Once the bidders have selected the tenders they are interested in, you can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

#### PREPARATION OF BIDS

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
- 5. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

#### **SUBMISSION OF BIDS**

- 1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by SMP, Kolkata.
- 3. Bidder has to select the payment option as "e-payment" to pay the tender fee as applicable and enter details of the instrument.
- 4. In case of BG bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official before the Online Opening of Financial Bid. In case of non-receipt of BG amount in original by the said time, the uploaded bid will be summarily rejected.
- 5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- 6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission

- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.
- 9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

## For any clarification in using eNivida Portal:

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact eNivida Helpdesk (as given below) for any query related to e-tendering.

Phone No. 011-49606060/7278929467/8448288981 Mail id: - enividahelpdesk@gmail.com/ ewizardkumar@gmail.com/

- (1) Mr. Navneet Mishra. Mobile No.: + 91 9355030630 E-mail: eprochelpdesk.17@gmail.com
- (2) Mr. Tariq Anwar Mobile No.: +91 9355030608 E-mail: eprochelpdesk.35@gmail.com

# 5. INSTRUCTIONS TO BIDDER

WORK TITLE: CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

#### 5.0 PREFACE

The work as described in the tender shall be executed in Haldia and in accordance with the attached General Conditions of Contract, Special Conditions of Contract, Particular Specifications, Drawings (if any) and detailed Bill of Quantities. Location Plan of the place of work might be inspected at the office of the Sr. Dy. Manager (IZ&R), I&CF on any working day before quoting for the tender.

#### 5.1 TENDER DOCUMENT FEES & EARNEST MONEY:

#### **5.1.1 TENDER DOCUMENT FEES:**

The intending bidders should submit Bid Document Fee of Rs. 2,950.00 (Rupees Two Thousand Nine Hundred and Fifty only) including 18% GST.

Mode of Payment: - E-payment only through Debit / Credit Card or Net Banking/eWallet/UPI.

Bidder has to select the payment option as "e-payment" to pay the tender fee as applicable and enter details of the instrument.

#### **5.1.2 EARNEST MONEY**

The intending bidders should submit Earnest Money of Rs. 26,85,850.00 (Rupees Twenty Six Lakhs Eighty Five Thousand Eight Hundred and Fifty only).

Mode of Payment: - E-payment only through Debit / Credit Card or Net Banking/eWallet/UPI.

Bidder has to select the payment option as "e-payment" to pay the tender fee as applicable and enter details of the instrument.

Tender submitted without requisite Earnest money and tender paper will be liable for rejection.

#### 5.2 MODE OF SUBMISSION OF BID

- 5.2.1 All bidders must submit their offers through e- tendering in accordance with the terms and conditions set out in the bid Documents and no deviation will be accepted.
- 5.2.2 Techno commercial part shall contain the following which are to be uploaded: -
- **I. Essential Document**: -(Bids will be rejected if any essential document is not submitted by the bidder)
- a) Credentials
- i) Letters of Award of Works of each credential.
- ii) Corresponding Completion Certificates from owners of each credential to justify that the intending bidder satisfies the earlier mentioned pre-qualification criteria.
- b) Certified copies of audited balance sheet and Profit and Loss account/ Trading account for the last 3 (three) financial years (i.e. 2020-2021, 2021-2022, 2022-2023).

### II) Other Documents:-

- a) No conditions/ deviations have been added in the price part of the Bid.
- b) A declaration as per annexure IB that the Bidding Firm has Not been debarred / de-listed by any Govt /Quasi Govt. / Public Sector undertaking in India.
- c) A declaration as per annexure IB that the proprietor/partner(s)/authorized signatory of the bidding firm (in the case of proprietorship firm /partnership firm /limited company, as the case may be) is/are not associated with any other firm bidding for the same work.

- e) The un-priced "Abstract Form of Tender" & "Form of Tender" (without price quoted) shall not only be signed and stamped by the Bidder, but must also be duly witnessed and scan copy to be uploaded.
- f) A list of works which are in hand at the time of submitting the offer as per the enclosed proforma titled 'Concurrent Commitments of the Bidder' vide 'Annexure-II' in of the tender Document.
- g) A Declaration as per 'Annexure IA' that no conditions / deviations have been added in the price part of the Bid.
- h) Scan copy of the following Documents to be uploaded:
  - i) PAN Card
  - ii) GST registration certificate.
  - iii) Valid Trade Licence.
  - iv) Valid Professional Tax Clearance Certificate / Up to date tax payment.
  - v) Proof of possessing valid Employees' Provident Fund (EPF) Account.
  - vi) Proof of being registered with Employees' State Insurance Corporation (ESIC).
- i) Details of the firm as per "BIDDER'S PROFILE" of the tender Document.
- j) Credentials in the form of copies of Letters of Award of Works along with corresponding Completion Certificates from owners to justify that the intending bidder satisfies the earlier mentioned prequalification criteria.
- k) TDS certificate including 26 AS to validate the legitimacy of the wok completion certificate/s submitted as credential.
- I) Certified copies of audited balance sheet and Profit and Loss account / Trading account for the last 3 (three) financial years (i.e. 2020-2021, 2021-2022, 2022-2023).
- m) Addendum/Corrigendum / Notice / Extension Notice issued and drawings (if any) duly signed by the Bidder under office seal.

The bidder will have to produce the original Documents or any additional Documents, if asked for, to satisfy the Authorities.

5.2.3 All the bidders should submit the e-tender in accordance with the Mode of submission of Bid as aforesaid.

#### 5.3 OPENING OF BIDS

Techno Commercial Part and Price Part (subsequently after Techno-Commercial evaluation) as stated above will be opened on the date and time as fixed in the e-tender Document on line.

#### 5.4 SECURITY DEPOSIT

- 5.4.1 For the successful Bidder, the Security Deposit shall be recovered from the bills as per clause no. 3.4 of G.C.C.
- 5.4.2 Refund of S.D. and forfeiture S.D. shall be guided by Cl. 3.5 (i) & (ii) of the G.C.C.

#### 5.5 VALIDITY OF OFFER

The e-tender shall remain valid for a period of 120 [One Hundred Twenty] Days from the date of opening the techno-commercial bid. If before expiry of this validity period, the Bidder amends his quoted rates or

tender, making them unacceptable to the Trustees and / or withdraws his e-tender, the Earnest Money deposited shall be liable to forfeiture at the option of the Trustees/ Sanctioning Authority/Engineer.

#### **5.6 EARNEST MONEY REFUND**

The Earnest Money received, will be refunded or released as the case may be to the unsuccessful Bidders without any interest after opening of Price bid of the e-Tender document.

#### 5.7 DETAILED SCRUTINY OF E-TENDERERS

- 5.7.1 During the course of examination of Techno Commercial Part of the bid, the bidders, if asked for, shall furnish any or additional Document(s) for the purpose of evaluation of his / their bids. The price bids of those bidders who meet the qualifying criteria of NIT shall be opened.
- 5.7.2 During techno-Commercial Evaluation of tender, an offer shall be considered non-responsive in case:-
  - (i) is not accompanied by requisite Bid Document Fee,
  - (ii) validity of the offer is less than tender stipulation,
  - (iii) It does not meet the Qualification Criteria as stipulated in the NIT.
  - (iv) The bidder submits conditional offer / impose own terms and conditions / does not accept tender conditions completely.

In addition to above, a bidder may be disqualified if -

- a) The bidder provides misleading or false information in the statements and Documents submitted.
- b) Record of unsatisfactory performance during the last seven years, such as abandoning of work or rescinding of contract for which the reasons are attributable to the non-performance of the contractor or inordinate delays in completion or financial bankruptcy etc.

The decision of SMP, KOLKATA in this regard shall be final and binding on the Bidder.

# 5.8 SUPPORT/ PREFERENTIAL TREATMENT TO MICRO & SMALL ENTERPRISES (MSEs):-

Policies of the Government to support Micro and Small Industries (MSEs, registered as per the following sub-clauses) in comparison to non-MSE enterprises shall apply to this procurement.

#### 5.8.1 Registration of MSEs

MSEs interested in availing such benefits must enclose with their offer the Udyam Registration Certificate with the Udyam Registration Number as proof of their being registered Udyam Registration Portal. The certificate shall be of latest but before the deadline for submission of the bid.

#### 5.8.2 Support to MSE

- a) Tender sets shall be provided free of cost to MSEs.
- b) MSEs shall be exempted from payment of Earnest Money.
- 5.8.3 Further, in case additional benefits in the form of Purchase preference to MSE is allowable in any tender for supply of goods or services (provided it is feasible to give part orders to different bidders), the following provision may be included additionally:

"The Procuring Entity reserves its option to give purchase preference to MSEs compared to the non-MSE enterprises as per policies of the Government from time to time. This preference shall only apply to products produced and services rendered by Micro and Small Enterprises. If an MSE bidder quotes a price within the band of the lowest (L-1) +15 percent in a situation where the L-1 price is quoted by someone other than an MSE, the MSE bidders are eligible for being awarded up to 25 percent of the total quantity being procured if they agree to match the L-1 price. In case of more than one such eligible MSE, this 25 percent quantity shall be distributed proportionately among these bidders."

#### 5.9 EVALUATION CRITERIA

5.9.1 During evaluation of Price Part, provided that the bidder submits his offer following e-tender stipulations & specifications, **the overall lowest offer received** shall be considered for acceptance by the Trustees.

## 5.10 ACCEPTANCE OF TENDER

- 5.10.1 SMP, KOLKATA reserves the right to accept / reject any / all offer(s) without assigning any reason thereof and also reserve the right to accept the tender in part or as a whole.
- 5.10.2 Any attempt to exercise undue influence in the matter of acceptance of Tender is strictly prohibited and any Tenderer who resorts to this will render his tender liable to rejection.
- 5.10.3 The successful Tenderer will be notified in writing of the acceptance of his tender. The "Tenderer" then becomes the "Contractor" and he shall forthwith take steps to execute the Contract Agreement within six weeks of issue of Letter Of acceptance and fulfil all his obligations as required by the Contract.
- 5.10.4 Work experience, as a sub-contractor or supply contractor shall not be considered as the requisite qualification.

#### 5.11 MISCELLANEOUS

- i. Bidder shall submit his offer for complete scope of work, strictly in accordance with the tender Documents. Any deviation from the tender Documents and / or any incomplete tender shall not be considered.
- ii. The bidder shall not impose his own terms & conditions in his offer or quote his rates based on his own terms and conditions, such E-Tenderers are liable to rejection at the option of the Trustees without further reference to the bidder.
- iii. All materials shall have to be procured by the successful Bidder and shall be of the best and approved quality conforming to relevant specifications. The successful Bidder shall also arrange for the supply of all labour, tools and plants as stipulated in the Special Conditions of Contract, required for efficient execution of the work.
- iv. All measuring units are in Metric System and rates and sums in the tender are in Indian Currency. The language used throughout shall be in English.
- v. The Tender Documents with all the enclosures, appendices, Abstract Form of Tender and Form of Tender shall be required to be complete, duly filled in and signed and uploaded.
- vi. The Bidder shall give a declaration about the names of their relations employed in SMP, KOLKATA. It is not the intention to debar the Contractors from working if their relatives are working in SMP KOLKATA, but such a declaration is necessary in the interest of Trustees against any possible lapses.

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# 6. SPECIAL CONDITIONS OF CONTRACT

E-TENDER FOR CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

#### **6.0 PREFACE**

These provisions though given in a separate section are part of the tender documents which must be read as a whole, the various sections being complementary to one another and are to be taken as mutually explanatory. These provisions shall be read in conjunction with the other parts of the tender documents viz. General Conditions of Contract, Notice Inviting E-Tenderers, Instructions to Bidder, Technical Specifications, Drawings, Bill of Quantities and other documents forming part of the Contract. In case of any discrepancy or ambiguity in the documents, the order of precedence of the documents as stated below will apply. In particular, these provisions will over ride those in the General Conditions provided there is discrepancy between them.

#### 6.1 CORRELATION AND ORDER OF PRECEDENCE OF TENDER DOCUMENTS

If the stipulations in the various tender documents be found to be at variance in any respect, one will override others (but only to the extent these are at variance) in the order of precedence as given in the list below, i.e. any particular item in the list will take precedence over all those placed lower down in the list.

- Order letter.
- Bill of Quantities.
- Drawings.
- Particular Specifications of work.
- Special Conditions of Contract.
- General Conditions of Contract.

In case of any dispute, question or difference either during the execution of the work or any other time as to any matter or thing connected with or arising out of this Contract, the decision of the Sr. Dy. Manager (IZ&R), I&CF Division, Haldia Dock Complex, thereon shall be final and binding upon all parties.

### **6.2 SCOPE OF WORK**

The scope of work comprises of construction of windscreen system along with RCC boundary wall from GC Berth Main Gate to up ramp of NH-41 flyover and masonry boundary wall at the western side of dock exterior zone. The work comprises of dismantling, earthwork in excavation, concreting, brickwork, reinforcement works, along with supplying, fabrication and erection of M.S Structural works, fixing of knitted fabric as per specifications and construction of security goomty along with installation of relevant facilities as mentioned in the BOQ together with painting of the structural steel etc. and other miscellaneous works. The wind barrier system, boundary wall and temporary fencing is to be constructed and erected as per design and drawing all complete including all appurtenant works as described and set forth in the Bill of Quantities, Special Conditions of Contract, Technical Specifications of Works, Specification for Materials and Workmanship with all additional or varied works which may thereafter be required in accordance with Clause 7 of the General Conditions of Contract and as per the direction and up to the satisfaction of the Engineer.

During execution of the work, if the Engineer-in-Charge or the competent authority of HDC decided to shift the location of the work within an ambit of 5 km from the location as mentioned in the instant tender considering the requirement of the management, the successful tenderer shall be bound to execute the work without any extra cost or time.

The works also include all appurtenant works as directed and set forth in Bill of quantities, Special Conditions of Contract, Technical Specification of the works, Specification for materials and workmanship with all additional or varied works which may thereafter be required in accordance with clause 7 of General Conditions of Contract and as per direction and per direction and up to satisfaction of the Engineer.

During execution of work, it is to be noted that the successful tenderer may have to execute any other appurtenant work beyond the BOQ items and / or beyond the BOQ quantity of any tender item as may be required for a successful completion of the work and as directed by the Engineer or his representative at site.

The intending tenderer shall inspect the site of work in consultation with the Sr. Dy. Manager (IZ&R), I&CF Division, HDC and acquaint himself / themselves with the nature of work before preparing his tender. His attention is being drawn to Clause No. 3.1 of the General Conditions of Contract in this regard. No excuse or ignorance as to the site conditions, availability of space for storing materials and approaches to site etc., will be entertained.

Unless otherwise specified, the work to be provided for by the contractor shall include but not be limited to the following:

- a. Provide all materials, supervision, services, scaffolding, shoring, strutting, from work, reinforcements, vibrators, other tools and plants, transportation, water supply, temporary drainage, dewatering of surface, necessary approaches, temporary fencing and temporary lighting as required for safety and work purposes etc.
- b. Prepare and submit for review and assessment to the Engineer working drawings showing how the work is actually going to be done including storage of materials, fencing etc., as well as sequence of construction and all other details as may be required by him.
- c. Providing all survey equipment's with competent personnel to carry out survey works required for execution of the work.
- d. Providing temporary drainage diversion works during execution of the work.
- e. To exercise rigid quality control in execution of the work and to carry out sampling, testing, and furnishing the test results to the Engineer for the quality of construction materials and the quality of the work done.
- f. The contractor shall at all-times carry out work in a manner creating least interference to the existing services / Traffic operation / Dock Operation while consistent with the satisfactory execution of the same. For all works, the Contractor shall, in accordance with the direction of the Engineer-In-Charge provide and maintain during the execution of the work, a passage for traffic operation along a part of the existing carriageway under improvement in addition to putting cautionary notice as may be required / directed by the Engineer for safety of workers and the users.
- g. The Contractor shall provide and maintain barricades, signs, lights, and flagman, as necessary, at either end of the Bye-passes, relocation and at such intermediate points as directed by the Engineer-In-Charge for the proper notification of the construction area. No extra payment shall be made for such work.
- h. The contractor shall carry out the work in phased manner as per availability of the site as the areas are very busy and cannot be blocked wholly at a time and also for a long period so that normal day to day activities are not affected for which no such extra payment will be entertained.

#### 6.3 LOCATION

The site of work is located along side of existing boundary wall from GC Berth Main Gate to recently constructed gate near Central Workshop at HDC, Haldia.

#### 6.4 ACCESS TO THE SITE

## (a) By Road:

All-weather hard top road approachable from N.H. 41 and State Highway exist right up to the area of work.

#### (b) By Rail:

S. E. Railway Branch Line connects Haldia with the Panskura Railway Station.

#### 6.5 INSPECTION OF SITE

The Bidder shall inspect the site of work and thoroughly familiarise himself with the nature of work, site conditions, and access to the site and location before submission of the tender. He should contact the Sr. Dy. Manager (IZ&R), I&CF Division, Haldia Dock Complex at his office at 2<sup>nd</sup> Floor, Operational Building, Chiranjibpur, for collecting information about the site before submission of the tender. No excuse will be entertained afterwards on the above ground. In case any part of the site cannot be handed over to the successful Bidder in time, no compensation for loss of labour or any other cause nor any claim will be entertained by the Trustees. Suitable extension of time shall, however, be granted to the successful Bidder on that ground if applied for.

#### 6.6 SITE CONDITIONS & METHOD OF WORK

The work shall have to be executed along the existing dock boundary wall area, Haldia, H.D.C.

The sequence of work shall have to be programmed by the successful Bidder without hampering the existing operational activities in the surrounding areas. The working hours may have to be adjusted as the situation demands. No claim for idle labour on this account shall be entertained.

Proper care should be taken to provide adequate protection to the existing structures, cables (high voltage, telephone, computer etc.), underground pipes and ducts, water lines and all such installations against any damage at the Contractor's risk and expense. Any damage caused to the existing structures / facilities or defect arising during construction shall have to be rectified forthwith as directed to the satisfaction of the Engineer, without charging extra.

The working hours may have to be adjusted as the situation demands but no claim for idle labour on this account shall be entertained. The work may be carried out in Sunday(s) or Holiday(s) or beyond Normal working hour(s), if the situation so demands without any extra cost.

Further, if so required by the Engineer in the interests of Normal working of the Port, it is found necessary to shift / suspend some construction activity for some duration, this shall be done in compliance with the instructions of the Engineer and as per relevant clause of the G.C.C.

#### 6.7 PARTICULARS OF EXISTING WORKS

Such information as may be given in the specification as to the existing features and works other than those now under construction as part of the present Haldia Dock Complex given without warranty of accuracy and neither the Trustees nor the Engineer will be liable for any discrepancies therein.

#### 6.8 DRAWINGS

Tender drawings are for providing an indication of the nature and extent of the work and are tentative. The actual work will have to be executed without any reservations at accepted rates as per final detailed drawings, which would be made available by the Engineer at an appropriate time.

The Engineer can modify the drawings at any time during of the contract for successful completion of the work. Working drawings as and when necessary, shall be provided by the Contractor and got approved by the Engineer.

#### 6.9 SETTING OUT WORKS AND INITIAL MEASUREMENTS

The Engineer shall provide the initial references and a benchmark for the setting out of the work. It will be the Contractor's responsibility to set out the works accurately and get them checked by the Engineer.

The Contractor shall provide at his own expense all necessary instruments, staff and labourers for the checking of the survey.

The Contractor shall be responsible for the true setting out of the Works, and for the correctness of all dimensions, levels, lines, positions and alignment. Any error in any of the dimensions, levels, lines, positions and alignment found in any part of the Works shall be rectified by the Contractor at his own cost. Checking by the Engineer at any stage shall not absolve the Contractor from any responsibility for proper setting out and construction of the Works to correct levels, lines, positions and alignment.

Before commencement of the work, the Contractor shall take initial measurements and spot levels at intervals as ordered by the Engineer and after verification by the Engineer, these records shall be signed by the Contractor and serve as the initial record for earthwork measurements. The Contractor shall give the Engineer or his representative at least 24 hours prior notice in writing of the time when any part of the setting out of the works will be ready for checking.

#### 6.10 TIME OF COMPLETION

The work is urgent in nature and must be commenced immediately on receipt of the work order and to be completed in all respects including preliminary time from the date of placement of work order for **Part - A:**12 months from the date of placement of order and for **Part - B:** 24 months from the date of placement of order.

### 6.11 MAINTENANCE PERIOD

The Contractor shall maintain the works allotted to him as per Clause 9.0 of the General Conditions of Contract for a period of 03 (three) years from the date of completion as certified by the Engineer or his representative in Form GC-1.

The defect liability period for the work is **3 (Three) years** from the date of completion. During this period, if any defect arises the contractor is bound to repair the same or take any other action as directed by the Engineer including replacement of the defective portion and redoing the same at his own cost within 7 days in case of repairing and 21 days in case of replacement and re-doing from receipt of such instruction failing which the work may be done by the Trustees' by some other agencies and the cost of which including 19 1/4 % departmental charges plus GST will be recovered from the security deposit or any other dues of the contractor.

### 6.12 TEMPORARY OR ENABLING WORK

The Contractor shall submit to the Engineer for his approval not less than 28 days before commencement or erection of any part of Temporary Works, drawings and detailed proposals for the method of construction of temporary works such as office, store, and temporary platforms, pre-casting yard, workshop etc. which he intends to construct for the execution of the contract and no such work shall be constructed before obtaining the written approval of the Engineer-in-Charge. The Contractor shall also

submit his calculations relating to the design of temporary works, strength etc., if required by the Engineer-in-Charge and shall carry out the modifications that the Engineer-in-Charge may require of such temporary works at Contractor's own cost. As with the permanent works, the Contractor shall take all precautions while carrying out the temporary works and shall abide by regulations of all statutory authorities. Notwithstanding approval by the Engineer-in-Charge, the Contractor shall be solely responsible for the safety and proper execution of the temporary work and all related permanent work. The Contractor at his own cost shall repair any damage occurring to part or whole of the permanent work due to any failure of the temporary works. These provisions will apply to all enabling works also. The contractor shall obtain permission for any Temporary Works and would ensure that during execution of works the statutory requirements of the concerned authorities such as Kolkata Port Trust, Police, Customs, etc. would be complied with.

### 6.13 CONTRACTOR'S SITE OFFICE, STORE SHEDS, ETC

On an application from the Contractor, land near to the site of work will be allotted by the Trustees for the construction of Site Office, Store etc. For such allotment a rent will be recovered from Contractor's bill at prevailing rates of HDC plus applicable GST. The Contractor shall hand over vacant possession of the land free from all encumbrances within two months from actual date of completion of work (as stated in G.C.-I). In case the contractor does not remove the site offices, store etc. within two months from the actual date of completion, the contractor will have to pay compensation equivalent to **three times** the applicable licence fee for the plot of land allotted to him temporarily for site offices, store etc. as per Schedule of Rent of Ko.PT's land and buildings at Haldia and to be recovered from his final bill / Security Deposit. The Contractor shall build office, sheds etc. on the land allotted to him as approved by the Engineer-in-Charge or his representative and shall maintain a clean hygienic condition throughout the period of their use.

The Contractor shall maintain a Site Order Book at his site office and all orders and instructions issued to him from time to time by the Engineer or his representative will be recorded in the Site Order Book. The Contractor shall promptly sign each entry as a token of having received such orders.

### 6.14 KEEPING THE SITE AND WORKING AREA CLEAR

The Contractor shall at all times keep the site and working areas free from all surplus materials, rubbish and offensive matter all of which shall be disposed of in a manner to be approved by the Engineer's Representative. As the works will be carried out mainly inside of operational buildings of HDC, the Contractor has to make necessary arrangement to clear the rubbishes etc. from the buildings, at the end of day's work at his own cost and risk.

#### 6.15 SUPPLY OF MATERIALS BY THE CONTRACTOR

It will be the responsibility of the contractor to make timely procurement of all materials for both temporary and permanent works required in accordance with the Bill of Quantities or for any extra/additional work required as per the directions of the Engineer. The contractor shall procure cement, reinforcement steel, structural steel, wind screen and all other construction materials used in permanent works only from manufacturers approved by the Engineer.

The contractor will be allowed to take away surplus materials on completion of the work, subject to Engineer's verification of contractor's records of entry and consumption of materials in the works.

#### **6.16 TESTING OF MATERIALS & EQUIPMENT**

The contractor shall provide at his own cost all necessary equipment and all necessary facilities for such testing which by the nature of work will have to be done at site.

Equipment will be in the nature of sufficient number of slump cones, standard metal moulds for concrete test cubes / beams, sets of standard IS sieves, weighing balance, graduated measuring cylinders, etc.

These are only indicative and it may be noted that equipment are to be provided and testing carried out as per direction of Engineer without any reservation and at the cost and expense of the contractor.

Any other testing of materials or workmanship desired by the Engineer shall be carried out by the contractor at his cost from National Test House or any other Government registered laboratory or Institutional Laboratory as approved by the Engineer-in-Charge. The testing charges and all other incidental charges like packaging and transporting the test samples etc. shall have to be borne by the contractor and must be included in the rates.

#### 6.17 PROGRAMME OF WORK AND PROGRESS REPORT

The contractor shall suitably schedule various activities required for completion of the work and shall submit detailed programme of work in writing in the form of a Bar / PERT Chart before commencement of the work.

If desired by the Engineer, the contractor, during execution of the work, shall submit on the first day of each month the progress report of the work in a manner as directed, showing therein corrective measures to be taken to make up the backlog, if there be any.

The contractor shall submit a detailed programme of work within 7 [seven] days from the date of Work Order / L.O.I. showing the commencement, duration and completion time of all major items of work including procurement of all materials etc,. The sequence of work shown in the programme must be practicable and compatible with technical specifications and conditions prevailing at site. The contractor shall maintain the progress of work as per the approved programme. In case of any slippage of programme the engineer may require the contractor to augment the input of plant, equipment, labour of any item as he may deem fit. The contractor shall comply with the engineer's directive in this regard, without any extra charge whatsoever.

In case of delays caused due to conditions or circumstances beyond the control of the contractor, the delays must individually be informed to the Engineer forthwith in writing.

Responsibility of the Contractor for methodology of works:

- i) The Contractor shall be solely responsible for the methodology and detailed working for the whole of the works, keeping in mind the site conditions and shall supply to the Engineer such particulars thereof as he may require from time to time.
- ii) The Contractor shall submit within the time stipulated by the Engineer in writing, the details of actual methods that would be adopted by the Contractor for the execution of each item of the work supported by necessary details.
- iii) Approval, for the Drawings and sketches, if necessary including those of the plant and machinery that would be used, their locations, arrangements for conveying and handling materials etc., should be obtained from the Engineer-in-Charge well in advance for starting each item of work. The Engineer reserves the right to suggest modifications or make concrete changes in the methods proposed by the Contractor whether accepted previously or not at any stage of the work, to obtain the desired accuracy, quality and progress of the work, which will be final and binding on the Contractor.

#### 6.18 SAFETY MEASURES

The contractor shall adhere to safe construction practice, guard against hazardous and unsafe working conditions and follow all safety precautions for prevention of injury or accidents and safeguarding life and

property. The contractor shall comply with relevant provisions of Dock Workers (Safety, Health and Welfare) Act – 1986 and Dock Workers (Safety, Health and Welfare) Regulation – 1990 and Safety Officer of the Trustees or Safety Inspectors shall be afforded all facilities for inspection of the works, tools, plant, machineries, equipments etc. wherever so required. The contractor shall further comply with any instruction issued by the Engineer, Trustees' Safety Officer, Safety Inspector in regards to safety which may relate to temporary, enabling or permanent works, working of tools, plants, machineries, equipments, means of access or any other aspect.

The contractor shall provide all necessary first aid measures, rescue and lifesaving equipment to be available in proper condition.

The contractor shall provide PPE's (Personal Protective Equipments) such as, helmet, safety shoe etc. to all workers and shall also provide job specific PPE's e.g. safety belts for working at heights, protective face and eye shield, goggles, hand gloves for welding / gas cutting works; protective foot wear and gloves for hot works, facemasks, gloves and overalls for painting works, mixing and handling materials etc , as directed by the Engineer.

All safety rules shall be strictly followed while working on live electrical systems or installations as stipulated in the relevant safety codes.

Use of hoisting machines and tackles including their attachments, construction tools, machineries and equipments shall comply with the relevant safety codes.

Before allowing workers in sewers, manholes, any duct or covered channel etc, the manhole covers shall have to be kept open and ventilated at least one hour in advance and necessary safety torches / lamps should be inserted first before allowing entry to the worker. Suitable hand gloves and other safety gear will be provided to the worker during handling / removing of slushes / sludge etc. without any extra cost. The contractor shall adopt all the above safety measures at his own cost.

