

Jaipur

Tender No: MWCJL/O&M/ROAD MAINT.WORKS/2019-20/T-001

TENDER FOR

ROAD MAINTENENACE WORKS IN MULTIPRODUCT SEZ ZONES AT MAHINDRA WORLD CITY, JAIPUR

EMPLOYER: MAHINDRA WORLD CITY (JAIPUR) LIMITED, 411, NEEL KANTH TOWERS# 1, BHAWANI SINGH ROAD, C-SCHEME, JAIPUR-302001

PHONE: 0141-6683400; FAX: 0141-2243060

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MAHINDRA WORLD CITY (JAIPUR) LIMITED, JAIPUR

BID FOR ROAD MAINTENENACE WORKS IN SEZ AND NON-SEZ AREA AT MAHINDRA WORLD CITY, JAIPUR

Tender No	: MWCJL/O&M/ROAD MAINT.WORKS/2019-20/T-001
Date of Issue	: <mark>17.05.2019</mark>
Tender Docum	nent issued to:
M/s	

By

Mahindra World City (Jaipur) Limited

SEZ Project Office, Vill & PO – Kalwara, Tehsil- Sanganer, Dist-Jaipur -302029 Phone No: 0141-6683411

Fax : 0141-2243060

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MAHINDRA WORLD CITY (JAIPUR) LIMITED, JAIPUR

BID NO :MWCJL/0&M/ROAD MAINT.WORKS/2019-20/T-001

NAME OF WORK :Road Maintenance Works in Multi-Product SEZ Area at Mahindra

World City, Jaipur

PERIOD OF ISSUE OF :From: 17.05.2019 to 17.05.2019
BIDDING DOCUMENT Time: 10:00 Hours to 17:00 Hours

LAST DATE AND TIME :Date: 25.05.2019 (Hard Copy submission)

FOR RECEIPT OF BIDS Time: **18:00 Hrs.**

Mahindra	World.	City	(.lainur)	N I td

INVITATION FOR BID

(IFB)

MAHINDA WORLD CITY (JAIPUR) LIMITED, JAIPUR

INVITATIONS FOR BIDS (IFB)

Date: May 17, 2019

BID NO: MWCJL/0&M/ROAD MAINT.WORKS/2019-20/T-001

1. **MAHINDRA WORLD CITY (JAIPUR) LIMITED** is developing an Multi Product SEZ & DTA Area and invites item rate Bids for the below mentioned works from the selected & Pre-qualified Bidders.

2. Tender document can be downloaded from our web site https://www.mahindraworldcity.com/tenders/, Hard copies of the document can be taken from the below mentioned address;

Mahindra World City (Jaipur) Limited

SEZ Project Office, Vill & PO – Kalwara,

Tehsil- Sanganer, Dist-Jaipur -302029 Phone No: 0141-3003402, 3003411 Fax : 0141-3003474, 2243060

- 3. Bids must be delivered to **Mahindra World City (Jaipur) Limited**, Multi-Product SEZ Project Office, Village & PO Kalwara, Tehsil Sanganer, Dist- Jaipur -302029, on or before **18:00 Hours** on **25.05.2019** for Hard Copy submission(Spiral binded). If the office happens to be closed on the date of receipt of the Bids as specified, the Bids will be received on the next working day at the same time and venue.
- 4. Other details can be seen in the Bidding documents.

TABLE - IFB 1

S. No.	Name of work	Cost of document (Rs.)	Period of completion
1	Road Maintenance Works in SEZ	5000/-	30 days (30)
	Zone at Mahindra World City,		
	Jaipur		

The Cost of tender shall be in favour of **Mahindra World City (Jaipur) Limited** in the form of a Demand Draft or Banker's Cheque or Pay order payable at Jaipur.



SECTION 1: INSTRUCTIONS TO BIDDERS
(ITB)

Section 1: Instructions to Bidders

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A. General Instructions

1. Scope of Bid

1.1 **Mahindra World City (Jaipur) Limited** (MWCJL), (referred to as Employer in these documents) invite Bids for the MWCJL/0&M/ROAD MAINT.WORKS/2019-20/T-001

(as defined in these documents and referred to as "the Works") detailed in the table No.IFB-1.

2. One Bid per Bidder

- 2.1 Each Bidder shall submit only one Bid for one Contract.
- 2.2 Tender documents are not transferable

3. Cost of Bidding

3.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

4. Site visit

4.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a Contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

B. Bidding Documents

5. Contents of Bidding Documents

Part - I

5.1 The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 8 (if any)

Invitation for Bids containing Sections as below.

1 41 0 1	11171000101011101	
Sections	1 2 3 4 5	Instructions to Bidders Letter of Acceptance and Agreement form Conditions of Contract Contract Data Forms of Securities
Part - II		Specifications
Part - III		Tender Drawings
Part - IV		Price Part (SCHEDULE OF QUANTITIES)

6. Clarification of Bidding Documents

6.1 The Employer has the sole discretion to short list Bidders and shall inform them in writing by Fax/e-mail. These short listed Bidders (shall be known as Bidder/Bidders hereinafter) requiring any clarification of the Bidding documents may notify the Employer by Fax or may contact following person:

Mr. Bibhor K Singh (Sr. Manager Contracts and Procurement), Mobile No. 09929388804, 0141- 6683411. The Employer will respond to any request for clarification all such quarries shall be made at least three (03) days before date of submission of Bids as per *Clause* 16.

The contractor shall submit Bid Security for a amount of **Rs. 2,91,000/- (Two Lacs Ninety One Thousand Only).** The Bid Security of tender shall be in favour of **Mahindra World City (Jaipur) Limited** in the form of **a Demand Draft** valid for a period of 120 days from the date of submission of the tender documents.

C. Preparation of Bids

7. Language of the Bid

7.1 All documents relating to the Bid shall be in the English language.

8. Documents comprising the Bid

- 8.1 The Bid submitted by the Bidder shall comprise the following:
 - a) The SCHEDULE OF QUANTITIES wherein the Bidder shall fill in the rates duly signed and stamped by the Bidder on each page.
 - b) Specifications and Drawing Volumes duly signed and stamped by the Bidder on each page.
 - c) any other materials required to be completed and submitted by bidders in accordance with these instructions

The Price Part (SOQ) shall be filled in without exception.

9. Bid Prices

- 9.1 The quoted item rates shall be deemed inclusive of all costs for material, labour, plant, EPF, Workmen Compensation, taxes, duties, royalties, levies, service tax etc, equipment, overhead, supervision, profit, preliminaries, all temporary works, night works, shift works, storage facility, security, working with site constraints, working with full compliance to all requirement, restrictions etc. from all relevant authorities.
- 9.2 The item rate quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account whatsoever.

10. Currencies of Bid and Payment

10.1 The rates and the prices given are in Indian Rupees.

11. Bid Validity

11.1 Bids shall remain valid for a period not less than 120 (One twenty) days after the date for Bid submission specified in *Clause 16*. A Bid corrected by the Bidder as valid for a shorter period shall be rejected by the Employer as non-responsive.

12. Contract Price

The Contract Price will remain fixed during the extended period of validity, if any.

13. Bid Security

- 13.1 The Employer on his sole discretion will notify the Bidder (as per *Sub-Clause 6.1*) for negotiation. The Bidder shall furnish as a part of his Bid, a Bid security in the amount as shown in column 4 of the table IFB-1 or as notified by the Employer before participating in negotiations. The Bid security shall be in favour of **Mahindra World City (Jaipur) Limited** in the form of a Demand Draft or Banker's Cheque or Pay order payable at Jaipur.
- 13.2 The Bid Security of unsuccessful Bidders will be returned within 30 days of the end of the Bid validity period specified in *Sub-Clause 11.1*.
- 13.3 The Bid Security of the successful Bidder will be adjusted with Performance Security when the Bidder has signed the Agreement and furnished the required Performance Security.

14. Format and Signing of Bid

- 14.1 The Bidder shall prepare the Bid as specified in *Clause 8* in One (01) copy.
- 14.2 The Rate in the original and one duplicate copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder.

- All pages of the Bid where entries or amendments have been made shall be signed by the person or persons signing the Bid.
- 14.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the Bid.

D. Submission of Bids

15. Sealing and Marking of Bids

15.1 The Bidder shall submit the original Bid in one sealed envelop marking as "Road Maintenance

Works in Multi-Product SEZ Area at Mahindra World City, Jaipur" Financial Bid shall contain

Part – IV: SCHEDULE OF QUANTITIES wherein the Bidder shall fill in the unit rates in digits and words and each page duly signed and sealed.

15.2 The envelope shall be addressed to the Employer at the following address:

Mahindra World City (Jaipur) Limited

Multi-Product SEZ Project Office, Vill & PO – Kalwara, Tehsil- Sanganer, Dist-Jaipur -302029 Phone No: 0141-6683400, 6683411

Fax: 0141-2243060

16. Deadline for Submission of the Bids

- 16.1 Bids (Sealed Envelope having Tender Cost ,EMD and Spiral Binded Tender Document with Financial Bid duly signed and stamped) must be received in by the Employer at the address specified above no later than 18:00 hours on 25.05.2019. In the event of the specified date for the submission of Bids declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day. Bid shall be submitted in hard binding / spiral binding format to MWCJ project office.
- 16.2 The Employer may extend the deadline for submission of Bids by issuing an amendment indicating the revised deadline.

E. Bid Opening and Evaluation

17. Process to Be Confidential

17.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a Contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

18. Correction of Errors

- 18.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
 - (a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
 - (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 18.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected.

19. Employer's Right to Accept any Variation

19.1 The Employer reserves the right to accept or reject any variation, deviation from the Bid document, or any alternative offer. Variations, deviations and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

F. Award of Contract

20. Award Criteria

20.1 The Employer will negotiate with the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents. On completion of negotiations the Employer will award the Contract to the most suitable Bidder.

21. Employer's Right to Accept any Bid and to Reject any or all Bids

21.1 Notwithstanding *Clause 19*, the Employer reserves the right to accept or reject any Bid or part of the Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

22. Notification of Award and Signing of Agreement

22.1 The Bidders whose Bid has been accepted will be issued Letter of Intent incorporating the final negotiated value of contract and major terms agreed mutually. Detailed work order comprising final negotiated item rates and detailed terms negotiated and agreed mutually shall be issued in due course alongwith form of agreement provided in bidding documents incorporating all agreements between parties.

23. Performance Security

23.1 Within 10 days of receipt of the Letter of Intent, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5 % of the Contract price.

a bank guarantee in Employer's prescribed format.; or

Bank demand draft, in favour of **Mahindra World City (Jaipur) Limited** payable at **Jaipur.**

- 23.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be from a Nationalised/Scheduled Bank acceptable to Employer and shall be in Employer's prescribed format.
- 23.3 Failure of the successful Bidder to comply with the requirements of *sub-Clause 23.1* shall constitute a breach of Contract, cause for annulment of the award and any such other remedy the Employer may take under the Contract, and the Employer may resort to awarding the Contract to any other Bidder, on sole discretion of Employer.

24 Corrupt or Fraudulent Practices

24.1 The Employer expects the Bidders, Suppliers, Contractors, and Consultants, observe the highest standard of ethics and integrity during the procurement and execution of such Contracts .Therefore, the Employer will reject the Bid and blacklist such Bidder, barring him from participation in future Bidding in the event he found indulged in any malpractice such as bribe, or other inducements to any person with a view to influence the placing of the Contract

SECTION-2

LETTER OF INTENT, LETTER OF AWARD AND AGREEMENT FORM

Table of Forms:

- LETTER OF INTENT
- LETTER OF AWARD
- AGREEMENT FORM

Letter of Intent

(Letterhead of the Employer)

Date:
To,
The Contractor's Name and Address
As Mentioned in the Tender.

Kind Attn: *Contractor's authorized signatory to the Tender*

Dear Sir,

Subject: Letter of Intent: Name of the Package

References:

- 1. Notice Inviting Tender dated
- 2. Tender document issued to you for the above.
- 3. Minutes of the Pre-bid meeting held on the <u>date</u> (Document number xxxxx), issued to you on the <u>date</u> of issue
- 4. Amendments/Addendum to the contract document for <u>name of the package</u> issued on <u>date</u>. (Document No. yyyyy)
- 5. Your Tender submitted to us on the *date*
- 6. Record of discussion of the meeting with you held on the *date*
- 7. Your revised offer submitted to us on the <u>date</u>

With reference to the above, <u>(Company Name)</u> is pleased to inform you we have completed the process of evaluation of your tender along with the Tenders submitted by other Tenderers. We intend to select you for executing the above referred work.

The negotiated price, for the execution of the scope of work mentioned in the tender documents or as amended and agreed thereafter, for the above work package, subject to all terms and conditions elaborated in the references above or as they stand amended as on date, has been mutually agreed as Rs. (In words Rs. Aaaaaaaaaaaa aaaaaa only) as per BOQ enclosed as Annexure I herewith. This amount is inclusive of all charges, taxes, (GST will be exempted in SEZ Zone(after approval of A-1 and A-2 Certificates) (excluding service tax on material supplied free of cost by clients to you), duties, royalties, excise duty, octroi, transportation, freight, customs duty, loading and unloading charges etc. levied by central / state / local authorities but excluding service tax on free issue materials by the developer. The quantities mentioned are approximate and can vary to any extent as per actuals.

A formal detailed work order pertaining to same will be issued to you in due course of time which shall be followed by signing of the Contract agreement.

Till a detailed work order is issued, this Letter of Intent shall be considered as a formal agreement between us and is binding on you. We would also like to inform you that all the terms and conditions as discussed during the final negotiation meeting would prevail and all the conditions mentioned in your letters stands withdrawn.

You have agreed to submit the copies of ESIC, PF, GST immediately on issue of LOI, failing which your payments under this contract will be withheld.)

You are kindly being requested to accept the LOI and acknowledge your acceptance of all the contents hereof on the copy and return the same to us. For
Authorised signatory

Enclosed : Annexure I

ACKNOWLEDGMENT

I,	in the capac	city of	duly
authorized to sign for and on behalf	of M/s	here by acknowledges the	receipt of your
Letter of Award and confirm accepta	nce of the terms	and conditions stated therein.	
	ъ.		
	Date:		

Signature & Stamp of Contractor

<u>Letter of Award</u> (on letterhead of Employer)

Project Site:
Date :
Γο,
Contractor's name.,
Contractor's Address.
Гelephone:
EMAIL ID:
Kind Attention:
Dear Sir,
Subject: Letter of Award: <u>Name of Package</u>
References:
1.Tender no
2.Your Tender submitted to us on
3.Record of discussion of the meeting with you held on
4.Your revised offer submitted to us on 26.08.2015
5.LOI

This is in continuation to our Letter of Intent (LOI) dated for the above mentioned work. We are now hereby pleased to award you the Work Order for carrying out Boundary Wall Works at Engineering zone.

This Work order read in conjunction with the Letter of Intent, tender documents, drawings issued to you till date, your priced offer, schedule of finishes, specifications, etc. with rates and such other details, forms the total **contract document** and supersedes all other documents including correspondences, Letters, faxes, e-mails, forwarded by both the parties to the extent in terms of specific conditions which may be in contradiction to this Work order and original tender documents, if any, exchanged by and between **M/................................(hereinafter referred to as "Contractor").**, and **M/s Mahindra World City, Jaipur or "Developer")**, prior to the date of this Work Order, same and except the documents which are relied upon in this Work Order.

1.1 SCOPE OF WORK

The scope of works also include any related works not presently included in the bill of quantities, but additional works as may be ordered by the Consultant.

Your scope of works also includes the management and coordination with all other designated sub-contractors or nominated contractors appointed for other works required for the delivery of the project.

The scope of works also includes to do the necessary coordination / follow up for your scope of work from Municipal authorities, department of industries and commerce, Pollution Control Board , State Government, Fire authorities & any other public body, Government, revenue departments, Local or any Statutory body to obtain necessary / required permission for debris, payments of royalties, duties, levies, etc., labour licenses, carting away and dumping of surplus excavated earth, erection of temporary structures (for labours, tower crane, RMC plant, site office, DG set up etc.), which are required for satisfactory progress and timely completion of the work

1.2 CONTRACT SUM

1.3 <u>TIME FOR COMMENCEMENT AND COMPLETION OF THE</u> WORKS

Works covered under this contract shall be completed within Months for this scope of works which is including monsoon from the date of issue of this Work Order or in the event of any delays due to reasons not attributable to you, any extended period as approved by the Project Head & Regional Head of Developer in writing.

The contractor shall mobilize adequate plants and machinery, material, equipment of sufficient capacities and numbers, and labours to meet the schedule. The time for completion is inclusive of any monsoon period and no extension of the time shall be granted on this account. The developer reserves the right to advance, defer or modify any part of this schedule to suit the project completion date.

1.4 ADDRESS FOR CORRESPONDENCE/NOTICE

1.5 TAXES & DUTIES

The above mentioned Amount is based on present tax structure. Any impact due to new taxes/change in tax during the tenure of contract shall be adjusted at actuals.

The considered GST component based on present tax structure and mentioned separately in the summary. Any variation in the tax structure/ introduction of new taxes during the tenure of the contract shall be adjusted at actuals.

Also if State/Central Government introduces any new taxes after award of the works, the same will be reimbursed at actual only on submission of documentary evidence.

1.6 NON-DISCLOSURE & CONFIDENTAILITY

All commercial and technical information and data provided by us or the Contract in relation to the project shall be kept confidential and you shall not at any time directly or indirectly disclose such information and data to any person or firm or use or exploit the same in any manner other than in connection with the pursuit of the object of this Agreement, without the prior written consent of us, save and except if the same is required to be disclosed by any law or rules. You acknowledge and hereby agree that you shall indemnify and keep harmless DEVELOPER from all claims, liabilities, damages, losses, costs, charges, expenses, proceedings and actions of any nature whatsoever made or instituted against the DEVELOPER directly or indirectly by reason of breach of the obligation to maintain the confidentiality of the information provided or accessed by you.

1.7 <u>CONTRACT AGREEMENT</u>

You shall be required to execute a formal Contract Agreement after issue of the Work Order. However, until the formal contract Agreement is executed, your this Work Order shall constitute a binding contract between yourselves and DEVELOPER. It is clearly and expressly agreed between the parties that if any stamp duty, registration charges, fine, penalty or fees etc. is payable at any time on this documents, the same shall be solely borne and paid by contractor. In case of any discrepancy between LOI, LOA and the formal Contract Agreement, the terms and conditions of the formal contract Agreement shall prevail.

1.8 **SUBMITTALS:**

- 1. Contractor is requested to submit a bank guarantee, as per the specified format valid for a period mentioned in the Contract documents, for an agreed amount mentioned in the Contract documents as the Performance Deposit, specified insurances and all other specified documentation as detailed in the Contract documents, within a period mentioned therein, from the date of this Letter of Award.
- 2. You are requested to submit a detailed schedule showing timelines for deployment of manpower, plants and machinery and other required establishment within a the period specified in the Contract documents.

1.9 <u>STATUTORY COMPLIANCES</u>

Contractor and all its sub-contractors shall comply with all the laws, rules, regulations etc. of the central and state government and other authorities, departments, etc. More specifically, Contractor shall comply with all labour laws applicable to their own personnel mobilized at the site and also their sub-contractors' personnel including but not limited to the provisions under The Contract Labour (Regulation & Abolition) Act, 1970, The Minimum Wages Act, 1948, The Employees Provident Fund and Miscellaneous Provisions Act, 1952. , The Employees' State Insurance Act, 1948, The Workmen compensation Act, The Inter State Migrant Workmen Act, 1979 etc and any other applicable laws. The possession of all the statutory registrations of Contractor's establishment is a precondition for the consummation of the contract.

Contractor shall agree that DEVELOPER and its Representative shall not be liable or responsible for any default by way of non-observance / compliance of the Laws on your part. In order to safeguard DEVELOPER and their Representative and to pre-empt cases of default, you shall submit to DEVELOPER and their Representative copies of paid challans duly tallied with the site wages and attendance register in respect of their own personnel and that of your sub-contractors for the previous month on or before the 20th of the succeeding month. Submission of proof of compliance under the extant labour laws shall be an essential precondition for the passing of bills. In case Contractor cannot produce the required paid challans for any reason whatsoever, DEVELOPER and their Representative shall effect the deductions on the basis of the attendance and wages records as per statutory rates and make

the remittance with the authorities concerned. In case Contractor fails to submit even the attendance and wages records to DEVELOPER and their Representative within the stipulated period the said deductions at statutory rates shall be made on the whole contract amount or instalment thereof falling due for payment.

Notwithstanding the above, Contractor will undertake to indemnify and keep harmless forever, DEVELOPER and their Representative from and against all losses, claims, demands, actions, liabilities and expenses under any labour enactment in respect of the labour involved in the said site including that of the sub-contractors for the period of the contract and extension thereof, which might arise during the subsistence of the contract or at any future point of time. The above said indemnity would include compliance under the Minimum Wages Act, 1948, The Employees' State Insurance Act, 1948, The Employees Provident Fund and Miscellaneous Provisions Act, 1952 and any other extant Act or any other Act which might become applicable or which might come into force during the tenure of the contract.

In case of any manner of action initiated by the Authorities implementing or enforcing labour laws against DEVELOPER and their Representative in respect of Contractor's personnel and their sub-contractors' personnel, notwithstanding and without prejudice to the other civil remedies for damages available to the Principal employer by virtue of the indemnity clause herein contained, DEVELOPER and their Representative shall in addition be entitled to implead Contractor as a necessary party to the proceedings before such Authority.

For avoidance of doubt, it is further clarified that there is no Employer - Employee relationship between the Contractors's Personnel and the Employer or the Employer's Representative. Nothing contained in the Contract shall create any contractual relationship between the Contractor's Personnel and the Employer or the Employer's Representative.

Contractor will comply with all the laws/regulations and statutory compliances in conformity, but not limited to, those mentioned in the Contract documents.

1.10 OCCUPATIONAL HEALTH AND SAFETY:

- 1. Safety at site Contractor will:
- (a) Comply with all applicable safety rules, regulations and laws as detailed in DEVELOPER Health Safety & Environment requirement as mentioned in the Contract Document
- (b) Be liable to pay compensation / penalty for violation of safety rules and for each accident so occurred as per Safety Penalty Matrix for as detailed in the Contract Document
- 2. Compliance with Applicable Labour Laws Contractor will obtain the requisite and necessary labour license and comply with all the labour laws of the Central and State Governments keeping and producing the necessary documents when called for by the authorities.

1.11 ENVIRONMENTAL MANAGEMENT SYSTEM.

Environmental Management System – Contractor will follow DEVELOPER's EMS system as detailed in the Contract Document. DEVELOPER will give necessary training to the Contractor's team on EMS and Green building implementation requirements at site.

1.12 **QUALITY ASSURANCE AND QUALITY CONTROL:**

Contractor will follow DEVELOPER QA/QC requirement as mentioned in Contract Document

1.13 NON-COMPLIANCE AND PENALTY:

Contractor shall carry out the work as per the latest "Project Quality Plan" (PQP) issued to him at project site. "Project Quality Plan" is an integral part of this work order. An NC will be issued to the contractor in case of any Non-compliance are found against the approved Drawings, Specifications, PQP, relevant BIS codes as applicable by the Project Manager. Any deviation

			acceptance o return one se			ns by signin	g this two sets	of this
	Yours fai	thfully,						
	For							
	Authoriz	ed Signato	ory					
				ACKNOWL	EDGMENT			
I,				in the cap	acity of			duly
authori	zed	to	sign	for	and	on	behalf	of
		,here by a	cknowledges t	he receipt of	your Work 0	rder and co	nfirm acceptanc	e of the
terms a	nd conditi	ons stated	therein.					

Date: _____

from quality requirements and acceptance criteria will lead to penalty to contractor (not exceeding 5% of contract value).

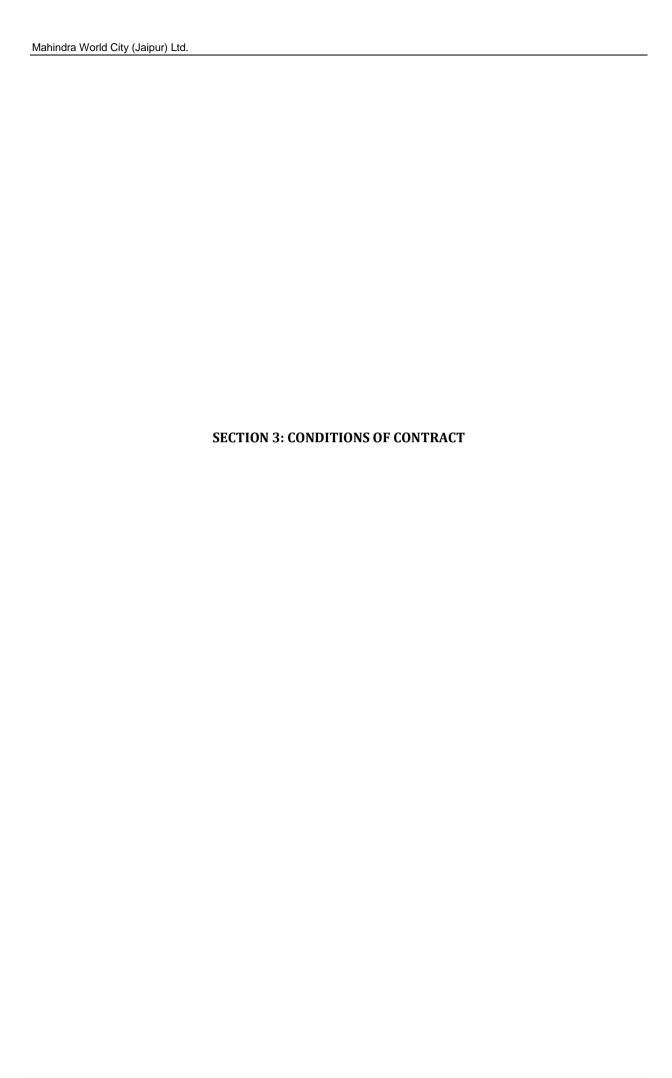
Signature & Stamp of Contractor

Agreement Form

Agreement

This Agreement, made the 2011, between Mahindra World City (Jaipur) Lim called "the Employer)" of the one part and					
[name and address of Contractor] (hereinafter called "the Contractor") of the other pa	art.				
Whereas the Employer is desirous that the Contractor execute Road Maintenand Area at Mahindra World City, Jaipur. (Bid No. MWCJL/O&M/ROAD MAINT.WOI 001 (hereinafter called "the Works") and the Employer has accepted the Bid by the C execution and completion of such Works and the remedying of any defects therein, a of Rs (Rupees)	RKS/2018-19/T- contractor for the				
NOW THIS AGREEMENT WITNESSETH as follows:					
1. In this Agreement, words and expression shall have the same meanings as assigned to them in the Conditions of Contract hereinafter referred to, a deemed to form and be read and construed as part of this Agreement.	•				
2. In consideration of the payments to be made by the Employer to the Contract mentioned, the Contractor hereby covenants with the Employer to execute a Works and remedy any defects therein in conformity in all aspects with the Contract.	and complete the				
completion of the Works and the remedying the defects wherein the Contr	The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.				
4. The following documents shall be deemed to form and be read and constru Agreement, viz.:	ed as part of this				
 i) Letter of Intent; ii) Letter of Award; iii) Work order; iii) Contractor's Bid; iv) Contract Data; v) Conditions of Contract (including Special Conditions of Contract); vi) Specifications; vii) Drawings; viii) SCHEDULE OF QUANTITIES and Rates; and ix) Any other document listed in the Contract Data as forming part of the 					
In witness whereof the Parties thereto have caused this Agreement to be executed year first before written.	cuted the day and				
The Common Seal of					
was hereunto affixed in the presence of:					
Signed, Sealed and Delivered by the said					

Mahindra World City (Jaipur) Ltd.
In the presence of:
Binding Signature of Employer
Binding Signature of Contractor



General Conditions of Contract GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 **DEFINITIONS**

In the Conditions of Contract ("these Conditions"), which include Special Conditions of Contract and these General Conditions, the following words and expressions shall have the meanings as stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

- 1.1.1.1 "Contract" means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, Letter of Award, these Conditions, the Specifications, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contracts Agreement or in the Letter of Acceptance etc.
- 1.1.1.2 "Contract Agreement" means the contract agreement (if any) referred to in Sub-Clause 1.6 [Contract Agreement].
- 1.1.1.3 "Letter of Acceptance/Intent" means the letter of formal acceptance, signed by the Project Company, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance/Intent" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance/Intent means the date of signing the Contract Agreement.
- 1.1.1.4 "Letter of Award" means the letter of formal letter signed and issued by the Project Company to execute the work formally with details signed by both Parties. It is just an extension to the "Letter of Acceptance/Intent" issued after Letter of Acceptance/Intent and before issuing the Purchase Order.
- 1.1.1.5 "Letter of Tender" means the document entitled letter of tender, which was completed by the Contractor and includes the signed offer to the Project Company for the Works.
- 1.1.1.6 "Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.
- 1.1.1.7 "Drawings" means the drawings of the Works, as included in the Contract, and any additional and modified drawings and/or sketches, details issued by (or on behalf of) the Project Company in accordance with the Contract from time to time.
- 1.1.1.8 "Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and / or prices.
- 1.1.1.9 "Tender" means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.
- 1.1.1.10 "Appendix to Tender" means the completed pages entitled appendix to tender which are appended to and from part of the Letter of Tender
- 1.1.1.11 "Bill of Quantities" and "Day-work Schedule" mean the documents so named (if any) which are comprised in the Schedules.

1.1.2 **Parties and Persons**

- 1.1.2.1 "Party" means the Project Company or the Contractor, as the context requires. Parties mean both the "Project Company" and the "Contractor".
- 1.1.2.2 "Project Company" means the Mahindra World City (Jaipur) Limited (MWCJL) named as Project Company in the Appendix to Tender and the legal successors in title to this Entity.
- 1.1.2.3 "Contractor" means the M/s Jagdish Raj Parihar named as contractor in the Letter of Tender accepted by the Project Company and the legal successors in title to this Entity.
- 1.1.2.4 "Project Manager" means the person appointed by the Project Company i.e. Infrastructure Head to act as the Project Manager for the purposes of the Contract and named in the Appendix to Tender, or other person/organization etc. appointed from time to time by the Project Company and may be notified to the Contractor under Sub-Clause 3.4 [Replacement of the Project Manager].
- 1.1.2.5 "Contractor's Representative" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.
- 1.1.2.6 "Project Company's Personnel" means the Project Manager, the assistants referred to in Sub-Clause 3.2 [Delegation by the Project Manager] and all other staff, labour and other employees of the Project Company, and any other personnel notified to the Contractor, by the Project Company or the Project Manager, as Project Company's Personnel.
- 1.1.2.7 "Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the contractor in the execution of the Works.
- 1.1.2.8 "Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9 "Bill of Quantities" shall mean the document titled "Bill of Quantities" providing inter alia, description of the Works, details of relevant material and their rates for the purpose of undertaking the Works forming part of the Contract Documents and the Contract agreement.
- 1.1.2.10 "Change Order" shall mean a written change order, approved and signed by the Project Company incorporating the change in Main Works and/or each of the Provisional Works Packages, as the case may be, and providing for any increase or reduction of the Contract Price, change in Contract Period or other relevant changes, in each case resulting from such change in Main Works and/or such Provisional Works Package.
- 1.1.2.11 "Entity" shall refer either to an individual, sole proprietorship, firm, partnership or a company as the case may be.

1.1.3 <u>Dates, Tests, Periods and Completion</u>

- 1.1.3.1 "Base Date" means the date of submission of the Tender.
- 1.1.3.2 "Commencement Date" means the date notified under Sub-Clause 8.1 [Commencement of Works]
- 1.1.3.3 "Time of Completion" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Appendix to Tender (with any extension under Sub Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.
- 1.1.3.4 "Tests on Completion" means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on

- Completion] before the Works or a Section (as the case may be) are taken over by the Project Company.
- 1.1.3.5 "Taking Over Certificate" means a certificate issued under Clause 10 [Project Company's Taking Over].
- 1.1.3.6 "Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out in accordance with the provisions of the Conditions of Contract after the Works or a Section (as the case may be) are taken over by the Project Company.
- 1.1.3.7 "Defects Liability Period" means the period for notifying defects in the Works or a Section (as the case may be) and remedying the same under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], as stated in the Appendix to Tender (with any extension under Sub-Clause 11.3 [Extension of Defects Liability Period]) as approved by the Project Company, calculated from the date on which the Works or Section is completed and satisfactorily handed over to the project company. The time period of defect liability period shall be calculated from the date of hand over as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].
- 1.1.3.8 "Work Completion Certificate" means the certificate issued under Sub-Clause 11.9 [Work Completion Certificate].
- 1.1.3.9 "Day" means a calendar day and "Year" means 365 days and in case of leap year, its 366 days.

1.1.4 Money and Payments

- 1.1.4.1 "Accepted Contract Amount" means the amount accepted in the Letter of Acceptance/Intent/Award for the execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 "Contract Price" means the price defined in Sub-Case 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.4.3 "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.4 "Final Payment Certificate" means the payment certificate issued under Sub-Clause 14.12 [Issue of Final Payment Certificate].
- 1.1.4.5 "Final Statement" means the statement defined in Sub-Clause 14.10 [Application for Final Payment Certificate].
- 1.1.4.6 "Foreign Currency" means currency of the country other than India.
- 1.1.4.7 "Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.
- 1.1.4.8 "Local Currency" means the currency of the Country, which is in Indian, Rupees (INR).
- 1.1.4.9 "Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price Payment].
- 1.1.4.10 "Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums], if such a an amount is allocated in the Contract.

- 1.1.4.11 "Retention Money" means the accumulated retention moneys which the Project Company retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.8 [Payment for Retention Money].
- 1.1.4.12 "Application for Payment" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

1.1.5 Works and Goods

- 1.1.5.1 "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Project Company's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply only materials (if any) to by supplied by the Contractor under the Contract.
- 1.1.5.4 "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- 1.1.5.5 "Plant" means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.
- 1.1.5.6 "Section" means a part of the works identified as such and more particularly described in the specifications or schedule of works for which a date of completion is stipulated in tender or subsequent communications.
- 1.1.5.7 "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 The "Works" is defined as the scope of supply and/or services or both as the context may demand; reasonably inferred from the various documents such as drawings, Bill of Quantities, specifications, site instructions etc. for which the Project Company and the Contractor have agreed to enter into this contract. A brief description of Work to be executed under this contract is provided in Appendix CD/A to Tender. The brief description provided therein is for the sake of convenience only and for detailed description and/or scope, various Contract documents shall be used. The brief definition elsewhere in the Tender in no way alters the intent defined in the various documents mentioned above. The expression "Works" or "Work" where used in these conditions shall unless there be something in the subject or context repugnant to such grammatical construction, be construed to mean the Work or part of Work contracted to be executed or in virtue of the contract, whether temporary or permanent and whether original, altered, substituted or additional.

1.1.6 Other Definitions

- 1.1.6.1 "Contractor's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.
- 1.1.6.2 "Country" means India (Jaipur, Rajasthan) where the Site is located, where the Works are to be executed.

- 1.1.6.3 "Project Company's Equipment" means the apparatus, machinery and vehicles (if any) made available by the Project Company for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Project Company.
- 1.1.6.4 "Force Majeure" is defined in Clause 19 [Force Majeure].
- 1.1.6.5 "Laws" shall mean any act, law, legislation, statute, rule, regulation, ordinance, decree, notification, policy, by-law, administrative guideline, ruling, instruction, directive, code, requirement, consent, license, approval, permit, judgment, court order, treaty promulgated by any Governmental Authority or any other law and any interpretation thereof by any Governmental Authority as applicable in the Country.
- 1.1.6.6 "Performance Guarantee" means the bank guarantee (or bank guarantees, if any) under Sub-Clause 4.2 [Performance Guarantee].
- 1.1.6.7 "Site" means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "Variation" means any change to the Works, which is instructed or approved as a Change Order under Clause 13 [Variations and Adjustments].
- 1.1.6.9 "Affiliate" shall mean any other party that directly or indirectly or through one or more intermediaries, controls, is controlled by or is under common control with the Project Company. For purposes of the foregoing, "control, "controlled by" and "under common control with" with respect to any party shall mean the possession, directly or indirectly, of the power to direct or determine the direction of the management and policies or through any other lawfully permissible means.

1.2 INTERPRETATION

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders:
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement or be recorded in writing, and
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record, emails and electronic correspondence not submitted in hard copy with signatures within 3 days from the date of such email and electronic correspondence shall not be treated as "Written" or "in writing".

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 **COMMUNICATIONS**

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted, facsimile.
- (b) delivered, sent or transmitted to the address for recipient's communications as stated in the Appendix to Tender, however:

- (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
- (ii) if the recipient has not stated otherwise when requesting an approval of consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed.

1.4 LAW AND LANGUAGE

The contract shall be governed by the Laws of the Republic of India as applicable and amended from time to time.

The language of communication shall be in English only.

1.5 PRECEDENCE OF DOCUMENTS

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation and in the event of any contradiction, the precedence shall be considered in the following order (preference order number is given):

- (i) Contract Agreement and any other special conditions signed along with the Contract Agreement and Schedules forming part of the Contract 1
- (ii) Special Conditions of Contract and its Annexures -2
- (iii) General Conditions of Contract and its Annexures 3
- (iv) The Letter of Award 4
- (v) The Letter of Acceptance/Intent' 5
- (vi) The Letter of Tender and its Appendix -6
- (vii) Specifications, Drawings and BOQ -7

In the event of further biguity or discrepancy, the Project Manager shall issue any necessary clarification or instruction which shall be final and binding on the contractor.

1.6 CONTRACT AGREEMENT

The Parties shall enter into a Contract Agreement within 60 days after the Contractor receives the Letter of Acceptance/Intent, unless the parties agree otherwise. The Contract Agreement shall be based upon the form annexed to the Contract Documents. Contractor shall submit an undertaking on non-judicial stamp paper (of Jaipur, Rajasthan) as per Appendix F (if applicable) before entering into Contract and the undertaking shall form a part of this contract. Such undertaking shall be duly signed and stamped by the authorized signatories having power of attorney to enter in to the Contract from Board of Directors of the Contractor. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne and paid by the Contractor.

1.7 ASSIGNMENT

Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract to any other party/organization/entity or any other directly or indirectly related party to the Contractor. However, the contractor:

- (a) may assign the whole or any part of the Contract with the prior written consent of the Project Company, at the sole discretion of the Project Company, and
- (b) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract with prior written consent of the Project Company.

However the Project Company may assign its interest in whole or any part of the Contract at any stage to its Affiliates and/or third party by giving written information to the Contractor.

Any violation of this clause shall result in penalty thus further resulted in termination of the contract agreement without any dues.

1.8 CARE AND SUPPLY OF DOCUMENTS

The Specification and drawings shall be in the custody and care of the Project Company. Unless otherwise stated in the contract, one copy of the Contract and three copies of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

Project Company will issue the drawings/specifications as enlisted in the contract document. Contractor shall study such drawings/specifications and confirm the sufficiency of the information given in such drawings/specifications for execution and completion of the Works in stipulated time for completion.

In case, the Contractor requires any additional drawings/specifications and/or instruction, information apart from those supplied along with the contract agreement, Contractor shall issue notice requesting such drawings/specifications and/or instruction, information to the Project Manager. Such request should commensurate the activities and milestones agreed in the construction program and shall be issued 30 days prior to the date by which contractor wants to receive the information from the Project Manager.

Project Manager, upon receipt of such notice shall determine the need of such information in accordance with the construction program and inform contractor whether such information is already issued or if it is not in accordance with the agreed construction program within 14 days of receipt of such notice by Project Manager.

In case the request is in accordance with the construction program, Project Manager shall issue the requested drawings/specifications and/or instruction, information within 45 days of receipt of such notice by Project Manager.

Each of the Contractor's Document shall be in the custody and care of the Contractor, unless and until taken over by the Project Company. Unless otherwise stated in the Contract, the Contractor shall supply to the Project Manager three physical copies of each of the Contractor's Documents.

The contractor shall keep, on the site, a copy of the contract, publications named in the specification, the Contractor's Documents (if any), the Drawings/specifications and Variations and other communications given under the Contract by the Project Company. The Project Company's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect and the other party shall be obligated to remedy it within 15 days after receiving the notice.

1.9 DELAYED DRAWINGS OR INSTRUCTIONS

This Sub-Clause is applicable only if the Contractor has followed the process for requesting the information as stated in Sub-Clause 1.8 [Care and Supply of Documents] above.

The Contractor shall forthwith give notice to the Project Manager whenever the Works are likely to be delayed or disrupted on account of reasons not foreseeable by the Contractor and the Project Manager shall supply/provide necessary drawing/specifications or instruction to the Contractor within 30 days from receipt of such notice by the Contractor's authorized

representative. The notice shall include details of the necessary drawing/specifications or instruction, details of why and by when it should be issued, and details of the nature and amount of the delay or disruption likely to be suffered if it is late on account of reasons not foreseeable by the Contractor.

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Project Manager to issue the notified drawing/specifications or instruction within 30 days from receipt of the notice referred above with supporting details, the contractor shall give a further notice to the Project Manager and shall be entitled subject to sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under sub-Clause 8.4 [Extension of Time for completion], and
- (b) payment of any such cost, which shall be included in the Contract Price which should be agreeable to the Project Company.

After receiving this further notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Project Manager's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time or Cost as indicated above.

However Contractor shall not be entitled to payment of cost as stated in (b) above if the delay in issuing drawings or instructions is due to delay in receiving requisite approvals from authorities.

1.10 PROJECT COMPANY'S USE OF CONTRACTOR'S DOCUMENTS

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Project Company a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) In the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Project Company for purposes other than those permitted under this Sub-Clause.

1.11 CONTRACTOR'S USE OF PROJECT COMPANY'S DOCUMENTS

As between the Parties, the Project Company shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Project Company. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Project Company's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract in any case, whatsoever.

1.12 CONFIDENTIAL DETAILS

The Contractor shall disclose all such confidential and other information as the Project Manager may reasonably require in order to verify the Contractor's compliance with the Contract.

The Contractor acknowledges and agrees that all the information disclosed/communicated by Project Company or which the Contractor may have access to during the course of this Contract shall be considered as confidential and proprietary information. The Contractor irrevocably agrees and undertakes and ensures that the Contractor shall keep the same secret and confidential and not disclose the same without the prior written permission of Project Company nor shall use or allow to be used any information other than for the due performance of the Contractor's obligation under this Contract in any case whatsoever, failing which attract a penalty, as agreed by the Project Company.

1.13 COMPLIANCE WITH LAWS

The Contractor shall, in performing the Contract, comply with all applicable Laws in time. Unless otherwise stated elsewhere in the Contract:

- (a) the Project Company shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or being) obtained by the Project Company, and the Project Company shall be responsible for the consequences arising out of not obtaining any requisite planning, zoning or similar permission; and
- (b) the Contractor shall give all notices, pay all taxes, workmen compensation, work contract tax, service tax, labour cess, minimum wages, PF, ESI, ESI cards, labour laws, statutory compliances, duties and fees, and obtain all permits, labour and other licenses etc. and approvals or any other applicable statutory taxes and deductions, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Project Company harmless against and from the consequences of any failure to do so. The Contractor shall indemnify the Project Company up to a 50% maximum value of total contract value.
- (c) The Contractor shall keep the Project Company indemnified against any and all losses, claims or damages which may be caused by:
 - (i) damages to the common facilities and amenities, utilities or any other project facilities in the project site for any reasons/causes attributable to the Contractor;
 - (ii) failure by the Contractor to comply with applicable laws and committing breach of any law, rule or regulation or direction;
 - (iii) failure by the Contractor to obtain or keep in force all statutory clearances or licenses, as required;
 - (iv) failure by the Contractor to comply with the statutory bodies under State of Rajasthan or Central if in case, applicable, as may be in force from time to time;
 - (v) any accident, causality, damages or any other mis-happening etc., occurring during the construction work or during the operations;
 - (vi) Non-payment of taxes, dues and duties payable to the Government or any local authority whatsoever.

1.14 JOINT AND SEVERAL LIABILITY

If the Contractor constitutes (under applicable Laws) a joint venture, consortium, partnership, whether registered or not, or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Project Company for the performance of the Contract;
- (b) these persons shall notify the Project Company of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Project Company.

1.15 PRIVATE & CONFIDENTIAL DETAILS

The Contractor shall treat the details of the Contract as private and confidential and shall not disclose the same to any third party except to the extent necessary to carry out obligations under this contract or to comply with applicable Laws. The Contractor shall not publish, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous consent of the Project Company in any case whatsoever, failing which attract a penalty, as agreed by the Project Company.

1.16 TAXES

Taxes shall mean the following, whether in force on the date hereof or imposed or levied after the date hereof:

- all taxes, duties, labour cess, cesses, imposts, fees, levies (including without limitation, all Indian central, state and local government taxes, octroi, local body tax, entry tax, excise duties, customs duties, sales tax, countervailing duties, value added tax, works contract tax, service tax, building and construction workers cess and withholding taxes) or any other applicable tax as imposed under any Applicable Law (whether within India or outside India) in connection with the Work or performance by the Contractor/Sub-Contractor of its obligations and responsibilities under this Contract;
- all taxes on Contractor's/Sub-Contractor's income, profit, real and personal property;
 and
- c. all applicable payroll, withholding, social security, workers' compensation and employment taxes and contributions imposed under any Applicable Law in connection with or measured by compensation (including without limitation wages and salaries) paid to employees of Contractor/Sub-Contractor (including without limitation taxes, health and welfare funds, pensions and annuities, disability insurance and all other similar social payments).

The Contractor's rates and prices as contained in the Accepted Contract Sum have included for all rates, duties and taxes as may be imposed by the Government of India/Government of Rajasthan.

Contractor should not consider the credit of input taxes in the rate analysis of the quoted rates. The Project Company has a right to avail the benefit of input credit for VAT on the actual value added to the material used in construction. The detailed procedure to achieve this shall be worked out with the Contractor before awarding the Works.

In case the Contractor is entitled for any refund of above taxes, necessary certificates regarding the use of materials for proposed Works will be issued by the Project Company only after receiving a written information from the Contractor.

Each payment made by the Project Company from time to time to the Contractor shall be subjected to the deduction of all Statutory Taxes, Labour Cess or any other applicable taxes as per the provisions of the Rules and Regulations prevailing and amended from time to time.

All charges payable to Local Authorities, Royalties and charges payable to Municipal Corporation etc. shall be borne and paid by the Contractor related to the scope of Works.

Any savings as tax relief benefits with respect to rates, duties and taxes as the result of the granting of tax incentives and concessions from the Government of India/Government of Rajasthan the required tax incentives and concessions for the Contract Works shall be returned and paid in favour of the Project Company only after receiving a written information from the Contractor.

1.17 BASIS OF CONTRACT:

The Contract is neither a fixed lump sum contract nor a piece work contract, but is an item rate contract to carry out the Works and each of the Provisional Sums Packages, according to the actual measured quantities at the rates contained in the Bill of Quantities along with estimated quantities with detailed Specifications. The Contract Price shall not exceed the Accepted Contract Amount indicated in the Letter of Acceptance/Intent, unless otherwise approved in the Change Orders. Amounts in excess of such amounts, not approved in advance by the Employer shall be at the Contractor's expense. The Contractor has to closely monitor the quantities and cost and obtain an Approval from the Project Company well in advance for any change outside the scope of the Work which would cause the cost of the Works to exceed the Accepted Contract Amount as indicated in the Letter of Acceptance/Intent or Contract Price as indicated in approved Change Orders issued subsequently by the Project Company. Prices mentioned in the Bill of Quantities or otherwise will be firm and final until the end of the Contract.

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Further, the Contract shall be an item-rate re-measureable Contract only to execute the Project according to the actual measured quantities at the rates contained in the Bill of Quantities. The Contractor shall be paid for the actual quantity of the Works and each of the Provisional Sums, Packages done as measured at Site, at the rates quoted and accepted by it in Bill of Quantities. The Contractor understands and agrees that the amount payable is assessed on a re-measurable basis in accordance with the rates mentioned in the Bill of Quantities. However, the Contract Price may be altered on account of a Change Order. The Contract Price shall include payment for the supply of all labour (including payment to its Sub-Contractors), equipment, materials, plant and machinery, tools, transportation, framework, scaffolding, construction of civil works and all applicable Taxes including the GST, labour cess, duties, octroi, LBT/entry tax, levies, royalties, fees, insurance premiums, contributions towards employees benefits including ESIC and provident funds and funds, distribution of power and water and all services and activities constituting the scope of Works. The Contract Price shall be inclusive of aggregate of all the Provisional Sums required to be paid to Nominated Contractor(s). The Contract Price shall also include the costs of Contractor's establishment, infrastructure, overheads and all other charges, and shall be inclusive of every cost and expense required by the Contract to be borne by the Contractor and necessary for the timely and successful execution and completion of the Works under the Contract, in conformity with the Contract and the best engineering and construction practices and to the satisfaction of the Project Manager, Delegated Assistants of Project Manager, Project Company's Representative and the Project Company.

Unless specified otherwise in the Conditions of Contract, no escalation of the prices mentioned in the Bill of Quantities or otherwise shall be allowed during the period of the Contract for any reasons whatsoever and such prices shall be deemed to be fixed and constant throughout the Time for Completion in accordance with Clause 8 and Defects Liability Period in accordance with Clause 11 of the General Conditions of Contract.

1.18 BILL OF QUANTITIES:

The quantities mentioned in the Bill of Quantities are provisional and are meant to indicate the scope of the Works and each of the Provisional Sums Packages and to provide a uniform basis for tendering.

The Project Company reserves the rights to increase or decrease the quantities or to totally omit any item of the Works and/or each of the Provisional Sums Packages, as the case may be. The Contractor by signing this contract shall have no right to claim any extra costs or claim damage on these grounds.

Any change in description or in quantity or omission of items from the Contract shall be done through a Change Order in accordance with Sub-Clause 13.3 [Variation Procedure] and shall not vitiate the Contract.

1.19 REPRESENTATIONS AND WARRANTIES

The Contractor represents and warrants to Project Company that,

- (i) It is a corporation duly incorporated, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated.
- (ii) It has the full capacity, power, authority and the legal right to enter into this Agreement and to perform its obligations hereunder.
- (iii) It has taken and will continue to take all necessary corporate action and further actions (including but without limitations the obtaining of necessary approval/consents in all applicable jurisdiction) on its part to authorize the execution and delivery of this Agreement and the performance of its obligations.
- (iv) This Agreement and the transaction contemplated by it do not contravene or conflict with, violate, breach or contravene any of its constituent documents or any law, regulation or official directive or any requirement of applicable laws or regulations or any contractual obligations of it.
- (v) The execution of this Agreement and providing Services by the Contractor to Project Company does not and will not infringe upon any intellectual property rights.
- (vi) There is no complaint, claim or litigation of any nature whatsoever outstanding, pending or threatened against it or its promoters, directors, officers or employees. The Contractor undertakes to forthwith disclose to Project Company of any such complaint, claim or litigation actual or threatened arising after the execution of this Agreement.

1.20 COVENANTS AND OBLIGATIONS OF THE CONTRACTOR

- a. Neither Contractor nor its representatives/personnel shall not at any time use or attempt to use the Project Company Trade Mark/ name or logo for any purpose including for the purpose of this Agreement unless specifically authorized by the Project Company, in writing prior to such usage.
- b. The Contractor undertakes to obtain all the requisite license/permission/ authorizations and certificates under all the applicable laws and keep the same valid by renewing from time to time as required under the various Acts/ Laws and payment of all applicable taxes, levies, and duties including service tax, if and where required. The Contractor shall maintain all the registers and records required to be maintained under the various labour enactments and rules framed there under.
- c. The Contractor shall ensure that it will employ as its personnel only those individuals who have attained majority as per law and undertakes not to act in violation against Labour Law or any law in force. The Personnel employed by Contractor shall not have any claim whatsoever on the

Project Company, and shall not raise any Industrial dispute, either directly or indirectly, against the Project Company, in respect of any of the service conditions or otherwise. It is further expressly clarified and agreed that in case of death or bodily injury to any such personnel appointed by Contractor while carrying out any of the Services under this Contract, the Project Company, shall not be liable or bound to pay any monetary compensation or otherwise be responsible in any way whatsoever. The Project Company, shall have the right to call upon the Contractor to replace any personnel of the Contractor who in the sole opinion of the Project Company, is jeopardizing the interest of the Project Company, and the Contractor shall forthwith comply with the demand of the Project Company without any costs/ fees or charges.

- d. The Contractor agrees that Contractor and any personnel assigned by the Contractor shall at all times comply with all applicable laws, policy and procedures including relating to security/access restrictions as may be prescribed by the Project Company at the Site.
- e. The Contractor shall not engage in any business activity, either by itself or through its subsidiaries, affiliates, or agents, which is in direct conflict with the interests of the Project Company or is detrimental to the interest of the Project Company, unless it obtains the prior written consent of the Project Company.
- f. The Contractor further warrants to the Project Company that, during the term of this Agreement, the Services and materials to be rendered or delivered hereunder, will be of the kind and quality designated and shall meet the requirements and specifications as determined in the Project Company's sole and exclusive discretion and communicated to the Contractor from time to time.
- g. The Contractor shall not claim any damages (liquidated or unliquidated), lien, set-off or counter claim on the material, document, information of the Project Company in the Contractor's possession or control.
- h. The Project Company shall also at it's sole discretion have the right to set off, deduct and recover from the fees/charges and/or from any other sum payable to the Contractor, any and all amounts which may be or become payable by the Contractor to the Project Company.
- i. The Contractor and its directors, partners and officers shall be solely liable for the payment of all taxes, duties, fines, labour cess, cesses, levies, penalties or any applicable statutory tax, deduction as the case may be, by whatever name called, as may become due and payable under the applicable laws in force from time to time in relation to the Services rendered pursuant to this Contract.

1.21 TIME VALIDITY

Time is the essence of this Contract agreement in so far as it relates to the observance, liabilities or performance by the Contractor of all or any of its obligations under this Contract.

1.22 The terms and conditions of the Tender shall form part of this General Conditions of Contract, in case of any ambiguity or contradiction in interpretation of tender documents and General Conditions of Contract, then Clause no. 1.5 (Precedence of documents) shall prevail.

2. THE PROJECT COMPANY

2.1 RIGHT OF ACCESS TO THE SITE

The Project Company shall give the Contractor right of access to required parts of the Site within the time (or times) solely based on the discretion of the Project Company as stated in the Appendix to Tender. The right may not be exclusive to the Contractor. If, under the Contract, the Project Company is required to give (to the Contractor) right of access to any

foundation, structure, plant, the Project Company shall do so in the time and manner stated in the Specification. However, the Project Company may withhold any such right until the Performance Guarantee has been received and on the satisfaction of the Project Company.

If no such time is stated in the Appendix to Tender, the Project Company shall give the Contractor right of access to the Site within such times as may be required to enable the Contractor to proceed in accordance with the program submitted under Sub-Clause 8.3 [Program].

If the Contractor suffers delay and / or incurs Cost as a result of a failure by the Project Company to give any such right within such time, the Contractor shall give notice to the Project Manager and shall be entitled to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Project Company's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time or Cost and Project Company shall not be liable to entertain the same.

Further if and to the extent that the Project Company's failure was caused by any delay in consents or permission from any authority or due to restrictions imposed by any authority, the Contractor shall not be entitled to payment of any such Cost mentioned in (b) above.

2.2 PERMITS, LICENSES OR APPROVALS

The Project Company shall (where he is in a position to do so) provide reasonable assistance for documentation to the Contractor at the request of the Contractor to the extent the relevant authority requires:

- (a) for the Contractor's applications for any permits, licenses or approvals required by the Law of the Country:
 - (i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws]
 - (ii) for the delivery of Goods, including clearance through customs,

2.3 PROJECT COMPANY'S PERSONNEL

The Project Company shall be responsible for ensuring that the Project Company's Personnel and the Project Company's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment]

2.4 PROJECT COMPANY'S AUTHORITY

The Project Company shall have the absolute authority to enforce compliance with the Contract Documents, on all questions relating to quantities, the acceptability of materials, equipment, or Works, the adequacy of the performance of the Work, and the interpretation of the Drawings and specifications. The decision of the Project Company will be final and

binding and shall only proceed to any payment if satisfied, under the contract agreement unless otherwise provided in the contract documents.