The successful bidder shall also ensure that -

- (i) No damage is caused to plants and vegetations unless the same is required for execution of the project proper.
- (ii) The work shall not pollute any source of water / land / air surrounding the work site so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life.
- (iii) His office & labour hutment etc. shall be maintained in a clean and hygienic condition through out the period of their use and different effluents of the labour hutment shall have to be disposed off suitably.
- (iv) Proper safety measure including insurance coverage of workmen during execution of work will be ensured by the Contractor. In case of any untoward incident happened during execution of work, Contractor will be solely responsible for such incidence.

#### 6.19 HOLIDAY OR SUNDAY WORK

Subject to provisions in local Acts and any statutes of the State, the Contractor shall arrange for working on Holidays and Sundays whenever so desired by the Engineer to expedite progress and complete the works in time.

The Contractor shall not be entitled to any additional payment for taking up works on Holidays and Sundays. The Contractor should be prepared to resort to round-the-clock working by following shift timings for labour.

#### 6.20 POWER SUPPLY

If available and if required, suitable power supply may be arranged by the Trustees at the nearest existing supply point of the site of work on receipt of request letter from the Contractor to that effect. All necessary arrangements for the distribution at site will have to be made by the Contractor at his own cost as approved by the Trustees' Plant and Equipment Division.

Charges for consumption of power shall be periodically recovered from the Contractor's Bill at the rates of WBSEB as prevalent amended from time to time along with departmental overhead of 19.25% including installation and hire charges for meters. The Trustees do not guarantee uninterrupted power supply from the above sources and Contractor shall not be compensated for any delay in providing / irregularity of power supply. The Contractor shall have to arrange for the supply of power at his own cost during such periods.

#### **6.21 WATER**

The Contractor will arrange for supply of water both for drinking and for construction purposes. However, on written request from the Contractor, water for drinking and for construction purposes may be made available from the exiting water line of the Trustees at a point near the site of work. The contractor will have to arrange for laying pipelines, as necessary, as per approval of the Engineer or his representative, for storing and distributing the same to the work point at his own cost.

For supply of water by Trustees to the Contractor, an amount equivalent of **1% (one percent)** of the gross bill value of work shall be progressively recovered from the running bill including final bill as applicable.

#### 6.22 METHOD OF MEASUREMENT

Unless otherwise specified in the Particular Specifications and Bill of Quantities, the work shall be measured according to the latest PWD's Schedule. For details of measurement not covered by the above the relevant parts of IS: 1200 (latest revision) shall be referred to.

#### 6.23 ON ACCOUNT PAYMENT

On account payment to the Contractor shall be arranged as and when required at the discretion of the Sr. Dy. Manager (IZ&R), I&CF Division on the basis of measurements of completed works at the quoted rates in the Bill of Quantities. The terms of payment shall be in accordance with Clause-6 of the General Conditions of Contract.

The Bills should be submitted by the contractor in quadruplicate to the Sr. Dy. Manager (IZ&R), I&CF Division Office with necessary documents in original.

Subject to the availability and feasibility of system, HDC may make payment directly to the contractor's designated bank account. For this purpose, the contractor will have to indicate (i) name of bank (ii) branch name (iii) branch code and (iv) designated account number in the "Abstract Form Of Tender ". In case payment is made directly through bank, the contractor may be required to submit a pre-receipt as per instruction of HDC.

## 6.24 WATCHING OF MATERIALS

The successful Bidder will have to arrange for proper security of all materials and tools brought by him. He may be allowed to post his Watchmen round –the-clock at the work-site with valid permit. No extra amount will, however, be paid separately for watching. The Contractor should quote his rates keeping this in view.

#### 6.25 PLANT & EQUIPMENT

The successful bidder shall supply all necessary labour, tools, plants and equipment's with fuel and operator required for successful execution of the work at his own cost.

#### 6.26 ESCALATION / VARIATION ON PRICES

No Escalation / Variation on the prices on any account will be considered for adjustment / payment for Part-A (NORTHERN SIDE).

However, Escalation / variation is applicable for Part-B (WESTERN SIDE) as per following:

If the prices of materials and /or wages of labour actually required for execution of the work increase or decrease, the Contract price shall be adjusted as per the provisions detailed below subject to the condition that such price adjustment shall be made only for the work done during the stipulated period of the Contract. Adjustment of contract price for materials and labour shall be worked out based on the following provisions:

#### **Formula for Price Variation**

The formula for price variation will thus be:-

$$Pa = Po \left[ \frac{\left( F + a \left( \frac{M1}{Mo} \right) + b \left( \frac{L1}{Lo} \right) \right)}{100} \right] - Po$$

Where: -

Pa is then adjustment amount payable to the supplier (a minus figure will indicate a reduction in the contract price) on the date of supply.

Po is the executed value under consideration [as part of sanctioned tender value (STV)].

F is the fixed element (as the percentage of the total price) not subject to price variation, i.e 15 %.

a is the assigned percentage to the material element in the contract price, i.e 63.75 % b is the assigned percentage to the labour element in the contract price i.e 21.25 % (F, a and b being percentages should total 100)

**LO** = Minimum Daily Wages in rupees of an unskilled Worker at Haldia area as fixed by Notification of Govt. of India, Ministry of Labour & Employment for the month in which tenders were stipulated to be received, including extension, if any.

**LI** = Average value of Minimum Wages in rupees of an unskilled Worker at Haldia area as fixed by Notification of Govt. of India, Ministry of Labour & Employment for the 3 months previous to the month under consideration for adjustment of contract prices.

**MIO** = All India Wholesale Price Index for all commodities as published by the Office of Economic Adviser to Government of India, Ministry of Commerce & Industry for the month in which tenders were stipulated to be received, including extension if any.

**MI** = Average of the values of All India Wholesale Index for all commodities for the 3 months previous to the month under consideration for adjustment of contract prices as published by the Economic Adviser to Government of India, Ministry of Commerce & Industry.

The following principles shall be followed while working out the indices mentioned above:

i) Price adjustment will be considered on calendar month basis w.e.f. commencement of the work.

ii) The index (MI) relevant to any month for which such compensation is paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to the date of completion after the quarter covered by the last such instalment of payment, is less than three months, the index MI shall be the average of the indices for the months falling within that period.

Irrespective of variation in minimum wages of any category of labour, for the purpose of this clause, the variation in the rates for an unskilled worker as stipulated alone shall form the basis for working out the escalation/ de-escalation compensation payable/ receivable on the labour component.

In the event of the price of materials and/or wages of labour required for execution of the work decrease/s, there shall be downward adjustment of the cost of work so that such price of materials and/ or wages of labour shall be deductible from the cost of Work under this Contract and in this regard, the formula hereinbefore stated under this clause shall mutatis mutandis apply, provided that: The Engineer shall be entitled to lay down the principles on which the provision of this sub clause shall be implemented from time to time and the decision of the Engineer in this regard shall be final and binding.

Provisional Indices on any account will not be considered as basis for computation of variation in prices.

No escalation /variation will be entertained on account of fuel separately.

An undertaking should be given by the contractor to the following effect in case it becomes necessary to make the final payment before he has submitted the required data/documents related to the PVC:

"It is certified that there has been no decrease in the price of price variation indices and, in the event of any decrease of such indices during the currency of this contract, we shall promptly notify this to the purchaser and offer the requisite reduction in the contract rate."

No price increase is allowed beyond original contract period.

Total adjustment will be subject to maximum ceiling of 05 (five) % of Po.

No price adjustment shall be payable if this is less than or equal to 02 (two) % of Po.

However, in case of variation on lower side, actual adjustment amount may be effected.

Price adjustment bill should be submitted only quarterly for the work executed during the quarter. Even if there is no price adjustment claim, contractor must submit all relevant data to prove that there is no downward variation. In any case he must submit a declaration as follows;

"It is certified that there has been no decrease in the price of price variation indices and in the event of any decrease of such indices during the currency of this contract we shall promptly notify the same to the purchaser and offer requisite reduction in the contract rate".

## 6.27 A. CONTRACT LABOUR LAWS

The Contractor must comply with the provisions of Contract labour (Regulation & Abolition) Act 1970 and Contract Labour (Regulation & Abolition) Central Rules 1971 and the rules framed there under with all modifications/amendments being enforced from time to time.

The Contractor shall indicate maximum number of workmen to be engaged on any day for execution of the work in the appropriate place in the ABSTRACT FORM OF TENDER & he shall have to obtain a regular /permanent license as per sec12(1) of the Contract Labour Act.

Further, whenever a contract work has commenced or completed, the contractor has to intimate the same to the Assistant Labour Commissioner(Central) /labour Enforcement Officer (Central) in Form IV-A, within 15 days of such commencement or completion.

The contractor has to obtain a certificate of registration under "Building & Other Construction Workers (Regulation of Employment & Conditions Of Service) Act-1996 and Central Rule 1998 and his rate shall include a cess payable @ 1 % of the cost of construction as applicable under "Building & Other Construction Workers Welfare Cess Act -1996 & Welfare Cess Rules 1998.

The contractor has to arrange for displaying the name of the Regional Labour Commissioner (Central), Asst. Labour Commissioner (Central) & Labour Enforcement Officer (Central) at his worksite(s).

The contractor shall inform the Principal Employer the date, time & venue of disbursement to be made by him to his workers.

The successful bidder shall also be required to put up a notice at the site of work mentioning the date, time & venue of disbursement to be made by him to his workers and he or his authorized representative shall have to be present during period of disbursement.

#### 6.27 B. COMPLIANCE WITH E.P.F & M. P. ACT

The successful contractor will have to comply with provision of EPF & MP Act –1952 (along with amendments, if any), issued from time to time.

If asked for by the Employer, the contractor will be required to submit photocopy of all payment challans and produce the original for verification to the representative of the principal employer, i.e. Sr. Dy. Manager (IZ&R), I&CF Division.

#### 6.27 C. COMPLIANCE WITH ESI ACT

If applicable, the successful bidder will have to comply with provisions of "Employers State Insurance Act – 1948", along with amendments (if any) issued from time to time. He shall obtain ESI registration and shall deduct employees' contribution as applicable percentage of the wages of each of the employees' and shall deposit the same together with employer's contribution as applicable percentage of such total wages payable to the employees or at such rates as fixed by the competent authority from time to time.

In case, where an employee is not covered under ESIC Scheme (or contribution not paid for him regularly) and meet an accident during and arising out of his employment, the contractor being the immediate employer, shall be liable to pay him suitable compensation.

The contractor will be required to submit Photo copies of all payment challans and produce the original for verification to the representative of the principal employer, i.e. Sr. Dy. Manager (I&CF).

## 6.27 D. INDEMNIFICATION

The successful bidder shall be deemed to indemnify and keep indemnified the Trustees from and against all actions, claims, demands and liabilities whatsoever under and in respect of the breach of any of the provisions of any law, rules or regulations having the force of law, including but not limited to

- a) The Minimum Wages Act, 1948.
- b) The Dock Workers (Regulation Of Employment) Act, 1948
- c) The Building And Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996
- d) The Dock Workers' Safety, Health & Welfare Act, 1986
- e) The Payment of Wages Act, 1936.
- f) The Workmen's Compensation Act, 1923.
- g) The Employees Provident Fund Act, 1952.

- h) The Contract Labour (Regulation and Abolition) Act, 1970; Rules 1971.
- i) The Payment of Bonus Act, 1965.
- j) The Payment of Gratuity Act, 1972.
- k) The Equal Remuneration Act, 1976.
- I) The Employees State Insurance Act, 1948 & Employees State Insurance (Amendment) Act, 1989
- m) Child Labour (Prohibition and Regulation) Act, 1986.
- n) The Maternity Benefits Act 1961
- o) Interstate Migrant Workmen (Regulation of Employment & Conditions of Service) Act, 1979.
- p) Motor Vehicle Act, latest revision.

#### **6.28 FORCE MAJEURE**

In the event of either party rendered unable by Force Majeure to perform any obligation required to be performed by them under the Contract, relevant obligation of the party affected by such Force Majeure shall upon notification to the other party be suspended for the period which Force Majeure events lasts. The cost and loss sustained by the either party shall be borne by the respective parties.

The term "Force Majeure" as employed shall mean the events as below:

- i. Riot (unless solely restricted to or perpetuated by employees of the Contractor or his subcontractors / suppliers or occurring outside India) so far as it is uninsurable;
- ii. War, hostilities (whether war be declared or not), invasion, directed to or by India or act of foreign enemies, directed to India;
- iii. Rebellion, revolutions, insurrection, or military or usurped power, or civil war in India;
- iv. Fire, flood, cyclone, hurricane and acts of God.

Time of performance shall be extended by the period of delay, which is directly caused by the Force Majeure. Upon the occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid shall notify the other party in writing immediately but not later than forty eight hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of his claim.

Time of performance of the relative obligation suspended by the Force Majeure shall stand extended by the period for which such event lasts and affects the relative obligation directly. Such extension of time shall be without prejudice to the provision that time is essence of the Contract and any other terms and conditions related to time of completion as may provide elsewhere in the Contract

If the work is affected by Force Majeure lasting for more than 60 days at a stretch, the parties to the Contract shall settle the issue mutually.

#### 6.29 CUSTOMS AND SECURITY REQUIREMENTS

The Haldia Dock area is a custom bonded area and as such the Contractor shall comply with all regulations of the Port and Customs authorities extent and those that may be imposed from time to time in respect of the transit of all Contractor's plant, vehicles, materials and staff in the area.

The contractor shall fence the area that may be allotted to him inside the "Bonded area" of the Port for stores and other requirements with closely boarded C.G.I. sheets fixed to a suitable framework, to the full satisfaction of the Port and Security authorities.

The Contractor shall abide by all the regulations and rules of SMP, Kolkata applicable to the Haldia Dock Complex, as extant or as may be amended.

#### 6.30 DOCK PERMIT

Entry inside Dock Premises is chargeable and Dock permits which may be necessary for any purpose related to the work shall be issued **against payment at the prevailing rates of HDC**.

#### **6.31 TAXES**

The quoted rates should include all other Taxes excluding GST. GST as applicable shall be paid extra against proper invoice submitted by the successful contractor.

The contractor will be required to submit GST compliant invoice with all required details and also to be required to file timely and proper return so as to enable KoPT to get due input credit against GST paid of.

In case of any failure on the above account, GST amount even if paid by SMP, Kolkata shall be recoverable from the contractor, along with applicable interest if any.

#### **6.32 SETTLEMENT OF DISPUTES**

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with or arising out of the contract or the execution of the works, the same shall be dealt as per relevant provisions of the General Conditions of Contract and THE ARBITRATION AND CONCILITATION (AMENDMENT) ACT, 2015 and any statutory amendment thereof.

#### 6.33 ROYALTY

Royalty as applicable from time to time for various materials like sand, stone aggregates etc. obtained by the contractor, his agents/suppliers or sub-contractors from government or private quarry/land for the purpose of this contract work shall be paid by the contractor at prevailing rates. He shall indemnify the Trustees against any claim from the Government / other authorities for short or non-recovery of royalty charges and shall pay such short or non-recovered amount(s) on demand to the appropriate authorities at anytime.

# 6.34 INTIGRITY PACT

The successful bidder must submit the Integrity Pact as per attached General Condition of Contract.

## **6.35 SUFFICIENCY OF TENDER**

- i) The tender drawings and all data / information as furnished herein or inspected and / or collected by the tenderer for the purpose of the work should be properly assessed, interpolated or utilised in his offer at his own responsibility and HDC does not guarantee sufficiency or adequacy of the data / information so supplied to him or collected or understood by the tenderer.
- ii) The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates stated in the priced Bill of Quantities and the rates shall cover all his obligations under the contract and all matters and things necessary for the proper construction, completion, commissioning and maintenance of the work.
- iii) In case rate of particular item is printed erroneously in B.O.Q., the rate stated in the schedule of rates will prevail over the rate misprinted in B.O.Q.

### 6.36 PROVISIONS FOR SITE STAFF OF ENGINEER

After the issue of Engineer's notice to commence, the contractor shall as soon as possible make available of the following facilities for the staff of the Engineer and PMC at the Site of Work, all in accordance with the approval of the Engineer or his Representative and PMC and the Contract Price shall be deemed to be inclusive of the provision for all these facilities.

- (a) Office Facilities: Throughout the period of Contract, office accommodation at site for two rooms with electricity and water supply and air-conditioned ventilation for the sole use of Engineer's Representative and PMC and his staff. The room shall be provided and maintained with suitable furniture, peon facility as directed by the Engineer. An independent toilet facility shall have to be provided solely for the use of the client and PMC.
- (b) Equipment Facilities: Provide and maintain all necessary equipments in working condition for use of Engineer's staff and PMC such survey, testing of materials and any other instruments, equipment and apparatus as they may require for carrying out the contractual obligations. Provide computer with printer connection of latest model (not more than six month old) at site office and maintain the same with the required software and consumables.
- (c) <u>Transport facilities:</u> Shall make available, maintain and operate **two (2) separate good 4 wheeler vehicles** (Bolero/Sumo/Equivalent) with AC facilities having a minimum sitting capacity for 4 persons with driver, fuel, etc. for both. This is for the use of (1) The Engineer or his representative and (2) For PMC team for survey, testing, inspection, measurement etc. related to the work on working days from 8:00 A.M to 10:00 P.M during currency of contract. The 2 vehicles shall not be more than 3 [Three] years old. Any failure in supply / sudden withdrawal / stoppage will attract deduction from bills @ HDC's similar operating transport contract. In case of exigency and work during night hours, the cars shall be made available for the entire night. The supply of one vehicle shall start on 7<sup>th</sup> day from the date of work order and one more vehicle subsequently after deployment of PMC team or immediately if required and shall finish on the date of completion of work including extension of date of completion, if any.

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# 7. TECHNICAL SPECIFICATIONS

E-TENDER FOR CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

#### 7.1 GENERAL

- All materials to be used in the permanent works shall be of the best quality of the kind and to the approval of the Engineer. They shall comply with the Specifications laid out in the BIS codes (referred to as IS) as revised or modified up to the date one month prior to the Tender Date unless otherwise specifically mentioned in the Tender Documents.
- Samples of materials to be supplied and used by the Contractor in the works shall be subject to the prior approval of the Engineer. For this purpose, the contractor shall furnish in advance, representative samples in quantities and in the manner as directed by the Engineer for his approval.
- Materials brought to the site, which in the opinion of the Engineer do not conform to the approved sample, shall, and if so directed by him, be removed by the contractor within 24 hours at his own cost from the site and replaced by materials of approved quality at no extra cost.
- ➤ The contractor shall produce manufacturer's test certificates for the materials procured by him. The Engineer may carry out or order any test on any of the materials as he may decide. The contractor shall, at his cost and expense, supply requisite materials for this purpose and render such assistance to the Engineer as he may require. The cost of testing will be borne by the Contractor. Further, if and as required by the Engineer, the contractor shall get the materials tested from approved laboratories at his expense and produce the test certificates for the inspection of the Engineer.
- ➤ If the Engineer is of the opinion that the materials are not suitable for use on the works; he may reject the consignment, notwithstanding the Manufacturer's certificates. The Engineer's decision regarding the suitability of materials brought to site for use in the works shall be final and binding on the contractor, who shall remove the rejected materials from site and replace them with materials of required quality.
- In spite of approval of the Engineer of any material brought to the site, he may subsequently reject the same if in his opinion the materials has since deteriorated due to long or defective storage or for any reason whatsoever and is thereby considered unfit for use in the permanent works. Any material thus rejected shall be immediately removed from the site at contractor's cost and expense.
- All materials bought to the site shall be properly stored and preserved to ensure their quality and fitness during the course of their use in work. If the storage arrangements are not to the Engineer's satisfaction, he may direct the contractor for arranging proper storage to which the contractor shall have to comply. The materials shall be stored in adequate quantities well in advance to meet the construction schedule and shall be guarded in the manner directed by the Engineer and to his satisfaction.
- All materials used in the works shall be of the best kind and to the approval of the Engineer's Representative. The materials supplied and the workmanship shall satisfy the relevant clauses as given below and in the Bill of Quantities of the tender. The specifications of the materials and workmanship which do not cover the above shall be referred to BIS specifications/workmanship.

#### 7.2 EARTH WORK

#### 7.2.1. INITIAL MEASUREMENTS AND JOINT RECORDS:

Before commencement of excavation or filling, the Contractor shall take initial measurements and final measurements at intervals as ordered by the Engineer and after verification by the Engineer these shall be signed by the Contractor and serve as the initial record for earth work measurement.

## 7.2.2 EXCAVATION

#### 7.2.2.1 SCOPE OF EXCAVATION WORK

Excavation for construction or other work shall consist of removal of vegetation over the area, cutting, removal and satisfactory disposal of all materials as necessary for the construction of the facilities or other purposes, in accordance with the requirements of these specifications to lines, grades and cross-sections shown in the drawings or as indicated by the Engineer. The work shall also include the hauling and stacking of suitable cut materials as directed, as also the disposal of unsuitable cut materials in specified manner, and trimming and finishing of the excavation to the specified dimensions or as directed by the Engineer.

For purposes of excavation work under this contract, there shall be no classification of soils.

#### 7.2.2.2 CUTTING GENERAL

All excavations shall be carried out in conformity with the directions laid herein under and in a manner approved by the Engineer.

While planning or executing excavations, the Contractor shall take adequate precautions against collapse of sides, soil erosion, water pollution etc.

All vegetation over the area shall be removed prior to commencement of excavation and disposed at locations approved by the Engineer.

The excavations shall conform to the grades, side slopes and levels shown on the drawings or directed by the Engineer. The Contractor shall not excavate outside the slopes or below the formation level or loosen any material outside or below the limits of excavation.

Foundation pits shall not be excavated to the full depth unless construction is imminent; the last 150 mm of the depth of excavation shall not be removed until just before concreting.

If the bottom of any excavation has been left exposed and in the opinion of the Engineer, has become badly affected by the atmosphere or by water, the contractor shall remove such portions of the deteriorated foundation material as directed by the Engineer and shall make good with lean concrete and/or sand, all at his own cost and expense.

Any excess depth excavated below the specified levels shall be made good with sand or lean concrete at the cost of the contractor as per the directions of the Engineer.

## 7.2.2.3 ADJACENT STRUCTURES

Where the excavation is to be carried out below the foundation level of adjacent structures, the contractor shall take precautions such as underpinning, shoring or strutting as directed by the Engineer, before proceeding with the excavation.

## 7.2.2.4 STRUTING AND SHORING

Any shoring, strutting and planking, close or open required for the execution of the work shall be done as per requirement.

## 7.2.2.5 METHODS, TOOLS AND EQUIPMENT

Only such methods, tools and equipment as approved by the Engineer, shall be used in the work.

## 7.2.2.6 DISPOSAL OF EXCAVATED MATERIALS

All the excavated materials shall be the property of the Employer and shall be handled as directed by the Engineer. If anything such as fossils, ancient coins etc. are found while excavating the earth that shall have to be handed over to the employer immediately and shall be the property of the employer.

Unsuitable and surplus materials not intended for use in any filling or otherwise shall be disposed off as directed by the Engineer.

## 7.2.2.7 CONSTRUCTION OPERATIONS

**7.2.2.7.1. Setting out:** After the site has been cleared, the limits of excavation shall be set out true to lines, curves, slopes, grades and sections, as shown in the sketches or as directed by the Engineer's Representative. The contractor shall provide surveyor, all labour, survey instruments and materials such as strings, pegs, nails, bamboos, stones, lime, mortar, concrete etc. required in connection with the setting out of works and establishment of bench marks. The contractor shall be responsible for the maintenance of bench marks and other marks and stakes as long as they required for the work in the opinion of the Engineer's Representative.

**7.2.2.7.2. Excavation:** All excavations shall be carried out in conformity with the directions laid herein under and in a manner approved by the Engineer's Representative. The work shall be so planned that the suitable materials available from excavation are satisfactorily utilised as directed upon beforehand.

The excavation shall conform to the lines, grades, side slopes and levels shown on the drawings or directed by the Engineer's Representative. The Contractor shall not excavate outside the slopes or below the established grades or loosen any material outside the limits of excavation. Subject to the permitted tolerances, any excess depth excavated below the specified levels on the roadway shall be made good at the cost of the contractor with silver sand or lean concrete and compacted.

All debris and loose materials on the slopes of cutting shall be removed. No back filling shall be allowed to obtain required slopes excepting that when boulders or soft materials are encountered in cut slopes these shall be excavated to approved depth on instructions of the Engineer's Representative and the resulting cavities filled with sand or lean concrete, as per direction of the Engineer and at the cost of the contractor.

**7.2.2.7.3. Excavation of road shoulders:** If directed by the Engineer's Representative, the shoulders shall be removed to their full width and to levels shown on the drawings or as directed by the Engineer's Representative. While doing so, care shall be taken to see that no portion of the existing pavement designated to be retained is loosened or disturbed.

#### 7.2.2.7.4 SLIDES

If slides occur in cuttings during the process of construction, they shall be removed at the cost of the contractor as ordered by the Engineer.

## **7.2.2.7.5 DEWATERING**

If water is met with in the excavated trenches due to springs, seepage, rain or other causes, it shall be removed by suitable diversions, pumping or bailing out and the excavation pit kept dry whenever so required or directed by the Engineer at the cost of the contractor. Care shall be taken to discharge the drained water as not to cause damage to the works, crops or any other property.

However if conditions met are such that conventional methods of dewatering are not adequate and well point or other such methods are necessary, the contractor shall submit details thereof for consideration and approval by the Engineer.

## 7.2.2.7.6 COMPACTING ORIGINAL GROUND

In all cases, the original ground shall be consolidated by rolling, as directed by the Engineer's Representative with static/dynamic force of suitable capacity.

Where so directed by the Engineer's Representative, any unsuitable materials occurring in foundation shall be removed and replaced by approved materials suitably consolidated.

#### 7.2.3 PAYMENT

- (i) Payment for earthwork in excavation / road cutting shall be based on volume of earthwork calculated from joint records.
- (ii) FOR TRENCHES, DRAINS and CULVERTS ETC.:- Payment for earthwork in excavation shall be made in Cu.M. based on the measurement of the volume of the pit or trench as per IS: 1200. The rate shall include excavation in all soils, all shoring, strutting, planking, dewatering, with all leads and lifts.

## 7.3 COURSE AGGREGATE

Stone aggregates required for works or aggregate for cement concrete (Plain or reinforced) shall be hard, of uniform and fine texture, free from faults or planes of weakness and free from weathered faces. These must also be free from loam, clay, free from organic matter or other impurities. The materials shall be stacked at roadside lands or other lands (as directed by the Engineer's Representative) in specified heights without causing inconvenience to traffic and in such a way as to afford maximum facilities of work. Aggregates for Cement concrete work should conform to IS: 383. Physical requirements and grading of aggregates for pavement courses shall be as specified for particular type of work and as described in P.W.D. (Roads) and the job specifications contained in the Bill of Quantities of the tender. Only stones as is available from quarries in Pakur areas will be normally used.

All coarse aggregate for concrete works must be well graded. These shall be screened for removal of dust and if so necessary in the opinion of the Engineer's Representative, shall be washed at the cost and expense of the contractor.

## 7.4 FINE AGGREGATE (SAND)

All sand shall be clean, sharp and free from clay, loam, organic or any other foreign matter and shall be obtained from the approved source. The contractor shall get the sample of sand to be used in different kinds of work approved by the Engineer before using the same in work. Sand that in the opinion of the Engineer is dirty must be washed to his satisfaction at the cost and expenses of the contractor. Sand for cement concrete work must be Zone-II sand. The sand shall pass through a mesh, 4.75 mm square measured in the clear. Sand shall not be used for concrete works if it contains more than 10% of fine grains passing through a 76 mesh sieve as used for cement test, nor should the fineness modulus be less than

2.00 unless specific permission is obtained from the Engineer's Representative, (ii) Sand of Zone II will be used for cement mortar for masonry plaster etc.

IS SIEVE	PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE
DESIGNATION	PASSING FOR	PASSING FOR	PASSING FOR	PASSING FOR
	ZONE-I	ZONE-II	ZONE-III	ZONE-IV
10 mm	100	100	100	100
4.75 mm	90-100	90-100	90-100	95-100
2.36 mm	60-95	75-100	85-100	95-100
1.18 mm	30-70	55-90	75-100	90-100
600 micron	15-34	35-59	60-79	80-100
300 micron	5-20	8-30	12-40	15-50
150 micron	0-10	0-10	0-10	0-15

#### 7.5 CEMENT CONCRETE WORKS

#### 7.5.1 STANDARDS

All connecting work shall be done to IS:456 -2000 – Code of Practice for Plain and Reinforced Concrete and other standards mentioned therein, unless otherwise specified or directed by the Engineer.