The Project Company shall have the authority to stop the progress of work or any part thereof as may be necessary to ensure the proper execution of the Work, to disapprove or reject the work which is defective, to demand the uncovering and inspection or testing of the work, to demand re-examination of the work, to issue interpretations and clarifications, to order changes or alterations in the Work over any other authority as provided elsewhere in the contract documents. The Project Company shall not be liable for the results of any ruling, interpretation, decisions rendered, request, demand, instruction or order issued by him. The Contractor shall promptly comply with requests, demand, instructions, and order from the Project Company.

2.5 PROJECT COMPANY'S CLAIMS

If the Project Company considers himself to be entitled to any payment under any clause of these Conditions or otherwise in connection with the Contract, then the Project Company has a suo-motto right to ask the Contractor to remedy its defaults, if any and for the payment from Contractor as agreed by both the parties.

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Project Company shall be entitled to set off against or make any deduction from an amount certified in a Payment Certificate.

2.6 LIMITATIONS AND RESPONSIBILITY

The Project Company or its representatives has a right to review/suggest/guide/instruct the Contractor and the Contractor shall be bound to follow the same.

3. THE PROJECT MANAGER

3.1 PROJECT MANAGER'S DUTIES AND AUTHORITY

The Project Company shall appoint the Project Manager who shall carry out the duties assigned to him in the Contract. The Project Manager's team shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Project Manager shall have no authority to amend the Contract.

The Project Manager may exercise the authority attributable to the Project Manager as specified in or necessarily to be implied from the Contract.

The Project Manager shall have the absolute authority to enforce compliance with the Contract Documents, on all questions relating to quantities, the acceptability of materials, plant, equipment, or Works, the adequacy of the performance of the Work, and the interpretation of the Drawings and specifications, statutory labour and other legal compliances. The decision of the Project Manager shall be final and binding and shall proceed to any payment under the contract agreement unless otherwise provided in the contract documents.

The Project Manager shall have the authority to stop the progress of work or any part thereof as may be necessary to ensure the proper execution of the Work in order according to the satisfaction of the Project Company, to disapprove or reject the work which is defective, to demand the uncovering and inspection or testing of the work, to demand re-examination of the work, to issue interpretations and clarifications, to order changes or alterations in the Work over any other authority as provided elsewhere in the contract documents. The Project Manager shall not be liable for the results of any ruling, interpretation, decisions rendered, request, demand, instruction or order issued by him. The Contractor shall promptly comply with requests, demand, instructions, statutory laws and order from the Project Manager.

3.2 DELEGATION BY THE PROJECT MANAGER

The Project Manager may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and / or independent inspectors, and/or any third entity appointed by Project Company to inspect and / or test items of Plant and / or Materials, or to perform any other duties to assist the Project Manager which Project Company may deem necessary. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both parties. However, unless otherwise agreed by both Parties, the Project Manager shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in English or any other language for communications defined in Sub-Clause 1.4 [Law and Language].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Project Manager. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Project Manager to reject the work, Plant or Materials:
- (b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Project Manager, who shall promptly confirm, reverse or vary the determination or instruction.

3.3 INSTRUCTIONS OF THE PROJECT MANAGER

The Project Manager may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Project Manager, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Project Manager or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Project Manager or a delegated assistant:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the contractor, within two working days after giving the instruction, and
- (c) does not reply by issuing a written rejection and / or instruction within seven days after receiving the confirmation.

Then the confirmation shall constitute the written instruction of the Project Manager or delegated assistant (as the case may be).

If the Contractor fails or refuses to comply with any instruction issued by the Project Manager or delegated assistant, the Project Company may after 7 days' notice from the Project Manager to the Contractor requiring such compliance, carry out or deploy other contractors to do so. All costs incurred shall be recoverable by the Project Company from the Contractor.

3.4 REPLACEMENT OF THE PROJECT MANAGER

If the Project Company intends to replace the Project Manager at his sole discretion, the Project Company may, before the intended date of replacement, inform the Contractor about such intended replacement of the Project Manager.

3.5 DETERMINATIONS

Whenever these Conditions provide that the Project Manager shall proceed in accordance with this sub-Clause 3.5 to agree or determine any matter, the Project Manager shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Project Manager shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Project Manager shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4. THE CONTRACTOR

4.1 CONTRACTOR'S GENERAL OBLIGATIONS

The Contractor shall design (to the extent specified in the contract), execute and complete the Works in accordance with the Contract and with the Project Manager's instructions, and shall remedy any defects in the Works.

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects. The Contractor shall prepare the Contractor's Documents in sufficient details to satisfy all regulatory approvals, to provide to the suppliers and construction personnel with sufficient instructions to execute the works, and to describe the operation of the completed Works from time to time.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract or any other work, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.

The Contractor shall, whenever required by the Project Manager, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Project Manager.

If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated elsewhere in the Contract.

- (a) the Contractor shall submit to the Project Manager the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
- (b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the English language and language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Project Manager to add to the Drawings for co-ordination of each Party's designs;
- (c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and

(d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Project Manager the "as-built" documents and operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Project Company to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Project Manager.

The design (to the extent mentioned in the Contract), the Contractor's documents, the execution and completion of the Works shall all comply fully with the applicable Laws, national specifications, conditions and stipulations (if any) imposed by any authorities.

4.2 PERFORMANCE GUARANTEE

The Contractor shall, within 07 days after receiving the Letter of Acceptance/Intent, provide to the Project Company a single, irrevocable and unconditional performance guarantee from the Scheduled/Nationalized Bank approved by the Project Company for an amount stated in the Appendix to Tender or such other amount as may be otherwise specified in the Contract towards security for due performance of the Contract having Jaipur as jurisdiction. Such performance guarantee shall be valid and enforceable 60 days beyond date of issuance of Taking Over Certificate by the Project Company for Works. No interest will be paid on the Bank Guarantee.

The Performance Guarantee shall strictly be in the form annexed to the Contract Documents and shall be executed on a non-judicial stamp paper having a jurisdiction of Jaipur, Rajasthan. The cost of obtaining such Performance Guarantee shall be borne and paid by the Contractor alone.

The submission of the Performance Bank Guarantee shall be a condition precedent to the Contract.

The Contractor shall ensure that the Performance Guarantee is valid and enforceable until the Contractor has executed and completed the Works and obtained Taking Over/Completion Certificate and 60 days thereafter. If the terms of the Performance Guarantee specify its expiry date, and the Contractor has not become entitled to receive the Taking Over/Completion Certificate by the date 30 days prior to the expiry date, the Contractor shall immediately extend the validity of the Performance Guarantee until minimum of 60 days beyond the extended Time for Completion of the Works. If the Contractor fails to extend the validity of such bank guarantee as stated above then Contractor hereby signing this Contract, gives an unequivocal, unconditional and irrevocable authority to the Project Company to invoke this bank guarantee without any prior notice to the Contractor and he shall not raise any objection and have no claim, whatsoever, against such action of Project Company.

The Project Company shall return the Performance Guarantee to the Contractor within 75 days after receiving a copy of the Taking Over/Completion Certificate.

4.3 CONTRACTOR'S REPRESENTATIVE/CONTRACTOR'S TEAM

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the contract.

The Contractor shall also appoint a designated team of agreed personnel who has the expertise and are competent to complete the contract/work as per the technical specifications and other conditions of contract in accordance with the satisfaction of Project Company.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Project Manager for consent of the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative where the consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's' Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Project Manager, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Project Manager's prior consent, and the Project Manager shall be notified accordingly.

The Contractor's Representative shall, on behalf of the contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Project Manager].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Project Manager has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

Notwithstanding the above provisions in this Sub-Clause, Contractor shall comply with additional requirements as specified in the Annexure to the General Conditions which shall form the part of the General Conditions.

4.4 SUB-CONTRACTORS

The Contractor shall not subcontract the whole or part of the Works.

The Contractor shall not engage or permit the engagement of any subcontractor for any part of the Works without the consent of the Project Manager / Project Company, which consent shall not be unreasonably withheld. The Contractor shall provide such reasonable details of the Subcontractor as may be required by the Project Manager/Project Company, for providing consent.

The Contractor shall give the Project Manager not less than 30 days' notice of the intended date of commencement of each Subcontractor's work, and of the commencement of such work on the Site.

It shall be a condition of any sub-contracting to which Sub-Clause 4.4 refers that the sub-contract shall include provisions which would entitle the Project Company's discretionary rights to require:

(a) the subcontract to be assigned to the Project Company under Sub-Clause 4.5 [Assignment of Benefit of Sub-contract] (if or when applicable) or if the Sub Contractor has undertaken a continuing obligation to the Contractor and if such obligation extends beyond the Contract Period, the assignment of the benefit of such obligation or in the event of termination of the Contractor's employment under Sub-Clause 15.2 [Termination by Project Company]; and/or

(b) the sub-contractor to enter into a novation agreement of the sub-contract with the Project Company only if the Project Company agrees/approves and if the Project Company so requires upon the termination of the Contractor's employment under this Contract.

The Contractor shall remain absolute liable under the Contract for all -contracted work and shall be responsible for acts or defaults of his Sub-contractor, his agents or employees, as if they were the acts or defaults of the Contractor as they are working under the contractor himself. The Contractor shall make good any damage or loss suffered by the Project Company by reason of any breach of contract, repudiation, default or failure (whether total or partial), on the part of his Sub-contractor, and shall indemnify the Project Company against any damage, liability, claim or loss arising there from. The indemnification value shall be the total agreed contract value between two parties.

If any dispute if so arises by the default of Contractor or Sub-Contractor, then in no case, whatsoever, the liability of the Project Company shall arise and the liability shall vest solely and exclusively upon the Contractor.

4.5 ASSIGNMENT OF BENEFIT OF SUB-CONTRACT

If a Sub-contractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Project Manager, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Project Company, then the Contractor shall do so. The Project Company shall not be liable for any rights which the Sub Contractor may have against the Contractor unless expressly stated otherwise in the Contract Agreement. For any claim, damage, obligation, lien etc. of the Sub-contractor to the Contractor, the Project Company shall not be liable in any case, meaning thereby, the whole and sole responsibility for any act of the sub-contractor shall vest upon the contractor and the Project Company shall in no case, be liable towards any acts of the sub-contractor directly or indirectly

4.6 CO-OPERATION

The Contractor shall co-operate, co-ordinate and allow appropriate opportunities for carrying out work to:

- (a) the Project Company's Personnel,
- (b) any other contractors deployed by the Project Company, and
- (c) the personnel of any legally constituted public authorities,

who may be deployed in the execution on or near the Site of any work not included in the Contract.

Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which shall be provided by the Contractor without any additional cost to the Project Company.

4.7 SETTING OUT

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Project Manager. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works in line with the satisfaction of the Project Manager.

The Project Manager shall provide such points of reference, but the Contractor shall use his reasonable efforts to verify his accuracy before they are used and shall be responsible for subsequent Works.

4.8 SAFETY PROCEDURES

The contractor shall:

- (a) comply with all applicable safety rules, regulations, laws, bye-laws, orders, notifications, legislature pronouncements etc.
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction, negligence and nuisance so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Project Company's Taking Over], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.
- (f) Comply with the additional requirements as specified under Project Safety Plan in Annexure to the General Conditions which shall form part of the General Conditions.

4.9 QUALITY ASSURANCE

The Contractor shall institute a quality assurance system as detailed out in Annexure to the General Conditions which shall form part of the General Conditions to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Project Manager shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Project Manager for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Project Manager, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

Third party Quality Testing for whole works will be done according to MoRTH Specifications and Agency/ Laboratory will be approved by MWCJ and cost of testing will be borne by Contractor. Detailed test reports for carry out road work shall be submitted with each Running Account Bill

4.10 SITE DATA

The Project Company shall have made available to the Contractor for his information, prior to the Base Date, all available data in the Project Company's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Project Company shall similarly make available to the Contractor all such data which come into the Project Company's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

The Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. The Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of the work and goods necessary for the execution and completion of the Works and remedying of any defects,
- (d) the Laws, procedures and labour practices of the Country, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

(f) Adjacent surrounding buildings/properties, access roads, regulation and/or stipulations by local authorities on the movement of traffic.

Contractor shall have no claim whatsoever on account of not understanding or obtaining necessary information, and/or incorrect interpretation of such information or any related provisions in the contract document only if a prior written intimation has been made to the Project Manager not exceeding 15 days' time. After perusing the specifications of the Contractor, both parties will then mutually agree on the matter.

4.11 SUFFICIENCY OF THE ACCEPTED CONTRACT AMOUNT

The contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-clause 4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers entire consideration for all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects. Notwithstanding anything to the contrary contained in the Contract Documents, the Accepted Contract Amount shall cover material cost inclusive of excise duty, income tax, GST paid at the time of purchase, labour cess or any other cess paid at the time of availing such a service, turn over tax, octroi, levies, taxes or duties of concerned authorities, royalties, insurances, licenses if any and expense towards transportation, loading, unloading, security, storing at site, safely handling at site, expected wastages, labour (skilled / unskilled), tools, plants and equipment, all overhead costs, contractors' profit, miscellaneous expenditure properly incurred or to be incurred whether on or off the site including overhead and other charges properly allocable thereto for an item of work.

4.12 UNFORESEEABLE PHYSICAL CONDITIONS

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydro-logical conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable under force majeure conditions only, the Contractor shall give notice to the Project Manager as soon as practicable and both parties shall accept the same. The Contractor has been informed (and shall be deemed to have been informed by virtue of this Contract) of the hard rock substrata conditions at the Site, de-watering during contract period and the conditions described in the Annexure to General Conditions and accordingly the said physical conditions shall not be considered to be Unforeseeable only.

This notice shall describe the physical conditions, so that they can be inspected by the Project Manager, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Project Manager may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and / or incurs Cost due to these

conditions the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and / or investigating these physical conditions, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Project Manager may also review whether other physical conditions in similar parts of the Works (if any) were more favourable that could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favourable conditions were encountered, the Project Manager may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Project Manager may take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which may be made available by the Contractor, but shall not be bound by any such evidence.

4.13 RIGHTS OF WAY AND FACILITIES

The Contractor shall bear all costs and charges for special and / or temporary rights-of-way which he may require and granted by the Project Company, including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site which he may require for the purposes of the Works.

4.14 AVOIDANCE OF INTERFERENCE

The Contractor shall not interfere unnecessarily or improperly with:

- (a) The convenience of the public and also to the Project Company's units, or
- (b) The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Project Company or of others.

The Contractor shall indemnify up to the agreed contract value and hold the Project Company harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15 ACCESS ROUTE

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

(a) The Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;

- (b) The Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) The Project Company shall not be responsible for any claims which may arise from the use or otherwise of any access route.
- (d) The Project Company does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne and paid by the Contractor.

4.16 TRANSPORT OF GOODS/MATERIAL

Unless otherwise stated elsewhere in the Contract:

- (a) The Contractor shall give the Project Manager not less than 30 days' notice of the date on which any Plant or a major item of other Goods/Material will be delivered to the Site;
- (b) The Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods/Material and other things required for the Works; and
- (c) The Contractor shall indemnify up to the agreed contract value and hold the Project Company harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods/Material, and shall negotiate and pay all claims arising from their transport.

4.17 CONTRACTOR'S EQUIPMENT

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Project Manager. However, consent shall not be required for vehicles transporting Goods/Material or Contractor's Personnel off site.

Contractor's Equipment which is owned by the Contractor (either directly or indirectly) shall be deemed to be for exclusive use of Works with effect from its arrival on the Site. However it is hereby clarified that such exclusive use of the equipments at Works shall not:

- (a) affect the responsibility or liability of the Contractor,
- (b) prejudice the right of the Contractor to the sole use of the Contractor's Equipment for the purpose of the Works, or
- (c) affect the Contractor's responsibility to operate and maintain Contractor's Equipment or any risk thereof. The personnel involved in operation of any construction equipment shall be experienced, careful and skilled enough to undertake such responsibilities.

4.18 PROTECTION OF THE ENVIRONMENT

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations and adhere to Central and State Pollution Control norms, MoEF, if applicable.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Specification, and shall not exceed the values prescribed by applicable Laws.

The Contractor shall follow the Project Company's Environment Management System (EMS) established at site. The Contractor shall read Project Company's- EMS Policy, Standard Operating Procedures, and relevant documents prior to commencement of Works. Project Company will give necessary awareness to the contractor's personnel on EMS and Green

building implementation requirements at site. Specific details are provided in the Annexure to the General Conditions which shall form part of the General Conditions.

4.19 ELECTRICITY, WATER AND GAS

The party and/or parties specified in Appendix to Tender shall be responsible for the provision of power, water and other services required for carrying out Works.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor on its own cost Project shall arrange the apparatus necessary for measuring the use of these services by the Contractor and Project Manager shall be responsible for recording the quantities consumed. If the Contractor is unable to arrange the apparatus, the Project Company can arrange the same provided that it shall be charged extra.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Project Manager in accordance with Sub-Clause 2.5 [Project Company's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Project Company.

Contractor shall comply with additional requirements as specified in the Annexure to the General Conditions which shall form part of the General Conditions.

4.20 PROJECT COMPANY'S EQUIPMENT AND FREE-ISSUE MATERIAL

The Project Company shall make the Project Company's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification or the Schedules unless otherwise stated in the Specification or the Schedules:

- (a) the Project Company shall be responsible for the Project Company's Equipment, except that
- (b) the Contractor shall be responsible for each item of Project Company's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Project Company's Equipment shall be agreed or determined by the Project Manager in accordance with Sub-Clause 2.5 [Project Company's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Project Company.

The Project Company shall supply, free of charge, the "free-issue materials" i.e. Cement and RCC Pipes (if any) in accordance with the details as stated in the Specification. The Project Company shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Project Manager of any shortage, defect or default in these materials within a stipulated time period of 7 days. Unless otherwise agreed by both Parties, the Project Company shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Contractor of liability for any shortage, defect or default not apparent from a visual inspection.

4.21 PROGRESS REPORTS

Unless otherwise stated elsewhere in the Contract, daily, weekly and monthly progress reports shall be prepared by the Contractor and submitted to the Project Manager in soft copies and hard copy as required. The daily and weekly progress reports shall commence from the date of commencement of Works. The first monthly report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Sub-contractors]),
- (b) photographs showing the status of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - (i) Commencement of manufacturing,
 - (ii) Contractor's inspections,
 - (iii) Tests, and
 - (iv) Shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment]:
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of notices given under Sub-Clause 2.5 [Project Company's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) Comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

Notwithstanding the reports listed out in sub clause (a) to (h) above, the Contractor shall also comply all the reporting procedures in line with the Project Quality Plan & Project Safety Plan as covered within the contract documents.

4.22 SECURITY OF THE SITE

Unless otherwise stated elsewhere in the Contract:

- (a) the Contractor shall be responsible for keeping unauthorized persons off the Site, and
- (b) authorized persons shall be limited to the Contractor's Personnel and the Project Company's Personnel; and to any other personnel notified to the Contractor by the Project Company or the Project Manager, as authorized personnel of the Project Company's other contractors on the Site.

The Contractor shall at its cost provide at all times adequate number of watchmen to guard the Site, materials and equipment, to the satisfaction of the Project Company's Representative/ Project Manager. The Contractor shall at all times be fully responsible for the security of all materials and equipment on the Site, whether its own or those of any Sub-Contractor. Neither the Project Company nor the Project Company's Representative/Project Manager shall be responsible for any loss due to theft, fire, accident or any other reasons, whatsoever. Further, if any loss is suffered by the Project Company, the Project Manager or

the Project Company's Representative due to any theft, fire, accident or other reasons, whatsoever, the Contractor shall indemnify and hold harmless the Project Company, the Project Manager or the Project Company's Representative for such losses up to a maximum amount of the contract value.

The Project Company may provide a security arrangement in his own interest. However such security arrangement shall not be responsible for safeguarding the Contractor's material, equipment or access.

4.23 CONTRACTOR'S OPERATIONS ON SITE

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Project Manager as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, unfinished and Temporary Works which are no longer required as to the satisfaction of the Project Company.

Upon the issue of instructions by Project Manager, the Contractor shall clear away and remove from that part of the Site and Works to which the instructions refer, all Contractor's Equipment, surplus material, wreckage, unfinished and Temporary Works as to the satisfaction of the Project Company. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Liability Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.24 FOSSILS

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Project Company. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Project Manager, who shall issue instructions for dealing with it. If the Contractor suffers delay and / or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) An extension of time for any much delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion] and
- (b) Payment of any such Cost, which shall be included in the contract Price.

After receiving this further notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

4.25 ORDERING MATERIALS

The Contractor shall place his orders for specified materials at the earliest possible date after notification of acceptance/intent of his Tender or at such times as may be specifically stated elsewhere herein for any particular material. If, in the opinion of the Project Manager, the Contractor by his failure to order any specified material, or by his failure to deliver on to the

job any specified material within the time stated for same, causes interruption or delay in the progress of the Works, then the Project Company shall be entitled to purchase such specified materials in whatever quantities he deems necessary and at the rates prevailing in local markets at the time of purchase and all costs consequent thereon or incidental thereto including delivery charges shall be borne by the Contractor and shall be deducted from monies due to or to become due to him under this Contract by means of a variation and no profit shall be allowed to the Contractor in respect of such items. Contractor will not have any right to challenge the decision of the Project Company in any manner to purchase such materials by the Project Company.

The Contractor shall on quarterly basis submit to the Project Manager a detailed procurement schedule in for major equipment and materials indicating the planned and actual dates for ordering and delivery of major materials and equipments and Project Company has a right to change the schedule depending upon the timelines indicated by Project Company and the Contractor is obligated to amend/change its schedule on the advice of Project Company if the set time lines have not been met within the stipulated period.

4.26 SITE MEETINGS

Contractor shall attend site meetings when requested by the Project Manager from time to time and shall make available a responsible representative conversant with the Works and with authority to accept and make decisions and act on his behalf. The Contractor shall submit to the Project Manager, within 2 days prior to the meeting an agenda listing site problems, variations or extra works instructed by the Project Manager, the program of Works or any other matters relating to the Contract for discussion during the meeting.

4.27 PUBLIC AND PRIVATE SERVICES

- a) The Contractor must ascertain and confirm for himself the exact routes and locations of all existing services whether or not shown on the Drawings. Prior to commencement of any Works, the Contractor shall carry out extensive site investigations and make additional records by means of cable detection equipment, exploratory trial holes and/or other approved methods.
- b) The Contractor shall notify the Project Manager and other relevant authorities of any pipe, cable, duct, service main etc. buried or exposed at the site before commencement of work or encountered during the progress of the Works. The Contractor shall protect, uphold and maintain all pipes, cables, ducts, drains, sewers and service mains including any wrappings or special lagging to same during the execution of the Works. Any damage due to a cause within the Contractor's control shall be made good as directed by the Project Manager at the Contractor's expense and the Contractor shall also indemnify the Project Company against any claims arising there from up to the maximum amount of the contract value. The Contractor shall sequence the Works to accommodate any diversion works to be undertaken by the various Authorities responsible for the services and extend all necessary co-operation and the provision of suitable access to the site for their workmen or contractors. The charges levied by the various Authorities for service diversions shall be borne by the Project Company.

4.28 DUMPING OF UNWANTED DEBRIS, ETC.

The Contractor shall not dump Unwanted Debris, debris, chemicals or any noxious or etc. polluting matter at the Site or any vacant land or at the roadside or into any drain or canal or any other kind of waste, excreta etc. All debris arising from the Contractor's occupation shall be collected, stored and thereafter removed from the Site to a permitted dumping ground, at the sole expense of the Contractor as indicated by the Project Manager.

The Contractor shall be responsible for obtaining the necessary permits for dumping of Unwanted Debris, etc and ensuring that the carting operation does not cause any spill overs

on or any damage to the public roads. The Contractor shall produce necessary documentary evidence of the permits to the Project Manager and shall fully indemnify the Project Company against any claims relating to the carting operation up to the maximum amount of the contract value.

4.29 SITE HYGIENE

The Contractor shall keep the Site free from stagnant water and provide temporary drainage to ensure that no stagnant water remains at the Site including dewatering in monsoon seasons or shall keep the site free from unhygienic conditions which may hamper the development progress at the site as indicated by the Project Manager. Such dewatering shall not be allowed to drain into the public drains or any other non-identified channels, for the same, the contractor is obligated to ask Project Manager to identify the channels where dewatering can be made. The Contractor shall not leave empty containers or receptacles capable of collecting water and forming breeding places for mosquitoes in the open and shall take all necessary steps to prevent the breeding of mosquitoes on the Site and shall act as per the instructions of Project Manager.

5 NOMINATED SUB-CONTRACTORS

5.1 DEFINITION OF "NOMINATED SUB-CONTRACTOR"

In the Contract, "nominated Sub-contractor" means a Sub-contractor:

- (a) who is stated in the Contract as being a nominated Sub-contractor, or
- (b) whom the Project Company instructs Contractor to appoint for any work which the Project Company feels deem fit or,
- (c) whom the Project Manager, under clause 13 [Variations and Adjustments], instructs the Contractor to appoint as a Subcontractor.

5.2 OBJECTION TO NOMINATION

The Contractor shall not be under any obligation to appoint a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Project Manager as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Project Company agrees to take responsibility of such nomination.

- (a) There are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- (b) The subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or

the subcontract does not specify that, for the subcontracted work (including design, if any).

5.3 PAYMENTS TO NOMINATED SUBCONTRACTORS

The Contractor shall pay to the nominated Subcontractor the amounts which the Project Manager certifies to be due in accordance with the subcontract. Project Company shall not be held responsible for the payment and related issues be made to Subcontractor/Vendor/Supplier/Or any other agency appointed by the contractor for completing the works under the contract or any specialized assignment within the framework of the contract which is to be completed by the contractor under the purview of the contract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

5.4 EVIDENCE OF PAYMENTS

Before issuing a Payment Certificate which includes an amount payable to a nominated subcontractor, the Project Manager may request the Contractor to supply reasonable evidence that the nominated subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- (a) Submits this reasonable evidence to the Project Manager, or
- (b) (i) Satisfies the Project Manager in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
 - (ii) Submits to the Project Manager reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

Then the Project Company may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall repay to the Project Company or authorize the Project Company to deduct from the amount due or to become due to the Contractor, the amount which the nominated Sub-contractor was directly paid by the Project Company.

6 STAFF AND LABOUR

6.1 ENGAGEMENT OF STAFF AND LABOUR

Except as otherwise stated in the Specification or the Schedules or Annexure to the General Conditions, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport and the Project Company shall not be responsible for the same.

6.2 RATES OF WAGES AND CONDITIONS OF LABOUR

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the state and as per the statutory stipulations and applicable Laws and good industry practice.

6.3 PERSONS IN THE SERVICE OF PROJECT COMPANY

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Project Company's Personnel or any other consultants appointed by Project Company.

6.4 LABOUR LAWS

The Contractor shall comply with all the relevant Labour Laws applicable from time to time to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, wages, PF, ESI, immigration and emigration or any other law of the land and shall allow them all their legal rights and shall produce sufficient evidence that the contractor is complying with the same.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

During continuation of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, laws, order,

decree, notifications and byelaws of State/Central Government or local authorities and any other labour law (including rules), regulations, bye-laws that may passed or notified under any labour law by the state / central government or the local authorities during execution of the Work as applicable. The Contractor shall keep the Project Company indemnified in case any action is taken against the Project Company by the competent authority on account of contravention of any of the provisions of any act or rules made under these regulations or notifications including amendments upto the maximum amount of the contract value. In case the Project Company is caused to pay or reimburse such amounts as may be necessary to cause or observe or for non-observance of the provisions stipulated in the notifications/bye-laws/acts/rules/regulations including amendments, if any, on the part of the Contractor, the Project Company shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Project Company.

The employees of the Contractor and his sub –contractor, whether nominated or otherwise, in no case shall be deemed to be the employees of the Project Company at any point of time.

Some of the major labour laws applicable to establishments engaged in building & other construction work are as under. The Contractor shall note that this list is not exhaustive but indicative and it shall be the Contractors responsibility to appraise himself with all the applicable laws in addition to the list below, their amendments and other changes.