#### **7.5.2 CEMENT**

Unless specifically mentioned otherwise the cement to be used in the Works shall be OPC of Grade 53/43 and PPC/PSC conforming to IS: 12269 / IS: 8112 or cement conforming to IS:455 /IS1489 or grades approved by the Engineer. The source of supply shall be subject to prior approval of the Engineer. The Contractor shall endeavour to get approval of at least two makes / sources, so as to have an alternative make / source in hand in case of disruption in supply from the other make / source.

Once the quality and make of cement to be used in the Works is approved the Contractor shall endeavour to obtain further supplies from the same source and make. The Contractor should be prepared to furnish Manufacturer's test certificate as and when required to do so by the Engineer.

For each delivery of cement to the Site the Contractor shall forward to the Engineer a certificate to the effect that such cement was tested and analysed at the Factory and the results of such tests and analysis meet the specifications stipulated in the relevant Indian Standards. The supplier shall also furnish the date of manufacture of the lot from which the contractor has drawn the consignment.

Notwithstanding the provisions of certificate as stated above, each consignment of cement may after delivery on site and at the discretion of the Engineer be subjected to part or whole of the tests and analyses required by relevant IS Codes. Cost of all such tests shall be borne by the Contractor. No cement shall be used in the works until the Engineer has accepted it as satisfactory.

Storage space shall be adequate to store the required quantity of cement to suit the concreting program for the entire work as well as to permit proper storage.

Cement shall be stored in a proper manner in suitable dry and waterproof sheds to prevent damage from weather or improper storage. Where cement in bags are stacked, the stacking shall be at least 10 to 20 cms above the floor with at least a space of 60 cms kept all round between exterior walls and the stacks. The height of the stacks shall not be more than 10 bags. Further safeguards shall be undertaken in monsoon such as covering the stacks with polythene sheets.

The cement storage at site shall be at Contractor's expense and risk. Damage, if any, occurring to cement due to faulty storage, shall be the liability of the Contractor.

Any consignment or part of a consignment of cement which has deteriorated in any way or which does not otherwise comply with the specifications shall not be used in the Works and shall be removed from the Site by the Contractor at no extra cost to the Employer.

Storage of cement shall be such as to permit easy identification of the different consignments stored. Records must be maintained by the Contractor showing the date-wise receipts with consignment numbers, amounts used and the balance.

Removal of cement from storage sheds for use in the Works shall be on "First in, First out" basis.

#### **7.5.3 WATER**

Water used for mortars, grout, concrete, curing and for other purposes on the Works, shall be clean and free from deleterious materials such as acids, alkalis, salts, vegetable or organic matters in injurious quantities. Potable water, in general, shall be used. The water shall satisfy the requirements laid down in IS: 456-2000. The Contractor shall arrange to have the water he proposes to use in the Works, tested at approved laboratories at his own cost. The Engineer may at any time refuse to permit the use of water, which contains sugar, or excess of alkali, acid or salt as shown by tests. River/Dock Basin water shall not, for any reason whatsoever, be permitted to be used in the work.

## 7.5.4 SHUTTERING / FORMWORK

Shuttering must be steel or ply board shuttering true to line as approved by the Engineer. Surface in contact with concrete are to be smooth except where otherwise stated. Joints of the shuttering are to be such as to prevent the loss of liquid from the concrete. In timber shuttering, joints shall therefore, be either tongued or grooved or the joints must be perfectly closed and lined with craft paper or other types of approved materials.

All shuttering and framing must adequately be stayed and braced to the satisfaction of the Engineer for properly supporting the concrete during the period of hardening. It shall be so constructed that it may be removed without shock or vibration to the concrete.

Before the concrete is placed, the shuttering shall, if considered necessary, be coated with an approved lubricant for preventing the adhesion of the concrete to the moulds and it is to be of such a nature and so applied that the surface of the finished concrete is not stained. Care shall also be taken that such approved preparation shall be kept out of contact with reinforcement.

All formwork shall be removed without shock or vibration before the formwork is stripped, the concrete surface shall be exposed where necessary in order to ascertain that the concrete has hardened sufficiently. Before stripping the shuttering of structural members, the contractor shall take prior permission of the Engineer or his representative

Re-Use Of Forms: Forms shall be surface cleaned of all adhering mortar, concrete and other foreign matter, all damages due to previous use repaired to restore the original condition, cracks and gaps closed to prevent loss of mortar, surface restored and treated with permitted composition. Forms, which in the opinion of the Engineer, are not in a condition to be re-used, shall be removed from the site forthwith.

#### 7.5.5 GRADE & TYPE OF CONCRETE MIX

The grades of concrete shall be as specified in the Bill of Quantities and as per IS Codal provisions.

## 7.5.6 BATCHING & MIXING

The contractor has to install/deploy a Batching Plant/ Self Loading Concrete Mixer of required capacity. Calibration Certificate is essential to approve the batching plant/concrete mixer. The concrete shall have to be carried by suitable means to the place of work. The concrete should be covered while transporting from Batching Plant/mixer to worksite. Cost for all such arrangements shall be included in the rates and to be made at the contractors own cost.

The mixing equipment shall be capable of combining the aggregates, cement and water into a thoroughly mixed and uniform mass within the specified time and of discharging the mixture without segregation. The mixers shall be maintained in a satisfactory operating condition and mixer drums kept free of hardened concrete. Mixers shall be properly cleaned before and after every mixing operation.

Mixer blades shall be replaced when worn down more than ten percent (10%) of their depth. Use of mixers which do not function satisfactorily and have leaking drums or other defects shall be discontinued and they shall be repaired or replaced to the Engineer's satisfaction.

Ready-mixed concrete supplied from mechanised Batching Plants and transported to the site of work by Transit Mixers may be used with due approval of the Engineer.

The type and capacity of the plant shall be got approved by the Engineer before commencement of the work. The weighing balances shall be calibrated. All measuring equipment's should be maintained in a clean serviceable condition, and their accuracy periodically checked.

Except where expressed otherwise by the Engineer, batching and mixing shall be followed as per relevant Clauses of IS 456-2000.

## 7.5.7 MIXING TIME

Mixing shall be continued until there is a uniform distribution of the materials and the mass is uniform in colour and consistency. There shall be no segregation while or after unloading the mix. The mixing time shall be about 1.5 to 2 minutes or as decided by the Engineer.

Each batch shall be discharged before charging the next batch. Mixing periods shall be measured from the time when all of the solid materials are in the mixer drum, provided that all of the mixing mortar shall be introduced before a quarter of the mixing time has elapsed.

All records and charts for mixing operations shall be prepared as directed by the Engineer and shall be submitted to him.

Each batch shall be discharged before charging the next batch. Mixing periods shall be measured from the time when all of the solid materials are in the mixer drum provided that all of the mixing mortar shall be introduced before a guarter of the mixing time has elapsed.

## 7.5.8 ADMIXTURES

Admixtures may be used as per IS: 9103/1979 but only with the prior approval of the Engineer regarding the type, brand and conditions of use of the admixture. Admixture such as FOSROCK / SIKA / BASF/ STP or similar may be used subject to approval of the Engineer.

## 7.5.9 PLACING OF CONCRETE

Concreting shall be commenced only after Engineer or his representative has inspected the centering, shuttering and reinforcement as placed and passed the same. Shuttering shall be clean and free from all shavings, saw dust, pieces of wood, or other foreign material. Ready made cover blocks of matching grade of concrete may be used.

In case of concreting of slab and beams, wooden plank or cat walks of chequered MS plated or bamboo challes or any other suitable material supported directly on the centering by means of wooden blocks or lugs shall be provided to convey the concrete to the place of deposition without disturbing the reinforcement in any way. Labour shall not be allowed to walk over the reinforcement.

The concrete shall be deposited in its final position in a manner to preclude segregation of ingredients. In deep trenches and footings concrete shall be placed through chutes or as directed by the Engineer-in-Charge. In case of columns and walls, the shuttering shall be so adjusted that the vertical drop of concrete is not more than 1.5 metres at a time.

During hot weather precaution shall be taken to see that the temperature of wet concrete does not exceed 38°C. No concrete shall be laid within half an hour of the closing time of the day, unless permitted by the Engineer-in-Charge.

## 7.5.10 COMPACTION

Concrete shall be compacted into dense mass immediately after placing by means of mechanical vibrators designed for continuous operations complying with IS 2505, IS 2506, IS 2514 and IS 4656. The Engineer-in-Charge may however relax this condition at his discretion for certain items depending on the thickness of the members and feasibility of vibrating the same and permit hand compaction instead. Hand compaction shall be done with the help of tamping rods so that concrete is thoroughly compacted and completely worked around the reinforcement, embedded fixtures, and into corners of the form. The layers of concrete shall be so placed that the bottom layer does not finally set before the top layer is placed. The vibrators shall maintain the whole of concrete under treatment in an adequate state of agitation; such that deaeration and effective compaction is attained at a rate commensurate with the supply of concrete from the mixers. The vibration shall continue during the whole period occupied by placing of concrete, the vibrators being adjusted so that the centre of vibrations approximates to the centre of the mass being compacted at the time of placing.

Concrete shall be judged to be properly compacted, when the mortar fills the spaces between the coarse aggregate and begins to cream up to form an even surface. When this condition has been attained, the vibrator shall be stopped in case of vibrating tables and external vibrators. Needle vibrators shall be withdrawn slowly so as to prevent formation of loose pockets in case of internal vibration. In case both internal and external vibrators are being used, the internal vibrator shall be first withdrawn slowly after which the external vibrators shall be stopped so that no loose pocket is left in the body of the concrete. The specific instructions of the makers of the particular type of vibrator used shall be strictly complied with. Shaking of reinforcement for the purpose of compaction should be avoided.

## 7.5.11 JOINTS IN CONCRETE

## 7.5.11.1 COLUMN BASE GROUTING

Concrete shall be judged to be properly compacted, when the mortar fills the spaces between the coarse aggregate Grouting at the column base is to be done using ready mix grouting compound of approved brand.

## 7.5.11.2 CONSTRUCTION JOINTS

Concreting shall be carried out continuously upto the construction joints, the position and details of which shall be as shown in structural drawing or as directed by Engineer in-Charge. Number of such joints shall be kept to minimum. The joints shall be kept at places where the shear force is the minimum. These shall be straight and shall be at right angles to the direction of main reinforcement. Construction joints should comply with IS 11817.

When stopping the concrete on a vertical plane in slabs and beams, and approved stop board shall be placed with necessary slots for reinforcement bars or any other obstruction to pass the bars freely without bending. The construction joints shall be keyed by providing a triangular or trapezoidal fillet nailed on the stopboard. Inclined or feather joints shall not be permitted. Any concrete flowing through the joints of stopboard shall be removed soon after the initial set. When concrete is stopped on a horizontal plane, the surface shall be roughened and cleaned after the initial set.

When the work has to be resumed, the joint shall be thoroughly cleaned with wire brush and loose particles removed. A coat of neat cement slurry at the rate of 2.75 kg of cement per square metre shall then be applied on the roughened surface before fresh concrete is laid.

## 7.5.11.3 EXPANSION JOINTS

Expansion joints shall be provided as shown in the structural drawings or as indicate as directed by Engineer-in-Charge, for the purpose of general guidance. The filling of these joints with bitumen filler, bitumen felt or any such material and provision of copper plate, etc., the cost of joint filling material is considered to be included in the cost and no extra amount shall be paid for the same.

## 7.5.12 CONCRETING DURING RAINS

To prevent damage to freshly laid concrete during rains, the contractor shall provide an adequate supply of tarpaulins or other waterproof covering material. The contractor may require to use make-shift tent like structures with water proof claddings to carry out the work during light drizzles/mild shower, if directed by the Engineer. Any concrete damaged by rain shall be removed and replaced by the contractor at his own cost as directed by the Engineer.

## 7.5.13 PROTECTION & CURING

The contractor shall adequately protect freshly laid concrete after its laying .Curing of concrete shall be carried out in accordance with IS: 456-2000. All equipment's and materials required for curing shall be available and ready for use before concrete is placed.

After the concrete has begun to harden i.e. about 1 to 2 hours after its laying, it shall be protected from quick drying by covering with moist gunny bags, sand, canvass Hessian or any other material approved by the Engineer-in-Charge. After 24 hours of laying of concrete, the surface shall be cured by ponding with water for a minimum period of 7 days from the date of placing of concrete in case of OPC and at least 10 days where mineral admixtures or blended cements are used. The period of curing shall not be less than 10 days for concrete exposed to dry and hot weather condition.

#### 7.5.14 SAMPLING & STRENGTH OF CONCRETE MIX

Samples from fresh concrete shall be taken as per IS 1199 and cubes shall be made, cured & tested at 28 days in accordance with IS 516. In this regard all provisions of of IS 456-2000 shall apply. The cube tests shall be carried out at the site laboratory and the Contractor shall arrange for Compression testing machine at site for testing of concrete cubes. Further, at the discretion of the EIC some samples of Cubes, Cement, Aggregates and Water may be required to be sent to an external NABL accredited laboratory for testing. All

necessary charges for testing shall be borne by the Contractor in this regard and no extra payment for testing charges incurred by the Contractor will be made.

Aggregates: Tests for determining the grading shall be carried out on coarse and fine aggregates at times and intervals specified by the Engineer.

Slumps test on concrete: Tests shall be carried out during all concreting operations and at times and intervals as specified by the Engineer.

#### **7.5.15 PAYMENT**

Payment for Plain / Reinforced Cement Concrete cast shall be made on the basis of volume in cubic meters of the actual finished concrete done or as per approved drawings for the work , whichever is less and the payment shall be inclusive of all labour, materials, machinery hire, transportation, all leads, lifts and descents, cost of leaving pockets, making channels or grooves as necessary, supply and application of cement slurry, all cost for testing of constituents as well as concrete, compacting , surface finish, cleaning, attendance during concreting, curing , protecting etc. and all other works of every description connected with any or all aspects of concreting excepting reinforcement and shuttering which will be paid for separately.

## 7.6 STEEL FOR REINFORCED CONCRETE CEMENT WORK

The steel used for reinforcement shall High Yield strength deformed (HYSD) steel bars conforming to IS 1786.

Nominal mass/weight: The tolerance on mass/ weight for round and square bars shall be the percentage given in Table 1.1 of the mass/ weight calculated on the basis that the masses of the bar/ wire of nominal diameter and of density 7.85 kg/cm3 or 0.00785 kg/mm<sup>3</sup>.

Tolerance shall be determined in accordance with method given in IS 1786 (Latest Revision).

Reinforcement shall be cleaned of all mill scale, oil mud, loose rust, paint or other deleterious coating or materials, to the satisfaction of the Engineer.

The contractor shall be responsible for the preparation and checking of all bar bending schedules against the drawings before commencement of cutting and bending of reinforcement. The rate quoted against reinforcement shall cover preparation of bar bending schedules and order lists, and no extra payment will be admissible for such work. Bar bending schedules and bar order lists shall be subject to the approval which will not absolve the contractor of any responsibility for reinforcement work to specifications and drawings.

## 7.6.1 BENDING, PLACING AND TYING

Bars shall be bent cold, to the sizes and shapes shown in the drawings, bending schedules and as per specifications, to the satisfaction of the Engineer. Where permitted, bars can be heated gradually and not beyond cherry red colour, and the bending done. After bending, the bars shall be allowed to cool gradually. No quenching of hot bars shall be done. Bars which develop high strength due to cold working shall not be not bent.

Quantity of reinforcement Steel used in the work shall be paid as per linear measurement of reinforcement multiplied by the unit weight of section as per IS1786 & payment shall be made to the contractor accordingly. No payment shall be made for wastages of Steel. All the chairs, laps, spacer bars etc. shall be paid to the contractor.

#### 7.6.2 STACKING AND STORAGE

Steel for reinforcement shall be stored in such a way as to prevent distorting and corrosion. Care shall be taken to protect the reinforcement from exposure to saline atmosphere during storage, fabrication and use. It may be achieved by treating the surface of reinforcement with cement wash or by suitable methods. Bars of different classifications, sizes and lengths shall be stored separately to facilitate issue in such sizes and lengths to cause minimum wastage in cutting from standard length.

## 7.6.3 IDENTIFICATION

Care shall also be taken to properly identify these bars at site. The staff shall be specially trained for looking for identification marks on these bars given by the manufacturers which are generally given colour code. It will be advisable to see that only one type/grade of bars are brought to site and used in the project after conducting tests for each lot.

#### **7.6.4 TESTING**

The contractor shall have to obtain and furnish manufacturers test certificates to the EIC respect of all supplies of steel brought by him to the site of work. Samples shall be taken and tested by the EIC as per the provisions in this regard in relevant IS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specification as per IS Code, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his own cost immediately. For checking nominal mass, tensile strength, bend test, re-bend test, etc., specimen of sufficient length shall be cut from each size of the bar at random, and at frequency as defined by the EIC. The Contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor and no separate payment shall be made by HDC in this regard.

## **7.6.5 PAYMENT**

Quantity of reinforcement Steel used in the work shall be paid as per linear measurement of reinforcement multiplied by the unit weight of section as per IS1786 & payment shall be made to the contractor accordingly. No payment shall be made for wastages of Steel. All the chairs, laps, spacer bars etc. shall be paid to the contractor.

## 7.7 STRUCTURAL STEEL WORK

Steel materials required for fabrication will be supplied by the Contractor at his own risk, cost and arrangement. Loading, unloading, transportation and all allied work to be carried out by the contractor at his own risk, cost and arrangement. All steel materials to be used should conform to BIS no. – 1786 (Latest Revision).

All steel shall be clean and free from loose mill scales, dust, loose rust and coats of pains, oil or other coatings. Any scale or loose rust shall be removed before use without any claim for extra charge for the same. No steel excepting those approved by the Engineer-in-Charge shall be used in work or brought to site by the contractor.

Sections with surface defects such as pitting, cracks, visible laminations, etc., shall be rejected if the defects exceed tolerances specified in the relevant standards. Warped plates shall not be used if deformation exceeds L/1000, but limited to a maximum of 10 mm (where L is the length of the member).

All the structural members shall be offered for inspection before they are brought to site. In case of inspection of the plates of thickness beyond 16mm thick, the inspector along with checking of the Manufacturer's Test Certificate, shall select one or more plates at random to be tested for lamination by ultrasonography. Spot ultrasonographic testing shall be carried out as per IS: 10609 latest edition at various

points throughout the surface of the plate. The plate shall be rejected if lamination is detected. Depending on the results obtained, the inspecting officer may issue instructions for multiple plates to be checked, which shall be complied with. If the plates are found to be free of lamination, they shall be accepted. A small part of a plate shall be cut and dispatched to an approved testing house or laboratory to confirm whether the mechanical characteristics and chemical composition satisfy the stipulations of the relevant standard. The Contractor shall bear all costs involved in testing, including testing charges, transportation, hoisting and shifting, labour, equipment, etc.

The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charge of all tools and plants and labour required for the work including all incidental charges such as electricity charges, labour insurance charges, testing etc.

Consumables like Electrodes, Gas, Paints, Thinner, Jute, Oil, etc. shall have to be supplied by the contractor at his cost. Electrodes, Gases & Paints to be used, shall be as per the relevant IS specification. Electrodes should be reserved in heat box chamber to prevent damage of electrodes during work. All welding work will have to be carried out by certified welder(s) only.

The Weld Size shall be as per IS 816 (Latest Revision) and the rate is inclusive of butt welding, fillet welding etc. inclusive of all ancillary activities like staging and consumables and no extra payment shall be made.

**Inspection of steel materials:** All steel materials supplied by the contractor shall be inspected by Sr. Dy. Manager (IZ&R) or his authorized representative before fabrication as per relevant BIS. In case at any point of time after final erection and during the three year maintenance period any defect to structural work is noticed, the same has to be rectified and repaired at no extra cost to HDC subject to investigation of the damage by EIC and the final decision of the EIC on the matter shall be binding upon the Contractor.

#### 7.7.1 FABRICATION / MANUFACTURE

The whole work shall be representative of the highest class of workmanship. The greatest accuracy shall be observed in the design, manufacture and erection of every part of the work to ensure that all parts will fit accurately together on erection.

#### 7.7.2 FLATTENING AND STRAIGHTENING

All steel materials, plates, bars and structurals shall have straight edges, flat surfaces and be free from twist. If necessary, they shall be cold straightened or flattened by pressure before being worked or assembled unless they are required to be of curvilinear form. Pressure applied for straightening or flattening shall be such as it would not injure the material and adjacent surfaces or edges shall be in close contact or at uniform distance throughout. Flattening and straightening under hot condition shall not be carried out unless authorized and approved by the Inspecting Officer.

## 7.7.3 PLANING AND SHEARING

Except where otherwise indicated, cutting of all plates and sections shall be affected by shearing or sawing. All edges shall be clean, reasonably square and true. Wherever possible the edges shall be cut in a shearing machine, which will take the whole length of the plate in one cut.

## 7.7.4 FLAME CUTTING

Flame cutting by mechanically controlled torch/torches shall be accepted both in the case of mild steel and high tensile steelwork. Provided the edge as given by the torch is reasonably clean and straight, plates may be cut to shape and beams and other sections cut to length with a gas-cutting torch, preferably oxyacetylene gas should be used. All flame cut edges shall be ground to obtain reasonably clean square and true edges. Draglines produced by flame cut should be removed. Unless machining has been specifically provided for, special care is to be taken to ensure that ends of all plates and members are reasonably in

close contact and the faces are at right angles to the axis of the members and joints, when made, are also reasonably in close contact. Use of multi-head flame cutting machine having multiple oxy acetylene torches is desirable for higher productivity and reducing the distortion due to cutting operation. Plasma-arc cutting method can also be employed.

## 7.7.5 DRILLING AND SUB-PUNCHING

All holes shall be drilled but the Contractor may, if he/she so prefers sub-punch them to a diameter 6mm less than that of finished holes, e.g. a punched hole which is to be drilled out to 25mm in diameter shall not exceed 19mm in diameter at the die end. When the rivet / bolt holes are to be sub-punched, they shall be marked with a centre punch and made with a nipple punch or preferably, shall be punched in a machine in which the position of the hole is automatically regulated. The punching shall be so accurate that when the work has been put together before drilling, a gauge 1.5mm less in diameter than the size of the punched holes can be passed easily through all the holes. Holes for countersunk heads of rivets, bolts or screws shall be drilled to the correct profile so as to keep the heads flush with the surface Holes for countersunk heads of rivets, bolts or screws shall be drilled to the correct profile so as to keep the heads flush with the surface.

## 7.7.6 PARTS IN CONTACT

All steel work intended to be bolted together shall be in contact over the whole surface.

#### 7.7.7 ERECTION AND EQUIPMENT

The Contractor shall provide at his/her own cost all tools, machinery, equipment and erection material necessary for the expeditious execution of the work and shall erect the structural steel and iron work, in every respect as covered by the contract and in accordance with the drawings and specifications. Before starting the work, the Contractor shall advise the Engineer fully as to the method he/she proposes to follow and the amount and character of equipment he/she proposes to use, which shall be subjected to the approval of the Engineer. The approval of the Engineer shall not be considered as relieving the Contractor of the responsibility for the safety of his/her method or equipment or from carrying the work in full accordance with the drawings and specifications. All temporary work shall be properly designed and substantially constructed for the loads, which it will be called upon to support. Adequate allowance and provision of a lateral forces and wind loads shall be made according to local conditions and ensure that support shall not settle during erection. Careful and periodical inspection of plants shall be made by the Contractor to ensure that all tackle, ropes, chains and other important lifting gear and machinery are in good order and fit for service and well up to the capacity for which they are required. When chains are used for lashing, care must be taken to protect the edges of members to avoid the marking and distortion otherwise caused. The method used for lifting and slinging flexible members shall be brought to the notice of the Engineer and shall be subject to his/her approval. Temporary bracing shall be provided to take care of stresses from erection equipment or other loads carried during erection. All the temporary arrangements shall be done by contractor at his own cost.

## 7.7.8 BOLTS AND NUTS

High strength bolts 8.8 grade with GI coating or SS shall be used. Nuts shall be of at least the strength grade appropriate to the grade of bolts or other threaded elements with which they are used.

## 7.7.9 SMITHED WORK

All joggles shall be performed by pressure. Craned sections or knees can be formed by forging or by gas cutting and welding by any approved electric arc process. Any bending, forging, cutting or welding shall be carried out in such a manner as not to impair the strength in the metal.

## **7.7.10 WASHERS**

All the washers shall confirm to relevant IS codes. Plain washers shall be made of GI/mild steel conforming to IS: 5369 unless noted otherwise.

Minimum one washer shall be supplied for each bolt and in case of special types of bolts more than one washer as required for the purpose shall be supplied. Helical spring washer conforming to IS: 6755 shall be provided for bolts carrying dynamic or fluctuating loads and those in direct tension. Tapered washers conforming to IS: 5372 & IS: 5374 shall be used for channels & beams respectively. Washers for high strength friction bolts shall conform to IS: 6649. Washer with relevant grade compatible with grade of bolts/ nuts may be used as per relevant standard.

## **7.7.11 WELDING**

Welding of the ISMB, ISMC, Plates etc. shall be done under strict supervision. Approved procedures shall be followed.

#### 7.7.12 WELDING CONSUMABLES

Covered electrodes (for metal arc welding of structural steel) shall conform to IS: 814 & IS: 2062(Latest Revision).

Filler rods & wires for gas welding shall conform to IS: 1278 (Latest Revision). Base wire electrodes (in submerged arc welding of structural steel) shall conform to IS: 7280 (Latest Revision). The combination of wire and flux shall comply with the requirements of IS: 3613(Latest Revision). Filler rods & base electrodes (for gas shield arc welding of structural steel) shall conform to IS: 6419(Latest Revision). Welding consumables & procedures shall be such that the mechanical properties of deposited weld metal are not less than the respective minimum values for the parent metal being welded.

## 7.7.13 FABRICATION

General- Fabrication of structures shall be done strictly as per "Approved for Construction" fabrication drawings and in accordance with IS: 800, IS: 9595 & other relevant BIS Codes and BIS Hand Book SP: 6(1). The fabrication programme along with the proposed methodology for execution of the work has to be submitted beforehand for approval by the EIC. Welder qualification certificates to be submitted and welder test to be performed prior commencement of the work. Land for setting up of the fabrication yard will be allotted and governed based on clause no 6.13 of Special Conditions of Contract. Any defective material used in the work shall be replaced by the Contractor at his own expense. Necessary care and precautions shall be taken so as not to cause any damage to the structure during any such removal and replacement. Any faulty fabrication pointed out at any stage of work by the Engineer-in-Charge, shall be made good or replaced by the Contractor at his own cost. Tolerances for fabrication of steel structures shall be as per IS: 7215 and other relevant IS codes.

## **7.7.14 BUTT WELDS**

Forms and details: All details of butt-welded joints shall be in accordance with IS: 9595 latest revision or as applicable. Incomplete penetration butt welds or fillet welds shall not be used. Intermittent butt welds shall not be used.

## 7.7.15 SEALING OR BACKING

Single V, U, J bevel or square butt welds shall generally be completed by depositing a sealing run of weld metal on the back of the joints. Where it is not practicable to deposit a run of weld metal on the back of the joint, then single V, bevel or square butt welds, welded from one side only, may be permitted, provided

that another steel part of the structure or a special steel backing strip is in contact with the back of the joint and the edges of the steel parts of the joint are prepared as specified in IS: 9595 or IS: 4353, whichever is applicable, to ensure complete fusion of the parts to be joined. In all full penetration butt welds which are to be welded from both sides, the back of the first run shall be gauged out by suitable means to clean sound metal, before welding is started on the gauged outside.

#### 7.7.16 FILLET WELDS

## 7.7.16.1 Deep penetration fillet weld

The fillet weld shall be continuous fillet weld unless otherwise stated.

Size - The minimum size of the fillet welds shall be as given in table-1.2.

Table-1.2 Minimum size of a fillet weld

Thickness of thicker part	Minimum size
Upto and including 6 mm	3 mm
Over 6 mm upto and including 12 mm	4 mm
Over 12 mm upto and including 18 mm	6 mm
Over 18 mm upto and including 28 mm	8 mm

#### Note:

When the minimum size of the first run of fillet weld and /or minimum size of the fillet weld as given in Table-1.2 is greater than the thickness of the thinner part, the minimum size of the weld shall be equal to the thickness of the thinner part.

## 7.7.16.2 Fillet welds applied to the edge of a plate or section

Where a fillet weld is applied to the square edge of a part, the specified size of the weld shall generally be at-least 1.5 mm less than the edge thickness, in order to avoid melting down of the outer corner.

Where a fillet welds is applied to the rounded toe of a rolled section, the specified size of the weld shall generally not exceed 3/4 of the thickness of the section at the toe.

Where a fillet weld equal in size to the thickness of the section at the toe of a rolled section or at the square edge of a plate is required from design considerations and is specially designated in the drawing, the toe or edge shall be specially built up with weld metal in such a manner as to ensure full throat thickness, full fusion area and no injury to the parent metal.

## 7.7.16.3 End fillets

When end fillets are used alone, each fillet shall be returned as a side fillet for a minimum length equal to twice the size of the weld, and this returned length shall be disregarded in calculating the strength of the joint.

#### 7.7.16.4 Fillet welds in slots or holes

When welding inside a slot or a hole, in a plate or other part, in order to join the same to an underlying part, fillet welding may be used along the wall or walls of the slot or the hole, but the later shall not be filled with weld metal or partially filled in such a manner as to form a direct weld metal connection between opposite wall.

The dimensions of the slot or hole shall comply with the following limits in terms of the thickness of the steel part in which the slot or hole is formed.

The width or diameter to be not less than three times the thickness or 25 mm whichever is greater.

Corners at the enclosed ends of slots to be rounded with a radius not less than 1.5 times the thickness or 12 mm whichever is greater.

The distance between the edge of the part and edge of the slot or hole or between adjacent slots and/ or holes not to be less than twice the thickness when measured along the direction of stress and five times the thickness when measured normal to the direction of stress.

#### 7.7.16.5 End Returns

Fillet welds terminating at the ends or sides of parts or members shall be returned continuously around the corner for a distance of not less than twice the size of the weld. This provision shall apply particularly to side and end fillet welds joining brackets, beam seating and similar attachments at the tension side of such connections.

## 7.7.17 PREPARATION OF JOINT FACES

Preparation of joint faces shall be done as per IS: 9595.

## **7.7.17.1 Fusion faces**

The preparation of fusion faces, angle of preparation root radius and root face shall be as specified in IS: 9595 and IS: 4353. Where the gap between the root faces of a butt joint is excessive, the gap shall not be bridged since this procedure often leads to cracking. The fusion faces of the joint shall be builtup with weld metal to give the appropriate gap before the weld proper is commenced.

The preparation of fusion faces, angle of bevel, root radius and root face shall be such that the limits of accuracy required by the appropriate application standard can be achieved. When however, no appropriate application standard exists and this standard is itself to be used, it is recommended that, for manual welding, the tolerances on limits of gap and root face should be  $\pm 1$  mm on the specified dimensions for material up to and including 12 mm thick and  $\pm 2$  mm for material over 12 mm thick. The tolerance on the included angle between the fusion faces of a V preparation is recommended to be  $\pm 5$  degree and for U and J preparations  $\pm 10$  degree. For an automatic process, closer limits are necessary and particular requirements depend on the characteristics of the process.

It shall be ensured, if necessary, by suitable non-destructive tests that the fusion faces and adjacent surfaces shall be free from cracks, notches or other irregularities which might be the cause of defects or would interfere with the deposition of the weld.

## 7.7.18 SAFETY PRECAUTIONS

Provisions of IS: 818, IS: 1179 and IS: 3016 latest revision shall generally apply for safety and health requirements during welding operations.

## 7.7.19 WELDING PROCESSES AND PROCEDURES

Welding work shall be given to a contractor who does produce satisfactory evidence of his ability to handle the work in a competent manner. The contractor shall also prove the ability of the operator/Welders employed by him to produce welds of the required strength. The contractor shall employ a competent welding supervisor to ensure that quality of materials and the standard of workmanship comply with the requirements laid down in this code. The sizes and length of welds shall not be less than those specified in the drawings nor shall they be substantially in excess of the requirements without prior approval of the Engineer. The location of welds shall not be changed without prior approval of the Engineer. Welds shall preferably be made in flat position.

Site welding should not be undertaken except in special circumstances with the approval of the Engineer. Site welding should be confined to connections having low stresses, secondary members, bracings etc. Manual metal arc welding may be done taking adequate precautions as per IS: 9595 and under strict supervision.

## 7.7.20 SEQUENCE OF WELDING

The sequence of welding shall be such that when possible the members, which offer the greatest resistance to compression, are welded first. The welding in the thinnest element of a section shall be done prior to the welding of the thicker elements. In making butt welded joints in rolled shapes, the sequence and procedure of welding shall take into account unequal amount of expansion or contraction in elements being welded.

Splices in each component part of a built-up member shall be made before such component part is welded to other component part of the member.

## **7.7.21 TACK WELDS**

Tack welds shall be not less than the throat thickness or leg length of the root run to be used in the joint. The length of the tack weld shall not be less than four times the thickness of the thicker part or 50 mm whichever is the smaller. Where a tack weld is incorporated in a welded joint, the shape, size and quality shall be suitable for incorporation in the finished weld and it shall be free from all cracks and other welding defects. Tack welds, which are prone to cracking, shall be cut out and re-welded. Tack welds shall not be made at extreme ends of joints.

#### 7.7.22 INTER-RUN CLEANING

Each run of weld bead shall be thoroughly cleaned to remove particles of slag, spatters, etc. before the subsequent bead is super-imposed during multi-pass welding. Similarly, each layer of weld should be thoroughly cleaned of slag, spatters, etc, before depositing subsequent layers of weld with particular reference to thorough cleaning of toes of the welds. Visible defects, such as cracks, cavities and other deposition faults, if any, shall be removed to sound metal before depositing subsequent run or layer of weld.

## 7.7.23 STRAY ARCING ON WORK

Stray arcing shall be avoided as this can leave local hard spots or cracking which are to be removed by mechanical means and be checked by inspection depending upon the application.

## 7.7.24 INSPECTION AND TESTING OF WELDED JOINTS

The inspection of fabricated components shall be done by HDC. The Inspector designated by the Engineer shall ascertain that fabrication by welding is performed in accordance with the requirements of this code. Inspection of welds shall also be carried out in accordance with this Code. For the provisions, which are not incorporated in this Code IS: 822 "Code of procedure for inspection of welds" shall be followed.

HDC shall be furnished with complete detailed drawings showing the size, length, type and location of all welds, which are required to be made. HDC shall be notified in advance of the start of any welding operations. HDC shall have free access to the work being done at all reasonable times by the contractor

and facilities shall be provided so that during the course of welding he may be able to inspect any layer of weld metal. HDC shall be at liberty to reject any material that does not conform to the provisions of this code and to require any defective welds to be removed and re-welded.

## 7.7.25 INSPECTION PRIOR TO WELDING

#### 7.7.25.1 Parent metal

All plates and sections shall be inspected in the contractor's works before fabrication. Verification of the quality of parent metal shall be carried out by reference to the relevant test certificate. The Inspector may, at his discretion, ask for spot checks to be made on the chemical composition and physical properties of the material. Freedom from harmful defects such as cracks, surface flaws, laminations, and rough, jagged or imperfect edges shall be verified by visual examination of the material prior to welding. Dimensions of parts shall be checked by measurement.

## 7.7.25.2 Edge preparation and set-up of parts

Edge preparation shall conform to the relevant drawings and meet the requirements of this code. After the parts are assembled in position for welding, the Inspector shall check for incorrect root gap, improper edge preparation and other features that might affect the quality of the welded joint.

## 7.7.26 INSPECTION AFTER WELDING

For visual inspection of defects, the weld surface shall be thoroughly cleaned of oxide layers and adherent slag. If chipping hammer is used to remove slag, care shall be taken to see that hammer marks do not obscure the evidence of fine cracks. Brushing with a stiff wire-brush or grit blasting shall normally be followed. Welding profile – The finished welds shall be visually inspected and shall conform to the size and contour specified in the approved fabrication drawing. Conformity of fillet welds as to size and contour shall be determined by the use of gauges. Concavity and excessive convexity of fillet welds shall be marked for correction. 50 % DPT to be performed on exposed welded portion.

## 7.7.27 MARKING OF DEFECTIVE WELDS

The marking shall be positive and clear and in accordance with the method of marking followed and understood by the Inspector and shop personnel involved in making the repairs. Marking shall be permanent enough to be evident until the repair is carried out and the inspection completed. After the repair has been done, it shall be inspected again and properly marked to indicate whether the repair is satisfactory or not.

## 7.7.28 ERECTION WORKS

The contractor shall have to submit an erection plan to the Engineer for approval of the same based on which the entire erection procedure shall be carried out.

#### 7.7.29 INSPECTION & TESTING OF MATERIALS

The Engineer-in-Charge (or his authorized representative) shall have free access at all times to those parts of the Contractor's works which are concerned with the fabrication of the steel work and shall be provided with all reasonable facilities for satisfying himself that the fabrication is being undertaken in accordance with the provisions of these specifications & other relevant BIS Codes. Should any structure or part of a structure be found not to comply with any of the provisions of this specification (or relevant BIS Codes as referred to), it shall be liable to rejection. No structure or part of the structure, once rejected shall be resubmitted for inspection. Defects which may appear during/after fabrication/ erection shall be made

good only with the consent of the Engineer-in Charge and procedure laid down by him.

In addition to the test certificate obtained from the steel producers/suppliers/dealers, for conformity sake, all materials/consumables, i.e. steel, welding electrodes, paints, etc. shall be got tested from the approved/recognized labs as per the table. Proper record of all such test results shall be maintained. A copy of the same be given to client/HDC as well. Test result of the supplier and that of the lab should match with each other. In case of major difference, mater has to be investigated. Decision of the HDC shall be final in that regard.

Rolled steel plates beyond 16 mm Thickness shall be subjected to ultrasonic testing by the reputed firm. Only ultrasonically tested steel shall be used for fabrication work. Record of ultrasonically tested steel shall be maintained separately.

All the testing work shall be done in accordance to the provisions of the relevant codes.

Regarding radiographic testing/x-ray testing of the welded joints, matter shall be finalized in consultation with the inspecting authority / HDC. Radiographic testing shall be carried out in case of identification of any defect in welding only. Agreed procedures in this respect shall be followed. Necessary arrangement for that has to be got done by the tenderer at their own cost.

All testing work shall be got done by the contractor at their own cost. Nothing extra shall be paid. Tenderers should quote their rate accordingly.

If quality certificates pertaining to a particular lot are missing or incomplete, or if the material quality does not meet the standard specifications, the Contractor shall conduct all appropriate tests as directed by the Engineer-in-Charge, at no extra cost, in approved laboratories or test houses.

#### **7.7.30 PAYMENT**

Payment will be made on the basis of calculated weight of structural members only in finished work as per IS specified weight. Payment for gusset, bracket, cleat, rivets, bolts and nuts will be made by adding the actual weight of such items with the weight of finished structural members or 7% of weight for finished structural members weighing not less than 22.5 Kg. / m. or 15 % of weight for finished structural members weighing less than 22.5 Kg/m will be increased allow for bracket, cleat, rivet, bolts and nuts etc. and no separate payment being made for these items. The rates are considered for a height of erection 10mts from the ground.

#### 7.8 PAINTING

The steel work shall be appropriately painted with primer and paint as provided in the Bill of Quantities. The work shall be in general carried out as per the PWD specifications and as per directions of Engineer in charge. Testing to be carried out as directed and no additional payment for testing shall be payable. Minimum painting DFT is to be maintained i.e. minimum given DFT is to be obtained at any point of the structure.

## 7.8.1 PAINTS: SOURCE & QUALITY

- 7.8.1.1 Paint and other accessories for the work will be supplied by the contractor. Paints manufactured by the following firms /as approved by Engineer -in- charge.
  - M/s. Asian paints.
  - M/s. Berger Paints
  - M/s. ICI Paints
  - M/s. Shalimar paints

- Other Equivalent subject to approval
- 7.8.1.2 The contractor shall furnish to HDC, the date of manufacture of paint as certified by the manufacturers with the necessary container marking and test certificate for paint conforming to relevant IS code /specifications. In addition to this, he shall also submit the necessary vouchers in respect of paint purchased by him.
- 7.8.1.3 HDC reserves the right to get the paint tested at contractor's expenses as considered necessary by HDC. If the test results do not conform to relevant IS specifications /specifications fully, then the lot of paint shall be rejected and got removed from the contractor(s) storage. If the paint has already been applied it shall be removed.

## 7.8.2 PAINTING – GENERAL INSTRUCTIONS

- 7.8.2.1 Painting shall not be commenced till the surface preparation has been approved by the Engineer or his representative or inspecting officer.
- 7.8.2.2 Sealed containers of paint of approved brand shall be used. The paint drums must be rolled, turned upside down and shaken before opening. The paint must be stirred well before use. Over stirring which results in invisible air bubbles etc, shall be avoided.
- 7.8.2.3 Where brush painting is accepted, the paint must be applied by means of flat brushes not more than 75mm in width having soft flexible bristles conforming to IS:384 Latest Revision.
- 7.8.2.4 Round and oval brushes of approved quality conforming to IS: 487 Latest Revision may also be us as per the instructions of the Engineer or his representative or inspecting officer.
- 7.8.2.5 All new brushes should be soaked in raw linseed oil conforming to IS: 77 for at least 24 hours before use.
- 7.8.2.6 The date of painting shall be marked with paint on the member.
- 7.8.2.7 Qualification and experience certificates to be submitted for any painter and practical test has to be performed prior commencement of the work as directed by the Engineer.

## 7.8.3 CARE DURING PAINTING

- 7.8.3.1 Paint should be mixed in small quantities sufficient to be consumed within short period.
- 7.8.3.2 The applied coat of paint shall be uniform, and free from brush marks, sack marks, blemishes, scratching, non-uniform thickness, holes, log marks, fuel staining, cracking, scaling, and other defects.
- 7.8.3.3 Paint shall be applied only on dry and clean surface free from moisture or dust (including scrapping dust).
- 7.8.3.4 Paint should be used within the prescribed shelf life from the date of manufacture.
- 7.8.3.5 Each coat of paint shall be left dry till it sufficiently hardens before the subsequent coat is applied.

  Each coat of paint shall be inspected by the engineer or inspecting officer and certified as satisfactory before applying subsequent coat.
- 7.8.3.6 The payment for complete painting of all components & other members including all accessories,

painting of contact surface etc including all labour and material, is included in the accepted rates for item in the schedule of items, rates and quantities and nothing extra shall be paid.

## 7.8.4 INSPECTION, TESTING & MARKING

All components shall be offered for inspection prior to painting. All approved components shall be stamped defect free, painted as per specifications prior to erection at site.

The painting work shall be subject to stage-wise inspection by the Engineer. Each stage of painting i.e. surface preparation, each coat of primer and finish paints shall have to be approved by the Engineer before proceeding further. Any defect noticed during these stage-wise inspections shall have to be rectified to the entire satisfaction of the Engineer.

All material supplied by Contractor shall be accompanied by test certificates either from the manufacturer or from a third party as the case may be. All these materials shall be of required IS grade / specification as mentioned in BOQ and all such material shall be approved by the Engineer prior to use.

#### 7.8.5 EQUIPMENT

All brushes, hand tolls for cleaning, all scaffolding materials, sand blasting materials required to be used and suitable for the work and all are in good order, shall be arranged by the contractor at site and in sufficient quantity. The contractor shall have to arrange for an air compressor with all tools and plants necessary for successful execution of sand blasting work.

## 7.8.6 SURFACE PREPARATION (BLAST CLEANING)

The surface of the structural shall be blast clean using grit at pressure of 7 Kg. Per Sq.cm. maintaining constant velocity and pressure in accordance to SA 2½ as per relevant Swedish code. On completion of the sand blasting operation, the blasted surface shall be cleaned and free from any scale or rust and should show a grey white metallic lustre on which primer as the 1st coat shall be applied within 4 hours of surface preparation. Blasting cleaning shall not be done in bad weathers or when there is dew on the metallic surface which is to be cleaned on Humidity Exceeding 85%.

#### 7.8.7 PAINTING MATERIALS

Contractor shall produce manufacturers recommended data sheet for each painting materials to the Engineer prior panting work for his approval to this effect. The recommended Dry film thickness wherever applicable and other service conditions for respective painting materials shall be indicated in the Datasheets. Primer and finish coats shall be of first class quality and shall conform to the following.

## 7.8.7.1 Primer

Inorganic Zinc Silicate Primer (Zinc Anode 304 MZ or equivalent)

Composition: Heavy duty anticorrosive primer containing Zinc silicate.

Minm. DFT: 75 micron /coat.

#### 7.8.7.2 Intermediate Coat

Polyamide cured high build epoxy coating based on laminar micaceaous iron oxide pigments (Epiguard high built M.I.O. brown or equivalent of approved make)

Composition – Polyamide cured high build micaceous iron oxide coating.

Min.DFT: 100 micron / coat

## 7.8.7.3 Finishing Coat

Alyphatic Isocynate cured polyurethene aluminium paint of approved make (TWO COATS) Composition – Polyami Alyphatic Isocynate cured polyurethene aluminium Minm. DFT: 30 micron / coat.

## 7.8.8 GUARANTEE PERIOD

In case at any point of time after final erection and during the three year maintenance period any defect to paint work is noticed, the same has to be rectified and repainted at no extra cost to HDC subject to investigation of the damage by EIC and the final decision of the EIC on the matter shall be binding upon the Contractor.

#### **7.8.9 PAYMENT**

The quantity which qualifies for payment shall be based on the finished area painted, with deduction for the concealed/hidden areas (i.e., portions of structures below ground level). For the items where unit is normally Sq. M. for measurement, measurements will be for the actual area painted as per IS: 1200 (Latest Revision).

## 7.9 WIND SCREEN MESH

The wind screen mesh shall be made up of HDPE monofilament yarn and shall be UV stabilised. The colour of the fabric shall be blue / green / black or any other colour as approved by the Engineer and having a weight of 4 gauge and weight not less than 275 gms / sqm with 60% shade factor aprrox. with eyelet or salvage at both the ends as available in the market to be used as greenhouse net and fixing the knitted fabric firmly in between the barrier frame and 10 gauge MS sheet of width 50 mm and at intervals not exceeding 1000 mm in the horizontal and vertical direction with 6 mm dia GI bolts and nuts (at spacing not exceeding 300 mm) all as per manufacturer's specification. The rate is inclusive of charge of all bolts, washers and labour including staging and other ancillary work, no separate payment shall be made for these works.

Every consignment shall be supported by manufacturer's certificate as a prerequisite for acceptance and testing shall be carried out as per the discretion of the Engineer and the cost has to be borne by the Contractor. In case at any point of time after final erection and during the three year maintenance period any defect to mesh work is noticed, the same has to be rectified and repaired/replaced at no extra cost to HDC subject to investigation of the damage by EIC and the final decision of the EIC on the matter shall be binding upon the Contractor.

If the knitted fabric strips are stitched together, it should be done using a double fold and stitching should be done using lubricated, twisted polyester thread of required thickness. The fabric shall be stretched as per the manufacturer's specification before fixing to the frame to avoid any sag or crease.

## **7.9.1 PAYMENT**

Payment for the knitted fabric shall be made only for the area covered by such fabric. The area folding over lapping for stitching purpose of the wastages shall not be accounted for the payment purpose.

## 7.10 STORAGE OF MATERIALS

All materials shall be stored in accordance with the provisions of given hereunder and other relevant IS Specifications. All efforts must be made to store the materials in proper places so as to prevent their deterioration or contamination by foreign matter and to ensure their satisfactory quality and fitness for the

work. The platform where aggregates are stockpiled shall be appropriately made. The area shall have slope and drain to drain off rain water. The storage space must also permit easy inspection, removal and storage of the materials. Aggregates of different sizes shall be stored in partitioned stack-yards. All such materials even though stored in approved godowns must be subjected to acceptance test as per these specifications immediately prior to their use.

#### 7.10.1. **GENERAL**

All materials may be stored at proper places so as to prevent their deterioration or intrusion by foreign matter and to ensure their satisfactory quality and fitness for the work. The storage space must also permit easy inspection, removal and re-storage of the materials. All such materials even though stored in approved godowns/places, must be subjected to acceptance test prior to their immediate use.

#### 7.10.2. AGGREGATES

Aggregate stockpiles may be made on ground that is denuded of vegetation, is hard and well drained. If necessary, the ground shall be covered with 50 mm plank.

Coarse aggregates, unless otherwise agreed by the Engineer in writing, 20 mm and downgraded Pakur variety stone chips. Aggregates placed directly on the ground shall not be removed from the stockpile within 30 cm. of the ground until the final cleaning up of the work, and then only the clean aggregate will be permitted to be used.

In the case of fine aggregates, these shall be deposited at the mixing site not less than 8 hours before use and shall have been tested and approved by the Engineer.

#### **7.10.3 CEMENT**

Cement shall be transported, handled and stored on the site in such a manner as to avoid deterioration or contamination. Cement shall be stored above ground level in perfectly dry and water-tight sheds and shall be stacked not more than eight bags high. Wherever bulk storage containers are used their capacity should be sufficient to cater to the requirement at site and should be cleaned at least once every 3 to 4 months.

Each consignment shall be stored separately so that it may be readily identified and inspected and cement shall be used in the sequence in which it is delivered at site. Any consignment or part of a consignment of cement which had deteriorated in any way, during storage, shall not be used in the works and shall be removed from the site by the Contractor without charge to the Employer.

The Contractor shall prepare and maintain proper records on site in respect of delivery, handling, storage and use of cement and these records shall be available for inspection by the Engineer at all times.

The Contractor shall maintain a register and on request submit a monthly return to the Engineer on the date corresponding to the interim certificate date, showing the quantities of cement received and issued during the month and in stock at the end of the month.

#### **7.10.4 BRICKS**

All brick shall be of approved quality of standard specifications, made of good brick earth, uniform deep red, cherry or copper colour, thoroughly burnt in kiln (machine made) without being vitrified, regular in shape and size, sound, hard, homogeneous in texture, true to shape and of standard dimensions and shall be free from cracks, chips, flaws, stones or humps of any kind and shall not show appreciable signs of efflorescence either dry or subsequent to soaking in water. The size of bricks shall be conventional as approved or directed. The Bricks shall emit a clear ringing sound on being struck and have minimum crushing strength of 105 kg/sq.cm. All the bricks which absorb water more than 20% of their own dry weight after 24 hours immersion in cold water shall be rejected.

## 7.11 QUALITY CONTROL FOR WORKS

- (i) The contractor shall carry out quality control tests on the materials and work to the frequency stipulated in relevant IS Codes. In the absence of clear indication about method and frequency of tests for any item, the instructions of Engineer shall be followed.
- (ii) The contractor shall provide necessary co-operation and assistance in obtaining the samples for tests and carrying out the field tests as required by the Engineer from time to time. This may include provision of labor, attendants, assistance in packing and dispatching and any other assistance considered
- (iii)The contractor shall carry out modifications in the procedure of work, if found necessary, as directed by the Engineer during inspection. Works falling short of quality shall be rectified/ redone by the Contractor at his own cost, and defective work shall also be removed from the site of works by the Contractor at his own cost.
- (iv) Cost of all equipment, tools, materials, labors & incidentals to perform tests and other operations of quality control according to the specification requirements shall be deemed to be incidental to the work and no extra payment shall be made for the same.
- (v) Where essential tests are to be carried out at the manufacturer's plants or at laboratories other than the site laboratory, the cost of samples, sampling, testing and furnishing of test certificates shall be borne by the Contractor. He shall also furnish the test certificate to the Engineer.
- (vii) DEFECTIVE MATERIALS: All materials which the Engineer /his representative has determined as not conforming to the requirements of the contract shall be rejected whether in place or not they shall be removed immediately from the site as directed. Materials, which have been subsequently corrected, shall not be used in the work unless approval is accorded in writing by the Engineer. Upon failure of the contractor to comply with any order of the Engineer/his representative, given under this clause, the Engineer/ his representative shall have authority to cause the removal of rejected material and to deduct the removal cost thereof from any payments due to the contractor.
- (viii) Works performed shall conform to the lines, grades, cross sections and dimensions shown on the drawings or as directed by the Engineer, subject to the permitted tolerances.

#### 7.11.1 CONTROL TESTS & THEIR MINIMUM FREQUENCY FOR CONCRETE INGREDIENTS

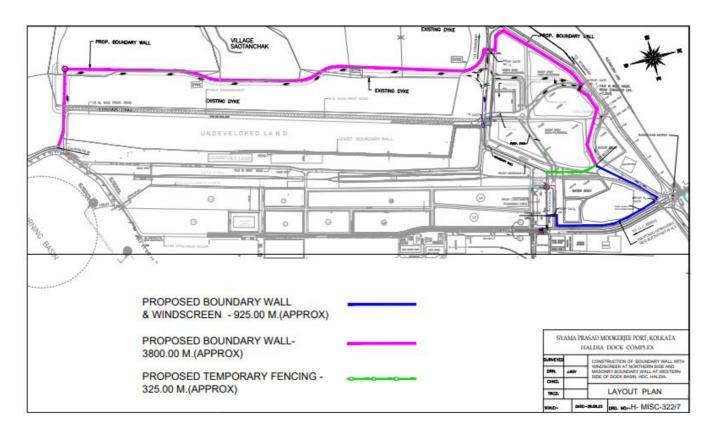
Frequency & tests for cement, aggregates, water, admixture, curing compounds etc. will be as detailed in the relevant IS Codes and as per QAP approved by the Engineer.

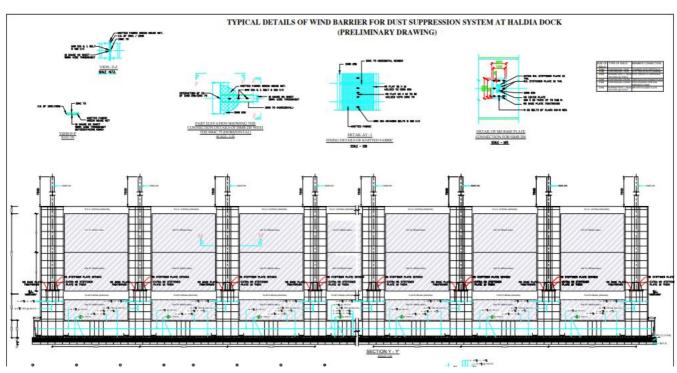
## 7.12 CLEANING DURING EXECUTION AND AFTER COMPLETION

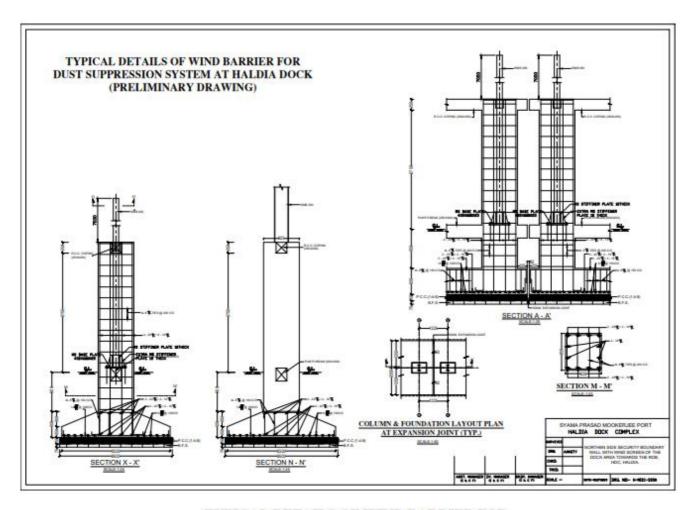
On completion of works the contractor shall reinstate and make good at his own expense any property or land which might have been disturbed and/or damaged by his works. He should also clean the site as required during execution and fully clear the site after completion of all the works. The contractor shall forward any usable materials found during the course of construction at the work site or its vicinity to KoPT stores/yards, dispose of the debris beyond the port area all at his own expenses by his own transport and labour and clean out all part of work and leave everything clean and tidy to the entire satisfaction of the Engineer, failing which suitable deduction will be made from final bill as per discretion of the Engineer/Engineer's representative.