- Workmen Compensation Act 1923 and its subsequent amendments, if any: Applicable in case of injury by accident on work.
- <u>Payment of Wages Act 1936 and its subsequent amendments, if any</u>: Provides for when and on which date payment is to be made as well as what deductions to be made.
- <u>Minimum Wages Act 1948 and its subsequent amendments, if any</u>: Provides compulsion for payment to contract labour not less than Minimum wages fixed by appropriate Government.
- <u>Maternity Benefit Act 1951 and its subsequent amendments, if any</u>: Provides for leave and other benefits to women employees in case of confinement / miscarriage.
- Employees PF and Misc. Provision Act 1952 and its subsequent amendments, if any:.
- <u>Contract Labour (Regulation & Abolition) Act 1970 and its subsequent amendments, if any:</u> Provides Labour welfare measures to be provided by the Contractor. Also provides for acquisition of Labour license if more than 20 contract labours are employed by the Contractor.
- <u>The Water (Prevention & Control of Pollution) Act 1974 and its subsequent amendments, if any:</u> Provides for prevention and control of water pollution and maintaining & restoring of wholesomeness of water.
- <u>Equal Remuneration Act 1979 and its subsequent amendments, if any</u>: Provides for equal wages for work of equal nature to male & female employees.
- The Air (Prevention & Control of Pollution) Act 1981 and its subsequent amendments, if any: Provides for prevention, control and abatement of air pollution.
- <u>Child Labour (Prohibition & Regulation) Act 1986 and its subsequent amendments, if any:</u> The Act prohibits employment of child labour in Building & Construction Industry.
- The Environment Protection Act 1988 and its subsequent amendments, if any: Provides for the protection and improvement of environment and for matters connected therewith and the prevention of hazards to all living beings, plants, & property.
- The Building and other Construction Workers Welfare Cess Act 1996 and its subsequent amendments, if any: provides for the levy and collection of a cess on the cost of construction incurred by Owners with a view to increase the resources of the Building and Other Construction Workers' Welfare Boards constituted under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

Notwithstanding with the provisions above Contractor shall also comply and perform in accordance with the additional provisions specified under Annexure to the General Conditions.

6.5 WORKING HOURS

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the Appendix to Tender, unless:

- (a) Otherwise stated in the Contract,
- (b) The Project Manager gives consent, or
- (c) The work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager

The Project Manager and the Contractor shall agree upon the Working hours in each month, depending upon work schedule requirements, exigencies Traffic restrictions/ statutory requirements, etc. and the Contractor is obligated to follow the instructions of the Project Manager

6.6 FACILITIES FOR STAFF AND LABOUR

Except as otherwise stated in the Specification or the Schedules, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Project Company's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works without consent of the Project Manager.

6.7 HEALTH AND SAFETY

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Project Company's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

Notwithstanding the provisions above, the Contractor shall also comply with the additional health and safety requirements as specified in Annexure to the General Conditions.

6.8 CONTRACTOR'S SUPERINTENDENCE

Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9 CONTRACTOR'S PERSONNEL

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Project Manager may require the Contractor to remove

(or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) Persists in any misconduct or lack of care,
- (b) Carries out duties incompetently or negligently,
- (c) Fails to conform with any provisions of the Contract, or
- (d) Persists in any conduct which is prejudicial to safety, health, or the protection of the environment.
- (e) Or any other reason not acceptable as per the Project Manager

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

Notwithstanding the provisions above Contractor shall also comply with the additional site organization requirements as specified in Annexure to the General Conditions.

6.10 RECORDS OF CONTRACTOR'S PERSONNEL AND EQUIPMENT

The Contractor shall submit, to the Project Manager, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Project Manager, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

6.11 DISORDERLY CONDUCT

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

6.12 WORKMEN

The Contractor shall at all times enforce strict discipline and good order among his employees and those of any subcontractor, and shall not employ on the Work any unfit person or anyone not skilled and experienced in the assigned task. The Contractor's employees employed on the Work, who fail to perform the Work in the manner required by the Project Company shall be discharged immediately and such persons shall not be re-employed at the Project Company's site for tasks for which they were found unfit. Such discharge shall not be the basis of any claim for compensation or damages against the Project Company. Contractor shall not employ any person who is under the age of 18 years. The Contractor shall keep labour attendance records (head counts) for both male & female workers with age group bifurcations as age less than 30 yrs., between 30 to 50 yrs., and more than 50 years of age. The record of labour attendance (head count) shall be submitted to the Project Company on a monthly basis. The Contractor shall make labour payments on regular basis as per the applicable labour laws and records of all labour payments shall be submitted to the Project Company as and when required by Project Company.

- 1. Minimum labour requirement should be maintained at site by contractor conforming to IS 7272 (part I) 1974.
- 2. Detail calculation of labour requirement should be worked out and submitted by the Contractor on receiving of Good for Construction drawings before executing the activity for review and approval of the Project Company.
- 3. Alternate labour arrangement should be made by the Contractor in peak period of labour shortage in all circumstances.
- 4. No delays in work will be accepted due to unavailability of labour at site.
- 5. Or any other reason arising out of non-satisfaction of the Project Company

7 PLANT, MATERIALS AND WORKMANSHIP

7.1 MANNER OF EXECUTION

The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognized good practice, and of desired quality, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

7.2 SAMPLES

The Contractor shall submit samples of Materials, and relevant information for the Project Manager's consent as and when required, prior to using the Materials in or for the Works. The samples must be submitted in advance giving 30 days' time for the Project Manager's review prior to quantity fabrication or, in the case of manufactured items, prior to placing purchase orders.

Samples of Materials shall be submitted with descriptive labels and/or application or installation instructions intact and legible and properly labelled/tagged to identify the material type, reference, manufacturer/supplier and country of origin.

Where variations in texture, colour, grain or other characteristics are inherent and anticipated in the samples submitted, a sufficient quantity shall be provided to indicate the full range of characteristics which will be present.

The Contractor shall accompany each transmittal of samples with a transmittal listing the sample data for each sample and referencing each sample to the appropriate Drawing or Specification section and clause.

The Contractor shall execute samples of workmanship for the Project Company as and when required.

The Contractor must obtain the Project Company's prior written approval in writing of the respective samples of Workmanship and prototypes before proceeding with the execution of the various sections of the Works.

Acceptance of any sample shall be only for characteristics or for uses named in such acceptance and for other any other purpose as indicated by the Project Manager. Acceptance or rejection of a sample shall not be taken as a Variation. Once a Material has been accepted, no further change in brand or make will be permitted.

The Contractor shall execute samples of workmanship and prototypes for the Project Manager as and when required. The Contractor shall obtain the Project Manager's approval of the respective samples of workmanship and prototypes before proceeding with the actual mass execution of the various sections of the Works.

The finished work shall correspond to the approved samples of materials, workmanship and prototypes. The Project Manager at his sole discretion may return certain samples for use in the Works. These shall be installed in good condition and suitably marked for identification. Such samples and any packing are to be provided at the expense of the Contractor for the use of the Project Manager and are to be displayed in a sample room.

In the event of non-compliance with samples of materials, workmanship and prototypes by the Contractor, the Project Manager may reject the Work under Sub-Clause 7.5 [Rejection] and the Contractor shall have to rectify such defective Work in accordance with the provisions of Sub-Clause 7.6 [Remedial Work].

7.3 INSPECTION

The Project Company's Personnel shall at all reasonable times:

- (a) Have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) During production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Project Company's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Project Manager whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Project Manager shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Project Manager does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Project Manager, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

7.4 TESTING

The Sub-Clause shall apply to all test specified or required to confirm the performance of the design, materials and workmanship proposed by the Contractors, other than Tests after completion.

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently.

The Contractor shall have well equipped laboratory at site with brand new equipment for testing of materials and samples as stated in list of laboratory equipments annexed to the contract document. The Contractor shall agree, with the Project Manager, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Project Manager may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne and paid by the Contractor, notwithstanding other provisions of the Contract.

The Project Manager shall give the Contractor not less than 24 hours' notice for offsite test and 4 hours' notice for all routine onsite tests of the Project Manager's intention to attend the tests. If the Project Manager does not attend at the time and place agreed, the Contractor any proceed with the tests, unless otherwise instructed by the Project Manager, and the tests shall then be deemed to have been made in the Project Manager's presence.

If the Contractor suffers delay and / or incurs Cost from complying with these instructions or as a result of a delay for which the Project Company is responsible, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) Payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Project Manager duly certified reports of the tests. When the specified tests have been passed, the Project Manager shall endorse the Contractor's test

certificate, or issue a certificate to him, to that effect. If the Project Manager has not attended the tests, he shall be deemed to have accepted the readings as accurate.

Third party Quality Testing for whole works will be done according to MoRTH Specifications and Agency/ Laboratory will be approved by MWCJ and cost of testing will be borne by Contractor. Detailed test reports for carry out road work shall be submitted with each Running Account Bill

7.5 REJECTION

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Project Manager may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect or replace such Plant, Materials and/or Workmanship and ensure that the rejected item complies with the Contract.

If the Project Manager requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Project Company to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Project Company's Claims] pay these costs to the Project Company.

7.6 REMEDIAL WORK

Notwithstanding any previous test or certification, the Project Manager may instruct the Contractor to:

- (a) Remove from the Site and replace any Plant, Materials and/or Workmanship which is not in accordance with the Contract,
- (b) Remove and re-execute any other work which is not in accordance with the Contract, and
- (c) Execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Project Company shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Project Company's Claims] pay to the Project Company all costs arising from this failure.

The Project Manager may but shall not be bound to accept any defective Plant, Materials or unremedied work, in which event the Contract Price shall be reduced to reflect the loss of value of the Works to the Project Company or any savings in cost to the Contractor in not having to rectify the defective Plant, Materials or work whichever is greater. The Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine such adjustment.

7.7 OWNERSHIP OF PLANT AND MATERIALS

Each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Project Company at whichever is the earlier of the following times, free from lines and other encumbrances:

- (a) When it is delivered to the Site;
- (b) When the Contractor is entitled to payment of the value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

7.8 ROYALTIES

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments and submit necessary proofs prior to commencement of Works for:

(a) Natural Materials obtained from outside the Site, and

(b) The disposal of material from demolitions and excavations and of other surplus material(whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

8 COMMENCEMENT, DELAYS AND SUSPENSION

8.1 COMMENCEMENT OF WORKS

The Commencement Date shall be communicated to the Contractor by the Project Manager and in the absence of any communication; the Commencement Date shall be 14 (Fourteen) days from the date of receiving the Letter of Acceptance/Intent.

The Contractor shall commence the execution of the Works from Commencement Date after due compliance of all its prerequisite obligations as stated below, and shall then proceed with the Works with due expedition and without delay.

Prerequisite Obligations to Commencement of Works:

- Submission of Performance Guarantee in accordance with Sub-Clause 4.2,
- Submission Insurances in accordance with Clause 18,
- Approval of Project Quality Plan in accordance with Sub-Clause 4.9 and Annexure to the General Conditions,
- Approval of Project Safety Plan Sub-Clause 4.8 and Annexure to the General Conditions,
- Obtaining Labour License from the concerned authorities,
- Approval of Construction Program in accordance with Sub-Clause 8.3,

8.2 TIME FOR COMPLETION

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), as stated in Appendix to Tender including:

- (a) Achieving the passing of the Tests on Completion, and
- (b) Completing all works which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections.]

8.3 PROGRAMME

The Contractor shall submit a detailed time program to the Project Manager within 07 (seven) days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) Micro construction schedule in MS Project/Primavera/MS Excel identifying all major/minor milestones and activities in the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
- (b) Each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Sub-contractors])
- (c) The sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
 - (i) A general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - (ii) Details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

The Contractor shall submit his detailed Program of Work in the form of a schedule to the Project Manager for approval, indicating the date that each part or element of the Work will be started and completed including, where applicable, the continuance of operations and indicating a schedule of the required submittals including shop drawings, samples, list of materials and equipment, equipment data and instruction manuals. The program and schedule shall conform to the Work and the Time for Completion, and shall be subject to such revisions the Project Manager may require for his approval.

The Contractor shall update and revise the above schedule every month. Each updated and revised schedule shall be submitted to the Project Manager for approval simultaneously with the Contractor's application for progress payment for the same time period, and shall be subject to such revisions the Project Manager may require for his approval. Additional requirements from the Project Company in this regard are enlisted in the Annexure to General Conditions.

The Project Manager's approval of revised progress schedules may be a condition precedent to the approval of the Contractor's applications for progress payments.

Unless the Project Manager, within 07 (Seven) days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Project Company's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Project Manager of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and / or a proposal under Sub-Clause 13.3 [Variation Procedure].

If, at any time, the Project Manager gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the contractor shall submit a revised programme to the Project Manager in accordance with this Sub-Clause.

8.4 EXTENSION OF TIME FOR COMPLETION

The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedural],
- (b) a cause of delay giving an entitlement to extension of time under a Sub-clause of these Conditions,
- (c) exceptionally adverse climatic conditions.
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) Any delay, impediment or prevention caused by or attributable to the Project Company, the Project Company's Personnel, or the Project Company's other contractors on the Site.
- (f) Any changes in quantities, in the Bills of Quantities, due to errors in the measurement shall not be a cause for any extension of time.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall immediately give notice to the Project Manager in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Project Manager shall review previous determinations and may without being obliged to increase, but shall not decrease, the total extension of time.

Nothing contained in this clause or in Clause 8.5 (Delays caused by authorities) shall be construed as giving a right to the Contractor for receiving increased Costs unless such entitlement to increased Costs are specifically provided for elsewhere in the Contract.

The decision of the Project Manager for application of the above conditions shall be final and binding to the Contractor.

8.5 DELAYS CAUSED BY AUTHORITIES

If the following conditions apply, namely:

- (a) The Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) These authorities delay or disrupt the Contractor's work, and
- (c) The delay or disruption was Unforeseeable,

Then this delay or disruption will be considered as a cause of delay under sub paragraph (b) of Subclause 8.4 [Extension of Time for Completion].

The decision of the Project Manager for application of the above conditions shall be final and binding to the Contractor.

8.6 RATE OF PROGRESS

If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and / or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

Other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Project Manager may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete the Works within the Time for completion.

Unless the Project Manager notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and / or Goods, at the risk and cost of the Contractor. If these revised methods cause the Project Company to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Project Company's Claims] pay these costs to the Project Company, in addition to delay damages (if any) under Sub-Clause 8.7 below. This is without prejudice to right of the Project Company to deduct and recover such amount from progress payment due to the Contractor.

8.7 DELAY DAMAGES

Damages for the delay in completion of the work due to reasons attributable to Contractor after taking into consideration approved extension of time, an amount equivalent to 0.5% of the contract price will be deducted from amount payable for every week's delay not exceeding 5% of contract price.

At the discretion of Project Manager such delay damages may be applicable for intermediate milestones as stated in the construction programme. In the event the contractor has achieved next milestone, the damages imposed or levied on the earlier milestone(s) shall be reversed & paid back to the contractor in subsequent Application for Payment.

8.8 SUSPENSION OF WORK

The Project Manager may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage. If due to suspension arising from the fault of Contractor, if any pecuniary loss has been occurred, the sole and exclusive liability shall be of the Contractor and not the Project Manager/Project Company.

The Project Manager may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

8.9 CONSEQUENCES OF SUSPENSION

If the Contractor suffers delay and/or incurs Cost from complying with the Project Manager's instructions under Sub-Clause 8.8 [Suspension of Work] and / or from resuming the work, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the contractor's design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-clause 8.8 [Suspension of Work].

The Contractor shall not be entitled to any revision in item rates in Bill of Quantities post resumption of Works if the suspension is due to obtaining approvals, consents, permissions or orders from authorities, even if obtaining such approvals, consents, permissions or orders is the responsibility of the Project Company or Project Manager.

8.10 PAYMENT FOR PLANT AND MATERIALS IN EVENT OF SUSPENSION

The compensation to the Contractor for the period of suspension exceeding continuous 60 (sixty) days as mentioned in the Sub-Clause 8.9(b) above, shall be decided by the Project Company and shall be included in the Contract Price. The decision of the Project Company in this regard shall be final and conclusive against the Contractor.

8.11 PROLONGED SUSPENSION

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 90 (Ninety) days, the Contractor may request the Project Manager's permission to proceed. If the Project Manager does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Project Manager, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 RESUMPTION OF WORK

After the permission or instruction to proceed is given, the Contractor and the Project Manager shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension.

9 TESTS ON COMPLETION AND PRE-COMPLETION INSPECTION

9.1 CONTRACTOR'S OBLIGATION

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

The Contractor shall give to the Project Manager not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed,

Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Project Manager shall instruct.

In considering the results of the Tests on Completion, the Project Manager shall make allowances for the effect of any use of the Works by the Project Company on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on completion, the Contractor shall submit a certified report of the results of these Tests to the Project Manager.

9.2 DELAYED TESTS

If the Tests on Completion are being unduly delayed by the Project Company, Sub-Clause 7.4 [Testing] (fifth paragraph) and / or Sub-clause 10.3 [Interference with Tests on Completion] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Project Manager may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Project Manager.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Project Company's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted by the Contractor as accurate.

9.3 RE-TESTING

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Project Manager or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4 FAILURE TO PASS TESTS ON COMPLETION

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Project Manager shall be entitled to:

- (a) order further repetition of Tests on Completion under sub-Clause 9.3;
- (b) if the failure deprives the Project Company of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be, in which event the Project Company shall have the same remedies as are provided in sub-paragraph (c) of sub-clause 11.4 [Failure to remedy Defects]; or
- (c) issue a Taking-Over Certificate, if the Project Company so requests.

In the event of sub-paragraph (c); the Contractor shall proceed in accordance with all other obligations under the contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Project Company as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Project Company may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [Project Company's Claims] and Cub-clause 3.5 [Determinations].

9.5 PRE-COMPLETION INSPECTION

Prior to any application for the Taking-Over Certificate, the Contractor shall issue a written request to the Project Company to carry out a joint inspection of the Works with the Contractor. The written request along with necessary supporting documents stating the completion of Works shall be issued at least seven (7) days prior to the commencement of the said joint inspection.

If during the course of the said joint inspection, the Project Company is of the opinion that there is any item of Works or Section, which does not comply with the Contract in any respect and that the same should be made good, remedied or reconstructed before the application of the Taking-Over Certificate, then the Project Manager shall instruct in writing to the Contractor to make good, remedy or reconstruct the same to the satisfaction of the Project Manager and the Contractor's full compliance therewith shall immediately operate as a condition precedent to the application of the Taking-Over Certificate unless the Project Manager expressly agrees to accept (but shall not be bound to) any of the items of Works or Section, specified in the said instructions without their being made good, remedied or reconstructed by the Contractor in such event the Contract Price shall be reduced by any loss of value or otherwise suffered by the Project Company, or by any saving in cost to the Contractor in carrying out the same, whichever is greater.

For the avoidance of doubt, nothing contained in this sub-clause shall be construed as limiting the other powers of the Project Manager under the Contract or as prejudicing the other rights or remedies of the Project Company under the Contract.

10 PROJECT COMPANY'S TAKING OVER

10.1 TAKING OVER OF THE WORKS AND SECTIONS

Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Project Company when (i) the Works have been completed in all respects including the completion of all the snag list/items identified after Contractor calls for inspection of complete project in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate/Completion Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Project Manager for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's and Project Manager's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

The Project Manager shall, within 15 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor, stating the date which the Works or Section were completed in accordance with the Contract; or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Project Manager fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract the Contractor shall issue a communication to the Project Manager with a copy to the Project Company stating that the issuance of Taking Over Certificate is pending and if the Project Manager fails to respond within 15 days of receipt of such communication, the Project Company shall intervene with appropriate measures after verifying the factual position, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

Issue of Taking Over Certificate shall not be construed as certifying that there are no Defects concerning the Works nor shall it absolve the Contractor from liability if any defects concerning the Works are subsequently notified during defects Liability period.

Provided that, without prejudice to the Project Manager's power under Sub-Clause 10.2, if any outstanding works are, in the opinion of the Project Manager, minor works such that:

(a) They can be completed following the removal of the Contractor's site organisation and major plant or equipment works; and

(b) There would not be unreasonable disturbance of the Project Company's full enjoyment and occupation of the property,

then upon the Contractor's undertaking in writing in favour of the Project Company to complete such minor outstanding work within such time or times as may be stipulated by the Project Manager, the Project Manager shall only after a due consultation with Project Company can issue a Taking-Over Certificate.

The Taking-Over Certificate when issued shall record the said minor outstanding work by way of a schedule attached to the certificate together:

- (a) with the terms of any agreement with the Contractor for the completion or performance of the said minor outstanding work, and
- (b) with the terms of any agreement as to the withholding and subsequent release of any monies that may otherwise have been payable or will be paid under the terms of the Contract.

10.2 TAKING OVER OF PARTS OF THE WORKS

The Project Manager may, at the sole discretion of the Project Company, issue a Taking-Over Certificate for any part of the Permanent Works.

The Project Company shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Project Manager has issued a Taking-Over Certificate for this part. However, if the Project Company does use any part of the Works before the Taking-Over Certificate is issued:

- (a) The Part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) The Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Project Company, and
- (c) If requested by the Contractor, the Project Manager shall issue a Taking-Over certificate for this part.

After the Project Manager has issued a Taking-Over Certificate for a part of the Works, the contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Liability Period.

If the Contractor incurs cost as a result of the Project Company taking over and/or using a part of the Works, other than such use as is specified in the contract or agreed by the Contractor, the Contractor shall (i) give notice to the Project Manager and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost, which shall be included in the Contract Price. After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost.

10.3 INTERFERENCE WITH TESTS ON COMPLETION

If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Project Company shall be deemed to have taken over the works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Project Manager shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Liability Period. The Project Manager shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Contractor suffers delay and / or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Project Manager and shall be entitled subject to sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price shall be borne by the contractor.

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

10.4 SURFACES REQUIRING REINSTATEMENT

Except as otherwise stated in a taking-over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11 DEFECTS LIABILITY

11.1 COMPLETION OF OUTSTANDING WORK AND REMEDYING DEFECTS

In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Liability Period as stated in Appendix to Tender or as soon as practicable thereafter, the contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, as set out in the Schedule to the Taking-Over Certificate, and
- (b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Project Company on or before the expiry date of the Defects Liability Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Project Company. The Defects Liability period shall not be applicable on parts of work. The Defects Liability period shall start once works are fully completed/functional and handed over satisfactorily to the Project Company.

11.2 COST OF REMEDYING DEFECTS

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

- (a) any design for which the Contractor is responsible,
- (b) Plant, Materials or workmanship not being in accordance with the Contract, or
- (c) Failure by the contractor to comply with any other obligation.
- (d) any other reason attributable to the Contractor.

11.3 EXTENSION OF DEFECTS LIABILITY PERIOD

The Project Company shall be entitled subject to Sub-Clause 2.5 [Project Company's Claims] to an extension of the Defects Liability Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, the Defects Liability Period shall not be extended by more than two years.

If delivery and / or erection of Plant and / or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-clause 16.1 [Contractor's Entitlement to suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Liability Period for the Plant and / or Materials would otherwise have expired.

11.4 FAILURE TO REMEDY DEFECTS

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Project Company, on or by which the defect or damages to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the contractor under Sub-clause 11.2 [Cost of Remedying Defects], the Project Company may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Project Company's Claims] pay to the Project Company the costs incurred at actual by the Project Company in remedying the defect or damage without prejudice to the Project Company's right to claim damages as provided in this Contract or under the Law.
- (b) Require the Project Manager to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations] Reasonable reduction shall mean either any saving in cost obtained by the contractor by failing to remedy the defect or damage or the reduced value of the works to the Project Company or the cost of rectifying, reconstruction or replacement of the Works by methods stipulated or approved by the Project Manager, whichever is the greatest; or
- (c) If the defect or damage deprives the Project Company of substantially the whole benefit of the Works or any major part of the Works, terminate the contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the contract or otherwise, the Project Company shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the site and returning Plant and Materials to the Contractor.

11.5 REMOVAL OF DEFECTIVE WORK

If the defect or damage cannot be remedied expeditiously on the Site and the Project Company gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security as approved by Project Company.

11.6 FURTHER TESTS

If the work of remedying of any defect or damage may affect the performance of the Works. The Project Manager may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Contractor, under sub-clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.7 RIGHT OF ACCESS

Until the Work Completion Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Project Company's reasonable security restrictions.

11.8 CONTRACTOR TO SEARCH

The Contractor shall, if required by the Project Manager, search for the cause of any defect, under the direction of the Project Manager and shall rectify the same in accordance with the directions of the Project Manager.

11.9 WORK COMPLETION CERTIFICATE

Performance of the Contractor's obligations shall not be considered to have been completed until the Project Manager has issued the Work Completion Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

The Project Manager shall issue the Work Completion Certificate after completion of the work followed by commencement of Defect Liability Period, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Work Completion Certificate shall be issued to the Project Company.

Only the Work Completion Certificate shall be deemed to constitute acceptance of the Works.

11.10 UNFULFILLED OBLIGATIONS

After the Work Completion certificate has been issued, each Party shall remain liable for the fulfillment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

11.11 CLEARANCE OF SITE

Upon receiving the Taking-Over Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site at his cost.

If all these items have not been removed within 28 days after the Project Company receives a copy of the Taking-Over Certificate, the Project Company may sell or otherwise dispose of any remaining items. The Project Company shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Project Company's costs, the Contractor shall pay the outstanding balance to the Project Company.

11.12 TEMPORARY REINSTATEMENT

If in connection with the execution of the Works, any highway or other road or way is damaged or otherwise affected and if the permanent reinstatement of such highway or other road or way is to be carried out by persons other than the Contractor, the Contractor shall:

- (a) at his own cost and independently of any requirement of or notice from the Project Manager make good any defects and maintain the temporary reinstatement so made good until:
- (i) the end of the Defects Liability Period; or

(ii) the taking of possession of the Site by the relevant authorities or any other person for the purposes of carrying out permanent reinstatement works; whichever is earlier; and

untill such time as stated in (i) or (ii) above, keep the Project Company indemnified against any loss arising from any damage, loss or expense arising from or in connection with the temporary reinstatement or the Contractor's failure to carry out the temporary reinstatement works.

Where the relevant authorities or any person take possession of the Site as aforesaid in sections or lengths, the responsibility of the Contractor shall cease with respect to such sections or lengths and the indemnity/ies given by the Contractor shall be construed and have effect accordingly.

12 MEASUREMENT AND EVALUATION

12.1 WORKS TO BE MEASURED

In the opinion of the Project Manager or his delegated assistants and if they feel that any part of the Works require measurement for the purpose of;

- (a) evaluation of a Variation in accordance with Sub-Clause 13.3 [Variation Procedure]; or
- (b) omputation of the Contract Price of the item(s) of works of which value is included in the Accepted Contract Amount on the basis of approximate quantities; or

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(c) ny other provision of the Contract requires measurement for its implementation,

A reasonable notice shall be given to the Contractor's Representative, who shall:

- (a) promptly either attend or send another qualified representative to assist the Project Manager in making the measurement at site and/or from the drawings issued to the Contractor for Works, and
- (b) Supply any particulars requested by the Project Manager.

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Project Manager shall be accepted as accurate.

Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Project Manager. The Contractor shall, as and when requested, attend to examine and agree the records with the Project Manager, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and / or does not sign them as agreed, then the Contractor shall give notice to the Project Manager of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Project Manager shall review the records and either confirm or vary them. If the Contractor does not so give notice to the Project Manager within 14 days after being requested to examine the records, they shall be accepted as accurate.

12.2 METHOD OF MEASUREMENT

Except as otherwise stated in the Contract and notwithstanding local practice:

- (a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and
- (b) In addition to other measurement methods elaborated under the specification, the method of measurement shall be in accordance with SP-27: 1987 "<u>Handbook of Method of Measurement of Building Works</u>" and IS: 1200 published by the Bureau of Indian Standards.

12.3 EVALUATION

Except as otherwise stated in the Contract, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the Contract Price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or a price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work, However, a new rate or price shall be appropriate for an item of work if:

- (i) the work is instructed under Clause 13 [Variations and Adjustments], and
- (ii) no rate or price is specific in the Contract for this item, and
- (iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.

Each new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of the matters described in sub-paragraph (a), as applicable only if the preliminaries are priced separately in the relevant document in Schedules and not factored in the item rates stated in Bill of Quantities.

If no rates or prices are relevant for the derivation of a new rate or price, it shall be based on market rates as per the quotations received to the Project Company.

If, and only if, work cannot be evaluated on any of the foregoing bases in second and third paragraphs hereof, then the evaluation shall be based on day work rates in the Contract. If no day work rates are relevant, evaluation shall be based on the cost of necessary Plant, Materials or Goods, labour and any additional equipment necessary for the execution of the works plus percentage of overheads and profits. This percentage shall be deemed to compensate adequately the Contractor in respect of all supervision, the use of Contractor's Equipment, overheads, profit and all other costs incurred in or connected with the execution of the work.

Until such time as an appropriate rate or price is agreed or determined, the Project Manager shall determine a provisional rate or price for the purposes of Interim Payment Certificates.