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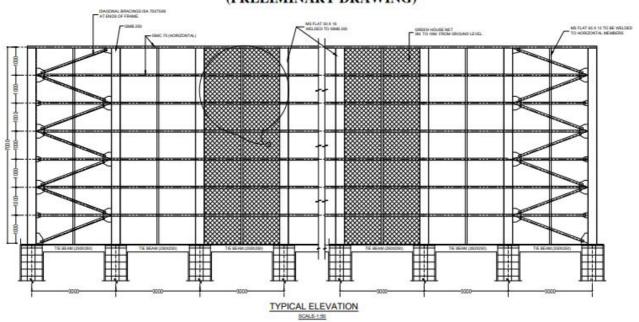
## 8. DRAWINGS







## TYPICAL DETAILS OF WIND BARRIER FOR DUST SUPPRESSION SYSTEM AT HALDIA DOCK (PRELIMINARY DRAWING)





## 9. PREAMBLE TO THE BILL OF QUANTITIES

# E-TENDER FOR CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

- 8.1 The Bill of Quantities must be read with the General Conditions of Contract, the Special Conditions of Contract and the Particular Specifications of Work and the Bidder is deemed to have examined the above documents and to have thoroughly familiarise himself with the total scope of work and its mode of execution.
- 8.2 The quantities given in the Bill of Quantities are approximate only and are given to provide a common basis for tendering. Payment will be made according to the quantities of each item of work actually carried out at the accepted rates as per Order Letter. The measurements of each item of work shall be measured jointly by the Engineer or his Representative.
- 8.3 This being a percentage rate tender, the Bidder shall quote his rates as percentage above / below / at per with the estimated amount put to tender on his own analysis.

The Tender Price thus established would be taken for comparative evaluation of tenders.

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## **10. BILL OF QUANTITIES**

E-TENDER FOR CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA.

## (PART- A: NORTHERN SIDE)

It. No.	Description of work	Qty.	Unit	<b>Rate</b> (in ₹)	Amount (in ₹)
1	Earth work in excavation of the foundation tranches or drains in all sorts of soil (including mixed soil but excluding laterite or sand stone) including removing, spreading or stacking the spoils within a lead of 1000 Mtr as directed. The Item includes necessary shoring, trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water etc. as required complete. Depth of excavation not exceeding 3000 mm.				
	a) Depth of excavation not exceeding 1500mm b) Depth of excavation more than 1500mm and upto 3000mm	4,500 700	Cu.M.	120.46 194.30	5,42,070.00 1,36,010.00
2	Dismantle all types of Masonry excepting cement concrete plain or reinforced, stacking serviceable Materials at site &removing the rubbish as directed within a lead of 75 Mtr in ground floor including roof.	10	Cu.M.	451.47	4,514.70
3	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. in ground floor including roof. above 150 mm. thick	10	Cu.M.	1,431.17	14,311.70
4	<b>Dismantling R.C. floor</b> , roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 75 m. including stacking of steel bars in ground floor including roof.	20	Cu.M.	1,975.56	39,511.20
5	Pumping out water from ponds or ditches (Payment if permitted will be made on the quantity of water calculated on the basis of initial water level and final level on consideration being made for any water that may have been added through percolation or otherwise).	10,500	Cu.M.	10.54	1,10,670.00
6	Provide, spread & fill the excavated area with zone - III Brown sand , in layers of thickness not exceeding 300 mm including consolidation by sprinkling of water and rolling by mechanically operated Roller of appropriate capacity , all inclusive as directed by the Engineer.(Payment to me made on pre-post level of compacted work)	125	Cu.M.	938.00	1,17,250.00

7	Providing necessary shoring and shuttering in the excavated portion and providing props upto the required extent including all labors, materials etc. as directed by the Engineer in charge. [Note: In case any damage occurs to existing structure the same will be rectified to original condition by the contractor and free of cost to HDC and to the satisfaction of the Engineer]	900	Sq.M.	378.75	3,40,875.00
8	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand	2,525	Sq.M.	349.46	8,82,386.50
9	Ordinary cement conc.(1:3:6) with stone ballast etc.	380	Cu.M.	4,694.48	17,83,902.40
10	Plain Cement Concrete (Mix 1:2:4) with graded stone chips (20 mm size nominal size) excluding shuttering all complete.	140	Cu.M.	5,593.80	7,83,132.00
11	Supplying ready mixed concrete of M 30 Grade with well graded stone chips of 20 mm nominal size containing designed quantity of cement per Cu.m of wet concrete produced in computerised batching plant under controlled condition using approved super plastisizer, designing concrete mix following IS 10262 and IS 456, transporting the mix with agitation in transit mixer to work site depositing the mix on a platform erected for the purpose at required levels of concreting and then placing the mix in its final location of form work, compacting and curing the same complete as per specification and direction of the EIC including computerised batching plant transit mixer with all accessories vibrators etc. inclusive of all other incidental charges in this connection complete excluding reinforcement and shuttering in ground floor and foundation.	2300	Cu.M.	6,835.75	1,57,22,225.00
12	Providing and laying of reinforced Controlled Cement concrete (PRECAST) M 30 Gradewith well graded Pakur Variety stone chips (20 mm nominal size) including shuttering but excluding reinforcement with complete design of concrete as per IS: 456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in charge. Consumption of cement will not be less than 320 Kg of cement with Super plasticiser per cubic meter of controlled concrete but actual consumption will be determined on the basis of preliminary test and job mix formula. [using concrete mixture] .etc., all complete and as directed by Engineer-in-charge.	15	Cu.M.	10,963.16	1,64,447.40

13	Hire and labour charges for shuttering with centering 25 mm to 30 mm thick hard wood plank with required bracing (without staging) for concrete beams, columns, footings etc. including fittings, fixing and striking out after completion of the works as per the direction of Engineer-in-Charge.	6,750	Sq.M.	207.05	13,97,587.50
14	Provide Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 18 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation and upto roof of ground floor/upto 4 m Tor steel/Mild steel. (SAIL / TATA / RINL)	230	MT	76,774.67	1,76,58,174.10
15	Curing compound: Immediately after the striking form work or after completion of the work the surface of the Concrete should be sprayed with NITOBOND AR of FOSROC/BASF/SIKA diluted with water in the ratio of 1:1 as a curing membrane.	9900	Sq.M.	270.30	26,75,970.00
16	Brick work with first class bricks in cement moratr 1:4 (1- Cement: 4 - medium coarse sand) including racking out joints, curing etc. complete.				
	(a) In foundation and plinth	130	Cu.M.	5,481.27	7,12,565.10
	(b) In superstructure	240	Cu.M.	5,706.50	13,69,560.00
17	125 mm th. Brick work with 1st class bricks in cement mortar (1:4)	950	Sq.M.	714.07	6,78,366.50
18	Brickwork in superstructure for string course only with cement mortar (1:4) etc.	15	Cu.M.	5,960.01	89,400.15
19	Cement plaster 15 mm thick with 1:4 (1- Cement : 4 - medium coarse sand ) cement plaster including for making scaffolding all complete as directed.	2800	Sq.M.	154.53	4,32,684.00
20	Cement plaster 20 mm thick with 1:4 (1- Cement: 4 - medium coarse sand) cement plaster including for making scaffolding all complete as directed.	2000	Sq.M.	177.76	3,55,520.00
21	Provide and lay neat cement punning about 1.5 mm. thick in wall, dado, window sills, floor, drain etc including carriage of all materials from store of I&CF Div.	850	Sq.M.	34.34	29,189.00

Applying two coats of protective and decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of EIC to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and incidental charges but excluding the cost of primer all complete as directed.  24 Supply, fabricate, erection of M.S. structural works in columns, beams etc. with simple rolled structural members (e.g. joists, ISA, ISMC,ISMB, M.S. / G.I. Pipe, etc. sections conforming to IS: 2062, IS: 808 & SP (6)-1964 connected to one another with bracket, gussets, cleats, required nut bolts as per design, direction of Engineer-in- charge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS: 816-1969 & IS: 1995 using electrodes of approved make and brand conforming to IS:814-2004, haulage, hoisting, erection all complete. The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charge of all tools and plants and labour required for the work including all incidental charges such as electricity charges, labour insurance charges etc. (Payment to be made on the basis of calculated weight of finished structural members only work as per IS specified weight.) (SAIL/TATA/RINL)  (i) For built up sections / structural members of specified sections weighning not less than 22.50 Kg/m	22	Applying one coat Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive acrylic exterior emulsion paint including scraping and prepairing the surface throughly complete as per manufacturer's specification and as per direction of the EIC. The rate includes cost of material, labour, scaffolding and incidental charges	6,500	Sq.M	31.71	2,06,115.00
works in columns, beams etc. with simple rolled structural members (e.g. joists, ISA, ISMC,ISMB, M.S. / G.I. Pipe, etc. sections conforming to IS: 2062, IS: 808 & SP (6)- 1964 connected to one another with bracket, gussets, cleats, required nut bolts as per design, direction of Engineer-in- charge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS: 816- 1969 & IS: 1995 using electrodes of approved make and brand conforming to IS:814- 2004, haulage, hoisting, erection all complete. The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charge of all tools and plants and labour required for the work including all incidental charges such as electricity charges, labour insurance charges etc. (Payment to be made on the basis of calculated weight of finished structural members only work as per IS specified weight.) (SAIL/TATA/RINL)  (i) For built up sections / structural members of specified sections weighning not less than 22.50 Kg/m	23	decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of EIC to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and incidental charges but excluding the cost of primer all complete as directed.	6,500	Sq.M.	67.67	4,39,855.00
(ii) For built up sections / structural members of 95 MT 77,909.73 74,01,424.35 specified sections weighing less than 22.50	24	works in columns, beams etc. with simple rolled structural members (e.g. joists, ISA, ISMC,ISMB, M.S / G.I. Pipe, etc. sections conforming to IS: 2062, IS: 808 & SP (6)- 1964 connected to one another with bracket, gussets, cleats, required nut bolts as per design, direction of Engineer-in- charge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS: 816- 1969 & IS: 1995 using electrodes of approved make and brand conforming to IS:814- 2004, haulage, hoisting, erection all complete. The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charge of all tools and plants and labour required for the work including all incidental charges such as electricity charges, labour insurance charges etc. (Payment to be made on the basis of calculated weight of finished structural members only work as per IS specified weight.) (SAIL/TATA/RINL)  (i) For built up sections / structural members of specified sections weighning not less than 22.50 Kg/m				

25	Supplying high strength M20 bolts of class 8.8, 700 mm long anchor bolts as shown in the drawing conforming to relevant Indian Standards with suitable Hexagonal nuts with washers and fixing in position the same in column pedestals while concreting including welding the bolts to the column pedestal reinforcement, making provision for pipe sleeves, including all materials, labor, tools, tollage, equipments, transportations, gate entry fees, fuel etc. completed as directed by the Engineer-incharge.	2815	Each	719.50	20,25,392.50
26	Supplying, fabricating and fixing knitted high strength new wind screen mesh made up of HDPE monofilament yarn and UV stabilised (laid with proper overlaping of 100 mm minimum both Horizontal and vertical side ). The colour of the fabric shall be blue / green / black or any other approved colour and having a weight of 4 gauge and weight not less than 275 gms / sqm with 60% shade factor aprrox. with eyelet or salvage at both the ends as available in the market to be used as greenhouse net and fixing the knitted fabric firmly in between the barrier frame and 10 gauge MS sheet of width 50 mm and at intervals not exceeding 1000 mm in the horizontal and vertical direction with 6 mm dia GI bolts and nuts (at spacing not exceeding 300 mm) all as per manufacturer's specification and as directed including all labour, materials, all testing charges, fuel, tools and scaffolding, transport, handling, fabrication, stitching, tying, gate entry fees, all taxes tollage, etc. complete as directed by the Engineer-in-charge.  N.B- Every consignment shall be supported by	6800	Sq M.	271.36	18,45,248.00
	manufacturer's certificate, as this is a prerequisite for acceptance. Notes:  1) if the knitted fabric strips are stitched together, it should be done using a double fold and stitching should be done using lubricated, twisted polyester thread of required thickness.  2) The fabric shall be stretched as per the manufacturer's specification before fixing to the frame to avoid any sag or crease.  a) Knitted fabric  N.B - Payment will be made on the actual area of knitted fabric shall be made only for the area covered by such fabric, extra payment for lap for stitching purpose of the wastages shall not be accounted for the payment purpose.	40450			
27	Cleaning the structural members by grit blasting with air compressor including all materials, hire charges of machineries, fuel and labour etc. all complete as per technical specification and direction of the Engineer-in-Charge.	12150	Sq.M.	570.78	69,34,977.00

28	Provide and apply one coat of inorganic zinc silicate primer of approved make on the blasted surface of pipes and accessories and as specified (Min.DFT per coat by brush is 75 micron).	12150	Sq.M.	127.05	15,43,657.50
29	Provide and apply one coat of polyamide cured high build epoxy coating based on laminar micaceaous iron oxide pigments (Epiguard high built M.I.O. brown or equivalent of approved make) over the steel surface and as directed. (Minm. DFT per coat by brush 100 micron).	12150	Sq.M.	60.63	7,36,654.50
30	Provide and apply 2 (two) coats of Alyphatic Isocynate cured polyurethene aluminium paint of approved make over the surface at the locations over the steel surfaces as directed by Engineer (Minm. DFT per coat by brush 30 micron).	12150	Sq.M.	108.56	13,19,004.00
31	Earthwork in backfilling in foundation trenches or plinth with good earth , in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work) (With earth obtained from excavation of It No.1)	2,600	Cu.M.	78.32	2,03,632.00
32	<b>Clearing compound</b> premises of shurbs, plants, jungles etc. by cutting and removing as directed (Specific permission of Engineer prior to execution will be necessary).	2,900	Sq.M.	11.11	32,219.00
33	Removal of rubbish, earth, etc. from the working site and disposal of the same beyond the compound, in conformity with the Municipal / Corporation Rules for such disposal, loading into truck and cleaning the site in all respect as per direction of Engineer-in-charge	100	Cu.M.	167.66	16,766.00
34	Hiring and fixing of Sheet fencing (3 mtr high from G.L.) made of 65 mm to 75 mm dia bamboo (in single line) driven 1.5 m into ground / foundation trenches and 3 mtr above GL at very close spacing of 250mm c/c side by side, with stout stays at an angle of 45 degree intervalof 250mm fixed with bamboo post driven 1.5 m below G.L., 7 nos. of half split bamboo runner of same dia fitted and fixed with nails etc. and lining exposed portion with galvanised plain sheets(0.63mm) fitted and fixed with 6mm dia J/L or U hook bolts with a end lap 150mm and side lap 50 mm at each joint, complete as per direction including the cost of labour, galvanised sheets, nails, wires, bamboo etc. all complete and subsequent removal of all these items from site after completion of the total project as per direction of Engineer.	325	Mtr.	1,739.42	5,65,311.50
				TOTAL= Rs.	9,91,68,808.92

Rupees Nine Crore Ninety One Lakhs Sixty Eight Thousand Eight Hundred Eight and Paisa Ninety Two Only.

## (PART- B: WESTERN SIDE)

lt. No.	Description of work	Qty.	Unit	<b>Rate</b> (in ₹)	Amount (in ₹)
1	Earth work in excavation of the foundation tranches or drains in all sorts of soil (including mixed soil but excluding laterite or sand stone) including removing, spreading or stacking the spoils within a lead of 1000 Mtr as directed. The Item includes necessary shoring, trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water etc. as required complete.	7,660	Cu.M.	120.46	9,22,723.60
2	Dismantle all types of Masonry excepting cement concrete plain or reinforced, stacking serviceable Materials at site &removing the rubbish as directed within a lead of 75 Mtr in ground floor including roof.	10	Cu.M.	451.47	4,514.70
3	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. in ground floor including roof. above 150 mm. thick	20	Cu.M.	1,431.17	28,623.40
4	<b>Dismantling R.C. floor</b> , roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 75 m. including stacking of steel bars in ground floor including roof.	10	Cu.M.	1,975.56	19,755.60
5	Pumping out water from ponds or ditches (Payment if permitted will be made on the quantity of water calculated on the basis of initial water level and final level on consideration being made for any water that may have been added through percolation or otherwise)	5,000	Cu.M.	10.54	52,700.00
6	Provide, spread & fill the excavated area with zone - III Brown sand , in layers of thickness not exceeding 300 mm including consolidation by sprinkling of water and rolling by mechanically operated Roller of appropriate capacity , all inclusive as directed by the Engineer.(Payment to me made on prepost level of compacted work)	550	Cu.M.	938.00	5,15,900.00
7	Supply 100 mm dia Bullah Pile/Post and Piling at work site including dressing and pointing, hoisting and placing piles in position including hire and labour for necessary driving appliances and all tackles. (100mm will be measured at the point 1.5m from thicker end)	56,000	Mtr.	180.79	1,01,24,240.00

8	Providing necessary shoring and shuttering in the excavated portion and providing props upto the required extent including all labors, materials etc. as directed by the Engineer in charge. [Note: In case any damage occurs to existing structure the same will be rectified to original condition by the contractor and free of cost to HDC and to the satisfaction of the Engineer]	750	Sq.M.	378.75	2,84,062.50
9	Supplying and laying polythene sheet (150gm/sqm) in foundation trenches.	3,800	Sq.M.	24.24	92,112.00
10	Ordinary cement conc.(1:3:6) with stone ballast etc.	580	Cu.M.	4,694.48	27,22,798.40
11	Plain Cement Concrete (Mix 1:2:4) with graded stone chips (20 mm size nominal size) excluding shuttering all complete.	180	Cu.M.	5,593.80	10,06,884.00
12	Providing and laying ordinary cement concrete (Mix 1:1.5:3) with pakur graded stone chips (20 mm size) excluding shuttering and reinforcement.	215	Cu.M.	6,082.71	13,07,782.65
13	Hire and labour charges for shuttering with centering 25 mm to 30 mm thick hard wood plank with required bracing (without staging) for concrete beams, columns, footings etc. including fittings, fixing and striking out after completion of the works as per the direction of Engineer-in-Charge.	3,100	Sq.M.	207.05	6,41,855.00
14	Provide Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 18 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation and upto roof of ground floor/upto 4 m Tor steel/Mild steel. (SAIL / TATA / RINL)	23	MT	76,774.67	17,65,817.41
15	Brick work with first class bricks in cement moratr 1:4 (1- Cement : 4 - medium coarse sand) including racking out joints, curing etc. complete.				
	(a) In foundation and plinth	2,800	Cu.M.	5,481.27	1,53,47,556.00
	(b) In superstructure	3,700	Cu.M.	5,706.50	2,11,14,050.00
16	Providing and laying 40 mm thick damp proof course with cement concrete (1:1.5:3) (with graded stone chips 20 mm nominal size) with water proofing compound of approved brand @ 0.2% weight of cement including cost of materials all complete as directed.	1,600	Sq.M.	280.78	4,49,248.00

17	Brickwork in superstructure for string course only with cement mortar (1:4) etc.	135	Cu.M.	5,960.01	8,04,601.35
18	Cement plaster 15 mm thick with 1:4 (1-Cement: 4 - medium coarse sand) cement plaster including for making scaffolding all complete as directed.	30,350	Sq.M.	154.53	46,89,985.50
19	Provide and lay neat cement punning about 1.5 mm. thick in wall, dado, window sills, floor, drain etc including carriage of all materials from store of I&CF Div.	4,050	Sq.M.	34.34	1,39,077.00
20	Applying one coat Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive acrylic exterior emulsion paint including scraping and prepairing the surface throughly complete as per manufacturer's specification and as per direction of the EIC. The rate includes cost of material, labour, scaffolding and incidental charges.	27,000	Sq.M.	31.71	8,56,170.00
21	Applying two coats of protective and decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of EIC to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and incidental charges but excluding the cost of primer all complete as directed.	27,000	Sq.M.	67.67	18,27,090.00
22	Supplying, fitting and fixing M.S.Structural Works for holding of concertina as per approved design made of M.S angle including necessary welding, locking and hanging arrangements fitting and fixing complete as per direction of Engineer - in -charge.	10.5	MT	59,710.19	6,26,957.00
23	Supplying, fitting and fixing G.I. gate as per approved design made of strong G.I.frame work, intermediate stiffeners and round or sq. bars, angles, G.I. sheet, cleats etc.including necessary bolting, welding, locking and hanging arrangements complete as per direction of Engineer - in -charge.	50	Qtl.	7,641.66	3,82,083.00
24	Supplying, fitting and fixing R.B.T concertina fencing 600mm dia as per approved design including necessary locking and hanging arrangements fitting and fixing complete as per direction of Engineer - in - charge.	3,900	Mtr.	412.08	16,07,112.00
25	125 mm th. Brick work with 1st class bricks in cement mortar (1:4)	60	Sq.M.	714.07	42,844.20

26	Supplying, fitting and fixing 1st quality ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10 mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc., as directed by Engineer-in-charge. Area of each tile upto 0.09 sqm (Matte finish)				
	(i) At floors: With Sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @0.20kg/Sq.m. Coloured decorative	15	Sq.M.	739.32	11,089.80
	(ii) At walls: With Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @0.20kg/Sq.m. Coloured decorative	45	Sq.M.	746.39	33,587.55
27	Provide and lay true to line and level Double Charge Vitrified Tiles of approved brand and colour (size not less than 600mmX 600 mm X 9.5 mm thick) conforming to IS 15622: 2006 (Group B I a) and tested as per IS 13630:2006 (relevant parts) [Non-modular sizes for tiles with Water Absorption (av.) ≤ 0.08 %] in floor, skirting etc. set in 20 mm thick sand cement mortar (1:4) bed prepared after application of slurry using 1.75Kg of cement per Sqm over the base and 2mm thick cement slurry using cement @2.91Kg./sqm at the back side of the tiles and laid over the mortar bed using 0.2 kg/sqm of White cement used for joint filling with approved pigment as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials,labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer-in-Charge.	36	Sq.M.	1,485.71	53,485.56
28	Provide and lay 10 mm thick 1:4 cement plaster (1 - cement : 4 Med. Coarse sand) including curing etc.	125	Sq.M.	125.24	15,655.00
29	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs	2.5	Qntl.	7,310.38	18,275.95

30	Supplying, fitting and fixing openable steel windows and ventilators as per IS sizes with side hung shutters and horizotal glazing bars without integrated grills conforming to IS 1038-1975 and manufactured from rolled steel sections conforming to IS 7452-1974 with non-friction projecting type, box type hinges, glazing clips, lugs locking bracket, handle plate etc, including hoisting in position, straightening if required, fixing lugs in cement concrete (1:2:4) with stone chips 20 mm down cutting holes and mending good damages to match with existing surface complete in all respect excluding glazing.	1	Sq.M.	1,679.63	1,679.63
31	Supplying, fitting and fixing 2/3-Track fully glazed Aluminium sliding window made up of aluminium alloy extrusions conforming to IS 733-1983 & IS 1285-1975, annodised conforming to IS 1868-1983, Membe fitted with all other accessories viz. PVC roller, EPDM gasket, maruti lock, screws etc. including fixing of glass (excluding cost of glass) all complete as directed by E.I.C.	210	Kg	452.48	95,020.80
32	Provide & supply Local sal Wood work in door and window frame fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame exluding cost of concrete, Iron Butt Hinges and M.S clamps.	0.60	Cu.M.	73,683.54	44,210.12
33	Provide & fix MS clamp made of 40mm x 6mm ms flat & 200mm long or as required at site to the door, window, cupboard frame.	60	Each	25.25	1,515.00
34	Supply of 35 mm. thick Panel shutters with 19 mm. thick panel of door and window, as per design (each panel consisting of single plank with out joint), including fitting and fixing the same in position but excluding the cost of hinge and other fittings. with sishu, gamar, champ etc. wood.	10	Sq.M.	2,816.89	28,168.90
35	Provide & fix 125 mm long wooden buffer block with Malayasian sal.	10	Each	51.51	515.10
36	Supplying, fitting & fixing factory made PVC Door Frame (Matt finish) (Sintex / Duroplast or equivalent approved quality) made out of extruded PVC multi chamber hollow section having dimensions 60mm x 50mm x 2mm 9 + / - 0.2mm, horizontal section will be jointed with vertical section by galvanised steel screws after inserting two nos steel brackets as reinforcement making suitable space for placing hinges. One steel tube 40mm x 20mm x 1.20mm will be inserted on one full vertical side of the frame (Hinge side) as reinforcement. The frame will then be fixed in the opening with the help of PVC expandable fastener / wooden gutties and galvanised steel screws including cost of all materials and labour, higher charges of tools and appliances, carriage of all materials, taxes and all other incidental charges complete.	25	Mtr.	281.79	7,044.75

37	Supplying, fitting & fixing factory made solid panel PVC Door Shutter made out of single piece extruded solid PVC profiles, 5 mm (+/- 0.2 mm) thick , having style & rails ( expect lock rail ) of size 95 mm X 35 mm X 5 mm , out of which 75 mm shall be flat and 20 extruded on the hinge side of the profile for better screw holding power , including reinforcing with MS tube of size 40 mm X 20 mm X 1 mm , joints of style & rails to be mitred cut & joint with the help of PVC solvent cement , self driven self tapping screws & M.S rectangular pipes bracket of size 190 mm X 100 mm of cross section size 35 mm X 17 mm X 1 mm at each corner. Single piece extruded 5 mm thick solid PVC lock rail of size 115 mm X 35 mm X 35 mm , out of which 95 mm to be flat and 20 mm to be tapered at both ends , having 15 mm solid core in middle of rail section integrally extruded, fixing the style & rails with the help of solvent and self driven self tapping screws of 125 mm X 8 mm , including providing 5 mm single piece solid PVC extruded sheet inserted in the door as panel, all complete as per manufacturer's specification and direction of Engineer - in- charge.	9	Sq.M.	2,588.63	23,297.67
38	Supply, fit and fix 4 mm thick best indian sheet glass panes set in putty with nails (as per I.S. specification) in all floors all complete and as directed.	25	Sq.M.	541.36	13,534.00
39	Provide & fix approved quality oxidised iron butt hinges as per requirement. i) 100mmx75mmx3.5mm	30	Each	66.66	1,999.80
40	Supply, fit and fix of anodised aluminum tower bolt of approved quality manufacture from extra date section confirming to IS 204/74 fitted and fixed with cadmium plates screw.				
	a) 225 mm long x 10mm dia bolt .	10	Each	84.84	848.40
41	Supply, fit and fix of iron hasp bolt of approved quality complete (oxidised ) 250 mm long 16 mm dia rod with centre bolt and round fitting.	10	Each	160.59	1,605.90
42	<b>Providing 75mm dia iron door ring</b> of approved quality fitted and fixed with nut and washer complete.	20	Each	28.28	565.60
43	Provide and apply one coat of primer of approved brand and manufacture to timber or plastered surface after necessary preparation of surfaces, all complete and as directed.	50	Sq.M.	38.38	1,919.00
44	Providing and applying paint on wood or wall surface with two coats of approved synthetic enamel paint (other than high gloss of approved quality) include for scrapping and preparation of surface with brushing and cleaning before painting.	50	Sq.M.	81.81	4,090.50

45	Providing and applying one coat approved primer to steel structures etc. include for scrapping, brushing, sand papering and cleaning the surfaces smooth before application of primer all complete as directed.	500	Sq.M.	29.29	14,645.00
46	Providing and applying paint on steel work with two coats of approved synthetic enamel paint (other than high gloss of approved quality) including scrapping, brushing and cleaning the surfaces if necessary all complete as directed.	500	Sq.M.	79.79	39,895.00
47	Supplying, fitting and fixing PVC pipes of approved make of schedule 80 (medium duty) conforming to ASTMD - 1785 and and threaded to match with G.I pipes as per IS :1239 with all necessary accessories, specials viz socket, bend, tee, union,elbo, nipple longscrew, reducing socket,reducing tee etc fitted with holder bats clamps including cutting pipes, making threads, fitting, fixing etc.complete in all respect including cost of all necessary fitting as required, jointing materials etc.				
	i) 50 mm dia pipe	2,000	Mtr.	387.84	7,75,680.00
	ii) 32mm dia pipe	80	Mtr.	238.36	19,068.80
	iii) 25mm dia pipe	100	Mtr.	178.77	17,877.00
	iv) 20mm dia pipe	100	Mtr.	130.29	13,029.00
	v)15mm dia pipe	100	Mtr.	102.01	10,201.00
48	Supply, fitting & fixing E.W.C with P- trap in white glazed vitreous chinaware of approved make complete in position with necessary bolts, nuts complete.	5	Each	1,435.21	7,176.05
49	Provide and fix gun metal bib cock / stop cock approved quality in position including taking out damaged stop cock and bib cock and return to store all complete as directed.				
	(i) 25 mm dia.	5	Each	492.88	2,464.40
	(ii) 15 mm dia.	12	Each	170.69	2,048.28
50	Supply,fit and fix Peet's valve fullway gunmetal standard pattern best quality of approved brand bearing ISI marking with fittings(tested to 21kg per sq.cm.).				
	a) 25 mm	5	Each	921.12	4,605.60
	b) 20 mm	5	Each	663.57	3,317.85
	c) 15 mm	5	Each	526.21	2,631.05
51	Supply, fit and fix 10 litre P.V.C low-down cistern with P.V.C fittings complete, CI brackets including two coats of painting to bracket etc.	5	Each	1,025.15	5,125.75

52	Supplying,fitting and fixing 450 mm long approved brand P.V.C. connector white flexible, with both ends coupling with heavy brass C.P.nut,15 mm dia	5	Each	82.82	414.10
53	Supply, fit and fix white vitreous china best quality approved make wash basin of size-550mm x 400mm with C.I. / G.I. pipe Brackets of required dia. on 75mm. x 75 mm. wooden blocks or inside wall ,C.P. waste fittings of 32 mm. dia. one approved quality brass C.P. pillar coak of 15 mm. dia, C.P. chain with rubber plug of 30 mm dia, approved quality PVC connection pipe with heavy brass CP nut of required length including mending good all damages and painting the brackets with two coats of approved paint all complete as directed.	5	Each	2,230.08	11,150.40
54	Supplying, fitting and fixing 750 mm long approved brand 32 mm dia P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.	5	Each	59.59	297.95
55	Supplying, fitting & fixing best quality Indian make beveled edged mirror 5.5mm. thick with silver red as per IS3438/1965 specification with C.P. hinges. size 600mm. X 450mm.	5	Each	488.84	2,444.20
56	Supplying P.V.C. water storage tank of 1000 litre capacity of approved quality with closed top with lid (Black) - Multilayer	5	Each	5,179.28	25,896.40
57	Provide, fit and fix high pressure polythene ball cock of size 32 mm dia. of approved make and brand with ball and liver	5	Each	166.65	833.25
58	<b>Provide, fit and fix CI gratings</b> round grating 100 mm dia.	5	Each	62.62	313.10
59	Supply fitting and fixing 25 mm dia. brass ferrule including connection with PVC pipe of approved make upto 450 mm long with plumbing joint, brass over C.P. coupling at both ends, with cap and lining complete in all respect, including cutting trenches in all sorts of soil and filling up trenches as per direction of the EIC.	5	Each	1,843.25	9,216.25
60	Provide fit and fix 110 mm dia internal dia UPVC soil pipes (B-Type) with all necessary fittings like bend, tee, 'Y' junction etc.conforming to IS 13592-1992 in position with necessary clamps, nails including making holes in the walls, floors etc and cutting trenches in any soil through masonry concrete and mending good damages including joining with jointing materials complete as directed. (Payment to be made as per centre line length of laid pipelines.)	150.00	Mtr.	294.92	44,238.00

61	Provide fit and fix 110 mm dia internal dia UPVC down pipes (A-Type) conforming to IS 13592-1992 including necessary bend, shoe, tee etc. in position with necessary clamps, nails including making holes in the walls, floors etc and cutting trenches in any soil through masonry concrete and mending good damages including joining with jointing materials complete as directed.	40	Mtr.	253.51	10,140.40
62	Construction of septic tank for 10 users as per approved drawing with 1st class brick work in cement mortar (1:4) including two 560 mm dia. R.C.C. manhole cover(heavy type)of approved make supplied, fitted and fixed in the 100mm thick R.C.C (1:1.5:3) top slab with necessary fittings, 20mm thick cement plaster (4:1) with neat cement finish to the internal surfaces and 15 mm thick cement laster (4:1) to outside wall upto 200 mm below G.L floor finished with 25 mm thick grey artificial stone over 100 mm thick R.C.C(1:1.5:3) bottom slab including supplying, fitting and fixing all necessry specials, fittings, S.W. tees, C.I. foot rest etc. including excavation earth in all sorts of soil, shoring, bailing out and pumping out water as necessary, ramming, dressing the bed and fefilling the sides of the tanks with earth, removing spoils, filling up the chamber with clear water, removing foreign materials from the chamber and including constructing attached inspection pit as per approved drawing and connecting all necessary pipes, joints etc. with internal plaster work and artificial stone flooring.	4	Each	34,980.34	1,39,921.36
63	Construction of circular soak well 2.5 metre deep in all types of sandy soils with dry brick work upto 1.6 metre from the bottom having 150 mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90 metre from top with 20mm thick cement plastering (1:4) to inside face upto the depth of cement brick work, 15mm thick cement plaster (1:4) on outer face from top of the well upto G.L. and 6 mm thick cement plaster (1:4) on top of the R.C.C. cover slab including filling bottom 1.00 metre of inside of the well with brick metal (50 mm to 63 mm size) including R.C.C. cover slab of 100 mm thick with cement conc (1:1.5:3) with stone chips with necessary reinforcement and shuttering including one 560 mm dia. R.C.C. manhole cover (heavy type) of approved make supplied, fitted and fixed in the cover slab with necessary fittings, making nacessary arrangements for pipe connections, excavation of well including shoring, dewatering and removing the excess earth from the premises as per direction complete in all recpect with all cost of labour and materials. (1.0m inside dia)	4	Each	16,298.37	65,193.48

64	Earthwork in backfilling in foundation trenches or plinth with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work) (With earth obtained from excavation of It No.1)	5,000	Cu.M.	78.32	3,91,600.00
65	Clearing compound premises of shurbs, plants, jungles etc. by cutting and removing as directed (Specific permission of Engineer prior to execution will be necessary).	4,000	Sq.M.	11.11	44,440.00
66	Removal of rubbish, earth, etc. from the working site and disposal of the same beyond the compound, in conformity with the Municipal / Corporation Rules for such disposal, loading into truck and cleaning the site in all respect as per direction of Engineer-in-charge	100	Cu.M.	167.66	16,766.00
		·	·	TOTAL= Rs.	6,94,15,282.01

Rupees Six Crore Ninety-Four Lakhs Fifteen Thousand Two Hundred Eighty Two and Paisa One Only.

#### **ABSTRACT**

NAME OF WORK: CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA

Tender No.: I&CF/IZ&R/T/408

PART – A - Rs. 9,91,68,808.92 PART – B - Rs. 6,94,15,282.01

Total = Rs. 16,85,84,090.93

[Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only]

#### **DECLARATION BY THE BIDDER**

(To be submitted on Company's Letter Head along with Techno Commercial Bid duly stamped and signed)

Sr. Dy. Manager (I&CF), Haldia Dock Complex. SMP, Kolkata

SUB: E-TENDER FOR "CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA".

Dear Sir,

Date:

Place:

We do hereby confirm that our offer is strictly in accordance with the terms and conditions of the Tender Document without any deviation / condition.

We further confirm that Part-II of the bid does not contain any condition / deviation.

Signature	of the E	Bidder wit	h Office S	eal

#### **DECLARATION BY THE BIDDER**

(To be submitted on Company's Letter Head along with Techno Commercial Bid duly stamped and signed)

Sr. Dy. Manager (I&CF), Haldia Dock Complex. SMP, Kolkata

SUB: E-TENDER FOR "CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA".

Dear Sir,	
a) The bidding firm has not been debarred / delisted by any Govt. in India.	/ Quasi Govt. / Public sector undertaking
b) The proprietor / partner(s)/ authorised signatory of the biddir firm bidding for the same work.	ng firm is/are not associated with other
	Signature of the Bidder with Office Seal.
Date:	
Place:	

#### **ANNEXURE - II**

### **CONCURRENT COMMITMENT(S) OF THE BIDDER**

SI. No.	Full particulars of works to be executed concurrently by the bidder. (i) Name of work. (ii) Client. (iii) W.O. No. & Date.	Sanctioned Tender Value. (in Rs.)	Completion time as stated in tender.	Name and address to whom reference can be made.
1	(ii) (iii)			
2	(i) (ii) (iii)			
3	(ii) (iii)			
4	(i) (ii) (iii)			

## **BIDDER'S PROFILE**

(To be submitted with Techno Commercial Bid)

The Bidders are also requested to furnish the following p	articulars:-
A) In case of Limited Company -	
1) Name of Company	:
2) Address of its present registered office.	:
3) Date of its incorporation	:
4) Full name and address of each of its Directors – any special particulars as to Directors if desire to be stated.	:
5) Name, address and other necessary particulars of Managing Agents, if any appointed by the Company.	:
6) Copies of Memorandum, Articles of Association (with the latest amendments, if any).	:
7) Copies of audited balance sheets of the Company for the last two years.	:
B) In case of a firm -	
1) Name and address of the firm.	:
2) When business started	:
3) If registered a certified copy of certificate of registration.	:
4) A certified copy of the Deed of Partnership	:
5) Full name and address of each of the partners and the interest of each partner in the partnership – any special particulars as to partners if desired to be stated.	:
6) Whether the firm pays income tax over Rs.10, 000/- per year	:
C) In case of an Individual:	

1) Full name and address of the Bidder any :

special particulars of the Bidder if desired to be stated.		
2) Name of the father of the Bidder.	:	
3) Whether the Bidder carries on business in his own name or any other name.	:	
4) When business was started and by whom.	:	
5) Whether any other person is interested in the business directly or indirectly, if so, name and address etc. of such persons and the nature of such interest.	:	
6) Whether the Bidder pays Income Tax over Rs.10, 000/- per year.	:	
Dated:	-	(Full signature of Bidder)

#### **ABSTRACT FORM OF TENDER (UNPRICED)**

(To be submitted with Techno Commercial Bid)

I / We hereby tender for the under mentioned work for its execution within the specified time and in accordance, in all respects with the specifications, design, drawing and instructions in writing and with such

materials as are provided for, by and in a practicable.	all oth	ner respects in accordance with such conditions so far as
(a) Name of Work.	:	E-TENDER FOR "CONSTRUCTION OF BOUNDARY WALL WITH WINDSCREEN (PHASE-II) AT NORTHERN SIDE AND MASONRY BOUNDARY WALL AT WESTERN SIDE OF DOCK BASIN, HDC, HALDIA".
(b) Estimated Cost.	:	Rs. 16,85,84,090.93 (Rupees Sixteen Crore Eighty Five Lakh Eighty Four Thousand Ninety and Paisa Ninety Three only).
(c) Earnest Money	:	Rs. 26,85,850.00 (Rupees Twenty Six Lakhs Eighty Five Thousand Eight Hundred and Fifty only).
(d) Time allowed for completion of the work	:	Part - A: 12 months from the date of placement of order Part - B: 24 months from the date of placement of order
(e) Permanent I/T A/C No.	•	
(f) Maximum number of workmen to be engaged on any day.	:	
(g) Bank Details		
Name of Bank:		Branch:
Branch Code:		Account Number:
IFS Code:-		
RATE TENDERED BY ME/ US IS:		(THE BIDDER IS NOT TO QUOTE IN THIS PAGE. THE PRICE BID WILL BE QUOTED ONLINE)
Witness:		(Signature of the Bidder) Address:
(Name in block letters) Address:-		

Occupation:-

# FORM OF TENDER (UNPRICED) (To be submitted with Techno Commercial Bid)

То	
The Sr. Dy. Manager (I&CF),	
Haldia Dock Complex	
I/We	
Conditions of Contract and Conditions of complete all the works required to be per General & Special Conditions of Contract and a special conditions of Contract and a special conditions of Contract and a special condition of order to commence the work and in the sundertake to enter into a Contract Agree additions thereto which may be necessary such Specification, Bill of Quantities, Draw hereby agree that until such Contract Agree and Contract Ag	cted the Drawings and read the specifications, General & Special of the Tender, hereby tender and undertake to execute and rformed in accordance with the Specification, Bill of Quantities, and Drawings prepared by or on behalf of the Trustees and at the of Quantities within months / weeks from the date event of our tender being accepted in full or in part. I / We also exement in the form hereto annexed with such alterations or to give effect to the acceptance of the Tender and incorporating wing and Special & General Conditions of Contract and I / We greement is executed the said Specification, Bill of Quantities, gether with the acceptance thereof in writing by or on behalf of
	hs preliminary time to arrange and procure the materials eptance of tender before I We could commence the work.
I / We have deposited with the Trustees' N of	
I / We agree that the period for which the four months.	tender shall remain open for acceptance shall not be less than
Dated:	(Signature of Bidder with Seal)
WITNESS:	Name of the Bidder:
Signature : Name :	Address :
(In Block letters)	Auul 533 .
Address :	
Occupation :	

CHECK LIST (To be Filled up by the Bidder)

1	Declarations a) The bidding firm has not been debarred / delisted by any Govt / Quasi Govt. / Public sector undertaking in India. b) The proprietor / partner(s)/ authorised signatory of the bidding firm is/are not associated with other firm bidding for the same work.	Declaration submitted	Yes / No
2	Application money towards cost of tender documents.	Deposited	Yes / No
3	Bid Document Fee.	Deposited	Yes / No
4	Declaration as per Annex-I that no conditions / deviations have been added in Volume-II in the tender offer.	Submitted on company's letter head.	Yes / No
5	GST registration certificate.	Submitted	Yes / No
6	Valid Trade License.	Valid up to	
0		Submitted	Yes / No
	Professional Tax Clearance Certificate. /	Valid up to	
7	Upto date tax payment challan.	Submitted	Yes / No
	Valid Employees' Provident Fund Account	Submitted	Yes / No
8		Photo copy of latest payment challan of EPF submitted	Yes / No
	ESI registration	Submitted	Yes / No
9	Ç	Photo copy of latest payment challan of ESI submitted	Yes / No
10	Details of firm as per Bidder's Profile	Format fill-up	Yes / No
11	Concurrent Commitments of the Bidder	Format fill-up	Yes / No
12	Credential within seven years	i) Amount	
	-	ii) Amount	
		iii) Amount	
		Credentials as per pre-qualification	Yes / No
		criteria.	
		Letter of award works and	Yes / No
		completion certificate from owners	
		are enclosed.	
13	Certified copies of audited balance sheet	i) Turnover amount and year	
		ii) Turnover amount and year	
		iii) Turnover amount and year	
		Certified by the CA / FA	Yes / No

Signature of the bidder with seal

# **General Conditions of Contract Forms and Agreements**

Sanctioned by the Trustees under Resolution No. 92 of the 6<sup>th</sup> Meeting held on 27<sup>th</sup> May, 1993

Including Addendum Sanctioned by the Trustees Meeting held on July, 2014

**KOLKATA PORT TRUST** 

**KOLKATA DOCK SYSTEM & HALDIA DOCK COMPLEX**JULY , 2014

## **GENERAL CONDITIONS OF CONTRACT**

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# AMENDMENT TO

#### GENERAL CONDITIONS OF CONTRACT

#### **❖ CI-3.4 THE TENDER /OFFER & ITS PRE-REQUISITES**

Table under sub-clause (a)

PREVIOUS			AS AMENDED			
		For Works Contract of Materials or Eq		, ,		
	For Works Contract	For Contract of Supplying Materials or Equipment only	Estimated Value of Work	Amount of Earnest Money	Estimated Value of Work	Amount of Earnest Money
Up to Rs. 1,00,000.00	5% of the estimated value of work	1% of the estimated value of work	Up to Rs. 10 Crore	2% of the estimated value of work	Up to Rs. 1,00,000.00	1% of the estimated value of work
Over Rs. 1,00,000.00	2% of the estimated value of work subject to a maximum of Rs. 20,000/- and minimum of Rs. 5,000/-	½% of the estimated value of work subject to a maximum of Rs. 10,000/- and minimum of Rs. 1,000/	Over Rs. 10 Crore	2% on first Rs. 10 Crore + 1% on the balance	Over Rs. 1,00,000.00	½% of the estimated value of work subject to a maximum of Rs. 10,000/- and minimum of Rs. 1,000/

# [ AMENDMENT SANCTIONED BY THE BOARD OF TRUSTEES VIDE RESOLUTION NO 210 OF THE TRUSTEES' MEETING HELD ON 26.02.2013 ]

Table under sub-clause (d)

PREVIOUS			AS AMENDED			
Class of	Amount Of	Financial Limit Of	Class of	Amount Of	Financial Limit Of	
Registra-	Fixed	Each Tender	Registra-	Fixed	Each Tender	
tion	Security		tion	Security		
Α	Rs 10,000/-	Any tender priced	Α	Rs 50,000/-	Any tender priced up	
		upto Rs 2,00,000/-			to Rs 10,00,000/-	
В	Rs 5,000/-	Any tender priced	В	Rs 25,000/-	Any tender priced	
		upto Rs 1,00,000/-			upto Rs 5,00,000/-	
С	Rs 2,500/-	Any tender priced	С	Rs 15,000/-	Any tender priced	
		upto Rs 50,000/-			upto Rs 3,00,000/-	

[ AMENDMENT SANCTIONED BY THE BOARD OF TRUSTEES VIDE RESOLUTION NO 82 OF THE TRUSTEES' MEETING HELD ON 12.10.2012 ]

#### 1. DEFINITIONS

- 1.0 In the contract, as here in after defined, the following words and expressions shall have the meaning herein assigned to them, except where the context otherwise required.
- 1.1 "Employer" or "Board" or "Trustees" means of the Board of Trustees for the Port of Calcutta, a body corporate under Section 3 of the Major Port Trusts Act, 1963, including their successors, representatives and assigns.

Employer

1.2 "Chairman" means the Chairman of the Board and includes the person appointed to act in his place under Sections 14 and 14A of the Major Port Trusts Act, 1963

Chairman

1.3 "Contractor" means the person or persons, Firm or Company whose tender/offer has been accepted by the Trustees and includes the Contractor's representatives, heirs, successor and assigns, if any, permitted by the Board/Chairman.

Contractor

1.4 "Engineer" means the Board's official who has invited the tender on its behalf and includes the Manager (Infrastructure & Civic Facilities) or other official as may be appointed from time to time by the Employer, with written notification to the Contractor, to act as Engineer for the purpose of the Contract, in place of the "Engineer" so designated.

Engineer

1.5 "Engineer's Representative" means any subordinate or Assistant to the Engineer or any other official appointed from time to time by the Engineer to perform the duties set forth in Clauses 2.4 to 2.6 hereof.

Engineer's Representative

1.6 "Work" means the work to be executed in accordance with the Contract and includes authorised "Extra Works" and "Excess Works" and "Temporary Works".

Works

1.7 "Temporary Works" means all temporary works of every kind required in or about the execution, completion or maintenance of the works and includes (without thereby limiting the foregoing definitions) all temporary erections, scaffolding, ladders, timbering, soaking vats, site offices, cement and other godowns, platforms and bins for stacking building materials, gantries, temporary tracks and roads, temporary culverts and mixing platforms.

Temporary works

1.8 "Extra Works" means those works required by the Engineer for completion of the Contract which were not specifically and separately included in the schedule of items of the works i.e. (Bill of Quantities) of the tender. "Excess Works" means the required quantities of work in excess of the provision made against any item of the bill of Quantities.

Extra works and Excess works

1.9 "Specifications" means the relevant and appropriate Bureau of Indian Standard's specifications / International Standard's Specifications (latest revisions) for materials and workmanship unless stated otherwise in the Tender.

**Specification** 

1.10	"Drawings" means the drawings referred to in the Tender and specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.	Drawings
1.11	"Contract" means and includes the General and Special Conditions of Contract, Specifications, Drawings, priced Bill of Quantities, the Tender / Offer, the letter of acceptance of the Tender/Offer, the Contract Agreement, if separately entered into and the Schedule of Rates and Price, if any, adopted by the Trustees at their discretion.	Contract
1.12	"Constructional Plant" means all appliances or things of whatsoever nature required or about the execution, completion or maintenance of the works or temporary works and includes (without thereby limiting the foregoing definition) all machinery and tools but does not include materials or other things intended to form or forming part of the permanent works.	Constructional Plant
1.13	"Site" means the land, waterways and other places, on, under, in or THOROUGH which the works are to be executed by the Trustees for the purpose of the Contract.	Site
1.14	"Contract Price" means the sum named in the letter of acceptance of the Tender/Offer of the Contractor, subject to such additions thereto and deductions therefrom as may be made by the Engineer under the provisions here in after contained.	Contract Price
1.15	"Month" means English Calendar Month.	Month
1.15 1.16		Month Excepted Risks
	"Excepted Risks" are riot in so far as it is uninsurable, war, invasion, act of foreign enemies, hostilities) whether war be declared or not), Civil War, rebellion, revolution, insurrection or military or usurped power or use or occupation by the Trustees of any portion of the works in respect of which a certificate of completion has been issued (all of which are herein	Excepted
1.16	"Excepted Risks" are riot in so far as it is uninsurable, war, invasion, act of foreign enemies, hostilities) whether war be declared or not), Civil War, rebellion, revolution, insurrection or military or usurped power or use or occupation by the Trustees of any portion of the works in respect of which a certificate of completion has been issued (all of which are herein collectively referred to as the excepted risks).  Word importing the singular only, also includes the plural and vice-versa	Excepted Risks
1.16	"Excepted Risks" are riot in so far as it is uninsurable, war, invasion, act of foreign enemies, hostilities) whether war be declared or not), Civil War, rebellion, revolution, insurrection or military or usurped power or use or occupation by the Trustees of any portion of the works in respect of which a certificate of completion has been issued (all of which are herein collectively referred to as the excepted risks).  Word importing the singular only, also includes the plural and vice-versa where the context so requires.  The heading and marginal notes in these General Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the	Excepted Risks  Singular/ Plural  Headings/ Marginal
<ul><li>1.16</li><li>1.17</li><li>1.18</li></ul>	"Excepted Risks" are riot in so far as it is uninsurable, war, invasion, act of foreign enemies, hostilities) whether war be declared or not), Civil War, rebellion, revolution, insurrection or military or usurped power or use or occupation by the Trustees of any portion of the works in respect of which a certificate of completion has been issued (all of which are herein collectively referred to as the excepted risks).  Word importing the singular only, also includes the plural and vice-versa where the context so requires.  The heading and marginal notes in these General Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.  Unless otherwise stipulated the work "Cost" shall be deemed to include	Excepted Risks  Singular/ Plural  Headings/ Marginal Notes.

2.2 The Contractor shall take instructions from the Engineer and subject to limitation of Clause 2.5 hereof, from the Engineer's Representative.

Authority of Engineer's Representative Engineer's Power

- 2.3 The Engineer shall have full power and authority:
  - (a) to supply to the contractor from time to time during the progress of the works such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works and the contractor shall carry out and be bound by the same.
  - (b) to alter or modify the specification of any material and workmanship and to inspect the work at any time.
  - (c) to order for any variation, alteration and modification of the work and for extra works.
  - (d) to issue certificates as per contract.
  - (e) to settle the claims & disputes of the Contractor and Trustees, as the first referee.
  - (f) To grant extension of completion time.
- 2.4 The Engineer's Representative shall:

Power of Engineer's Representative.

- (i) watch and supervise the works.
- (ii) test and examine any material to be used or workmanship employed in connection with the work.
- (iii) have power to disapprove any material and workmanship not in accordance with the contract and the contractor shall comply with his direction in this regard.
- (iv) take measurements of work done by the contractor for the purpose of payment or otherwise.
- (v) order demolition of defectively done work for its reconstruction all by the Contractor at his own expense.
- (vi) have powers to issue alteration order not implying modification of design and extension of completion time of the work and
- (vii) have such other powers and authorities vested in the Engineer, which have been delegated to him in writing by the Engineer under intimation to the Contractor.

2.5 Provided always that the Engineer's Representative shall have no power:

Limitation of Engineer's Representative's Power

(a) to order any work involving delay or any extra payment by the Trustees,

- (b) to make variation of or in the works; and
- (c) to relieve the Contractor of any of his duties or obligations under the Contract.

#### 2.6 Provided also as follows:

Engineer's Overriding Power

- (a) Failure of 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, breaking-up thereof and re-constructing at the contractor's cost and the contractor shall have no claim to compensation for the loss if any sustained by him.
- (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) Any written instructions or written approval given by the Engineer's Representative to the contractor, within the terms of delegation of power and authority vested in the Engineer to his Representative in writing, shall bind the contractor and the Trustees as though it had been given by the Engineer, who may from time to time make such delegation.

#### 3.0 THE TENDER/OFFER AND ITS PRE-REQUISITES

3.1 The Contractor shall, before making out and submitting his tender/offer, be deemed to have inspected and examined the site, fully considered all factors, risks and contingencies, which will have direct and indirect impact on his expenses and profit from the work and shall be specifically deemed to have taken the following aspects into consideration:

The tender must encompass all relevant aspects/issues.

(a) The form and nature of the site and its surroundings including their sub-surface, hydrological, tidal and climatic conditions, the means of access to the site and all other local conditions, including the likely charges and costs for temporary way-leave, if any, required for the work.

Site & Local condition.

(b) The drawings, specifications, the nature and extent of work to be executed and the quality, quantity and availability of the required materials and labour for the work and the need to execute the work to the entire satisfaction of the Engineer, and also by complying with the General and Special Conditions of Contract.

Drawing/ Specification/ Nature & extent of work to be done. (c) The accommodation required for the workmen and site office, mobilisation/demobilisation and storage of all plant, equipment and Construction materials.

Accommodation for Contractor's men/materials.

(d) The sources and means of procurement of water for drinking, washing and execution of work, and source and availability of electrical power, all at Contractor's cost.

Water for drinking etc. /Electrical power.

(e) Payment of taxes and duties and compliance of all applicable statutes, ordinances and law together with the rules made thereunder, the rules, regulations and bye-laws of public bodies or any local or other authority by the Contractor, keeping the Trustees indemnified against penalties and liabilities of every kind arising from the Contractor's failure in such compliance.

Payment of Taxes/duties and observance of all statutes.

(f) Payment of all kinds of stamp-duty for executing the agreement or for any legal instrument including Bank Guarantees and Indemnity Bonds.

Payment of Stamp Duty by the Contractor.

3.2 The Contractor's tender shall be in ink on the Tender Forms supplied by the Trustees, unless stipulated otherwise in the Notice Inviting the Tender and shall be faultless in figures and free from erasing. Corrections, if any, shall only be made by scoring out and initialling of the revised figure.

Disclosure of Owner's name.

3.3 If required by the Engineer or the Trustees, the Contractors in their tender or subsequently, shall disclose the names of their owners/partners/share holders at the required points of time. The failure in this regard shall be treated as a breach and a contract, if entered into, shall be liable to be cancelled.

Earnest Money and Security Deposit.

3.4 (a) Unless otherwise stipulated in the Notice Inviting Tender / Offer, every tender must be submitted with Earnest Money of the amount calculated as per the following scale.

calculated as per the following scale.				
Estimated Value of	Amount of Earnest Money			
Work		For Contract of		
	For Works Contract	Supplying Materials or		
		Equipment only		
Up to Rs.	5% of the estimated	1% of the estimated		
1,00,000=00	value of work	value of work		
Over	2% of the estimated	½% of the estimated		
Rs. 1,00,000=00	value of work subject	value of work subject		
	to a maximum of Rs.	to a maximum of Rs.		
	20,000/- and minimum   10,000/- and min			
	of Rs. 5,000/	of Rs. 1,000/		

(b) Earnest Money shall be deposited with the Trustees' treasurer in cash or by Banker's Cheque of any Calcutta Branch of a Nationalised Bank of India drawn in favour of Calcutta Port Trust or in the form of any "Account Payee" Draft of any Nationalised Bank of India drawn in favour of "Calcutta Port Trust" and payable at Calcutta/Haldia, as the case may be, and the receipt granted therefor be kept attached to the Tender/Offer in the Sealed Cover.

Method of Paying E.M.

(c) Earnest Money of unaccepted tender shall be refunded without any interest THOROUGH A/c. Payee Cheque drawn on a Nationalised Bank of Calcutta / Haldia.

Refund of

(d) The enlisted (registered ) Contractors of the Trustees who have deposited Exemption fixed Security with the Trustees' FA & CAO / Manager (Finance) according to his Class of Registration, shall be exempt from depositing the Regd. Firms Earnest Money, as per the following scale:

from E.M. to

Eurnest Woney, as per the	rono wing stare .	,
Class of Registration	Amount of Fixed	Financial Limit of
	Security	Each Tender
	D 07 000/	Any tender priced up to
A	Rs. 25,000/-	Rs.5,00,000/-
		A . 1 · 1 .
	<b>D</b> 40 000/	Any tender priced up to
В	Rs. 10,000/-	Rs.2,00,000/-
		Any tender priced up to
C	Rs. 5,000/-	Rs.1,00,000/-

(e) (i) Tender submitted without requisite Earnest rejection.

Money may be liable to

Tender without EM liable to rejection.

(ii) If before expiry of the validity period of his Tender/Offer, the tenderer amends his quoted rates or tender/offer making them unacceptable to the Trustees and/or withdraws his tender/offer, the Earnest Money deposited shall be liable to forfeiture at the option of the Trustees.