12.4 OMISSIONS

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- (a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount:
- (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) this cost is not deemed to be included in the evaluation of any substituted work;

then the Contractor shall give notice to the Project Manager accordingly, with supporting particulars. Upon receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13 VARIATIONS AND ADJUSTMENTS

13.1 RIGHT TO VARY

Variations may be initiated by the Project Manager at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.

The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Project Manager stating (with supporting particulars) that the Contractor cannot readily obtain the Goods required for the Variation. Upon receiving this notice, the Project Manager shall cancel, confirm or vary the instruction. The Contractor is obligated to give us the variations within 3 days if any change is noticed by Project Company, if the variation is not intimated to the Project Company within this time period then the Contractor's variation shall stand null and void.

Each Variation may include:

- (a) significant changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- (b) significant changes to the quality and other characteristics of any item of work
- (c) changes to the levels, positions and / or dimensions of any part of the Works,
- (d) omission of work, unless it is to be carried out by others,
- (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- (f) changes to the sequence or timing of the execution of the Works.

The Contractor shall not make any alteration and/or modification of the Permanent Works, unless until the Project Manager instructs or approves a Variation.

For the avoidance of doubt, the term "Variation" shall not only include changes as aforesaid but also include the changes which may be designed to alter the use to which the Works will be put, but shall exclude any instruction (which would otherwise be a Variation) which has arisen due to or is necessitated by or is intended to cure any default of or breach of contract by the Contractor.

13.2 VALUE ENGINEERING

The Contractor may, at any time, submit to the Project Manager a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Project Company of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Project Company of the completed Works, or (iv) otherwise be of benefit to the Project Company.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

If a proposal, which is approved by the Project Manager, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

- (a) the Contractor shall design this part,
 - (b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
 - (c) if this changes results in a reduction in the contract price of this part, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations]:

13.3 VARIATION PROCEDURE

If the Project Manager requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed work to be performed and a programme for its execution,
- (b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and
- (c) the Contractor's proposal for evaluation of the Variation.

The Project Manager shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval as change order, disapproval or comments. The Contractor shall not proceed with any work in absence of a signed change order released by Project Manager on behalf of Project Company.

The Contractor shall not proceed with additional scope of work without prior Approval from Project Company/Project Company's Representative through Project Manager.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Project Manager to the Contractor, who shall acknowledge receipt.

Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Project Manager instructs or approves otherwise in accordance with this Clause.

13.4 PAYMENT IN APPLICABLE CURRENCIES

All the payments shall be made in INR (Indian National Rupee).

13.5 PROVISIONAL SUMS

The term Provisional Sums also refers to the Prime Cost Sums or P.C. Sums. Each Provisional Sum shall only be used, in whole or in part, in accordance with the Project Manager's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Project Manager shall have instructed. For each Provisional Sum, the Project Manager may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and / or
- (b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Sub-contractors]) or otherwise; and for which there shall be included in the Contract Price:
- (i) the actual amounts paid (or due to be paid) by the Contractor, and
 - (ii) a sum for overhead changes and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule.

The Contractor shall, when required by the Project Manager, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.6 DAY-WORK

For work of a minor or incidental nature, the Project Manager may instruct that a Variation shall be executed on a day-work basis. The work shall then be valued in accordance with the Day-work Schedule included in the Contract, and the following procedure shall apply. If a Day-work Schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the contractor shall submit quotations to the Project Manager. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the Day-work Schedule specifies that payment is not due, the Contractor shall deliver each day to the Project Manager accurate statements in duplicate which shall include the following detains of the resources used in executing the precious day's work:

- (a) the names, occupations and time of Contractor's Personnel,
 - (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Project Manager and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Project Manager, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

The Project Company is not liable to pay any escalation or variation on all materials labour fuel plant and equipments used by Contractor for the Works.

14. CONTRACT PRICE AND PAYMENT

14.1 THE CONTRACT PRICE

Unless otherwise stated elsewhere in the Contract:

- (a) the Contract Price shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;
- (b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs:
- (c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
- (i) of the Works which the Contractor is required to execute, or
- (ii) for the purposes of Clause 12 [Measurement and Evaluation]; and
 - (d) the Contractor shall submit to the Project Manager, within 60 days in after the Commencement Date mutually agreed stages, a re-measured bill of quantities worked out from drawings and designs issued by Project Manager. Such bill of quantities shall be supported by valid measurement sheets in the format agreed with the Project Manager. The Project Manager may take account of such Bill of Quantities when preparing Payment Certificates, but shall not be bound by it.

The Contract Price shall in no situation exceed the Accepted Contract Amount unless there has been an increase in Cost in accordance with the conditions contained in this Contract.

14.2 ADVANCE PAYMENT

The Project Company shall make an advance payment, as an interest-free loan for mobilization (10% of Contract Value), when the Contractor submits an irrevocable, unequivocal, single and unconditional Bank Guarantee for an equivalent amount as per the format enclosed in Tender in accordance with this Sub-Clause. The total advance payment, the number and timing of installments (if more than one), and proportions, shall be as stated in the Appendix to Tender.

Unless and until the Project Company receives this bank guarantee, or if the total advance payment is not stated in the Appendix to Tender, this Sub-clause shall not apply.

The Project Manager shall issue an Interim Payment Certificate for the first installment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Project Company receives (i) the Performance Guarantee in accordance with Sub-clause 4.2

[Performance Guarantee] and (ii) a bank guarantee in amounts and currencies equal to the advance payment. This bank guarantee shall be issued by a nationalized or schedule "A" bank rated by Reserve Bank of India and approved by the Project Company, and shall be in the form as per Appendix A attached to the tender document.

The Contractor shall ensure that the bank guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the bank guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall immediately extend the validity of the guarantee until the advance payment has been fully repaid. If the Contractor fails to extend the validity of such bank guarantee as stated above then Contractor hereby signing this Contract, gives an unconditional and irrevocable authority to the Project Company to invoke this bank guarantee without any prior notice to the Contractor and he shall not raise any objection and have no claim whatsoever against any such action of Project Company.

The advance payment shall be deducted on pro-rata basis at the percentage stated in Appendix to Tender in Payment Certificates. Total advance payment shall be recovered when value of works certified in payment certificate reaches 85% of the Accepted Contract Amount.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the works or prior to termination under Clause 15 [Termination by Project Company], Clause 16 [Suspension and Termination by Contractor] or clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Project Company and Project Company shall be entitled to immediately adjust the same from the balance payment due to the Contractor.

14.3 APPLICATION FOR INTERIM PAYMENT CERTIFICATES

The Contractor shall submit a Draft Application for Payment in two copies to the Project Manager on 1st week of each month for the work period of previous month, in form approved by the Project Manager, showing in detail the amounts to which the Contractor considers himself to be entitled not less than 10% of total contract value, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.21 [Progress Reports].

The Draft Application for Payment shall include the following items, as applicable, which shall be, in the sequence listed:

- (a) the estimated contract price of the Works executed and the Contractor's Documents produced up to the 1st day of month from last day of same month (including Variations but excluding items described in sub-paragraphs (b) to (g) below;
- (b) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Appendix to Tender to the total of the above amounts, until the amount so retained by the Project Company reaches the limit of retention Money (if any) stated in the Appendix to Tender;
- (c) any amounts to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [Advance Payments];
- (d) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Advance Payment for Plant and Materials intended for the works];
- (e) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
- (f) the deduction of amounts certified in all previous Payment Certificates.
- (g) Add Statement showing claim for payment/recovery towards variation in basic rate items as specified in Schedule A.
- (h) All Applications for Payment shall be deemed to have been submitted to the Project Manager only after joint measurements (if required) are certified. In case joint measurement is not needed and the payment is made as per the dimensions on the drawings,

the bills will be deemed to have submitted only after a joint preliminary check has been done and accepted.

(i) Undertaking stating compliance with all applicable laws including Labour Regulations as per Appendix as amended by Project Company from time to time and as per any other formats provided by the Project Company from time to time.

On approval from Project Manager to the draft Application for Payment as detailed above, Contractor shall submit the Application for Payment with all necessary supporting documents as stated above on last day of each month and it should be compulsorily having the details as per Rule 4A of Service Tax Rules 1994.

14.4 SCHEDULE OF PAYMENTS

The Contractor shall submit a program of the various activities of the project with milestone along with specific dates of completion of vital activities indicating the percentage of payments to be released on completion of each milestone duly certified by the Project Manager. This shall be discussed and mutually agreed between the Project Company and Contractor before acceptance of the Contract.

14.5 ADVANCE PAYMENT FOR PLANT AND MATERIALS INTENDED FOR THE WORKS

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3 (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of sub-Clause 14.3 [Application for Interim Payment Certificates].

If the lists referred to in sub-paragraphs (b) (i) below are not included in the Appendix to Tender, this Sub-Clause shall not apply.

The Project Manager shall determine and certify each addition if the following conditions are satisfied:

(a) the Contractor has:

- (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
- (ii) submitted a Application for Payment of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;

(b) the relevant Plant and Materials

- (i) are those listed in the Appendix to Tender for payment when delivered to the Site, and
- (ii) have been delivered to and are properly stored on the site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

The additional amount to be certified shall be the equivalent of seventy percent of the Project Manager's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-clause and of the contract value of the Plant and Materials. Payment against Plant & Machineries advance will be made only after agreed by MWCJ Project Manager or authorized representative of MWCJ or else it will be not allowed.

14.6 ISSUE OF INTERIM PAYMENT CERTIFICATES

No amount will be certified or paid until the Project Company has received and approved the Performance Guarantee. Thereafter, the Project Manager shall, within 21 days after receiving an Application for Payment and supporting documents, issue to the Project Company an Interim Payment

certificate which shall state the amount which the Project Manager fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, the Project Manager shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Appendix to Tender. In this event, the Project Manager shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason, although:

(a) if in the opinion of Project Manager anything supplied or work done by the Contractor is not in accordance with the contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and / or (b) if in the opinion of Project Manager the Contractor was or is failing to perform any work or obligation in accordance with the contract, and had been so notified by the Project Manager, the value of this work or obligation has been performed.

The Project Manager may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Project Manager's acceptance, approval, consent or satisfaction.

14.7 PAYMENT

The Project Company shall pay to the Contractor in accordance with Sub-Clause 14.14 [Disbursement of Payment] if it is in operation:

- (a) the first installment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents and Sub-clause 14.2 [Advance Payment], and Insurance policies as per Sub-Clause 18 [Insurance] whichever is later;
- (b) the amount certified in each Interim Payment Certificate within 30 days after the Project Manager accepts the Application for Payment and supporting documents as stated in Sub-Clause 14.3 [Application for Interim Payment Certificates]; and
 - (i) An Ad-hoc Payment of 60% of the net payable amount of the Interim Application for Payment submitted taking into account all recoveries, advance payment, material advance, taxes etc. shall be made not later than 10 (Ten) days from acceptance of the Application for Payment by the Project Manager. The submission of the draft Application for Payment shall not be deemed as an acceptance. The said amount shall be paid to the Contractor.
 - (ii) In case the amount claimed in any of the Application for Payment submitted by the Contractor is in excess of the finally certified amount by the Project Manager by more than 10% then the facility of ad-hoc payment may be withdrawn from the subsequent interim payment certificates."
 - (iii) Payment for remaining amount of the Interim Payment Certificate after deducting Ad-hoc payment made as stated in (i) above, shall be made within 21 (Twenty one) days after receipt of the Payment Certificate by the Project Company from Project Manager. The certification of interim bills shall be done within 21 (Twenty one) days after acceptance of the Application of Payment by Project Manager.
- (c) the amount certified in the Final Payment Certificate and Certificate at Completion within 60 days after the Project Company receives this Payment Certificate.

14.8 PAYMENT OF RETENTION MONEY (TO BE RELEASED IN FULL AFTER DLP)

Promptly after the issuance of the Performance Certificate and after submitting full compliance documents, the Retention Money (@ 5%) in the form of Cash retention shall be certified by the Project Manager for release/payment to the Contractor.

However, if any work remains to be executed under Clause 11 [Defects Liability], the Project Manager shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

14.9 APPLICATION FOR PAYMENT AND PAYMENT AT COMPLETION

Within 28 days after receiving the Taking-Over Certificate for the Works, the contractor shall submit to the Project Manager three copies of an Application for Payment at completion with supporting documents, in accordance with Sub-clause 14.3 [Application for Interim Payment Certificates], showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the works;
- (b) any further sums which the contractor considers to be due, and
- (c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

When submitting the Application for Payment at Completion, the Contractor shall submit a written discharge which confirms that the total of the Application for Payment at Completion represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the contractor has received the Performance Guarantee, Retention Money and the outstanding balance of this total, in which event the discharge shall be effective on such date. Such written discharge shall be submitted as per proforma annexed to this Contract.

The Project Manager shall then certify Payment at Completion as stated below.

The Project manager will, within 45 (Forty Five) days after the Contractor has submitted the Application for Payment at Completion as stated above and has satisfied all the Project Company's requirements of the contract, indicate in writing his approval of payment or will return the application to the Contractor within 15 (fifteen) days indicating in writing his reasons for refusing to approve final account, in which case the Contractor shall make the necessary corrections and resubmit the application.

The Project Company within 28 (Twenty Eight) days from receipt of Certificate from Project manage under Sub-Clause 14.6 will [Issue of Payment Certificates at Completion] pay the Contractor the amount due less, the unsatisfied liens, after all the reconciliation of material, advances etc. has been completed, unless a longer period of time is prescribed by law or required for the lawful filing and publishing of notices of completion. Appropriate deductions as required by law shall be made for taxes duties; royalties etc. form the payment due to the Contractor.

14.10 APPLICATION FOR FINAL PAYMENT CERTIFICATE

Within 15 days after receiving the work completion Certificate, the Contractor shall submit, to the Project Manager, three copies of a draft final Application for Payment with supporting documents showing in detail in a form approved by the Project Manager:

(a) the value of all work done in accordance with the Contract, and
(b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Project Manager disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Project Manager may reasonably require and shall make such charges in the draft as may be agreed between them. The contractor shall then

prepare and submit to the Project Manager the final statement as agreed. This agreed statement is referred to in these conditions as the "Final Statement".

However if, following discussions between the Project Manager and the contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Project Manager shall deliver to the Project Company (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.2 [Amicable Settlement] or 20.3 [Arbitration], the Contractor shall then prepare and submit to the Project Company (with a copy to the Project Manager) a Final Statement.

14.11 DISCHARGE

When submitting the Final Statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the contractor has received the outstanding balance of this total, in which event the discharge shall be effective on such date. Such written discharge shall be submitted as per proforma annexed to this Contract.

14.12 ISSUE OF FINAL PAYMENT CERTIFICATE

Within 28 days after receiving the Final Application for Payment and written discharge in accordance with Sub-Clause 14.10 [Application for Final Payment Certificate] and Sub-Clause 14.11 [Discharge], the Project Manager shall issue, to the Project Company, the Final Payment Certificate which shall state:

- (a) the amount which is finally due, and
 - (b) after giving credit to the Project Company for all amounts previously paid by the Project Company and for all sums to which the Project Company is entitled, the balance (if any) due from the Project Company to the Contractor or from the Contractor to the Project Company, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.10 [Application for Final Payment Certificate] and Sub-Clause 14.11 [Discharge], the Project Manager shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Project Manager shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

14.13 CESSATION OF PROJECT COMPANY'S LIABILITY

The Project Company shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- (a) in the final statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

14.14 DISBURSEMENT OF PAYMENT

Along with submission of the invoice for progress payment, the Contractor shall also submit a declaration, clearly stating that all the payments due to the Contractors vendors/ suppliers for the Works and subcontractors including the labour contractors engaged for the Works have been made for the period starting 60 days previous to the date of invoice and ending 30 days previous to the date of invoice. The aforesaid declaration shall cover the following payments but shall not be limited to the same.

- 1. Salaries of Contractors employees engaged for the Works
 - 2. Payments to the subcontractors and labour contractors for the period stated above.
- 3. Payment to all the suppliers and vendors for the Works.
 - 4. All the statutory payments towards Income Tax, Sales Tax, Service Tax etc.
- 5. Payment of the net liability of the VAT

In case the Project Company wants to see the documentary evidence for all or any of the above, the Contractor shall produce the same without delay.

In case the Contractor fails to submit such a declaration consecutively for two progress payments then the procedure enlisted in the following paragraph shall come in effect without any further representation on the issue.

The Contractor will open an Escrow account in a nationalized/Schedule A bank of the Project Company's choice. The Contractor shall enter into an Escrow agreement as per the proforma annexed to the Contract. This Escrow account will be for the sole purpose of the Works only. This Escrow bank account shall be operated under control of the Project Company. The Contractor by signing this contract confirms his concurrence to facilitate the opening and operating this account. The Contractor shall not deposit any money in this account for any purpose whatsoever without the written permission of the Project Company. Any deviation will be held as a breach of this Contract. The purpose for this arrangement is to ensure smooth payments to the suppliers/vendors/subcontractors. The Project Company is not liable for any claims or lien or any dispute that the Contractor may have to face from a supplier/vendor/ or a subcontractor. This is only an arrangement and by signing this Contract, the Contractor agrees that the Project Company is in no way liable for any payment or shortfall of payment to any of the suppliers / vendors or sub-contractors. On approval of the progress payment, the Contractor shall receive a part of the approved payment in this account. The suppliers / vendors or sub-contractors shall be paid through this account. Notwithstanding this method of payment, no Project Company employee relationship will be deemed to have been created between the subcontractors and the Project Company. Cost for opening and operating this Escrow Account shall be fully borne and paid by the Contactor.

14.15 PROJECT COMPANY'S FINAL STATEMENT

The Project Manager may (but shall not be bound to) proceed to prepare the Final Application for Payment and issue the Final Payment Certificate if the Contractor fails to submit the draft final Application for Payment under Sub-Clause 14.11 after 28 days from the date of his receipt of the Project Manager's notice requiring him to submit the same. The Final Application for Payment prepared by the Project Manager under this Sub-Clause shall in the absence of any written objection by the Contractor with 28 days from the date of its receipt by the Contractor be deemed to be final and conclusive.

14.16 WITHHOLDING OF PAYMENTS

The Project Manager may withhold payment or, on account of subsequently discovered evidence, nullify the whole or a part of any payment certificate to such extent as may be necessary to protect the Project Company from loss on account of including but not limited to the following:

- Defective work not remedied by the Contractor.
- Failure of the Contractor to make payments properly and regularly to its own workers, to its Sub-Contractors, to its suppliers.
- Damage by the Contractor to the work of other contractors, Sub-Contractors or Vendors.
- A reasonable doubt that the Contract cannot be completed for the balance unpaid amount.
- A reasonable doubt that the Contractor intends to leave work items incomplete.
- Failure of the Contractor to execute the Works in conformity with the Contract Documents.

- Failure of the Contractor to meet or keep-up with the Approved Construction Programme.
- Failure of the Contractor to comply with and fulfill all contractual obligations and liabilities stipulated in the Contract.
- Failure of the Contractor to produce clear and correct compliance documents with relation to statutory norms, rules, regulations etc.

15 TERMINATION BY PROJECT COMPANY

15.1 NOTICE TO CORRECT

If the Contractor fails to carry out any obligation under the Contract, the Project Manager may by notice require the failure and to remedy it within a specified reasonable time.

15.2 TERMINATION BY PROJECT COMPANY

The Project Company shall be entitled to terminate the Contract at any point of time if the Contractor:

- (a) fails to comply with his obligations as per Sub-Clause 4.2 [Performance Guarantee] or with a notice under Sub-Clause 15.1 [Notice to Correct],
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
 - (ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving it,
- (d) subcontracts the whole of the Works or assigns the Contract without the required agreement without taking the prior approval from the Project Company,
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable laws) has a similar effect to any of these acts or events, or
- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favour or dis favour to any person in relation to the Contract,

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this subparagraph (f) However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

Without prejudice to the rights and remedies available to the Project Company under this Agreement or law, the Project Company may at any point of time terminate this Agreement upon happening of any one or more of the following events:

- (g) Contractor commits a breach of all or any of the terms of this Agreement or fails or neglects to observe or commits or allows to be committed any breach of the terms, conditions provision, representation warranties, covenants or stipulations of this Agreement.
- (h) Contractor discontinues its business by whatsoever reasons.
- (i) Contractor is dissolved or liquidated or any petition is filed against the contractor for the same, makes a general assignment for the benefit of its creditors, or files or has filed against it, a petition in Bankruptcy or has a receiver appointed for a substantial part of its assets.

- (j) If any of the representations made by Contractor are found to be false or wrong.
- (k) If Contractor does or suffers any act or thing or omits to do or suffers to be done any act, thing, deed or matter whereof in the consequence of which the business of the Project Company may be or is likely to suffer.
- (l) If Contractor acts beyond the scope of this Agreement or is suspected or falsifying records or;
- (m) If the Contractor by its act of omission or commission given to the Project Company reasonable ground to consider that its rights may; be prejudiced or jeopardized.
 - (n) fails to comply with Sub-Clause 6.12 [Workmen],
 - (o) non-compliance of documents.

In any of these events or circumstances, the Project Company may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of subparagraph (e) or (f), the Project Company may by notice terminate the Contract immediately.

The Project Company's election to terminate the Contract shall not prejudice any other rights of the Project Company, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required goods, all Contractor's Documents and other design documents made by or for him, to the Project Manager. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment or novation of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Project Company may complete the Works and / or arrange for any other entities to do so. The Project Company and these entities may then use any Goods, Contractor's documents and other design documents made by or on behalf of the Contractor.

The Project Company shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Project Company, these items may be sold by the Project Company on the terms and conditions which Project Company may deem fit in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

15.3 VALUATION AT DATE OF TERMINATION

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Project Company] has taken effect, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works. Goods and Contractor's Documents and any other sums due to the Contractor for work executed in accordance with the Contract.

15.4 PAYMENT AFTER TERMINATION

After a notice of termination under Sub-Clause 15.2 [Termination by Project Company], has taken effect, the Project Company may:

- (a) proceed in accordance with Sub-Clause 2.5 [Project Company's claims],
- (b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Project Company, have been established, and /or
- (c) recover from the Contractor any losses and damages incurred by the Project Company and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Project Company shall pay balance to the Contractor.

15.5 PROJECT COMPANY'S ENTITLEMENT TO TERMINATION

Notwithstanding with anything contained in this contract, in case at any point of time after the issue of Letter of Acceptance, the Project Company shall for any reason whatsoever not require the whole or part of the Works to be carried out by the Contractor or intend to terminate this Contract for any other reason whatsoever, the Project Company shall give notice in writing of the fact to the Contractor without assigning any reason to foreclose and/or terminate the Works within 45 days of receipt of such notice, who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage, which he might have derived from execution of the Work in full but which he did not derive in consequence of the foreclosing of the Work. The Contractor shall be paid at Contract Rates for the portion of Work executed including such additional works e.g. clearing of the Site, etc. as may be rendered necessary by the said foreclosing. The Contractor shall also be allowed a reasonable payment for any expenses sustained on account of labour, materials, Contractor's Equipment collected but which could not be utilized on the Works as verified by the Project Company and certified by him. Upon such foreclosure Project Company shall be at absolute liberty and entitled to carry remaining work through any other Contractor or in any other manner as Project Company deems fit.

Upon such termination or foreclosure of the contract the Contractor shall have no interest or right of any nature in the Works and he shall not create any impediment to the other/ new Contractor or the Project Company in carrying out the balance Works.

15.6 APPOINTMENT OF NEW CONTRACTOR AFTER TERMINATION

If the termination of this contract takes place in accordance with Sub-Clause 15.2; and Project Company appoints a new contractor at the price solely negotiated by Project Company following a competitive bidding process.

Any difference in contract price finalized with the new contractor and that of this contract shall be borne and paid by the Contractor or adjusted from the payment to be made to the Contractor in accordance with Sub-Clause 15.3 & 15.4.

16 SUSPENSION AND TERMINATION BY CONTRACTOR

16.1 CONTRACTOR'S ENTITLEMENT TO SUSPEND WORK

Only, if the Project Company fails to comply with Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 45 days' notice to the Project Company, suspend work unless and until the Contractor has received the Payment certificate, reasonable evidence or payment, as the case may be and as described in the notice.

If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and / or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

16.2 TERMINATION BY CONTRACTOR

The Contractor shall be entitled to terminate the Contract if:

- (a) the Project Company substantially fails to perform his obligations under the Contract,
- (b) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
- (c) the Project Company becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

In any of these events or circumstances, the Contractor may, upon giving 45 days' notice to the Project Company, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

16.3 CESSATION OF WORK AND REMOVAL OF CONTRACTOR'S EQUIPMENT

After a notice of termination under Sub-Clause 15.5 [Project Company's Entitlement to Termination], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Project Manager for the protection of life or property or for the safety of the works,
- (b) hand over Contractor's documents, Plant, Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site at his own cost.

16.4 PAYMENT ON TERMINATION

After a notice of termination under Sub-Clause 16.2 [Termination by contractor] has taken effect, the Project Company shall promptly:

- (a) return the Performance Security to the Contractor,
- (b) pay the Contractor in accordance with Sub-Clause19.6 [Optional Termination, Payment and Release],

17 RISK AND RESPONSIBILITY

17.1 INDEMNITIES

The Contractor shall indemnify and keep indemnified and hold harmless the Project Company till issuance of Performance Certificate, the Project Company's Personnel, and their respective agents up to a maximum amount of the contract value, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful act or breach of the contract by the Project Company, the Project Company's Personnel, or any of their respective agents, and
- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - (i) arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, and
 - (ii) is attributable to any negligence, willful act or breach of the Contract by the Contractor, the Contractor's Personnel, their

respective agents; or anyone directly or indirectly employed by any of them.

17.2 CONTRACTOR'S CARE OF THE WORKS

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Project Company. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Project Company.

After responsibility has accordingly passed to the Project Company, the Contractor shall take responsibility for the care of any work which is outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Project Company's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works. Goods and Contractor's Documents conform with the Contract.

The contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 PROJECT COMPANY'S RISKS

The risks referred to in Sub-Clause 17.4 below are:

- (a) use or occupation by the Project Company of any part of the Permanent Works, except as may be specified in the Contract,
- (b) design of any part of the Works by the Project Company's Personnel or by others for whom the Project Company is responsible,

17.4 CONSEQUENCES OF PROJECT COMPANY'S RISKS

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's documents, the Contractor shall promptly give notice to the Project Manager and shall rectify this loss or damage to the extent required by the Project Manager.

If the Contractor suffers delay and / or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of time for Completion], and
- (b) Payment of any such Cost, which shall be included in the contract Price.

After receiving this further notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

17.5 INTELLECTUAL AND INDUSTRIAL PROPERTY RIGHTS

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Contractor shall bear the cost arising from any claim alleging an infringement which is or was:

- (a) result of the Contractor's compliance with the Contract, unless the Contractor was aware or with reasonable diligence ought to have become aware that the same would result in an infringement, or
- (b) a result of any Works being used by the Project Company:
 - (i)for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract

The Contractor shall indemnify and hold the Project Company harmless against and from any other claim up to a maximum contract value which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

17.6 LIMITATION OF LIABILITY

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract unless specifically provided for.

The total liability of the Contractor to the Project Company, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum up to 25% of the Accepted Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

18 INSURANCE

18.1 GENERAL REQUIREMENTS FOR INSURANCES

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Project Company. These terms shall be consistent with any terms agreed by both parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Project Company is the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details annexed to the Contract conditions.

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the contractor shall act under the policy on behalf of these additional joint insured except that the Project Company

shall act for Project Company's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring party shall, before the commencement of any work on Site, submit to the other Party:

(a) evidence that the insurances described in this Clause have been effected and
(b) copies of the policies for the insurances described in Sub-Clause 18.2
[Insurance for Works and contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].

Project Company shall procure the Insurances as listed under Appendix To Tender. The Contractor shall be liable to take all other Insurances in the manner and to the extent specified in Clause 18 and Appendix to Tender.

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Project Manager.

Each party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Project Company, under the other terms of the contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and / or the Project Company in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one party to the other Party shall be subject to Sub-Clause 2.5 [Project Company's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.

18.2 INSURANCE FOR WORKS AND CONTRACTOR'S EQUIPMENT

The insuring party shall insure the Works, Plant, Equipments, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the Commencement Date, until the date of issue of the Taking-Over Certificate for the Works. Contractor's All Risk (CAR) insurance if

procured by Project Company will not cover Plant, Equipment, Materials and Documents of Contractor and the Contractor shall solely be responsible for the same.