Forfeiture of E.M. before Acceptance of offer.

(f) The Earnest Money of accepted tender/offer shall be retained by the Trustees as part of the Security Deposit, for which a separate Treasury Receipt shall be issued to the Contractor after cancellation of the previous Receipt of Earnest Money.

E.M. to be converted to part S.D.

(g) Balance security for works contract shall be recovered by deduction from all progressive Bill (including final Bill, if necessary) @ 10% of the gross value of work in each such bill, so that the total recovery may not exceed the quantum computed as per the under noted percentages of the total value of work actually done up to the stage of completion.

Mode of recovery of balance S.D.

Value of Work	% of Security Deposit for works contract.	% of Security Deposit For contract of supply- ing materials & equipment only.	Scale of S.D. recovery.
For works up to Rs.10,00,000/	10% (Ten percent)	1% (One percent)	
For works costing more than Rs.10,00,000/- and up to Rs.20,00,000/-	10% on first Rs.10,00,000/- +7½% on the balance.	1% on first Rs.10,00,000/- + ½% on the balance.	
For works costing more than Rs.20,00,000/-	10% on first Rs.10,00,000/- + 7 ½% on the next Rs.10,00,000/- + 5% on the balance.	1% on first Rs.10,00,000/- + 1/2% on the next Rs.10,00,000/- + 1/4% on the balance.	

(h) Balance Security for Contract of supplying materials and equipment computed in terms of the percentages given above, shall have to be deposited with the Trustees' Treasurer in advance and within 30 days from the date of placement of supply order, either in cash or by A/c. Payee Draft of a Nationalised Bank of India drawn in favour of Calcutta Port Trust and payable at Calcutta/Haldia, as the case may be.

S.D. for supply contracts to be deposited in advance.

(i) No interest shall be paid by the Trustees to the Tenderer/Contractor on the amount of Earnest Money/Security Deposit held by the Trustees, at any stage.

No interest payable on E.M./S.D

3.5 (i) The Security Deposit shall refunded to the Contractor in terms of Clause 9.3 hereinafter and subject to deduction, if any, under the provision of Sub-clause 3.5 (ii) herein below. Id, however, the Contract provides for any maintenance period. 50% of the Security Deposit may be refunded against any of the treasury Receipt for that amount on expiry of half of the maintenance period and the balance deposit on the expiry of the said maintenance period and after the Engineer has certified the final completion of work in Form G.C.2 and the Contractor has submitted his "No Claim" Certificate in Form G.C.3.

Mode of refund of S.D.

(ii) The Security Deposit/Earnest Money may be liable to forfeiture at the option of the Trustees, if the Contractor fails to carry out the work or to perform/observe any of the conditions of the Contract. The Trustees shall also be at liberty to deduct any of their dues from the Security Deposit, fixed Security, Earnest Money or from any sum due or to become due to the Contractor under any other contract.

Forfeiture of

If stipulated in the contract as a Special Condition, the contractor shall have to submit to the Engineer a performance Bond in the form of an irrevocable guarantee from Calcutta/Haldia Branch, as the case may be, of any Nationalised Bank of India in the proforma annexed hereto and for the sum and period as mentioned in the letter of acceptance of the Tender/Offer, within 15 days from the date of such letter, failing which the Contract shall be liable to be terminated and the earnest money shall be liable to forfeiture; all at the discretion of the Engineer. The cost of obtaining this or any other Bank Guarantee and/or the revalidation thereof, wherever required, has to be borne by the Contractor and it shall be his sole responsibility to arrange for timely revalidation of such Bank Guarantee, failing which and for non-fulfilment of any contractual obligation by the Contractor, the Engineer and/or the Trustees shall be at liberty to raise claim against the Guarantee and/or enforce the same unilaterally.

Bank Guarantee in lieu of Cash S.D. in certain cases

3.7 "Every Tenderer/ Bidder shall submit, in respect of a tender value of more than Rs 5 Crore, along with their tender comprising Special Conditions of Contract, General Conditions of Contract, BOQ, Earnest Money, etc. a Document called Integrity Pact Agreement duly signed by their authorized representative. The Proforma of the Integrity Pact Agreement shall as specified in the GCC. In case of tender value more than Rs 5 Crore, the Integrity Pact Agreement is an essential part and parcel of bid Document to be submitted by each tenderer, without which the tender shall not be considered."

#### 4.0 THE CONTRACT & GENERAL OBLIGATIONS OF CONTRACTOR

4.1 (a) The contract Documents shall be drawn-up in English language.

English language to be used

(b) The contract shall be governed by all relevant Indian Acts. As applicable only within the jurisdiction of the High Court at Calcutta, India, including the following Acts:

Applicability of laws on the contract

- 1. The Contract Act (India), 1872.
- 2. The Major Port Trusts Act, 1963.
- 3. The Workmen's Compensation Act, 1923.
- 4. The Minimum Wages Act, 1948.
- 5. The Contract Labour (Regulation & Abolition) Act,1970.
- 6. The Dock Workers' Act, 1948.
- 7. The Arbitration and Conciliation Act (1996) (in the case of a definite Arbitration Agreement only).
- 4.2 After acceptance of his Tender/Offer and when called on to do so by the engineer or his representative, the contractor shall, at his own expense, enter into and execute a Contract Agreement to be prepared by him in the form annexed hereto. Until such Contract Agreement is executed, the other Documents referred to in the definition of the term 'Contract' here-in-before, shall collectively be the Contract.

Contractor to Execute Contract Agreement.

4.3 Several Documents forming the contract are to be taken as mutually explanatory of one another. Should there by any discrepancy, ambiguity, omission or error in the various contract Documents, the Engineer shall have the power to correct the same and his decision shall be final and binding on the parties to the Contract.

Interpretation of contract Documents – Engineers' Power 4.4 Two copies of the Drawings referred to in the general and special Conditions of Contract and in the Bill of Quantities, shall be furnished by the Engineer to the Contractors free of cost for his use on the work, but these shall remain the property of the Trustees and hence, the Contractor shall return them to the Engineer or his Representative on completion of the work, if not torn or mutilated on being regularly used at site.

All Drawings are Trustees' property.

4.5 The Contractor shall prove and make at his own expense any working or progress drawings required by him or necessary for the proper execution of the works and shall, when required, furnish copies of the same free of cost to the Engineer for his information and/or approval, without meaning thereby the shifting of Contractor's responsibility on the Engineer in any way whatsoever.

Contractor to prepare working / progress drawings

4.6 The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part thereof without the written permission of the Engineer. Even if such permission be granted, the Contractor shall remain responsible (a) for the acts, defaults and neglect of any sub-contractor, his agents, servants or workmen as fully as if these were the acts, defaults or neglects of the Contractor himself or his agents, servants or workmen and (b) for his full and entire responsibility of the contract and for active superintendence of the works by him despite being sublet, provided always that the provision of labourers on a "piece rate" basis shall not be deemed to be sub-letting under this clause.

Contractor cannot sub-let the work

4.7 Unless otherwise specified, the Contractor shall be deemed to have included in his Tender/Offer all his cost for supplying and providing all constructional plant, temporary work. Materials both for temporary and permanent works, labour including supervision thereof, transporting to and from the site and in and about the work, including loading, unloading, fencing, watching, lighting, payment of fees, taxes and duties to the appropriate authorities and other things of every kind required for the construction, erection, completion and maintenance of the work.

Contractors' price is inclusive of all costs

4.8 The Contractor shall be solely responsible for the adequacy, stability and safety of all site operations and methods of construction, even if any prior approval thereto has been taken from the Engineer or his Representative. The Contractor shall not be responsible for the correctness of the design or specification of the Temporary and Permanent works formulated by the Engineer; but the Contractor shall be fully responsible for the correct implementation thereof, as also for any design and specification prepared/proposed/used by the Contractor.

Contractor responsible all construction process, except for correctness of design and specification formulated by the Engineer Contractor to submit his programme of work

4.9 Whenever required by the Engineer or his representative, the Contractor shall submit to him the details of his (a) programme for execution of the work, (b) proposed procedure and methods of work, (c) proposed deployment of plant, equipment, labour, materials and temporary works. The submission to and/or any approval by the Engineer or his Representative to any such programme or particulars shall not relieve the Contractor of any of his obligations under the contract.

If for any reason the contractor be unable to adhere to his earlier programme, he shall submit his revised programme for completion of work within the stipulated time whenever asked to do so.

4.10 Necessary and adequate supervision shall be provided by the Contractor during execution of the works and as long thereafter as the Engineer or his representative shall consider necessary during the maintenance period. The Contractor or his competent and authorised agent or representative shall be constantly at site and instructions given to him by the Engineer or his representative in writing shall be binding upon the Contractor subject to limitation in Clause 2.5 hereof. The Contractor shall inform the Engineer or his representative in writing about such representative/agent of him at site.

Contractor to supervise the works

4.11 The Contractor shall employ in execution of the Contract only qualified careful and experienced persons and the Engineer shall be at liberty to direct the Contractor to stop deployment of any of is staff, workmen or official at site and the Contractor shall within 48 hours comply with such instruction without any demur whenever the Engineer shall feel that the deployment of the person concerned will not be conducive to the proper and timely completion of the work.

Contractor to deploy qualified men and Engineer's power to remove Contractor's men

4.12 The Contractor shall be responsible for the true and proper setting out of the works in relation to reference points/lines/levels given by the Engineer in writing. The checking of any setting-out or of any alignment or level by the Engineer or his Representative shall not in any way relieve the contractor of his responsibility for the correctness thereof and he shall fully provide protect and preserve all stakes, templates, bench marks, sight rails, pegs, level marks, profile marks and other things used in setting out the works.

Contractor is responsible for line, level, setting out etc.

4.13 From the commencement of the works till issue of the completion certificate in Form G.C.1, vide Clause 5.12 hereof, the contractor shall take full responsibility for the care thereof. Save for the excepted risks, any damage, loss or injury to the work or any part thereof shall be made good by the Contractor at his own cost as per instruction and to the satisfaction of the engineer, failing which the Engineer or his Representative may cause the same to be made good by any other agency and the expenses incurred and certified by the Engineer shall deem proper. This Clause will not apply to that part of the work, which might have been taken over by the Trustees on partial completion of the work and in such case the Contractor's obligation will be limited to repairs and replacement for manufacturing or construction defects during the Maintenance period (Guarantee Period) as per the directions of the Engineer as also for defects/damages if any caused to the work by the Contractor during such repairs and replacement in the maintenance period.

Contractor is responsible to protect the work

4.14 The Contractor shall at his own cost protect support and take all precautions in regard to the personnel or structure or services or properties belonging to the Trustees or not which may be interfered with or affected or disturbed or endangered and shall indemnify and keep indemnified the Trustees against claim for injury, loss or damage caused by the Contractor in connection with the execution and maintenance of the work to the aforesaid properties, structures and services and/or to any person including the Contractor's workmen. Cost of Insurance Cover, if any, taken by the Contractor shall not be reimbursed by the Trustees, unless otherwise stipulated in the Contract.

Contractor is responsible for all damages to other structures / persons caused by him in executing the work.

4.15 The Contractor shall immediately inform the Engineer's Representatives if any fossil, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological importance be discovered at site which shall remain the property of the Trustees and protect them from being damaged by his workmen and arrange for disposal of them at the Trustees' expense as per the instruction of the Engineer's Representative.

Fossils, Treasure travois, etc. are Trustees' property

4.16 The Contractor shall be deemed to have indemnified and shall indemnify the Trustees against all claims, demands, actions and proceedings and all costs arising therefrom on account of:

Contractor to Indemnify the Trustees against all claims for loss, damage, etc.

- (a) Infringement of any patent right, design, trademark or name or other protected right in connection with the works or temporary work.
- (b) Payment of all royalties, rent, toll charges, local taxes, other payments or compensation, if any, for getting all materials and equipment required for the work.
- (c) Unauthorised obstruction or nuisance caused by the contractor in respect of Public or Private or Private road, railway tracks, footpaths, crane tracks, waterways, quays and other properties belonging to the Trustees or any other person.
- (d) Damage/injury caused to any highway and bridge on account of the movement of Contractor's plants and materials in connection with the work.
- (e) Pollution of waterway and damage caused to river, lock, sea-wall or other structure related to waterway, in transporting contractor's plants and materials.
- (f) The Contractor's default in affording all reasonable facilities and accommodation as per the direction of the Engineer or his Representative to the workmen of the Trustees and other agencies employed by or with the permission and/or knowledge of the Trustees on or near the site of work.
- 4.17 Debris and materials, if obtained by demolishing any property, building or structure in terms of the Contract shall remain the property of the Trustees.

Dismantled materials Trustees' property

4.18 The Contractor's quoted rates shall be deemed to have been Contractor's quoted inclusive of the following:

rates/price must be all inclusive

- (a) Keeping the site free of unnecessary obstruction and removal from site of constructional plant wreckage, rubbish, surplus earth or temporary works no longer required.
- (b) Cleaning and removal from site all the surplus materials of every kind to leave the site clean and tidy after completion of the work, without which payment against final bill may be liable to be withheld.
- (c) Precautionary measures to secure efficient protection of Docks, the River Hooghly and other waterways against pollution of whatever nature during execution and maintenance of the works and to prevent rubbish, refuse and other materials from being thrown into the water by the Contractor's men or those of his agency.
- (d) Making arrangements for deployment of all labourer and workers, local or otherwise including payment for their wages, transport, accommodation, medical and all other statutory benefits and entry permits, wherever necessary.
- (e) Making arrangements in or around the site, as per the requirements of local authority or the Engineer or his Representative for preventing (i) spread of any infectious disease like smallpox, cholera, plague or malaria by taking effective actions for destruction of rats, mice, vermin, mosquitoes, etc. and by maintaining healthy and sanitary condition, (ii) illegal storage and distribution of Drugs, Narcotics, Alcoholic liquor, Arms and Ammunitions, (iii) unlawful, riotous or disorderly conduct of the Contractor's or his Sub-Contractor's workmen, (iv) deployment of workmen of age less than 16 years.
- 4.19 Every direction or notice to be given to the Contractor shall be deemed to have been duly served on or received by the Contractor, if the same is posted or sent by hand to the address given in the tender or to the Contractor's Site Office or to the Registered Office of the Contractor. The time mentioned in these conditions for doing any act after direction or notice shall be reckoned from the time of such posting or despatch.

Notice to Contractor.

The Contractor and his Sub-contractor or their agents and men and 4.20 any firm supplying plant, materials and equipment shall not publish or caused to be published any photographs or description of the works without the prior authority of the Engineer in writing.

Contractor not publish photograph or particulars of work

4.21 The Contractor shall at the Trustees' cost to be decided by the Engineer render all reasonable facilities and Co-operation as per direction of the Engineer or his representative to any other Contractor engaged by the Trustees and their workmen to the Trustees' own staff and to the men of other Public Body on or near the site of work and in default the Contractor shall be liable to the Trustees for any delay or expense incurred by reason of such default.

Contractor to provide facilities to outsiders

4.22 The work has to be carried out by the Contractor causing the minimum of hindrance for any maritime traffic or surface traffic.

Work to cause minimum possible hindrance to traffic movement Trustees' lien on

4.23 All constructional plants, temporary works and materials when brought to the site by the Contractor shall be deemed to be the property of the Trustees who will have lien on the same until the satisfactory completion of the work and shall only be removed from the site in part or in full with the written permission of the Engineer or his Representative.

Contractor's
Plant &
Equipment.

# 5.0 COMMENCEMENT, EXECUTION AND COMPLETION OF WORK.

5.1 The Contractor shall commence the work within 7 days of the receipt of Engineer's letter informing acceptance of the Contractor's tender/offer by the Trustees or within such preliminary time as mentioned by the Contractor in the Form of Tender or the time accepted by the Trustees. The Contractor shall then proceed with the work with due expedition and without delay, except as may be expressly sanctioned or ordered by the Engineer or his Representatives, time being deemed the essence of the contract on the part of the contractor.

Preliminary time to commence work an maintenance of steady rate of progress

The Contractor shall provide and maintain a suitable office at or near the site to which the Engineer's Representative may send communications and instructions for use of the Contractor.

Contractor's site office

Unless specified otherwise in the contract or prior permission of the Engineer has been taken, the contractor shall not execute the work beyond the working hours observed by the Engineer's Representative and on Sundays and Holidays observed in the Trustees' system, except in so far as it becomes essential on account of tidal work or for safety of the work. If the progress of the work lags behind schedule or the work has been endangered by any act or neglect on the part of the contractor, then the Engineer or his Representative shall order and the contractor at his own expense shall work by day and by night and on Sundays and Public Holidays. Any failure of the Engineer or his Representative to pass such an order shall not relieve the contractor from any of his obligations. The Engineer's decision in this regard shall be final binding and conclusive.

Contractor to observe Trustees' working hours 5.4 Unless stipulated otherwise in the contract all materials required for the work shall be procured and supplied by the contractor with the approval of the Engineer or his Representative and subject to subsequent testing as may be required by the Engineer or his Representative. The Engineer shall exercise his sole discretion to accept any such materials.

Contractor to supply all materials as per requirement of the Engineer or his representative

5.5 Unless stipulated otherwise in the contract all materials, workmanship and method of measurement shall be in accordance with the relevant Codes (Latest Revision) of the Bureau of Indian Standards and the written instructions of the Engineer or his Representative. Where no specific reference is available in the contract, the material and workmanship shall be of the best of their respective kinds to the satisfaction of the Engineer.

Materials & Works

5.6 Samples shall be prepared and submitted for approval of the Engineer or his representative, whenever required to do so, all at the Contractor's cost.

Contractor to submit samples for approval

Unless stipulated otherwise in the contract, the cost of any test required by the Engineer or his representative in respect of materials and workmanship deployed on the work, shall be borne by the Contractor.

Contractor to arrange all testing at his own cost.

- Regarding the supply of any materials by the Trustees to the contractor in accordance with the contract, the following conditions shall apply:
  - (a) The Contractor shall, at his own expense, arrange for transporting the materials from the Trustees' Stores, watching, storing and keeping them in his safe custody, furnishing of statement of consumption thereof in the manner required by the Engineer or his representative, return of surplus and empty container to the Trustees' Stores as per the direction of the Engineer or his Representative.

The Contractor shall account for and look after the Trustees' materials

(b) Being the custodian of the Trustees' materials, the contractor shall remain solely responsible for any such materials issued to him and for any loss or damage thereof for any reason other than "Excepted Risks", the Contractor shall compensate the Trustees' in the manner decided by the Engineer and shall at no stage remove or cause to be removed any such material from the site without his permission in writing.

Contractor to compensate for loss and damage to Trustees' materials

(c)The Trustees' materials will generally be supplied in stages and in accordance with the rate of progress of work but except for grant of suitable extension of completion time of work as decided by the Engineer. The Contractor shall not be entitled to any other compensation, monetary or otherwise, for any delay in the supply of Trustees' materials to him. The Contractor shall, however, communicate his requirement of such materials to the Engineer from time to time.

Delay in supply of Trustees' materials will only entitle the Contractor for extension of completion time of work

(d) Unless stipulated otherwise in the contract, the value of the Trustees' materials issued to the contractor shall be recovered from the contractor's bills and/or any of his other dues, progressively according to the consumption thereof on the work and/or in the manner decided by the Engineer or his representative and at the rate/s stipulated in the contract. These rates shall only be considered by the contractor in the preparation of his tender/offer and these will form the basis of escalation/variation, if in future the contractor is required to procure and provide any such material on the written order of the Engineer consequent on the Trustees' failure to effect timely supply thereof.

Recovery from Contractor for Trustees' materials under normal cirCu.Mstances

(e) If the Engineer decides that due to the contractor's negligence, any of the Trustees' materials issued to the contractor has been – (i) lost or damaged, (ii) consumed in excess of requirement and (iii) wasted by the contractor in excess of normal wastage, then the value thereof shall be recovered from the contractor's bills or from any of his other dues, after adding 19 ½% extra over the higher one of the followings -

Recovery from Contractor for Trustees' materials under other cirCu.Mstances.

- (1) The issue rate of the materials at the Trustees' Stores and
- (2) The market price of the material on the date of issue as would be determined by the Engineer.
- 5.9 The Engineer or his Representative shall have the power to insect any material and work at any time and to order at any time (I) for removal from the site of any material which in his opinion is not in accordance with the contract or the instruction of the engineer or his representative, (ii) for the substitution of the proper and suitable materials, or (iii) the removal and proper re-execution of any work which in respect of material and workmanship is not in accordance with the contract or the instructions of the Engineer. The Contractor shall comply with such order at his own expense and within the time specified in the order. If the contractor fails to comply, the Engineer shall be at liberty to dispose any such materials and re-do any work in the manner convenient to the Trustees by engaging any outside agency at the risk and expense of the contractor and after giving him a written prior notice of 7 days.

Contractor to replace materials/work not acceptable to the Engineer or his Representative

5.10 No work shall be covered up and put out of view by the contractor without approval of the Engineer or his Representative and whenever required by him, the contractor shall uncover any part or parts of the work or make openings in or THOROUGH the same as may be directed by the Engineer or his representative from time to time and shall reinstate or make good those part of works thus affected to the satisfaction of the Engineer, all at the cost of the contractor.

Contractor to seek approval of Engineer or his Representative before covering up any portion of work

The Trustees shall reimburse such cost as determined by the Engineer, if the initial covering up was with prior written order of the Engineer or his Representative.

5.11 On a written order of the Engineer or his Representative, the contractor shall delay or suspend the progress of the work till such time the written order to resume the execution is received by him. During such suspension the contractor shall protect and secure the work to the satisfaction of the Engineer or his Representative. All extra expenses in giving effect to such order shall be considered by the Trustees, unless such suspension is –

Contractor to suspend work on Order from Engineer or his Representative

- (a) otherwise provided for in the contract, or
- (b) necessary by reason of some default on the part of the contractor, or
- (c) necessary by reason of climatic conditions on the site, or
- (d) necessary for proper execution of the works or for the safety of the works or any part thereof.

The Engineer shall settle and determine such extra payment and/or Extension of completion time to be allowed to the contractor, as shall, in the opinion of the Engineer be fair and reasonable, and the same shall be final and binding on the Contractor.

- 5.11.1 If at any time before or after commencement of the work the Trustees do not require the whole of the work tendered for the Engineer shall notify the same to the contractor in writing and the contractor shall stop further works in compliance of the same. The Contractor shall not be entitled to any claim for compensation for underived profit or for such premature stoppage of work or on account of curtailment of the originally intended work by reason of alteration made by the Engineer in the original specifications, drawings, designs and instructions.
- When the whole of the work has been completed to the satisfaction of the Engineer and has passed any final test prescribed in the contract, the contractor shall, within 21 days of submission of his application to the Engineer, be entitled to receive from him a certificate for completion of work in Form G.C.1, annexed hereto. If any part of the total work having been completed to the satisfaction of the Engineer, be taken over and/or used by the Trustees, the Contractor shall on application be entitled to partial completion certificate in the Form G.C.1 indicating the portion of the work covered by it, so that the Contractor's liability during maintenance period of the contract, if any, shall commence from the date mentioned in such certificate so far as the completed portion of the work is concerned.

Completion Certificate G.C.1.

#### 6.0 TERMS OF PAYMENT:

6.1 No sum shall be considered as earned by or due to the Contractor in respect of the work till final and satisfactory completion thereof and until a certificate of final completion in Form G.C.2 has been given by the Engineer.

All interim payments are advances till issue of Certificate in Form G.C.2

On account payments, if any, made prior to issue of the certificate in Form G.C.2, shall all be treated as mere advance, which shall stand recoverable in full or in part, if the Engineer so decides in the context of Contractor's unfulfilled contract condition, if any.

6.2 All payments shall be made to the Contractor only on the basis of measurements of actual work done, as recorded in the Trustees' measurement books and at accepted tendered or at agreed rates, as the case may be, except as otherwise provided in the contract and when the Engineer decides any other rate for change in the scope of work or omission, if any, on the part of the Contractor.

Payment on the basis of measurements at agreed rates.

6.3 For work of sanctioned tender value more than Rs.50,000/- or having an initially stipulated completion period of 4 months or more, on account payments may be made sat the discretion of the Engineer or his Representative at intervals deemed suitable and justified by him. Provided always that subject to execution of work of substantial value in the context of the contract price, the interval of such on account payments shall be decided by the Engineer or his Representative, which shall ordinarily not be less than 1 month in between two payments for on account bill and/or advance.

Limitation for on account payment

6.4 Measurement for works done shall be progressively taken by the Engineer's Representative and entered in the Trustees' Measurement Book, at intervals deemed suitable and proper by him and/or the Engineer. The Contractor or his duly accredited Representative or Agent shall remain present at the time of such measurement and assist the engineer's Representative in every manner required by him. After the measurements taken have been entered in the Measurement Book, the Contractor or his Agent shall sign the Measurement Book at the wend of such Measurements over the Contractor's Rubber Stamp as a token of acceptance of all such measurements, recorded above and prior to such signature. If the Contractor or his Agent fails to participate even after 3 days written notice from the Engineer's Representative, the measurement shall be taken ex-parte by the Engineer's Representative and those shall be accepted by the Contractor.

Recording of measurements

6.5 Based on the quantum of work and the value thereof computed in the Measurement Book, the Contractor shall type out his bill in the approved proforma by Engineer and submit the same to the Engineer's Representative in quadruplicate, duly signed by him or his accredited Agent over his Rubber Stamp. The Engineer or his Representative may in his absolute discretion, allow advance payment against such bill to the extent of an amount not exceeding 75% of the "net payable" sum of the said bill, subject to adjustment thereof against the bill at the time of checking and auditing the bill at the Trustees' end. The measurement Book will not be handed over to the Contractor; but he will obtain the abstracts of quantities, amounts and recoveries to type out the bill.

Contractor to prepare and submit his bills

- 6.6 At the discretion of the Engineer or his Representative and only in respect of accepted offers/where estimated amount put to tender would be Rs.2,00,000/- or more, advance payment may be made to the extent of 75% of the value of any material purchased and brought to the site by the Contractor. Provided always that
  - (i) the materials shall, in the opinion of the Engineer or his Representative be of imperishable nature,
    - payment against neer Non-perishable materials

Advance

- (ii) the value of such materials shall be assessed by the engineer or his Representative at their own discretion,
- (iii) a formal agreement has been drawn up with the contractor, under which the Trustees secure a lien on the contractor's materials,
- (iv) the materials are safe-guarded by the contractor against losses, shortage and misuse due to the contractor postponing the execution of the work or otherwise,
- (v) in the event of storage of such materials within the Trustees' protected areas in the Docks, the contractor shall submit an Indemnity Bond in the proforma and manner acceptable to Trustees' whereby the contractor shall indemnify the Trustees against all financial loss/damage, on account of loss/damage to such materials for whatever reasons,

- (vi) in the event of storage of such materials outside the Trustees' protected areas the Contractor shall submit to the Engineer an irrevocable Bank Guarantee favouring the Trustees and for the same sum as is being advance, in the proforma and manner acceptable to the Trustees. The Guarantee shall be of a Calcutta/Haldia Branch of any Nationalised Bank or a Schedule Commercial Bank, as the case may be, acceptable to the Trustees and shall remain valid till the anticipated period of consumption of such materials in the work. The Bank Guarantee must bear an undertaking by the issuing Bank guaranteeing automatic payment of the guaranteed sum to the Trustees by the Bank on the date of expiry of the validity of the Guarantee, unless with the prior written approval of the Engineer on behalf of the Trustees, the Bank has extended the validity of the Guarantee.
- (vii) The amount of advance shall be recoverable from the contractor's bills or any other dues, progressively with the consumption of the materials on the basis of quantity consumed. Consequent on full recovery of the advance the Indemnity Bond/Bank Guarantee, vide Sub-clause (v) & (vi) above, shall be returned to the Contractor duly discharged by the Engineer on behalf of the Trustees.
- 6.7 No certificate of the Engineer or his representative shall protect the Contractor against or prevent the Trustees from obtaining repayment from the Contractor, in case the Engineer or his representative should overcertify for payment or the Trustees should over-pay the Contractor on any account.

Recovery for wrong and over payment

6.8 No claim for interest shall be admissible or payable to the Contractor at any stage and in respect of any money or balance or Bank Guarantee, which may be due to the Contractor from the Trustees, owing to dispute or otherwise or for any delay on the part of the Trustees in making interim or final payment or otherwise.

Interest not admissible to Contractor

#### 7.0 VARIATION AND ITS VALUATION:

7.1 The Quantities set out in the Bill of Quantities of the tender shall be treated as estimated quantities of the work and shall never be deemed as actual or correct quantities of the works to be executed by the contractor in fulfilment of his obligation under the contract.

Quantities in Bill of Quantities of Tender

7.2 The Engineer shall have the power to order the Contractor in writing to make any variation of the quantity, quality or form of the works or any part thereof that may, in his opinion, be necessary and the Contractor upon receipt of such an order shall act as follows:

Engineer's power to vary the works

- 7.2 (a) Increase or decrease the quantity of any work included in the contract.
  - (b) Omit any work included in the contract.
  - (c) Change the Character or quality or kind of any work included in the contract.
  - (d) Change the levels, lines, position and dimensions of any part of the work, and
  - (e) Execute extra and additional work of any kind necessary for completion of the works
- 7.3 No such variation shall in any way vitiate or invalidate the contract or be treated as revocation of the contract, but the value (if any) of all such variations evaluated in accordance with the Engineer's sole decision shall be taken into account and the contract price shall be varied accordingly.

Variation by engineer do not vitiate the contract

7.4 Provided always that written order of the Engineer shall not be required for increase or decrease in the quantity of any work upto 15% where such increase or decrease is not the result of any variation order given under this clause but is the result of the quantities exceeding or being less than those stated in the bill of quantities. Provided also that verbal order of variation from the Engineer shall be complied with by the Contractor and the Engineer" subsequent written confirmation of such verbal order shall be deemed to be an order in writing within the meaning of this clause.

Where written order for variation is not needed

7.5 (a) The Contractor shall not be entitled to any claim of extra or additional work unless they have been carried out under the written orders of the Engineer.

Payment for extra or additional, or omitted work or substituted work, Engineer's powers

- (b) The Engineer shall solely determine the amount (if any) to be added to or deducted from the sum named in the tender in respect of any extra work done or work omitted by his order.
- (c) All extra, additional or substituted work done or work omitted by order of the Engineer shall be valued on the basis of the rates ad prices set out in the contract, if in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices directly applicable to the extra, additional or substituted work, then the Engineer may decide the suitable rates on the basis of Schedule of Rates (including surcharge in force at the time of acceptance of tender), if any, adopted by the Trustees with due regard to the accepted contractual percentage, if any thereon. In all other cases the Engineer shall solely determine suitable rates in the manner deemed by him as fair and reasonable, and his decision shall be final, binding and conclusive.

(d) If the nature or amount of any omission or addition relative to the nature or amount of the whole of the contract work or to any part thereof shall be such that, in the opinion of the Engineer, the rate of prices contained in the contract for any item of the works or the rate as evaluated under sub-clauses (b) and (c) of this clause, is by reason of such omission or addition rendered unreasonable or in-applicable, the Engineer shall fix such other rate or price as he deems proper and the Engineer's decision shall be final, binding and conclusive.

### 8.0 DELAY / EXTENSION OF COMPLETION TIME / LIQUIDATED DAMAGE / TERMINATION OF CONTRACT

8.1 Should the quantum of extra or additional work of any kind or delayed availability of the Trustees' materials to be supplied as per contract or exceptionally adverse climatic conditions and natural phenomenon or strikes, lock-outs, civil commotion or other special cirCu.Mstances of any kind beyond the control of the Contractor, cause delay in completing the work, the contractor shall apply to the Engineer in writing for suitable extension of completion time within 7 days from the date of occurrence of the reason and the Engineer shall thereupon consider the stated reasons in the manner deemed necessary and shall either reject the application or determine and allow in writing the extension period as he would deem proper for completion of the work with or without the imposition of "Liquidated Damage" Clause (No.8.3 hereof) on the Contractor and his decision shall be final and binding on the Contractor. If an extension of completion time is granted by the Engineer without imposition of liquidated damage, from the Clause No.8.3 of the Liquidated damage shall apply from its date of expiry, if the work be not completed within the extended time, unless stated otherwise in the decision communicated by the Engineer, as aforesaid.

Extension of completion time

8.2 (a) If the Contractor fails to complete the work within the stipulated dates or such extension thereof as communicated by the Engineer in writing, the Contractor shall pay as compensation (Liquidated Damage) to the Trustees and not as a penalty, ½% (half percent) of the total value of work (contract piece) as mentioned in the letter of acceptance of the tender/offer, for every week or part thereof the work remains unfinished. Provided always that the amount of such compensation shall not exceed 10% of the said value of work. The amount of Liquidated damages shall be determined by the Engineer, which shall be final and binding.

'Liquidated
Damage' and
other
compensation
due to Trustees

- (b) Without prejudice to any of their legal rights, the Trustees shall have the power to recover the said amount of compensation/damage in Sub-clause (a) of this clause, from any money due or likely to become due to the Contractor. The payment or deduction of such compensation/damage shall not relieve the Contractor from his obligation to complete the work or from any of his other obligations/liabilities under the contract and in case of the Contractor's failure and at the absolute discretion of the Engineer, the work may be ordered to be completed by some other agency at the risk and expense of the Contractor, after a minimum three days notice in writing has been given to the Contractor by the Engineer or his Representative.
- 8.3 Without being liable for any compensation to the Contractor, the Trustees may, in their absolute discretion, terminate the contract and enter upon the site and works and expel the Contractor there from after giving him a minimum 3 days' notice in writing, due to occurrence of any of the following reasons and decision of the Trustees in this respect, as communicated by the Engineer shall be final and conclusive:

Default of the Contractors remedies & & powers/Termination of Contract.

- (i) The Contractor has abandoned the contract.
- (ii) In the opinion of the Engineer, either the progress of work is not satisfactory or the work is not likely to be completed within the agreed period on account of Contractor's lapses.
- (iii) The Contractor has failed to commence the works or has without any lawful excuse under these conditions has kept the work suspended for at least 15 days despite receiving the Engineer" or his Representative" written notice to proceed with the work.
- (iv) The Contractor has failed to remove materials from site or to dismantle or demolish and replace work for 7 days after receiving from the Engineer or his representative the written notice stating that the said materials or work were condemned and rejected by him under these conditions.
- (v) The Contractor is not executing the works in accordance with the contract or is persistently or flagrantly neglecting to carry out his obligations under the contract.
- (vi) Any bribe, commission, gift or advantage is given, promised or offered by or on behalf of the contractor t any officer, servant or representative of the Trustees or to any person on his or their behalf in relation to the obtaining or to the execution of the contract.
- (vii) The Contractor is adjusted insolvent or enters into composition with his creditors or being a company goes into liquidation either compulsory or voluntary.

- 8.3.1 Upon receipt of the letter of termination of work, which may be issued by the Engineer on behalf of the Trustees, the Contractor shall hand over all the Trustees' tools, plant and materials issued to him at the place to be ascertained from the Engineer, within 7 days of receipt of such letter.
- 8.3.2 In all such cases of Termination of work, the Trustees shall have the power to complete the work THOROUGH any other agency at the Contractor's risk and expense and the Contractor shall be debited any sum or sums that may be expended in completing the work beyond the amount that would have been due to the Contractor, had he duly completed the work of the work in accordance with the contract.
- 8.3.3 Upon termination of contract, the Contractor shall be entitled to receipt payment of only 90% of the value of work actually done or materials actually supplied by him and subject to recoveries as per contract, provided the work done and materials conform to specifications at the time of taking over by the Trustees. The payment for work shall be based on measurements of actual work done and priced at approved contract rates or other rates, as decided by the Engineer. The payment for materials supplied shall be at the rates as decided by the Engineer, which shall I in no case be more than market rates prevailing at the time of taking over by the Trustees. The Engineer's decision in all such case shall be final, binding and conclusive.
- 8.3.4 The Trustees shall have the power to retain all moneys due to the Contractor until the work is completed by other agency and the Contractor's liabilities to the Trustees are known in all respect.

#### 9.0 MAINTENANCE AND REFUND OF SECURITY DEPOSIT

9.1 On completion of execution of the work the Contractor shall maintain the same for a period, as may be specified in the form of a Special Condition of the Contract, from the date mentioned in the Initial Completion Certificate in Form G.C.1. Any defect/fault, which may appear in the work during aforesaid maintenance period, arising, in the sole opinion of the Engineer or his representative, from materials or workmanship not in accordance with the contract or the instruction of the Engineer or his representative, shall, upon the written notice of the Engineer or his representative, be amended and made good by the Contractor at his own cost within seven days of the date of such notice, to the satisfaction of the Engineer or his representative, failing which the Engineer or his representative shall have the defects amended and made good THOROUGH other agency at the Contractor's risk and cost and all expenses, consequent thereon or incidental thereto, shall be recoverable from the Contractor in any manner deemed suitable by the Engineer.

Contractor's obligation for maintenance of work.

9.2 The Contractor shall not be considered completed and the work shall not be treated as finally accepted by the Trustees, until a Final Completion Certificate in Form G.C.2 annexed hereto shall have been signed and issued by the Engineer to the contractor after all obligations under the Contract including that in the maintenance period, if any, have been fulfilled by the Contractor. Previous entry on the works or taking possession, working o using thereof by the Trustees shall not relieve the Contractor of his obligations under the contract for full and final completion of the work.

Certificate of final completion

9.3 On completion of the contract in the manner aforesaid, the Contractor may apply for the refund of his Security Deposit by submitting o the Engineer (I) The Treasury Receipts granted for the amount of Security held by the Trustees, and (ii) his "No further claim" Certificate in Form G.C.3 annexed hereto (in original), where upon the Engineer shall issue Certificate in Form G.C.2 and within two months of the Engineer's recommendation, the Trustees shall refund the balance due against the Security Deposit to the Contractor, after making deduction therefrom in respect of any sum due to the Trustees from the Contractor.

Refund of Security Deposit

### 10.0 INTERPRETATION OF CONTRACT DOCUMENTS, DISPUTES AND ARBITRATION

In all disputes, matters, claims, demands or questions arising out of or connected with the interpretation of the Contract including the meaning of Specifications, drawings, designs and instructions or as to the quality of workmanship or as to the materials used in the work or the execution of the work whether during the progress of the works or after the completion and whether before or after the determination, abandonment or breach of the contract the decision of the Engineer shall be final and binding on all parties to the contract and shall forthwith be given effect to by the Contractor.

Engineer's decision

10.2 If the Contractor be dissatisfied with any such decision of the Engineer, he shall within 15 days after receiving notice of such decision require that the matter shall be referred to Chairman, who shall thereupon consider and give a decision.

Chairman's award.

10.3 If, however, the Contractor be still dissatisfied with the decision of the Chairman, he shall within 15 days after receiving notice of such decision require that within 60 days from his written notice, the Chairman shall refer the matter to an Arbitrator of the panel of Arbitrators to be maintained by the Trustees for the purpose and any such reference shall be deemed to be a submission to arbitration within the meaning of Indian Arbitration Act, 1940 or any statutory modification thereof.

Arbitration.

10.3.1. If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another person from panel shall be appointed as Sole Arbitrator and he shall proceed from the stage at which his predecessor left it.

- 10.3.2 The Arbitrator shall be deemed to have entered on reference on the date he issues notice to both the parties fixing the date of first hearing.
- 10.3.3 The time limit within which the Arbitrator shall submit his award shall normally be 4 months as provided in Indian Arbitration Act, 1940 or any amendment thereof. The Arbitrator may, if found necessary, enlarge the time for making and publishing the award, with the consent of the parties..
- 10.3.4 The venue of the arbitration shall be either Calcutta or Haldia as may be fixed by the Arbitrator in his sole discretion. Upon every or any such reference the cost of any incidental to the reference and award respectively shall be in the discretion of the Arbitrator who may determine, the amount thereof or by whom and to whom and in what manner the same shall be borne and paid.
- 10.3.5 The Award of the Arbitrator shall be final and binding on all parties subject to the provisions of the Indian Arbitration Act 1940 or any amendment thereof. The Arbitrator shall give a separate award in respect of each item of disputes and respective claim referred to him by each party and give reason for the award.
- 10.3.6 The Arbitrator shall consider the claims of all the parties to the contract within only the parameters of scope and conditions of the contract in question.
- 10.3.7 Save as otherwise provided in the contract the provisions of the Arbitration Act, 1940 and rules made thereunder, for the time being in force, shall apply to the arbitration proceedings under this Clause.
- The Contractor shall not suspend or delay the work and proceed with the work with due diligence in accordance with Engineer's decision. The Engineer also shall not withhold any payment, which, according to him, is due or payable to the Contractor, on the ground that certain disputes have cropped up and are likely to be referred to arbitration.
- 10.5 Provided always as follows:
  - [a] Nothing of the provisions in paragraphs 10.3 to 10.3.7 hereinabove would apply in the cases of contracts, where tendered amount appearing in the letter of acceptance of the tender / offer is less than Rs.40,00,000/-.
  - [b] The Contractor shall have to raise disputes or differences of any kind whatsoever in relation to the execution of the work to the Engineer within 30 days from the date of occurrence of the cause of dispute and before the preparation of the final bill, giving detailed justifications, in the context of contract conditions.

- [c] Contractor's dispute if any arising only during the maintenance period, if any, stipulated in the contract, must be submitted to the Engineer, with detailed justification in the context of contract conditions, before the issuance of final completion certificate in Form G.C.-2 ibid.
  - No dispute or difference on any matters whatsoever, the Contractor can raise pertaining to the Contract after submission of certificate in form G.C.3 by him.
- [d] Contractor's claim / dispute raised beyond the time limits prescribed in sub-clauses 10.5[b] and 10.5 [c] hereinabove, shall not be entertained by the Engineer and / or by any Arbitrator subsequently.
- [e] The Chairman / Trustees shall have the right to alter the panel of Arbitrators, vide Clause 10.3 hereinabove, on their sole discretion, by adding the names of new Arbitrators and / or by deleting the names of existing Arbitrators, without making any reference to the Contractor.

#### (TO BE SUBMITTED WITH COVER- I OFFER)

## THE BOARD OF TRUSTEES FOR THE PORT OF KOLKATA FORM OF TENDER (UNPRICED)

То	
The Manager (I&CF),	
Haldia Dock Complex.	
I/We	
having examined the site of work, inspected the Drawings and read Conditions of Contract and Conditions of the Tender, hereby tender and the works required to be performed in accordance with the Specificatio Conditions of Contract and Drawings prepared by or on behalf of the Trusthe annexed Bill of Quantities within months / weeks from the and in the event of our tender being accepted in full or in part. I / We Agreement in the form hereto annexed with such alterations or additions effect to the acceptance of the Tender and incorporating such Specification & General Conditions of Contract and I / We hereby agree that unthe said Specification, Bill of Quantities, Conditions of Contract and the thereof in writing by or on behalf of the Trustees shall be the Contract.	undertake to execute and complete all on, Bill of Quantities, General & Special stees and at the rates & prices set out in the date of order to commence the work also undertake to enter into a Contract thereto which may be necessary to give cation, Bill of Quantities, Drawing and till such Contract Agreement is executed
THE TOTAL AMOUNT OF TENDER Rs. NOT TO BE QUOTED IN COVER	I OFFER
(Repeat in words) NOT TO BE QUOTED IN COVER I OFFER	
I / We requiredays / months preliminary time to arrange the work from the date of acceptance of tender before I We could comm  I / We have deposited with the Trustees' Manager (F of as Earne	nence the work. Finance), HDC, vide Receipt No.
I / We agree that the period for which the tender shall remain open for months.	, and the second
Dated :	(Signature of Bidder with Seal)
WITNESS:	
Name of the B	idder:
Signature:	
Name : (In Address : Block Letters)	
Address:	

## SYAMA PRASAD MOOKERJEE PORT, KOLKATA HALDIA DOCK COMPLEX

#### FORM G.C.1

Contractor
Address
Date of completion:
Dear sir(s),
This is to certify that the following work viz:-
Name of work:
Estimate No. E.E.0
C.E.O
Work Order No
which was carried out by you is in the opinion of the undersigned complete in every respect on the day of 2000 in accordance with terms of the Contract and you are required to maintain the work as per Clause 62 of the General Conditions of Contract and under provisions of the Contract for a period of weeks / months / years
from the day of day of 2000 to day of 2000 .
Yours faithfully,
Signature.  (ENGINEER/ENGINEER'S REPRESENTATIVE)  Name.  Designation

## SYAMA PRASAD MOOKERJEE PORT, KOLKATA HALDIA DOCK COMPLEX

#### FORM G.C.2.

Certificate of Final Completion.
The Financial Adviser & Chief Accounts Officer The Manager (Finance), Haldia Dock Complex.
This is to certify that the following work viz:-
Name of work:
Estimate No. E.E.O
Work Order No.
Contract No.
Resolution & Meeting No
Allocation:
which was carried out by Shri/Messrs
Signature (ENGINEER/ENGINEER'S REPRESENTATIVE)

OFFICE SEAL

## SYAMA PRASAD MOOKERJEE PORT, KOLKATA HALDIA DOCK COMPLEX

#### FORM G.C.3

('NO CLAIM ' CERTIFICATE FROM CONTRACTOR)			
The Manager (I&CF) Haldia Dock Complex Calcutta Port Trust Haldia. (Atten:)			
Dear Sir,			
$I \ / \ We$ do hereby declare that $I \ / \ we$ have received full and final payment from the execution of the following work viz:-	Calcutta Port	Trust fo	or the
Name of work:	-		
Work Order No :			
Contract No			
Agreement NoDt			
and I / we have no further claim against the Calcutta Port Trust in respect of the above-	mentioned jo	b.	
Yours faithfully,			
Contractor)  Dated	(Signature	of	the
Name of Contractor			
Address:			
(OFFICIAL SEAL OF THE CONTRACTOR)			

# SYAMA PRASAD MOOKERJEE PORT, KOLKATA PROFORMA OF FORM OF AGREEMENT

THIS AGREEMENT made day of day of between the "Board Of Trustees for the Port Of Calcutta , a
repugnant to the context he deemed to include his heirs, executors, administrators, representative, successor in officer and permitted assigns) of the other part.
WHEREAS The TRUSTEES are desirous that certain works should be executed viz and have accepted a Tender/Offer by the contractor for the execution, completion and maintenance of such works .
contractor for the execution, completion and maintenance of such works.
NOW THIS CONTRACT AGREEMENT WITNESSETH as follows :-
1. In this agreement words expressions shall have the same meanings as are respectively assigned to them in General Conditions Of Contract, hereinafter referred to.
2. The following Documents shall be deemed to form and be read and construed as part of this Agreement , viz :-
i. The said Tender/Offer & the acceptance of Tender/Offer.
ii.The Drawings.
iii. The General Conditions Of Contract.
iv.Special Conditions Of Contract (If any).
v.The Conditions Of Tender.
vi.The Specifications.
vii.The Bill Of Quantities.
viii.All correspondences by which the contract is added, amended, varied or modified in any
way by mutual consent.
3. In consideration of the payments to be made by the Trustees to the Contractor as hereinafter mentioned the contractor hereby covenant with the Trustees to execute ,complete and maintain the work in conformity in all respects with the provisions of Contract.
4. The Trustees hereby covenants to pay to the contractor in consideration of such execution ,completion and maintenance of the works the Contract Prices at the times and in the manner prescribed by the contractor .
IN WITNESS whereof the parties hereto have caused their respective Common Seals to be hereunto as fixed (or have set their respective hands and seals) the day and year first above written. have executed these presents on the day and year first above written.
The Seal of
The sear of

Name :
Address :
OR
SIGNED SEALED AND DELIVERED
By the said
In the presence of :
Name :
Address :
The Common Seal of the Trustees was hereunto affixed in he presence of :
Name :

Address :-\_\_\_\_\_

Proforma Of Irrevocable Bank Guarantee (PERFORMANCE BOND) in lieu of cash Security Deposit, to be issued by the Kolkata/ Haldia Branch, as the case may be, of any nationalised Bank of India on Non-Judicial Stamp Paper worth Rs 50/- or as decided by the Engineer/ Legal Adviser of the Trustees.

Ref	Bank (			
To The Board of Trustees fo 15, Strand Road Kolkata – 700 001	r the Port of Kolkata,			
Dear Sirs,				
EMPLOYER"which exp successors admir	pression shall unless rep pristrators and		- (hereinafter referred to ext or meaning thereof in having awarded at	
(hereinafter referred to as or meaning thereof, incl issue of EMPLOYER'S	s the "CONTRACTOR" ude its successors, admit work order datedtractor resulting in a	which expression shanistrators, executors the CONTRACT'	nall unless repugnant to the sand assigns) a CONTR. same having been unequestionable bearing. Letter Of Aw Valued at "and the contractor having and	ACT by uivocally vard No t Rs
to prove a Contract pe			only) to the EMPLOY	Contract
or meaning thereof, included and undertake to pay the extent of Rs( reservation, contest, recordemand made by Employbetween EMPLOYEER Arbitrator or any other A	ude its successors, admine Employer on demand only) as aforesaid a purse or protest an/or with yer on the Bank shall be and CONTRACTOR of authority. The Bank undent of employer and furt	which expression shateristicators, executors any and all monies at any time upto thout any reference conclusive and binder any dispute penertakes not to revoke ther agrees that the	ata/ Haldia having its Headall unless repugnant to the and assigns) do hereby go payable by the Contract without an to the CONTRACTOR, A ling notwithstanding any doding before any Court, this guarantee during its guarantee herein contains	e context guarantee for to the by demur, Any such lifference tribunal, currency

EMPLOYER shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the CONTRACT by CONTRACTOR. Employer shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or any right which they might have against Contractor, and to exercise the same at any time in any manner, and other to enforce or to forebear to enforce any covenants, contained or implied, in the CONTRACT between EMPLOYER and CONTRACTOR or any other course of remedy or security available to EMPLOYER of its liberty with reference to the matters aforesaid or any of them or by reason or any other acts of omission or

commission on the part of employer or any other indulgence shown by EMPLOYER or by any other matter or thing whatsoever which under Law would, but for this provision, have the effect of reliving the bank.

The Bank also agreed that EMPLOYER at its option shall be entitled to enforce this Guarantee against the Bank as principal debtor, in the first instance without proceeding against CONTRACTOR and notwithstanding any security or other guarantee that EMPLOYER may have in relation to the CONTRACTOR'S liabilities.

Notwithstanding anything contained to and including whose behalf this guarantee has been	herein above our liability under this guarantee is restricted to I (rupees only) and it shall remain in force a and shall be extended from time to time for such period, o given.	ıp
Dated, thisat	day of201	0
WITNESSES		
(Signature)	(Signature)	
(Name)	(Name)	
(Official address)	(Designation with Bank Stamp) + Attorney as per power of Attorney No.	
	Dated	

### **Integrity Pact**

Between

SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMPK) hereinafter referred to as "The Principal/ Employer".

	And		
hereinafter	referred to as	"The Bidder/Contractor"	

#### **Preamble**

In order to achieve these goals, an Independent External Monitor (IEM) appointed by the principal, will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

#### NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the PRINCIPAL/EMPLOYER to get the contractual work executed and/or to obtain/dispose the desired said stores/ equipment at a competitive price in conformity with the defined specifications/ scope of work by avoiding the high cost and the distortionary impact of corruption on such work /procurement/ disposal and Enabling BIDDERs/ CONTRACTORs to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the PRINCIPAL/EMPLOYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

#### **Section 1 – Commitments of the Principal/ Employer.**

- (1) The Principal commits itself to take measures necessary to prevent corruption and to observe the following principles:
  - a. No employee of the Principal, personally or THOROUGH family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information THOROUGH which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - c. The Principal will exclude from the process all known prejudiced persons.
- (2). If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC)/Prevention of Corruption (PC) Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

#### **Section-2** –**Commitments of the Bidder(s)** / **Contractor(s)**

(1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a. The Bidder(s) /Contractor(s) will not directly or THOROUGH any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contract, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or Document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principles, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines, all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is annexed and marked as Annex-A.
- e. The Bidder(s)/Contractor(s) will when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2). The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

#### Section-3-Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s) before award or during execution has committed a transgression THOROUGH a violation of Section 2 above, or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as considered appropriate.

#### **Section 4-Compensation for damages**

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3 or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

#### **Section 5-Previous transgression**

- (1) The Bidder declares that no previous transgressions occurred in the last 3 years from the date of signing the Integrity pact with any other Company in any country conforming to the anti corruption approach or with any other Public Sector Undertaking / Enterprise in India, Major Ports/ Govt. Departments of India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as considered appropriate.

#### Section 6- Equal treatment of all Bidders/Contractors/Sub-Contractors

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal, will enter into agreements with identical conditions as this one with all Bidders, Contractors and Sub-contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

#### Section 7- Other Legal actions against violating Bidder(s)/ Contractor(s)/ Sub Contractor(s)

The actions stipulated in this Integrity pact are without prejudice to any other legal action that may follow in accordance with provisions of the extant law in force relating to any civil or criminal proceedings.

#### <u>Section 8 – Role of Independent External Monitor(IEM):</u>

- (a) The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.
- (b) The Monitors shall not be subject to instructions by the representatives of the parties and shall perform their functions neutrally and independently.
- (c) Both the parties accept that the Monitors have the right to access all the Documents relating to the contract.
- (d) As soon as the Monitor notices, or has reason to believe, a violation of this pact, he will so inform the authority designated by the Principal and the Chief Vigilance Officer of Kolkata Prot Trust.
- (e) The BIDDER/ CONTRACTOR(s) accepts that the Monitor has the right to access without restriction to all contract Documentation of the PRINCIPAL including that provided by the BIDDER/ CONTRACTOR. The BIDDER/ CONTRACTOR will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract Documentation, if any. The same is applicable to subcontractors. The Monitor shall be under contractual obligation to treat the information and Documents of the Bidder/Contractor/ Sub-contractor(s) with confidentiality.
- (f) The Principal/ Employer will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor, the option to participate in such meetings.
- (g) The Monitor will submit a written report to the designated Authority of Principal/ Employer/ Chief Vigilance Officer of SYAMA PRASAD MOOKERJEE PORT, KOLKATA within 8 to 10 weeks from the date of reference or intimation to him by the Principal/ Employer/ Bidder/ Contractor and should the occasion arise, submit proposals for correcting problematic situation. BIDDER/ CONTRACTOR can approach the Independent External Monitor (s) appointed for the purposes of this Pact.
- (h) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (i) If the Monitor has reported to the Principal substantiated suspicion of an offence under the relevant IPC/PCA, and the Principal/ Employer has not, within reasonable time, taken visible action to proceed against such offence or reported to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (j) The word 'Monitor' would include both singular and plural.

#### **Section 9 – Facilitation of Investigation:**

In case of any allegation of violation of any provisions of this Pact or payment of commission, the PRINCIPAL/EMPLOYER or its agencies shall be entitled to examine all the Documents including the Books of

Accounts of the BIDDER/CONTRACTORS and the BIDDER/CONTRACTOR shall provide necessary information and Documents **in English** and shall extend all possible help for the purpose of such examination.

#### **Section 10 – Pact Duration:**

The pact beings with when both parties have legally signed it and will extend upto 2 years or the complete execution of the contract including warranty period whichever is later. In case bidder/contractor is unsuccessful this Integrity Pact shall expire after 6 months from the date of signing of the contract.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairman, KoPT.

#### **Section 11 – Other Provisions:**

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal in Kolkata.
- (2) Changes and supplements as well as termination notices need to be made in writing in English.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & on behalf of the Principal)	(For & on behalf of Bidder/Contractor).
(Office Seal)	(Office Seal)
Place:	
Date:	
Witness 1:	
(Name & Address)	
Witness 2:	
(Name & Address)	

#### GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

- 1.1 There shall be compulsory registration of Indian agents of Foreign suppliers for all Tenders. An agent who is not registered with KoPT shall apply for registration in the prescribed Application-Form.
- 1.2 Registered agents will file an authenticated Photostat copy (duly attested by a Notary Public)/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/ remuneration/salary/retainer ship being paid by the principal to the agent before the placement of order by KoPT.
- 1.3 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

#### 2.0 DISCLOSURE OF PARTICULARS OF AGENTS/REPRESENTATIVES IN INDIA. IF ANY.

- 2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:
- 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it is to be conformed whether it is real substantial Company and details of the same shall be furnished.
- 2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/ representatives in India.
- 2.1.3 Confirmation of the Tenderer that the commission/remuneration if any, payable to his agents/representatives in India, is to be paid by KoPT in Indian Rupees only.

#### 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:

- 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or THOROUGH the agents /representatives.
- 2.2.2 The amount of commission/remuneration included in the price(s) quoted by the Tenderer for himself.
- 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remunerations, if any, reserved for the Tenderer in the quoted price(s), is to be paid by KoPT in India in equivalent Indian Rupees.
- 2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission/remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable for rejection or in the event of a contract materializing, the same liable to termination by KoPT. Besides this there would be a penalty of banning business dealings with KoPT or damage or payment of a named sum.

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