The Contractor shall maintain this insurance to provide cover until the date of issue of the Work Completion certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).

The Contractor shall insure the Contractor's Equipment for not less that the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Contract Conditions, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Project Company's Risks],
- (d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Project Company of another part of the Works, and loss or damage from the risks listed in sub-paragraph, (g) of Sub-Clause 17.3 [Project Company's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the appendix to tender (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage of, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in subparagraph (ii) below),
 - (iii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

18.3 INSURANCE AGAINST INJURY TO PERSONS AND DAMAGE TO PROPERTY

The Contractor shall insure against each party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

Unless otherwise stated in the Contract conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party.
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Project Company's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
 - (i) the Project Company's right to have the Permanent Works executed, over, under, in or through any land, and to occupy this land for the Permanent Works,

(ii) a cause listed in Sub-Clause 17.3 [Project Company's Risks], except to the extent that cover is available at commercially reasonable terms.

18.4 INSURANCE FOR CONTRACTOR'S PERSONNEL

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Project Company and the Project Manager shall also be indemnified by the Contractor under the policy of insurance or otherwise, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Project Company or of the Project Company's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be primarily responsible for compliance with this Clause.

The insurance policy effected by the Contractor under this sub-clause shall be endorsed to include as jointly insured with the Contractor, the Project Company as Principal. The policy shall be further endorsed to extend cover to all workers upon the site including those who are not statutorily required to be insured under the Workmen's Compensation Act or any other applicable laws and must be sufficient and adequate to meet any claim arising out of or in the course of or by reason of the carrying out of the works.

The Contractor shall also indemnify and keep the Project Company indemnified till issuance of performance certificate against all claims, losses and damages which may be upon the Project Company, whether under the Workmen's Compensation Act 1923 or any other applicable Laws, during the duration of this Contract or in respect of any employee of the Contractor or Subcontractor and shall at his own expense effect and maintain until the end of the Defect Liability Period, with an insurance company, approved by the Project Company, a policy of insurance against such risks and deposit such policy or policies with the Project Company from time to time during the duration of this Contract.

19 FORCE MAJEURE

19.1 DEFINITION OF FORCE MAJEURE

In this Clause, "Force Majeure" means an exceptional event or circumstance:

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering into the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, of civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Sub-contractors,

- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2 NOTICE OF FORCE MAJEURE

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either party to make payments to the other party or to recover from the other party under the contract.

19.3 DUTY TO MINIMISE DELAY

Each party shall at all times use all reasonable endeavours to minimize any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

19.4 CONSEQUENCES OF FORCE MAJEURE

If the contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) Neither party shall claim for payment of cost incurred or arising from the consequences of Force Majeure except for those incidences covered under CAR Insurance policy.

Under the terms of this CAR policy, the Contractor shall prepare and forward all such claims to the insurance company and all such claims shall be directly covered / payable by the insurance company to the Contractor

After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

19.5 FORCE MAJEURE AFFECTING SUBCONTRACTOR

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

19.6 OPTIONAL TERMINATION, PAYMENT AND RELEASE

If the execution of substantially all the works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of

Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].

Upon such termination, the Project Manager shall determine the value of the work done and issue a Payment Certificate which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Project Company when paid for by the Project Company, and the Contractor shall place the same at the Project Company's disposal;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.

19.7 RELEASE FROM PERFORMANCE UNDER THE LAW

Notwithstanding any other provision of this clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- (b) the sum payable by the Project Company to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

20. CLAIM, DISPUTES AND ARBITRATION

20.1 CONTRACTOR'S CLAIMS

If the Contractor considers himself to be entitled to any extension of the Time for Completion and / or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Project Company shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Project Company's liability, the Project Manager may, after receiving any notice under this Sub-Clause,

monitor the record-keeping and / or instruct the contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and / or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and / or amount claimed, and such further particulars as the Project Manager may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the contractor and approved by the Project Manager.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Project Manager shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of time for Completion], and / or (ii) the additional payment (if any) to which the contractor is entitled under the contract.

The requirements of this Sub-Clauses are in addition to those of any other Sub-Clause which may apply to a claim. If the contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and / or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

20.2 AMICABLE SETTLEMENT

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Project Manager, either Party may refer the dispute through notice in writing to the Senior Management of the other party for its amicable settlement with copy to the Project Manager. Such notice shall clearly state that it is given under this Sub-Clause. Upon receipt of such notice by the other party both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the forty second day after the day on which such notice was received by the other party, even if no attempt at amicable settlement has been made.

20.3 ARBITRATION

All disputes and differences, failing amicable settlement under Sub-Clause 20.5 [Amicable Settlement] of GCC, shall be resolved through arbitration by a sole arbitrator appointed mutually by both the Parties and if both the Parties fail to mutually agree on the name of the Arbitrator then either party

can approach the High Court for appointment of the sole arbitrator under Arbitration and Conciliation Act, 1996. The arbitration proceedings shall be conducted in accordance with the Arbitration and Conciliation Act, 1996, and/or statutory modifications thereof. The arbitration award shall be final and binding on the parties. The venue of Arbitration proceedings shall be Jaipur, Rajasthan, India and language of the proceedings shall be in English. The seat of the Arbitration shall be exclusively in Jaipur, Rajasthan, India.

The Arbitrators shall have power to open up, review and revise any certificate, opinion, decision, requisition or notice save in regard to the excepted matters referred to in the preceding clause, and to determine all matters in dispute which shall be submitted to arbitration and of which notice shall have been given as aforesaid.

The Arbitrators shall make his or their award within six months (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings both the parties mutually settle, compromise or compound their dispute or difference, the reference to arbitration proceedings shall stand withdrawn or terminated, with effect from the date on which the parties file a joint memorandum of settlement thereof, with the arbitrators.

Upon every or any such reference, the cost of and incidental to the reference and award respectively shall be borne and paid by both the parties equally. The cost of the attorneys and cost incidental thereto shall be borne and paid by the concerned party alone. This submission shall be deemed to be a submission to arbitration within the meaning of the Arbitration and Conciliation Act, 1996 or any statutory modification thereof.

Notwithstanding anything contained in this clause and/or in the Contract the work under the Contract shall continue under any circumstances, during the arbitration proceedings and no payment due to the Contractor shall be withheld on account of such proceeding under progress.

No award of the Arbitrators shall relieve the Contractor of his obligations to adhere strictly to the Project Manager's instructions with regard to the works.

The Arbitrator shall give his award separately on each item with reason and costs. The award of the Arbitrators shall be final, conclusive and binding on all parties.

The Project Company and the Contractor hereby shall also agree that arbitration under this clause shall be a condition precedent before referring any disputes and differences except appointment of Arbitrator to any other authority/Courts of Law. The provisions of this clause shall survive the expiry or sooner termination of his Contract.

20.4 CONTINUATION OF WORK DURING DISPUTE

Provided always that the Project Company shall not withhold the payment for an Interim Bill after the issuance of an Interim Certificate by the Project Manager which shall be judged on the reasonable grounds. The Contractor except with the consent in writing of the Project Company shall in any way delay the carrying out of the Works by reason of any such matters, question or dispute being referred to arbitration but shall proceed with the Work with all due diligence and shall, until completion of arbitration proceedings, relieve the Contractor of his obligations to adhere strictly to the Project Company's instructions with regard to the actual carrying out of the Works. The Work shall however be undertaken as per time scheduled, independent of such exigencies unless the Project Company desires otherwise.

21 NO PARTNERSHIP

The Parties agree that this Agreement is on a principal to principal basis and does not create or constitute, a partnership, agency, trust or other similar arrangement and this Contract is not to be construed as creating any such partnership, agency, trust or other similar arrangement.

Unless otherwise expressly stated in this Contract, neither party has the authority to act for, or incur any obligation on behalf of, the other party.

22 WAIVER AND EXERCISE OF RIGHTS

A waiver of a provision or of a right arising under this Contract must be given in writing signed by the party or an authorised officer of the party granting the waiver for it to constitute a valid waiver. A waiver is effective only in the specific instance and for the specific purpose for which it is given.

A single or partial exercise of a right by a party does not preclude another or further exercise or attempted exercise of that right or the exercise of another right.

Failure by a party to exercise or delay in exercising a right does not prevent its exercise or operate as a waiver.

23 RIGHTS CUMULATIVE

The rights, remedies and powers of the Parties under this Contract are cumulative and not exclusive of any rights, remedies or powers provided to the Parties by law.

24 DECLARATION AGAINST WAIVER

The condonation by the Project Company of any breach or breaches by the Contractor or a sub-contractor of any of the stipulations and conditions contained in the Contract shall in no way prejudice or affect or be construed as a waiver of the Project Company's rights, powers and remedies under the Contract in respect of any breach or breaches aforesaid.

25 TITLE AND INTELLECTUAL PROPERTY RIGHTS

Project Company shall retain its Intellectual Property Rights in any program, data, software, hardware or other material which constitute proprietary items of the Project Company and which are submitted by Project Company to the Contractor for the provision of the services under the Agreement, with respect to which no right, title or interest will be transferred or be deemed to be transferred from Project Company to the Contractor.

26 NON-ASSIGNMENT

The Contractor shall itself perform its obligation under this Contract and shall not assign, transfer or sub-contract any of its rights and obligations under this Contract expect with prior written permission of Project Company. Project Company shall be entitled to assign/transfer its rights and benefits under this Contract.

27 NOTICES

All notices to be given pursuant to the provisions of this Contract shall be sent to the parties at the following address:

The Contractor:

Tel: No:

Fax:

Email

Kind Attn:

If to Project Company:

411, Neelkanth Towers, Bhawani Singh Marg, C-Scheme, Jaipur

Tel: No: 0141-3003497 Fax: 0141-2243060

Email: Kind Attn:

SAFETY MANUAL

CHAPTER 01

1.0. THE MAIN CONTRACTOR.

1.1. RELATIONSHIP WITH THE CLIENT.

A close relationship and continuous interaction must be maintained with the client by the Project Manager of the main or managing contractor. The client does have specific safety and health requirements to be observed and co-operation with his contractor, throughout the contract is essential. The prospective main contractors are given information on which to base their tenders and at the Tender Stage; the prospective contractors are expected to understand fully the Scope and Design Intent of these provisions.

1.2. Selection of sub contractors.

Management contractors should select sub or works contractors, using the same criteria of practical safety policy. Again, it must be ensured that the terms of contracts include adequate provision for safe working and for specified safety and health items.

1.3. Planning.

Detailed planning should take the following matters into account

- Know hazardous operations, e.g., use of cranes and site transport, steel erection, excavation and false work, scaffolding, roof work, demolition, asbestos removal, etc.
- Requirement for plant and equipment to ensure safe working, or ease of handling.
- The sequence of work and its phasing between contractors, to minimise the possibility of one contractor placing another contractor's men at risk. Where appropriate, the segregation of contractors should be considered.
- The need to provide information, instruction and appropriate training, both on general site safety and on hazards specific in the site. The latter could range from restricted zones, permitto-work systems and lifting operation, to the wearing of safety helmets.
- The need for fire precautions and emergency procedures.
- The need for environmental monitoring and health surveillance.
- Site security and foreseeable risks to the public, including the need for directional and warning signs
- Safe access across the site for persons, vehicles and plant. Thought should be given to arrangements for keeping the site tidy, accommodation for site staff, welfare, first aid and other facilities
- The provision of safe places of work at different stages of the job, including the provision of scaffolding for a number of sub or works contractors.

1.4. Control.

Sub and works contractors should be briefed about the safety policy and site rules of the main contractor at an initial safety meeting. Decisions on all other matters affecting safety and health should be laid down so that the responsibilities of all parties are made clear before contractors start work. Such matters should include.

- Appropriate precautions and work methods for identified hazards or hazardous work.
- Necessary plant and equipment and arrangements for its provision, maintenance use and inspection.

- The question of trade union or other workforce safety representation and the need for a joint safety committee.
- Arrangements for some form of induction training for new-starters on site.
- Arrangements for any specialist training.
- Arrangements for promulgating safety and health information, e.g. on site notice boards.

It is important that such safety and health arrangements are reviewed at the first project meeting, where the site management can set the tone for the conduct of work by resolving, at an early stage, any difficulties which may arise.

1.5 Co-ordination.

The Project Manager, appointed by the main contractor, must be totally responsible for compliance with health and safety code. He must appoint a Chief Safety Officer and form a Safety Committee along with operatives from sub vendors. This Safety Committee will be Chaired by the Client's representative and sit twice a week and report to the Project Controller. The Project Manager must take suitable arrangements to ensure the effective co-ordination of the work of all contractors on site. He should ensure that he is kept informed on a day to day basis, of progress and problems which arise. Clear lines of communication should be set up between each contractor and the Safety Officer of the Main Contractor. Operatives must also know whom to contact over safety and health matters requiring action or a decision. Such effective co-ordination will be enhanced by ensuring that 'safety and health' figures prominently on the agenda of regular project meetings. Safety Committee's weekly report must be submitted to the Project Controller in every Project Meeting.

1.6 Monitoring.

Arrangements must be made for safety and health monitoring of the site on a regular basis. This will include, not only ensuring the safety of such items as scaffolding excavations and plant but also environmental matter such as hazardous dust fume noise etc. In all cases, the Project Manager should ensure that daily site inspections are carried out, by Safety Officer, more in depth inspections being done periodically by visiting safety advisers. It may be necessary for arrangements to be made for specialist occupational health and hygiene advice. The Check List for daily inspection is given in the following Chapters.

1.7 Records.

The Contractor should ensure that all statutory notifications, examinations and inspections are carried out. A copy of all the documents should be submitted to the Engineer-in-charge for his record.

1.8 Standards.

The following standards shall be followed, unless more onerous provisions have been specified in the Safety Provisions given in this Code.

IS: 3696 (Part I) - 1966 Safety code for scaffolds and ladders: Part I Scaffolds

IS: 3696 (Part II) - 1966 Safety code for scaffolds and ladders: Part II Ladders

IS: 3764-1966- Safety code for excavation work.

IS: 4082-1977- Recommendations on stacking and storage of construction materials at site (first revision)

IS: 4130-1976- Safety code for demolition of buildings (first revision)

IS: 4912-1978 -Safety requirements for floor and wall openings, railings and toe boards (first revision)

IS: 5121-1969- Safety code for piling and other deep foundations

IS: 5916-1970- Safety code for constructions involving use of hot bituminous materials.

IS: 7205-1974- Safety code for erection of structural steel work.

IS: 7969-1975- Safety code for handling and storage of building materials.

IS: 8989-1978- Safety code for erection of concrete framed structures.

1.9 Non Compliance of Safety and Health Provisions:

The Compliance of the Safety and Health provisions are of utmost important to the Client. The prospective contractors must note that the client will take a serious view of any non compliance report of Safety Committee. Based on Safety Committee's report, the Client has a right to order stoppage of work till rectification is carried out to the satisfaction of the Safety Committee and all stoppages on this account will be at the entire risk, costs and consequences of the Contractor.

CHAPTER 2.0

2.0 CONTRACTOR'S SAFETY INSPECTION CHECKS LIST.

	Contractor Contract No		
	Project		
	Location		
	Type of Work		
	Type of Work Date Checked By		
			(Inspector)
Sr	ITEM	STATUS	REMARKS
3.0	ACCIDENT PREVENTION ORGANISATION.		
3.1	Trained First Aid Person		
3.2	First Aid Kit.		
3.3	Safety Material Posted.		
3.4	Emergency Phone # Posted.		
4.0	HOUSEKEEPING & SANITATION		
4.1	General neatness of working areas.		
4.2	Regular disposal of waste and trash.		
4.3	Passageways and walkways clear.		
4.4	Adequate lighting		
4.5	Projecting nails removed.		
4.6	Oil and grease removed.		
4.7	Waste containers provided and used.		
4.8	Sanitary facilities adequate and clean.		
4.9	Drinking water tested and approved.		
4.10	Adequate supply of water.		
4.11	Drinking cups, Clean Dispensers.		
5.0	FIRE PREVENTION.		
5.1	Fire extinguishers identified, checked, lighted.		
5.2	Hydrants clear access to public thoroughfare open.		
5.3	Good housekeeping.		
5.4	NO SMOKING posted and enforced where needed.		
6.0	PERSONAL PROTECTION.		
6.1	Hard-hats		
6.2	Noise Level Exposure.		
6.3	Eye Protection.		
6.4	Safety Lines & Belts.		
6.5	Life Jackets.		
7.0	ELECTRICAL INSTALLATION.		
7.1	Adequate well insulated wiring.		
7.2	Fuses & GFI provided.		
7.3	Fire hazards checked.		
7.4	Electrical dangers posted.		

Sr	ITEM	STATUS	REMARKS	
8.0	HAND & POWER TOOLS			
8.1	Tools and cords in good condition.			
8.2	Proper grounding.			
8.3	All mechanical safeguards in use.			
8.4	Tools neatly stored when not in use.			
8.5	Right tool being used for the job at hand.			
8.6	Wiring properly installed.			
8.7	Enough men used to handle material.			
9.0	LADDERS.			
9.1	Stock ladders in good condition.			
9.2	Stock ladders not spliced.			
9.3	Properly secured, top and bottom.			
9.4	Side rails on fixed ladders extend above top landing.			
9.5	Built-up ladders constructed of sound materials.			
9.6	Rungs not over 12 inches on centre.			
9.7	Stepladders fully open when in use.			
9.8	Metal ladders not used around electrical hazards.			
9.9	Proper maintenance and storage.			
10.0	SCAFFOLDING.			
10.1	All structural members adequate for use.			
10.2	All connections adequate			
10.3	Safe tie-in to structure.			
10.4	Ladders and working areas free of debris, snow, ice,			
	grease.			
10.5	Proper footings provided.			
10.6	Passerby protected from falling objects.			
10.7	Supports plumb, adequate cross bracing provided.			
10.8	Guard rails and toe boards in place.			
10.9	Scaffold machines in working order.			
10.10	1 0			
11.0	HOISTS, CRANES & DERRICKS.			
11.1	Inspect cables and sheaves.			
11.2	Check slings and chains, hooks and eyes.			
11.3 11.4	Equipment firmly supported. Outriggers used if needed.			
11.4	Power lines inactivated, removed, or at safe distance.			
11.6	Proper loading for capacity at lifting radius.			
11.7	All equipment properly lubricated and maintained.			
11.8	Signalmen where needed.			
12.0	MOTOR VEHICLES.			
12.1	Brakes, lights, warning devices operative.			
12.2	Weight limits and load sizes controlled.			
12.3	Personnel carried in safe manner.			
13.0	BARRICADES.			
13.1	Floor openings planked over or barricaded.			
13.2	Roadways and sidewalks effectively protected.			
13.3	Adequate lighting provided.			
13.4	Traffic controlled.			

Sr.	ITEM	STATUS	REMARKS	
14.0	HANDLING & STORAGE OF MATERIALS.			
14.1	Neat storage area, clear passageway.			
14.2	Stacks on firm footings, not too high.			
14.3	Men picking up loads, correctly.			
14.4	Materials protected from heat and moisture.			
14.5	Protection against falling into hoppers and bins.			
14.6	Dust protection observed.			
15.0	EXCAVATION & SHORING.			
15.1	Shoring of adjacent structures			
15.2	Shoring and sheathing as needed for soil and depth			
15.3	Public roads and sidewalks supported and protected.			
15.4	Materials not too close to the edge of excavation.			
15.5	Lighting at night.			
15.6	Water controlled.			
15.7	Equipment at safe distance from edge.			
16.0	CONCRETE CONSTRUCTION.			
16.1	Forms properly installed and braced.			
16.2	Adequate shoring, plumbed and cross braced.			
16.3	Shoring remains in place until strength is attained.			
16.4	Proper curing period and procedures.			
16.5	Check heating devices.			
16.6	Adequate runways.			
16.7	Protection from cement dust.			
16.8	Hard-hats, safety shoes, shirts covering skin.			
16.9	Nails and stripped form material removed from area.			
17.0	MASONRY.			
17.1	Proper scaffolding.			
17.2	Masonry saws properly equipped, dust protection			
	provided.			
17.3	Safe hoisting equipment.			

CHAPTER 3.0

3.0 ACCIDENT PREVENTION ORGANISATION.

3.1 Trained First Aid Person

A contractor shall provide, or ensure that there is provided, such number of suitable persons as is adequate and appropriate in the circumstances for rendering first aid to his employees if they are injured or become ill at work: and for this purpose a person shall not be suitable unless he has undergone –

- a) Such training and has such qualifications as the Health and Safety Executive may approve for the time being in respect of that case of the class of case, and
- b) Such additional training, if any, as may be appropriate in the circumstances of that case.

In practice, (a) refers to a trained first aider and (b) to an occupational first aider. In addition, a person who holds a current first aid certificate issued by registered medical association or Indian Red Cross Society will be classed as a "Suitable Person" for the purposes of Regulation.

For most sites, the contractor should ensure that at least one first aider is normally present when the number of employees at work is between 50 and 150, there should be at least one additional first aider for every 150 or so should ensure that sufficient first aiders are appointed to provide adequate coverage for each shift. Provisions for medical care must be made available by the contractor for every employee covered by the regulations. In the absence of infirmaries, clinics, or hospitals in proximity to the work site, properly trained and certified first aid personnel must be available, and first aid supplies must be provided by the contractor. Appropriate equipment for transportation of injured personnel to a physician or hospital must be provided for.

3.2. First Aid Kit

Regardless of the number of employees there must be at least one first-aid box on site. Every first aider and occupational first aider should have easy access to first-aid equipment, and provision should be made for every employee to have reasonably rapid access to first aid. Each box should be placed in a clearly identified and readily accessible location, and contain a sufficient quantity of suitable first-aid materials and nothing else. Boxes and kits should be checked frequently to ensure they are fully stocked and all items are in a usable condition. Sufficient quantities of each item should always be available in every first aid box or cabinet.

Sr.No	Item	Numbers of Employees.				
		1-5	6-10	11-50	100	150
1	Guidance Card individually wrapped.	1	1	1	1	1
2.	Sterile adhesive dressings.	10	20	40	40	40
3.	Sterile eye pads with attachment.	1	2	4	6	8
4	Triangular bandages	1	2	4	6	8
5	Sterile coverings for serious wounds	1	2	4	6	8
	(where applicable)					
6	Safety pins.	6	6	12	12	12
7	Medium sized sterile un medicated dressings.	3	6	8	10	12

Sr.No	Item	Numl	bers of E	mployee	S.	
8	Large sterile un medicated dressings	1	2	4	6	10
9	Extra Large sterile un medicated dressings.	1	2	4	6	8
10	Sterilc water or saline in 300 ml disposable containers, where tap water is unavailable.	1	1	3	6	6

The first-aid box or cupboard should protect the contents from dampness and dust and be clearly marked with a white cross on green background.

3.2.1 First - Aid Rooms.

Where there is 250 or more person at work on site, a suitably staffed and equipped first-aid room should be provided. In addition, where there is a large (over 150) number of employees divided into several dispersed working groups, or the location of the site makes access to places of treatment outside it difficult, the contractor should consider whether a centralised first-aid room may be needed.

A first aid room should:

- a) Be under the charge of an occupational first aider in most circumstances; names and locations of all first aiders should be displayed.
- b) Be readily available and used only for the rendering of first aid
- c) Be clearly identified and of sufficient size to allow access for a stretcher, wheelchair, etc. and to hold a couch with space for people to work around it
- d) Contain in addition to the previously mentioned first aid materials; a sink with hot and cold running water, drinking water, paper towels, impermeable work surfaces, clean garments for use by first aiders and occupational first aider's clinical thermometer a couch with pillow and blankets frequently cleaned
- e) Be heated, lighted, ventilated and cleaned regularly
- f) Be designed so that immediate contact can be made with the person on call, e.g. radio, siren, and a telephone link if feasible. It should be stressed that a sufficient number of first aid boxes must be provided for any work area which is not within easy reach of the first aid room.

3.3 Emergency Phone # Posted.

Project Name	Project No.

The following are the business telephone numbers where project key personnel can be reached at all times. In addition, the emergency telephone numbers of other vital agencies are listed:

BUSINESS

RESIDENCE

CLIENTS PROJECT CONTROLLER
CHIEF PROJECT MANAGER
SAFETY OFFICER (CONTRACTOR).
OTHER EMERGENCY TELEPHONE NUMBERS

FIRE

AMBULANCE

DOCTOR

HOSPITAL

POLICE

GAS COMPANY

ELECTRIC COMPANY

WATER COMPANY

TELEPHONE COMPANY

INSURANCE CARRIER

OTHER

OTHER

OTHER

CHAPTER 4.0

4.0 HOUSEKEEPING & SANITATION

At the work site, an adequate supply of potable water must be provided, as well as clean drinking water dispensers. Potable water for cleanup must be provided. Where non potable water is used for industrial or fire fighting purposes it must be identified by appropriate signs.

CHAPTER 5.0

5.0 FIRE PREVENTION.

Electrical wiring equipment for heating, light, or power purposes must be installed in compliance with the requirements. Internal combustion engine-powered equipment must be located with exhausts well away from combustible materials. Smoking is to be prohibited in the vicinity of fire hazards, and such areas must be conspicuously posted. Care shall be taken properly to ground nozzles, hoses, or steam lines used in hazardous tankage or vessels.

In location of temporary buildings and yard storage, appropriate care shall be taken for proper separation to preclude an accumulation of fire potential. The contractor is responsible for maintaining the entire area, but particularly storage areas, free from accumulation of unnecessary combustible materials.

Site Fire Check List

- 1. Are safe ashtrays provided where smoking is permitted?
- 2. Are heaters properly guarded?
- 3. Are wet clothes kept clear of heaters?
- 4. Are portable heaters secure from being knocked over?
- 5. Is all temporary wiring well supported and protected?
- 6. Are any circuit's overloads?
- 7. Are all flammable liquids, gas cylinders and flammable materials separately and properly stored?
- 8. Are all gas appliances fitted with control taps?
- 9. Is rubbish being "burned in proper fashion"?
- 10. Is all flame cutting and welding taking place with proper precautions?
- 11. Are all blowlamps and blowtorches being used correctly?
- 12. Do all night watchmen and security patrols know the fire routines?

Preventing the spread of fire

- 1. Is waste accumulating in hoist shafts, under buts, in odd corners?
- 2. Are separate metal waste containers supplied for each of the following: oily rags, paint rags, paint scrapings, waste flammable liquids, wood shavings and off cuts?
- 3. Is all waste regularly cleared?
- 4. Are all huts safely sited?

Means of escape

- 1. Are all gangways, stairs and platforms free from obstruction?
- 2. Does everyone know what to do in emergency?
- 3. Is fire drill practised, and is there a system to ensure that all persons have evacuated the area?

Fire Fighting

1. Have all extinguishers been checked and / or recharged?

Are they clearly identified and easily accessible? Are operatives trained in their use

CHAPTER 6.0

6.0 PERSONAL PROTECTION.

Workers are often reluctant to use protection equipment. Such items should not only be suitable for their purpose but also be as comfortable as possible and acceptable to the workers concerned. Only then can efforts to ensure that equipment is worn or used prove successful.

All necessary personal safety equipment as considered adequate by the Engineer-in-charge shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use; and the contractor shall take adequate steps to ensure proper use of equipment by those concerned.

- a) Workers employed on mixing asphaltic materials, cement and lime mortars / concrete shall be provided with protective footwear and protective gloves.
- b) Those engaged in handling any material which is injurious to eyes shall be provided with protective goggles.
- c) Those engaged in welding works shall be provided with welder's protective eye-shields.
- d) Stone workers are employed in sewers and manholes, which are in use, the contractor shall ensure that man-holes cover are opened and manholes are ventilated at least for an hour before workers are allowed to get into them. Manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.
- e) The contractor shall not employ men below the age of 18 and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken:
 - i) No paint containing lead or lead products shall be used except in the form of paste or ready.
 - ii) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.
 - iii) Overalls shall be supplied by the contractor to workmen and adequate facilities shall be provided to enable working painters to wash during and on cessation of work.

CHAPTER 7.0

7.0 ELECTRICAL INSTALLATION.

Contact of plant with un insulated overhead electric cables (over 200 volts) or electrical discharge due to plant coming into close proximity.

Electrical short circuit or overload causing explosion or fire resulting in stoppage of plant involved for more than 24 hours and which might have caused injury.

General Guidelines Electrical

- 1. Provide earth leakage protection (ELCB of 20mA) on every socket outlet and lighting circuits.
- 2. Use separate 15 A socket outlets also multi sockets are not to be used.
- 3. All socket outlets shall be shuttered type.
- 4. All wiring shall be properly colour coded.

Phase - Red / Yellow / Blue

Neutral - Black Earth - Green.

- 5. Wiring shall be done only in rigid metal conduits. PVC and metal flexible are not to be used.
- 6. Fuses are not to be used. Only circuit breakers to be used.
- 7. Lighting protection as per IS: 2309 to be provided.

CHAPTER 8.0

8.0 HAND & POWER TOOLS

Hand and power tools must be maintained in a safe condition, whether furnished by the contractor or by the employee. When power-operated tools are designed to accommodate guards, they must be equipped with appropriate guards when in use. Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains and other moving parts of equipment must be guarded if the parts are exposed to contact by employees.

All hand-held power tools must be equipped with a constant pressure switch that shuts off when the pressure is released. Electric power-operated tools shall be of the approved double insulated type, or grounded in accordance with good electrical practice. Pneumatic power tools must be secured to the hose or whip by positive means. Safety clips or retainers must be maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.

Pneumatically driven nails, staplers, and similar equipment provided with automatic fastener feed that operate at more than 100 psi pressure at the tool must have safety devices on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in direct contact with the work surface.

Hoses shall not be used for hoisting or lowering tools, and hoses exceeding ½-in inside diameter must have a safety shutoff at the source of supply to reduce pressure in case of a hose failure.

All fuel-powered tools must be stopped while being refuelled, serviced, or maintained.

Only trained employees may be allowed to operate a powder-actuated tool. Such tools must be tested each day before loading to see that the safety devices are in proper working condition, in accordance with manufacturer's recommended test procedure. Tools shall not be loaded until just prior to the intended firing time. Neither loaded nor empty tools are to be pointed at any employee, and hands shall be kept clear of the open barrelled end. Fasteners shall not be driven into very hard or brittle materials such as cast iron, glass block, face brick, hardened steel, or hollow tile. For driving into materials that are easily penetrated, appropriate backing must be available to prevent the pin fastener from passing completely through.

All employees using abrasive wheels must use eye protection, and other tools must be operated using appropriate personal safety equipment.

CHAPTER 9.0

9.0 LADDERS

Use of Ladders and Folding Step-Ladders.

- This regulation applies to all ladders and pairs of steps but not roof ladders and crawling boards.
- Ladders must:
- a) Be fixed near the top if practicable, or near the bottom if not: if suspended they must be secure,
- b) Be placed (except when suspended) on a firm level base; they must not stand on loose packing (e.g. bricks),
- c) Be intermediately secured, where necessary, to prevent swaying and sagging, and
- d) Be supported, or suspended, equally on each stile.
- If a ladder, standing on the ground, cannot be fixed to prevent slipping, then someone must hold it at the base when it is being used.
- A ladder which is not more than 3 m in length, need not be fixed or footed, provided it is securely placed so as to prevent it from slipping or falling. This exemption does not apply to ladders which are used as a means of communication between one working place and another, or to suspended ladders.
- Ladder must :
- a) Extend at least 1.05 m above any landing place beyond the highest rung from which a person may be working, or have a nearby handhold of equivalent height.
- b) Be placed so that there is space behind each rung for proper foothold (e.g. no rung should coincide with a scaffold tube).

CHAPTER 10.0

10.0 SCAFFOLDING

Collapse of any scaffold or part of a substantial part of the scaffold falling or overturning; also collapse or part collapse of the suspension arrangements of a slung or suspended scaffold, causing the platform or cradle to fall more than 5m.

10.1. Provision of Scaffolds, ETC.

Scaffolds must be provided for all work which cannot be safely done from the ground or part of the building.

Ladders, properly secured, can be used - but only for light work which can be done with one hand.

10.2. Supervision of Work and Inspection of Material.

Scaffolds must be erected, altered, or dismantled only under competent supervision and, as far as possible, by experienced persons. All scaffolding materials must be inspected before use to check that they are up to standard.

10.3. Construction and Material.

Sufficient sound material must be provided for a scaffold to be strong enough and stable enough for the job.

Wherever timber is used for any kind of scaffolding purpose, it must be of the right type for the job, be free from back and must not be painted so that any defects are hidden. Scaffold tubes and fittings must not be bent, distorted or unduly rusty.

10.4. Defective Material

Scaffold tubes, couplers or fittings that are bent unduly rusty or distorted should be rejected.

Timber with dangerous splits and knots should always be rejected.

- Ropes and lashings showing signs of chafing through wear, or of being corroded, should be rejected.
- All scaffold components must be properly stored when not in use and kept separately from all other building materials.

10.5. Maintenance of Scaffolds.

Scaffolding must be kept in good order and every effort made to prevent the accidental displacement of any part.

10.6. Partly Erected or Dismantled Scaffolds.

In any scaffold is either partly erected (or partly dismantled), but nevertheless is still capable of being used to some extent, it must have a bold warning notice fixed, or all access blocked off or barred, at the point beyond which it cannot be safely used.

10.7. Standards or Uprights, Ledgers and Putlogs.

- Scaffold standards should be vertical and spaced closely enough for the intended use of the scaffold.
- Base plates must be used. Timber sole plates should also be used to distribute the load from the standard over a wider area, as well as to offset possible local subsidence.
- Ledgers must be level and fixed to standards with right-angle couplers.
- Putlogs and transoms must be firmly fixed to ledgers or standards.

The flattened end of the putlog must be pushed right into the wall to provide maximum support.

 Putlogs and transoms should be spaced according to the expected load and the thickness of the boards to be used in the platform.

In normal use, putlogs and transoms should be spaced so that the spans of scaffold boards should not be greater than:

32 mm boards : 1 m 38 mm boards : 1.50 m 50 mm boards : 4.60 m

10.8. Ladders used in Scaffolds

- Ladders used as uprights must be :
- a) Strong enough for the load,
- b) Equally supported on each stile, and
- c) Secured to prevent slipping.
- Ladders are only to be used to support a scaffold platform when the work is light, e.g. painting.

10.9. Stability of Scaffolds

- All scaffolds must be:
- a) On a solid, even base; or suspended from a sound structure.
- b) Braced to prevent failure, and
- c) Tied to the building or structure unless specially designed to be completely independent.
- Any building or structure which supports a scaffold must be strong enough to carry the scaffold and its load.
- Mobile scaffolds must:
- a) Be stable, weighted at the base if necessary.
- b) Be used only on a flat, level surface.
- c) have the wheels locked to prevent movement whilst being used for work, and

- d) Be pushed, or pulled only at the base when being moved.
- Scaffolds must not be built on loose bricks, drain pipes, chimney pots, etc. Bricks or blocks can be used to support a platform no higher than 600 mm from the ground or floor.

10.10. Slung Scaffolds

- a) Be strong enough,
 - b) Be properly secured to be overhead anchor-ages and to be platform frame,
 - c) Be spaced so as to keep the platform stable,
 - d) Be vertical, and
 - e) Be kept taut.
- No rope other than wire rope may be used for suspension.
- Packing must be used to prevent damage to suspension ropes or chains at any point where sharp or rough - edged protrusions could cause chafing.
- The platform must be secured to prevent swaying whilst in use.

10.11. Cantilever, Jib, Figure and Bracket Scaffolds.

Cantilever or jib scaffolds must be anchored to a structure which is strong enough to carry the total load. Outriggers must be long enough and strong enough and the scaffold must be braced to ensure stability.

Figure or bracket scaffolds supported by dogs or spikes must not be used if there is any danger of these pulling out of the brickwork or stone-work.

10.12. Support for Scaffolds, etc.

No part of the building may be used to support scaffolding unless it is strong enough to do so. Unless gutters have been designed as walkways and are strong enough to bear the weight, they must not be used to support scaffolding or ladders.

10.13. Suspended Scaffolds (Not Power Operated)

- The ropes, winches, blocks and tackle must be strong enough and correctly rigged. A safe anchorage for the suspension must be provided.
- Winches or similar lifting devices must :
- a) Have brakes which apply when the operating lever is released, and
- b) Be protected from the weather, falling dirt, etc.
- Outriggers must:
- a) Be long enough and strong enough,
- b) Be horizontal (light cradles are excepted),
- c) Have stops at their outer ends (light cradles excepted)
- d) Be tied down or properly counterweighted at the tail, and
- e) Be close enough together to support the rails and scaffolds properly.
- Counterweights Must :
- a) Be bolted or securely attached to the outriggers, and
- b) Be at least three times the overturning moment or load.
- Platforms must be hung clear of the building or face of the structure.
- Runways must :

- a) Be strong enough and in good condition,
- b) Have stops at each, and
- c) Be bolted or tied securely to their supports.
- Suspension ropes or chains must :
- a) Be properly secured, both overhead and to the frame of the platform, and
- b) Be kept taut.
- Winches must:
- a) Have at least two full turns of rope on the drum when the platform is in its lowest position, and
- b) Be marked with the length of rope on the drum.
- Suspended scaffolds and associated equipment must be maintained in good condition. Platforms must be prevented from tipping or swaying whilst in use.
- Steel wire rope must be used for the suspension of all platforms other than lightweight cradles.

Lightweight cradles may be suspended by fibre ropes and pulley blocks which should not be more than 3.20 m apart. (only ropes recommended by manufacturers for this purpose should be used).

- Platforms of suspended scaffold must :
- a) Be close boarded,
- b) Be at least 430 mm wide on lightweight cradles.
 - be at least 600 mm wide on all other types, if used only for workmen, or
 - be at least 800 mm wide, if used for workmen and materials, and
- c) Never be used to carry another higher platform.

Platforms should be as close as possible to the face of the building, but where persons sit on the edge of the platform to carry out their work, then the distance between platform and building can be up to 300 mm.

10.14. Boatswain's Chairs Cages, Skips etc. (Not Power Operated)

- Hand-operated boatswain's chairs, skips etc. must :
- a) Be well constructed, strong enough, and properly maintained.
- b) have outriggers strong enough and firmly anchored,
- c) Have chains, ropes and lifting gear firmly secured to the outriggers above and to the chair, skip etc. The construction (lifting operations) regulations apply to the lifting gear,
- d) Be designed so that the occupant cannot fall out,
- e) Carry no loose materials which could interfere with the safety of the occupant,
- f) Have means of preventing spinning and tipping (a swivel connection at the suspension point is strongly advised),
- g) In the case of skips, be at least 910 mm deep, and
- h) Be under the supervision of a competent person during installation and use.
- A boatswain's chair may only be used as a workplace when the work would not take long enough to make the use of a suspended (or standard) scaffold reasonably practicable.

CHAPTER 11.0

11.0 HOISTS, CRANES & DERRICKS

Safety of Hoist ways. Platforms and Cages.

- Hoist ways must be enclosed wherever access is provided or wherever persons could be struck by the platform or other moving parts. Gates must be fitted in the enclosure at all landing places and must normally be at least 2m high, but gates 910 mm high are acceptable where persons are not at risk of falling down the hoist-way or coming into contact with moving parts. Gates must be kept closed except for the movement of persons and materials; it is the duty of all persons to see that this is done.
- Hoist platforms and cages must be fitted with a device capable of supporting them, fully loaded, should hoists, ropes or driving gear fail.
- Hoists must be fitted with ver-run stops at the top.

Operation of Hoists.

- Hoists must only be capable of being operated from one position at a time, whether by rope, lever or switch. Hoists must not be operated from the cage.
- Where the hoist driver cannot see the platform or cage during its movement, a signalling system, which covers all landing places, must be used.

Safe working Load and Marking of Hoists.

- A) The platform of materials or goods hoists must carry a notice stating (I) the safe working load and (ii) that passengers must not ride on the platform.
- The safe working load must not be exceeded except for test purposes.
- B) Cages for passenger's hoists must carry a notice stating (i) the safe working load and (ii) the number of passengers permitted.
- No greater number of passengers may be carried and the safe working load must not be exceeded except for test purposes.

Cranes & Derricks

Manufacture's recommendations on operating conditions shall be followed by the contractor. Rated load capacities and recommended operating speeds and special hazard warnings or instructions must be conspicuously posted on all equipment visible to the operator while he is at his control station.

A boom angle indicator and a load-indicating device in good working order must be provided for cranes and derricks. Hand signals to crane and derrick operators shall be those prescribed by the applicable ANSI standards for the type of crane in use. Accessible areas within the swing radius of the rear of the rotating superstructure of a crane must be barricaded to prevent an employee from being struck or crushed by the crane.

In operating boom equipment, careful clearance shall be given to electrical distribution and transmission lines. For lines rated 50 kV or below, minimum clearance is 10 ft, whereas for loads rated over 50 kV, minimum clearance shall be 10 ft + 0.4 in per each kV over 50 - or use twice the length of the line insulator, but never less than 10 ft.

For hammerhead tower cranes, adequate clearance must be maintained between the moving and rotating structures and fixed objects to allow the passage of employees without harm. Employees required to perform duties on the horizontal booms of hammerhead tower cranes must be protected against falling by guard rails or by safety belts and lanyards. Overhead and gantry cranes must have the rated load of the crane plainly marked on each side, and if the crane has more than one hoisting unit, each must have its rated load marked on the load block in marking clearly legible from the ground or floor. All operation must be prescribed in ANSI B30.2, "Safety code for Overhead and Gantry Cranes"

Derricks in use must meet the applicable requirements for design, construction, installation, inspection, testing, maintenance, and operation prescribed in ANSI B30.6, "Safety code for Derricks"

CHAPTER 12.0

12.0 MOTOR VEHICLES

Motor equipment left unattended at night near areas where work is in progress must have appropriate lights, reflectors, or barricades to identify the location of the equipment. A safety tire rack, cage, or equivalent protection must be used when a worker is inflating, mounting, tires installed on split rims or rims equipped with locking rings. Heavy machinery that is suspended or held aloft by the use of slings, hoists, or jacks must be blocked or cribbed to prevent falling or shifting before employees are permitted to work under them. Bulldozer and scraper blades and similar equipment shall be either fully lowered or blocked when being repaired or when not in use. All controls must be in the neutral position and the motor stopped and brakes set, unless work being performed requires otherwise. Parked equipment must be checked and parking brakes set. All cab glass shall be safety glass. All vehicles must have a service brake system, an emergency brake system, and a parking brake system. Vehicles that require additional light shall have at least two headlights, as well as brake lights.

Other standard vehicles equipment such as seat belts, rear-view mirrors, and safety latches on operating levers shall be in accordance with standard vehicle codes, and state-inspected where appropriate.

CHAPTER 13.0

13.0 BARRICADES

- i) Contractor shall erect and maintain barricades required in connection with his operation to guard or protect.
 - a) Hoisting Areas.
 - b) Areas adjudged hazardous by contractor or Client.
 - c) Owner's existing property subject to damage by Contractor's operations.
- ii) Contractor's employees and those of his subcontractors shall become acquainted with Project Managers barricading practice and shall respect the provisions thereof.
- 13.1. Guarding of Floor Openings and Floor Holes.
- 13.1.1 Every temporary floor opening shall have railings, or shall be constantly attended by someone. Every floor hole into which persons can accidentally fall shall be guarded by either:
 - a) A railing with toe board on all exposed sides, or
 - b) A floor hole cover of adequate strength and it should be hinged in place. When the cover is not in place, the floor hole shall be constantly attended by some one or shall be protected by a removable railing.
- 13.2. Every stairway floor opening shall be guarded by a railing on all exposed sides, except at entrance to stairway. Every ladder way floor opening or platform shall be guarded by a guard railing with toe board on all exposed sides (except at entrance to opening), with the passage through the railing either provided with a swinging gate or so offset that a person can not walk directly into the opening.
- 13.3. Guarding of Open-Side Floors and Platform.

Every open-sided floor or platform 120 cm or more above adjacent floor or ground level shall be guarded by a railing (or the equivalent) or all open sides, except where there is entrance to ramp, stair-way, or fixed ladder. The railing shall be provided with a toe board beneath the open sides wherever.

- a) Persons may pass;
- b) There is moving machinery; or
- c) There is equipment with which falling materials could create a hazard.

CHAPTER 14.0

14.0 HANDLING & STORAGE OF MATERIALS

14.1 Cement.

a) Storage and Stacking - Cement shall be stored at the work site in a building or a shed which is dry, leak proof and as moisture-proof as possible. The building or shed for storage should have minimum number of windows and close fitting doors and these should be kept closed as far as possible.

Cement received in bags shall be kept in such a way that the bags are kept free from the possibility of any dampness or moisture coming in contact with them. Cement bags shall be stacked off the floor on wooden planks in such a way as to keep them 150 to 200 mm clear from the floor and space of 450 mm minimum shall be left all-round between the exterior walls and the stacks. In the stacks the cement bags shall be kept close together to reduce circulation of air as much as possible. Owing to pressure on bottom layer of bags sometimes 'warehouse pack' is developed in these bags. This can be removed easily by rolling the bags when cement is taken out for use.

The height of stack shall not be more than 15 bags to prevent the possibility of lumping up under pressure. The width of the stack shall be not more than four bags length or 3 metres. In stacks more than 8 bags high, the cement bags shall be arranged alternately lengthwise and crosswise so as to tie the stacks together and minimise the danger of toppling over.

For extra safety during monsoon, or when it is expected to store for an unusually long period, the stack shall be completely enclosed by a water proofing membrane such as polyethylene, which shall close on the top of the stack. Care shall be taken to see that the waterproofing membrane is not damaged any time during the use.

Drums or other heavy containers of cement shall not be stacked more than two layers high.

The manner of storage shall facilitate the requirement that lots of cement received are removed and used more or less in the order in which they are received.

b) HANDLING - Hooks shall not be used for handling cement bags unless specifically permitted by the engineer-in-charge.

14.2. Polyethylene Pipes.

a) Storage & Stacking - Black polyethylene pipes may, be stored either under cover or in the open. Natural polyethylene pipes, however, should be stored under cover and protected from direct sunlight.

Coils may be stored either on edge or stacked flat one on top of the other, but in either case they should not be allowed to come into contact with hot water or steam pipes and should be kept away from hot surface.

Straight lengths should be stored on horizontal racks giving continuous support to prevent the pipe taking on a permanent set.

Storage of pipes in heated areas exceeding 27° C should be avoided.

b) Handling - Removal of pipe from a pile shall be accomplished by working from the ends of the pipe.

14.3. Pipes of Conducting Materials.

a) Storage and Stacking - Pipes shall be stacked on solid level sills and contained in a manner to prevent spreading or rolling of the pipe. Where quantity storage is necessary, suitable packing shall be placed between succeeding layers to reduce the pressure and resulting spreading of the pile.

In stacking and handling of pipes and other conducting materials, the following minimum safety distances shall be ensured from the overhead power lines:

11 kV and below 40m Above 11 and below 33 kV 60 m Above 33 and below 132 kV 70 m Above 132 and below 275 kV 70 m Above 275 and below 400 kV 50 m

b) Handling - Removal of pipes from a pile shall be accomplished by working from the ends of the pipe. During transportation, the pipes shall be so secured as to insure against displacement.

14.4 Paints Varnishes and Thinners.

a) Storage and Stacking - Paints, varnishes, lacquers, thinners and other flammable materials shall be kept in properly sealed or closed containers. The containers shall be kept in a well ventilated location, free from excessive heat, smoke, sparks or flame. The floor of the paint stores shall be made up of 10 cm thick loose sand.

Paint materials in quantities other than required for daily use shall be kept stocked under regular storage place.

Where the paint is likely to deteriorate with age, the manner of storage shall facilitate removal and use of lots in the same order in which they are received.

Temporary electrical wiring / fittings shall not be installed in the paint store. When electric lights, switches or electrical equipment are necessary, they shall be of explosion proof design.

b) Handling - Ventilation shall be adequate to prevent the accumulation of flammable vapours to hazardous levels of concentration shall be provided in all areas where painting is done.

When painting is done in confined spaces where flammable or explosive vapours may develop, any necessary heat shall be provided through duct work remote from the source of flame.

Sources of ignition, such as open flame and exposed heating elements, shall not be permitted in area or rooms where spray painting is done nor shall smoking be allowed there.

Care should be taken not to use any naked flame inside the paint store. Buckets containing sand shall be kept ready for use in case of fire. Fire extinguishers when required shall be of foam type conforming to accepted standards.

Each workman handling lead based paints shall be issued 1/2 litre milk per day for his personal consumption.

14.5. Bitumen, Road Tar, Asphalt, etc.

- a) Storage and Stacking Drums or containers containing all types of bitumen, road tar, asphalt, etc. shall be stacked vertically on their bottoms in up to 3 tiers. Leaky drums shall be segregated. Empty drums shall be stored in pyramidal midal stacks neatly in rows.
- b) Handling Bitumen / Tar Bitumen / tar shall not be heated beyond the temperature recommended by the manufacturer of the product. While discharging heated binder from the boiler, workers shall not stand opposite to the jet so as to avoid the possibility of hot binder falling on them. The container shall be handled only after closing the control valve. While handling hot bitumen / tar, workers shall exercise scrupulous care to prevent accidental spillage thereof. The buckets and cans in which the hot material is carried from boiler shall be checked before use to ensure that they are intact and safe. Mops and other applicators contaminated with bituminous materials shall not be stored inside buildings.

14.6. Bituminous Roofing Felts.

- a) Storage and Stacking Bituminous roofing felts shall be stored away from other combustible flammable materials. For long storage it shall be kept under shade.
- b) Handling Bituminous roofing felts should be handled in a manner to prevent cracking and other damages.

14.7. Flammable Materials.

- a) Storage and Stacking In addition the following provisions shall also apply:
- 1) Outdoor storage of drums requires some care to avoid contamination because moisture and dirt in hydraulic brake and transmission fluid, gasoline, or lubricants may cause malfunction of failure of equipment, with possible danger to personnel. The storage area should be free of accumulations of spilled products, debris and other hazards.
- 2) Compressed gases and petroleum products shall not be stored in the same building or close to each other.
- b) Handling Petroleum products delivered to the job site and stored there in drums shall be protected during handling to prevent loss of identification through damage to drum markings, tags, etc. Unidentifiable petroleum products may result in improper use, with possible fire hazard, damage to equipment or operating failure.

Workmen shall be required to guard carefully against any part of their clothing becoming contaminated with flammable fluids. They shall not be allowed to continue work when their clothing becomes so contaminated.

CHAPTER 15.0

15.0 EXCAVATION & SHORING

Excavation and Trenching: All trenches, 1.5 meters or more in depth, shall at all times be supplied with at least one ladder for each 30 meters in length or fraction thereof. Ladder shall be extended from bottom of trench to at least 1 meter above surface of the ground. Sides of a trench which is 1.5 meters or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated material shall not be placed within 1.5 meters of edge of trench or half of depth of trench, whichever is more cutting undermining or undercutting be done.

CHAPTER 16.0

16.0 CONCRETE CONSTRUCTION

16.1. Handling of Plant.

- 16.1.1. Mixers All gears, chains and rollers of mixers shall be properly guarded. If the mixer has a charging skip the operator shall ensure that the workmen are out of danger before the skip is lowered. Railings shall be provided on the ground to prevent anyone walking under the skip while it is being lowered.
- 16.1.2. All cables, clamps, hooks, wire ropes, gears and clutches, etc, of the mixer, shall be checked and cleaned, oiled and greased, and serviced once a weak. A trial run of the mixer shall be made and defects shall be removed before operating a mixer.
- 16.1.3. When workmen are cleaning the inside of the drums, and operating power of the mixer shall be locked in the off position and all fuses shall be removed and a suitable notice hung at the place.

16.2. **Trucks.**

When trucks are being used on the site, traffic problems shall be taken care of. A reasonably smooth traffic surface shall be provided. If practicable, a loop road shall be provided to permit continuous operation of vehicles and to eliminate their backing. If a continuous loop is not possible, a turnout shall be provided. Backing operations shall be controlled by a signalman positioned so as to have a clear view of the area behind the truck and to be clearly visible to the truck driver. Movement of workmen and plant shall be routed to avoid crossing, as much as possible, the truck lanes.

16.3. Formwork.

- 16.3.1. Formwork shall be designed after taking into consideration spans, setting temperature of concrete, dead load and working load to be supported and safety factor for the materials used for formwork.
- 16.3.2. All timber formwork shall be carefully inspected before use and members having cracks and excessive knots shall be discarded.
- 16.3.3. The vertical supports shall be adequately braced or otherwise secured in position that these do not fall when the load gets released or the supports are accidentally hit.
- 16.3.4. Tubular steel centering shall be used in accordance with the manufacturer's instructions. When tubular steel and timber centering is to be used in combination necessary precautions shall be taken to avoid any unequal settlement under load.
- 16.3.5. All centering shall be finally, inspected to ensure that:
 - a) Footings or sills under every post of the centering are sound.
 - b) All lower adjustment screws or wedges are snug against the legs of the panels.
 - c) All upper adjustment screws or heads of jacks are in full contact with the formwork.
 - d) Panels are plumb in both directions.
 - e) All cross braces are in place and locking devices are in closed and secure position.

f) In case of CHHAJAS and balconies, the props shall be adequate to transfer the load to the supporting point.

16.4. Ramps and Gangways.

- 16.4.1. Ramps and gangways shall be of adequate strength and evenly supported. They shall either have a sufficiently flat slope or shall have cleats fixed to the surface to prevent slipping of workmen. Ramps and gangways shall be kept free from grease, mud, snow or other slipping hazards or other obstructions leading to tripping and accidental fall of a workman.
- 16.4.2. Ramps and gangways meant for transporting materials shall have even surface and be of sufficient width and provided with skirt boards on open sides.

16.5. Prestressed Concrete.

- 16.5.1. In pre-stressing operations, operating, maintenance and replacement instructions of the supplier of the equipment shall be strictly adhered to.
- 16.5.2. Necessary shields should be put up immediately behind the prestressing jacks during stressing operations.
- 16.5.3. Wedges and other temporary anchoring devices shall be inspected before use.
- 16.5.4. The prestressing jacks shall be periodically examined for wear and tear.

16.6. Erection of Prefabricated Members.

- 16.6.1. A spreader beam shall be used wherever possible so that the cable can be as perpendicular to the members being lifted as practical. The angle between the cable and the members to be lifted shall not be less than 60° .
- 16.6.2. Methods of assembly and erection specified by the designer shall be strictly adhered to at site. Immediately on erecting any unit in position, temporary connections or supports as specified shall be provided before releasing the lifting equipment. The permanent structural connections shall be established at the earliest opportunity.

16.7. **Heated Concrete.**

When heaters are being used to heat aggregates and other materials and to maintain proper curing temperatures, the heaters shall be frequently checked for functioning and precautions shall be taken to avoid hazards in using coal, liquid, gas or any other fuel.

CHAPTER 17.0

17.0 MASONRY

17.1. Walls.

- 17.1.1. **General** Depending on the type of wall to be constructed the height of construction per day shall be restricted to ensure that the newly constructed wall does not come down due to lack of strength in the lower layers. Similarly, in long walls adequate expansion / crumple joints shall be provided to ensure safety.
- 17.2. **Opening in Walls** Whenever making of an opening in the existing wall is contemplated, adequate supports against the collapse or cracking of the wall portion above or roof or adjoining walls shall be provided.
- 17.2.1. **Guarding of Wall Openings and Holes** Wall opening barriers and screens shall be of such construction and mounting that they are capable of withstanding the intended loads safely. For detailed information reference may be made to good practice. Every wall opening from which there is a drop of more than 120 mm shall be guarded by one of the following;
 - a) Rail, Roller, Picket Fence, Half Door or Equivalent Barrier The guard may be removable but should preferably be hinged or otherwise mounted so as to be conveniently replaceable. Where there is danger to persons working or passing below on account of the falling materials, a removable toe board or the equivalent shall also be provided. When the opening is not in use for handling materials, the guards shall be kept in position regardless of a door on the opening. In addition, a grab handle shall be provided on each side of the opening. The opening should have a sill that projects above the floor level at least 2.5 cm.
 - b) Extension platform into which materials may be hoisted for handling shall be of full length of the opening and shall have side rails or equivalent guards.
- 17.2.2. Every chute wall opening from which there is a drop of more than 120 mm shall be guarded by one or more of the barriers specified in 17.2.1. or as required by the conditions.

CHAPTER 18.0

18.0 **HEALTH STANDARDS**

18.1 DRINKING WATER

- a) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- b) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- c) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or any other source of pollution.

18.2 WASHING FACILITIES

- a) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- b) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- c) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

18.3 **LATRINES AND URINALS**

- a) Latrines shall be provided in every work place on the following scale namely:
 - i) Where female are employed there shall be at least one latrine for every 25 females.
 - ii) Where males are employed, there shall be at least one latrine for every 25 males.

Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto first 100, and one for every 50 thereafter.

- b) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have proper door and fastenings.
- c) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting non-absorbent materials and shall be cement washed inside and outside at least once a year, latrines shall not be of standard lower than borehole system.
- d) i) Where workers of both sexes are employed, there shall be displayed out side each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only " or "For Women only " as the case may be.
 - ii) The notice shall also bear the figure of man or woman, as the case may be.
- e) There shall be at least one urinal for male workers upto 50 and for female workers upto 50 employed at a time, provided that where the number of male or female workers, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females upto the first 500 and one for every 100 or part thereafter.
- f) i) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.

- ii) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of Public Health Authorities.
- g) Water shall be provided by means of tap or otherwise so as to conveniently accessible in or near the latrines and urinals.
- h) Disposal of excreta: Unless otherwise arranged by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with 15 cm layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- i) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees of the site. The contractor shall be responsible for payment of any charges which may be levied by the municipal or cantonment authority for execution of such on behalf.

18.4 PROVISION OF SHELTER DURING REST

At every place there shall be provided , free of cost , four suitable sheds , two for meals and other two for rest separately for the use of men and women labour . The height of each shelter shall not be less than 3m from the floor level to the lowest part of the shed roof. These shall be kept clean and the space provided shall be on the basis of 0.6sq.m per head.

Provided that the Engineer-in-charge may permit subject to his satisfaction, a portion of building under construction or other alternative accommodation to be used for the purpose.

18.5 CRÈCHES

- I) At every work place, at which 20 or more women workers are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under at the age of six years. One room shall be used as a play room for the children and the other as their bedroom.
- ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- iii) The contractor shall supply adequate number of toys and games in playroom and sufficient number of cots and bedding in the bed room.
- iv) The contractor shall provide one aya to look after the children in the crèche when the number of women workers does not exceed 50 and two when the number of women workers exceeds 50.
- v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

18.6 CANTEENS

- I) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering 100 or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such labour.
- ii) The canteen shall be maintained by the contractor in an efficient manner.
- iii) The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- iv) The canteen shall be sufficiently at all times when any person has access to it.
 - v) The floor shall be made of smooth and impervious materials and inside walls shall be lime washed or colour washed at least once a year .The inside walls of the kitchen shall be lime washed every four months.
- vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- vii) Suitable arrangements shall be made for the collection of disposal of garbage.
- viii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause nuisance.

- ix) The dining hall shall accommodate at a time 30 percent of the contract labour working at a time.
- x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one sq.m per diner to be accommodated as prescribed in sub-rule (ix).
- xi) a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment necessary for efficient running of canteen.
 - 2. The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.
 - b) 1. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
 - 2. A service counter, if provided, shall have top of smooth and impervious material.
 - 3. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.
- xii) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
- xiii) Sufficient tables stools or benches shall be available for the number of diners to be accommodated as prescribed in sub rule (ix).
- xiv) The food stuff and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- xv) The charges for food stuffs, beverages and other items served in the canteen shall be based on "No profit No loss" and shall be conspicuously displayed in the canteen.
- xvi) In arriving at the price of foodstuffs, and other article served in the canteen , the following items shall not be taken into consideration as expenditure namely:
 - a) The rent of land and building.
 - b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
 - c) The purchase, repairs and replacement of equipment including furniture , crockery, cutlery and utensils.
 - d) The water charges and other charges incurred for lighting and ventilation.
 - e) The interest and amounts spent on the provision and maintenance of equipment provided for the canteen.
- xvii) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

18.7 ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by Engineer-in-charge including the filling up of any borrow pits which may have been dug by him.

CHAPTER 19.0

19.0 RECORD OF FIRST AID TREATMENT.

Project Data:		
Project:		
Location:		
Injured Data:		
Name:		
Employer:		
Employer's Supervisor:		
Injury Data:		
Date:		
Date: Time:		
Description of Injury:		
First Aid Treatment:		
That Aid Treatment.		
Treatment administered by:		
Type of treatment administer		
Referred for Medical Treatme	ent:	
No		
Yes.		
Doctor		
Hospital		
Report Prepared By:		Date:
Treatment Received By:	Date:	

CHAPTER 20.0

20.0 DAMAGE REPORT FORM

Contract				
Plant and equipment affected	 			
Serial numbers or identifying marks				
Owner of plant or equipment				
Place, date and time of incident				
Circumstances of incident				
Details of damage				
Names of operators involved (if not Company emplo		give	details	of such
Were normal working methods used ?				
Contributory causes of incident				
Names of witness				
(attach statements)	_			
Preventative action proposed or taken				
Signature of Site Agent or Manager	 			
Date				

CHAPTER 21.0

21.0 PERSONNEL ACCIDENT REPORT FORM.

Contractor Full name and address of injur	red person (IP)
Occupation of IP	Age of IP
Employed (state if self - emplo	yed or under training)
Trade of sub contractor (where a	applicable)
Particulars of accident:	
Date and time of accident	
Exact place where accident ha	ppened
	ccident?
First air or hospital treatment	•
Time lost (state of IP is still of	f work)
Brief description of accident, g	giving dimensions where applicable
Details of tools, equipment pla	nt or machinery
	uipment was being worn / used by IP?e body injured. e.g. punctured foot, hand, broken leg
Contributory factors:	
)
Lack of training, supervision e	tc. YES/NO
	nd, rain, ice, etc.) YES/NO

Other Delete as appropriate and give details.	
Names and address of witness	
If reportable:	
Date and time Safety Officer informed by Telephone	
Preventative action taken or proposed	
Signature of Site Agent or Manager	



Contract Data

- 1. The following documents are also part of the Contract:
 - The Schedule of Other Contractors working simultaneously in the area if any
 - The Schedule of Key Personnel organogram to be submitted along with Bio data of Key Personnel for approval of Engineer in Charge
 - The Methodology and Program of Construction
 - The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of construction
- 2. The **Employer** is:

Mahindra World City (Jaipur) Limited

SEZ Project Office, Vill & PO – Kalwara,

Tehsil- Sanganer, Dist-Jaipur -302029 Phone No: 0141-3003402/3003411 Fax : 0141-3003474, 2243060

Authorized Representative: **HEAD** (**O&M**)

- 4. The Name and identification number of the Contract is: **ROAD MAINTENANCE WORKS at MWC JAIPUR** and the number is MWCJL/O&M/ROAD MAINT.WORKS/2017-18/T-. The Works consist of **Maintenance of SEZ and Non-SEZ at Mahindra World City, Jaipur** as described in detail under the caption "Scope of Work" in the Special conditions of Contract.
- 6. The Date of Commencement shall be the date specified in the Letter of Intent of the work.
- 7. The Intended Completion Date for the whole of the Works is Six**ty (60) days** reckoned from the date of commencement as indicated in the letter of Intent, issued by the Employer. The work shall have the following milestones
- 8. Milestone dates:

Milestone 1 will be given at the time of award Milestone 2 will be given at the time of award Milestone 3 will be given at the time of award will be given at the time of award

- 9. The Contractor shall submit a work schedule including the commencement date, to reflect the ground realities and adhering to the schedule of milestone indicated above. This revised work schedule shall be submitted within 10 days of delivery of the Letter of Intent.
- 10. The Site Possession Date shall be the date within seven days from the date of issue of letter of Intent.
- 11. The Site is located at Mahindra World City (Jaipur) Limited, MULTI-PRODUCT SEZ. Village: Kalwada, Tehsil: Sanganer, District: Jaipur, PIN- 302029
- 12. The Defects Liability Period is **12 Months** from the certified date of completion of works. (where sectional completion certificate is issued this will apply from those dates for those sections).
- 13. Third party Quality Testing for whole works will be done according to MoRTH Specifications and Agency/ Laboratory will be approved by MWCJ and cost of testing will be borne by Contractor. Detailed test reports for carry out road work shall be submitted with each Running Account Bill.

14.. Insurance requirements are as under:

Sr. No.	Policy for	Insurance cover required
1	Contractor's All Risk Insurance for works	-N.A
2	Loss or damage to Employer's Equipment	By Contractor Contractor shall be liable and cost to be borne by Contractor
3	Other Employers property	By Contractor Contractor shall be liable and cost to be borne by Contractor
4	Personal injury or death insurance: a) Third Party	By Contractor Contractor shall be liable and cost to be borne by Contractor
	b) For Contractor's Employee	By Contractor Contractor shall be liable and cost to be borne by Contractor Contractor should ensure such insurance is in force through out the Contract period (Including defect liability period) and necessary proof to be submitted before the commencement of the project and at least a fortnight before the expiry of current insurance. The Contractor should indemnify and include in the policy the Employer
(iii)	Motor Vehicle Insurance	By Contractor as per statutory requirements, covering third Party liability.
	Third Party liability insurance (Including the name of Employer)	By Contractor Minimum cover Rs. 10 Lacs.
	Contractor's Equipments (Including liability arising out of usages of such equipment)	By Contractor.

- 15. The language of the Contract documents is English
- 16. The law which applies to the Contract is the laws of Republic of India
- 17. The currency of the Contract is Indian Rupees.
- 18. The proportion of payments retained (retention money) shall be 5 % from each bill to be released within 30 days after completion of defect liability period.
- 19. The liquidated damages for the whole of the works are 0.5% of the Contract value per week or part or part thereof .
- 20. The maximum amount of liquidated damages for the whole of the works is five percent (5%) of final Contract price.
- 21. Deleted
- 22. The amounts of the advance payment are:

Nature of Advance	Amount (Rs.)	Conditions to be fulfilled
1. Mobilization	10%	Against BG

(The advance payment will be paid to the Contractor no later than 15 days after fulfilment of the above conditions, if any).

- 23. Performance Bank Guarantees shall be exclusively issued by following Banks -:
- HDFC BANK LTD
- KOTAK MAHINDRA BANK LTD
- YES BANK
- AXIS BANK LTD
- STATE BANK OF INDIA
- 24. The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price:
- 25. Performance Security shall be for 5% per cent of Contract price to be submitted prior to signing the Contract. Performance Security shall be released within 30 days after the Certified date of Completion.
- 26. The standard form of Performance Security acceptable to the Employer shall be an <u>unconditional</u> and irrevocable Bank Guarantee of the type as presented in Section 5 of the Bidding Documents and valid for one month after the issue of the completion certificate.
- 27. During the contract period, any kind of Bank Guarantee acceptable to the employers shall be renewed by the contractor time to time.
- 27. The as-built drawings in 2 sets are required before issue of certificate of completion of whole or section of the work, as the case may be. The amount to be withheld for non submission is **Rs. 25, 000/-.**
- 28. The following events shall also be fundamental breach of Contract:
 - 28.1 The Contractor has contravened any Clause / sub-Clause of the General Condition of Contract.
 - 28.2 The Contractor does not adhere to the agreed construction program and agreed environmental management plan and also fails to take satisfactory remedial action as per Agreements.
 - 28.3 The Contractor fails to carry out the instructions of Engineer in Charge within a reasonable time determined by the Engineer in Charge in accordance with General Condition of Contract.

Mahindra World City (Jaipur) Ltd.	
SECTION 5: FORMS OF SECURITIES	

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

Annex A: Performance Bank Guarantee

Annex B: Bank Guarantee for Advance Payment

ANNEXURE -A

PERFORMANCE GUARANTEE

M/s. Mahindra World City (Jaipur) Limited	l,
411, Neelkanth Towers,	
Bhawani Singh Marg,	
C-Scheme, Jaipur - 302021.	

WHEREAS:

- A. M/s. Mahindra World City (Jaipur) Limited is developing a special economic zone at Jaipur called "Mahindra World City, Jaipur" (hereinafter referred to as "**SEZ**");
- C. Contractor has, by its acceptance to enter into the Contract with MWCJ has agreed to furnish a bank guarantee to MWCJ to ensure timely and satisfactory performance and completion of the work as per terms of the Contract;
- D. The Bank has, at the request of the Contractor, agreed to grant in favour of MWCJ, a guarantee to secure performance by Contractor of its obligations under the said works contract.

NOW THIS GUARANTEE WITNESSES AS FOLLOWS:

demanded until the obligation of the Bank in respect hereof is finally determined and the payment made to MWCI.

- 3. The Bank agrees that MWCJ has the fullest liberty, without affecting in any manner the Bank's obligations hereunder, to vary any of the terms and conditions of the said Contract, to extend the time of performance by the Contractor from time to time and to forbear from enforcing any of the terms of the said Contract without any notice to or the consent of the Bank and the Bank shall not be released from its liability under this Guarantee by reason of any such variation or extension or forbearance being granted to Contractor. The Bank agrees that MWCJ has no obligation whatsoever to exercise its rights against collateral, if any, of Contractor but may immediately call on this Guarantee.
- 4. This Guarantee herein contained shall remain in valid and effect till MWCJ certify that the terms and conditions of the said Contract have been fully and properly carried out and that the Contractor has fulfilled all its obligations under the Contract and that MWCJ has no claim against the Contractor on any account against the said Contract or the expiry date whichever is earlier.
- 5. Only neglect or forbearance, on the part of MWCJ, in the enforcement of the payment of any money, the payment whereof is intended to be hereby secured or the giving of the time for the payment hereto shall in no way relieve the Bank of their liability under this Guarantee.
- 6. The Bank shall not revoke this Guarantee during its currency except with the previous consent in writing of MWCJ.
- 7. Any notice or communication under this Guarantee shall be in writing and shall be served on the Bank at its address first hereinbefore mentioned and to MWCJ at its address first hereinbefore mentioned. Either party may notify to the other in writing any change in such address for service of notice upon it. The notices shall be served personally against acknowledgement or by Email or by Registered Post.
- 8. This Guarantee shall not be affected by any change in the constitution of the Bank or of Contractor or of MWCI.
- 9. This Guarantee shall be governed by the applicable laws of India.
- 10. The expression "The Bank" and "the Contractor" hereinbefore used shall include their respective successors and permitted assigns.

Notwithstanding anything contained herein above in the Bank Guarantee.

ANNEXURE -B

ADVANCE BANK GUARANTEE

Bank Guarantee Bond (RE: Mobilization Advance)

M/s. Mahindra World City (Jaipur) Limited, 411, Neelkanth Towers, 1, Bhawani Singh Road, C-Scheme, Jaipur Rajasthan – 302001.

B.G NO	
B.G DATE	
B.G AMOUNT	
DATE OF EXPIRY	

This Bond (hereinafter referred to as "Guarantee") made this (date)
WHEREAS: A. M/s. Mahindra World City (Jaipur) Limited is developing a special economic zone at Jaipur called "Mahindra World City, Jaipur" (hereinafter referred to as "SEZ");
B. On the assurance of(Vendor name with complete address). (Hereinafter referred to "Contractor") that they are having the necessary infrastructure and capacity to undertake construction of
C. And whereas MWCJ has agreed to pay the said Contractor a sum of Rs
D. The said Contractor has agreed to refund to the Company the balance un-recovered sum in the event of the said

NOW THIS GUARANTEE WITNESSES AS FOLLOWS:

advance payment made by MWCI to the Contractor.

Contract Ref No. **PO.** **Dated** being terminated or coming to as end for whatsoever reason.

E. We the Guarantor, at the request of the Contractor, agreed to guarantee in favour of MWCI, a guarantee to

Contractor and MWCJ as to the liability for or quantum of loss / damage / claim / costs / expenses and notwithstanding any notice by Contractor to the Bank withhold or not to pay any amount to MWCJ against this Guarantee either before or after invoking of this Guarantee by MWCJ Provided always the total liability of the Bank hereunder shall be limited to **Rs.....(RupeesOnly).**

- 3. The Bank agrees that MWCJ has the fullest liberty, without affecting in any manner the Bank's obligations hereunder, to vary any of the terms and conditions of the said Contract, to extend the time of performance by the Contractor from time to time and to forbear from enforcing any of the terms of the said Contract without any notice to or the consent of the Bank and the Bank shall not be released from its liability under this Guarantee by reason of any such variation or extension or forbearance being granted to Contractor. The Bank agrees that MWCJ has no obligation whatsoever to exercise its rights against collateral, if any, of Contractor but may immediately call on this Guarantee.
- 4. The Bank agrees that MWCJ has the fullest liberty, without affecting in any manner the Bank's obligation hereunder, to assign this guarantee in favour of any MWCJ Branch in India without the consent of but with prior intimation to, the Bank, and the Bank shall not be released from its liability under this Guarantee by reason of any such assignment. The Bank shall forthwith, on receipt of such intimation; undertake necessary endorsements or amendments hereto to incorporate the assignment in favour of such MWCJ affiliate assignee.
- 5. This Guarantee herein contained shall remain in force and effect till MWCJ certify that the Contractor has dully paid the Advance back to MWCJ. The Bank shall be released of its liabilities and obligations under this Guarantee only after such a certificate as aforesaid are issued by MWCJ to the Bank orwhich occurs earlier.
- i) The Bank shall not revoke this Guarantee during its currency except with the previous consent in writing of MWCI.
- ii) Only neglect or forbearance, on the part of MWCJ, in the enforcement of the payment of any money, the payment whereof is intended to be hereby secured or the giving of the time for the payment hereto shall in no way relieve the Bank of their liability under this Guarantee.
- However, this guarantee shall in any case will cease to be in effect after and any demand under this guarantee should reach us on or before the said date.
- 6. Any notice or communication under this Guarantee shall be in writing and shall be served on the Bank at its address first hereinbefore mentioned and to MWCJ at its address first hereinbefore mentioned. Either party may notify to the other in writing any change in such address for service of notice upon it. The notices shall be served personally against acknowledgement or by Registered Post / Fax / Telex.
- 7. The Bank hereby agrees that their liability hereunder shall not be discharged or released or altered or impaired in any manner by any change in the constitution structure or our Bank or by merger or amalgamation by our Bank with any other Bank, Company, Corporation or Body.
- 8. The Bank hereby agrees that their liability hereunder shall not be discharged or released or altered or impaired in any manner by any change in the constitution structure or powers of the said, Contractor or of the MWCJ.
- 9. This Guarantee shall be governed by the applicable laws of India.
- 10. The expression "The Bank" and the Contractor hereinbefore used shall include their respective successors and permitted assigns.

Notwithstanding anything contained herein

We the			(Nam	e of the l	oank and add	ress) he	reby ir	revocably	and un	nconditionally undertake
to pay to M	WCJ, by Ba	nker's Cl	neque /	' Deman	d Draft favou	ring Mal	nindra	World City	(Jaipu	ır) Ltd., payable at Jaipur
on First De	mand with	out prot	est or d	lemur oi	r proof or con	idition a	ny and	l all amour	it dem	anded by your Company
in writing,	with refere	ence to t	he gua	rantee a	and that the l	iability	of the	Bank Guar	antee,	under this guarantee is
restricted	to. Rs.			(R	Rupees			Only)	unles	s a claim in writing is
presented t	o us during	g the vali	dity pe	riod of t	his Guarantee	Period.				
a) Our	liability	under	this	Bank	Guarantee	shall	not	exceed.	Rs.	(Rupees
		Only								

entire liquidation of the mobilization	n advance, whichever occur ed amount or any part the	, scheduled date of Commissioning or till the rs earlier. reof under this Bank Guarantee only and only if you
IN WITNESS WHEREOF		

Annexure

List of Documents to be submitted on award of work order and with Bill submission.

A) One time document to be submitted at the time of issue of Work order.

- 1) PAN card copy
- 2) Valid Workmen's compensation insurance policy certificate. (WC policy)
- 3) Valid Contractors all risk (CAR) Policy.
- 4) Valid Contract labour license.
- 5) Valid PF registration certificate.
- 6) Valid ESIC registration certificate.
- 7) TIN no. certificate.
- 8) Registration in BOCW .(required as per the nature of work carried out).
- 9) Proprietorship PAN Declaration on your letter head. (if applicable). Format will be given by MWCJ.
- 10) Registration certificate if registered in MSME act (Micro, small, and medium enterprise) If not registered in MSME act provide this in writing on your letter head.
- 11) GST ID docs.

B) Documents to be submitted with every Running bill.

- 1) Bill Invoice with MWCJ's proper Name, address, zone in which the work is awarded, invoice no. invoice date, PAN no, GST ID of both the parties MWCJ and vendor, SAC / HSN code along with the description of work as per the code list of GST of each line items as per GST rules. Separate tax rates applicable as per GST.
- 2) Measurement sheet and abstract of bill as per invoice amount raised.
- 3) Labour Attendance sheet of the month in which the work is carried out.
- 4) Labour wages sheet with signature of workers, their bank name and bank account no. in which salary is transferred.
- 5) PF challan with bank seal.(bank seal not required if submitted online)
- 6) ESIC challan with bank seal. .(bank seal not required if submitted online)
- 7) ECR of PF in proper format.
- 8) ECR of ESIC in proper format.
- 9) Labour cess registration certificate & labour cess deposit challan.(required as per the nature of work carried out).
- 10) All required test reports duly approved by quality in charge of MWCJ.(if required).
- 11) If work is not completed within the timeline given in PO, a request letter for time extension needs to be submitted with proper justification of delay in works.

C) Documents to be submitted with Final bill.

- 1) All documents listed in **section B**.
- 2) No claim certificate on your letter head with seal and signature (format will be given by MWCJ at the time of final bill submission).
- 3) Indemnity bond on Rs. 100/- non judicial stamp paper duly notarized of jaipur jurisdiction. (format will be given by MWCJ at the time of final bill submission).
- 4) Work completion certificate. (format will be given by MWCJ at the time of final bill submission).
- 5) As built drawings with all details in Autocad format duly signed by project incharge and contractor.
- 6) Material reconciliation of free issue material along with signed documents of material received and material handover to purchase deptt. Else recovery will be imposed.

Format for Invoicing

Name and	complete address of Vendor													
PAN No.														
GSTIM:														
To,														
Project O											Invoice Date			
	World City (Jaipur) Ltd.													
PO-Mahin	dra World City,										Work Order N	0.		
Tehsil-Sar	nganer, Jaipur, (Rajasthan)-30	2037												
	ijast han, State code: 08										Invoice No.			
	BAAECM4950C2ZM for SEZ (fo										RAB no.:			
CELLM : DE	BAAECM4950C1ZM for DTA (f	or billing in DTA)												
					TAX-	INVOICE								
.cM2	Description as per work	Description as per SAC Code	HSN/SAC	Unit	Quantity	Rate	Amount of		T290		TZDZ		1681	Total Amount
			Code		-		Work done	Rate	Amount	Rate	Amount	Rate	Amount	
														0
\perp														
													Total Value	-
												-		
											Total Amount Be	fore Tax		-
											ADD CGST			-
											ADD:SGST			-
											ADD: IGST			-
											Tax Amount : GS	T		-
			(Rupees	in Words -)							Total Amount Af	ter Tax		-
												Fork	d /c	
													-,-	
													Auth	norized Signatory
Note: If	Invoice is for work done in SEZ	, please mention below line at the bo	ttom of Invoice.											
		PPLY TO SEZUNIT OR SEZ DEVELOPE	R FOR AUTHORIS	SED OPERATIO	INS UNDER BON	DORLETTERO	FUNDERTAKING							
W	VITHOUT PAYMENT OF INTEGRA	ATED TAX"												

PART-II

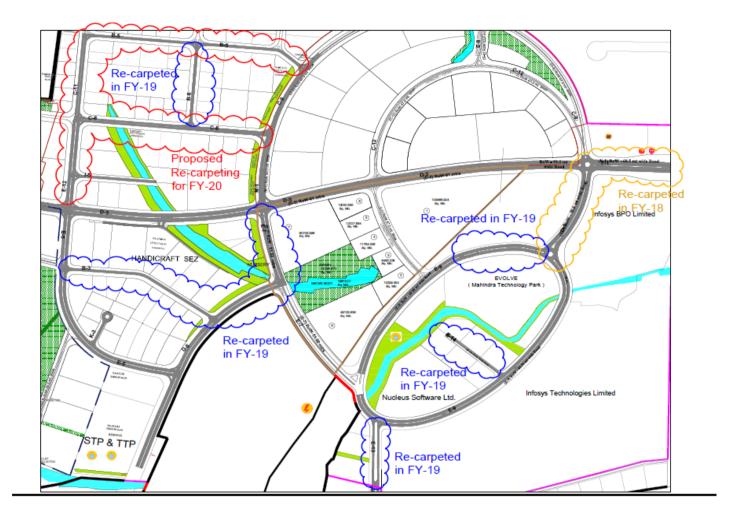
TECHNICAL SPECIFICATIONS

PREAMBLE

- 1 The Technical Specifications referred herein shall be read in conjunction with the other Bidding Documents
- The Technical Specification governing the works shall be "Specification For Road and Bridge Works (Fourth Revision) of Ministry of Shipping, Road Transport & Highways (MoRTH), Indian Road Congress Publications (IRC) and relevant Indian Standard (IS) codes.
- 3 Detail Specification Refer BSR, Government of Rajasthan.

PART-III

Tender Drawings



PART-IV Bill of Quantities

S.N.	Description of Work	Unit	Quantity	Rate	Amount					
	Providing and applying single tack coat of liquid bituminous material of RS									
	(Rapid setting emulsion) over the first layer of DBM surface which is									
	preparatory to lay another layer of DBM as a tack coat @ 0.2 kg / sqm. Area		42,073.79							
	and applying another layer of single tack coat over the finished layer of DBM									
1	surface which is preparatory to lay bituminous concrete as a tack coat @0.20	Sam								
	kg/sqm. Area, as per Table No.500-5 of MORT & H (Fifth Revision)									
	specifications. Including cost of bitumen and cleaning the surface by									
	mechanical means as per the direction of engineer-in-charge.									
	Providing and laying Bituminous concrete with 100-120 TPH batch type HMP		1,262.19							
	producing an average output of 75 tones per hour using crushed aggregates of									
	specified grading, premixed with VG-40 @ 5.5% (percentage by weight of									
	total mix) and lime filler @ 3% (percentage by weight of Aggregate) filler as									
2	per Job Mix Formula, transporting the hot mix to work site, laying with a	Cum								
2	hydrostatic paver finisher with sensor control to the required grade, level	Cuiii								
	and alignment, rolling with smooth wheeled, vibratory and tandem rollers to									
	achieve the desired compaction as per Clause No. 507 of MORTH									
	specification, complete in all respects as per the direction of engineer-in-									
	charge.									
	Providing and applying 2.5 mm thick road marking strips for center line and									
	stop line (retro reflective) of specified shade/ colour using hot thermoplastic									
	material by fully/ semi automatic thermoplastic paint applicator machine									
	fitted with profile shoe, glass beads dispenser, propane tank heater and									
3	profile shoe heater, driven by experienced operator on road surface		4,163.58							
5	including cost of material, labour, T&P, cleaning the road surface of all dirt,	Sqm.	4,163.58							
	seals, oil, grease and foreign material etc. complete as per drawings and									
	direction of Engineer-in-charge and accordance with applicable									
	specifications.									
	Providing and applying two coats with oil bound Waterproof paint (Make -									
	Asian/Berger/ICI) and shade on concrete surface including priming coat with		3,458.70							
	distemper primer after thoroughly brooming the surface free from mortar									
4	drops and other foreign matter including preparing the surface even and sand	Sqm.								
	paper smooth, cost of materials, labour etc. complete as per specifications,									
	drawings and direction of Engineering-charge For Kerb Stone									
	Providing and Fixing of Road Reflective Studs with fastener with test									
5	certificate of load capacity not less than 45 Tons. Size- 100X100X20mm as	Nos								
	approved by Engineer-in-Charge as per IRC Guidelines.		2,425.36							
6	Solar Studs as approved by Engineer-in-Charge as per IRC Guidelines.	Nos	2,104.00							
					Λ					
			ļļ	Total	0					
lote:										
	1. Rate should be inclusive of all taxes except GST, which shall be paid extra or	zero rateo	d in Multiprod	luct SEZ zor	ne against LU					
	Bond.									
	2. Time is essence of the contract, work to be completed with in given time line.									
	3. Contractor has taken LUT/Bond for working in SEZ.									
	3. Any Extra Items / Increase in Qty other then BOQ shall be pre-intimated before execution. Such Items shall be recorded in s									
	instruction book and same shall be paid as per approval by Engineer-Incharge based on proper rate analysis (in case of extra									
	items) by Contract dept.									