

AIRPORTS AUTHORITY OF INDIA
ELECTRICAL ENGINEERING WING
KATIHAR MSSR STATION

TENDER DOCUMENT

Name of Work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

Estimated Cost : ₹ 25,34,137/-(Excluding GST)

Time Allowed : 05 (Five) Months

Tender Processing Fee : Rs. 1180.00 (with GST)

Sale End Date/Bid Submission End Date: 12/08/2026

Bid Manager,

(Debdeep Dutta)
Dy. GM (E-E)
AAI, Bagdogra Airport

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Certified that this tender document contains Total – 247 (Two Hundred Forty Seven) pages excluding cover & Index page.

Sd/-

DGM (E-E)
Bagdogra Airport
Airports Authority of India.

NOTICE INVITING e-TENDER (2 BOT - 2 Envelope Open Tender)

Tender ID: 2026_AAI_284693_1

1. Item Rate e-tenders are invited through the e-tendering CPP Portal by Dy. General Manager(E-E) on behalf of Chairman, AAI from the eligible contractors for the work of **“Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).”** at an estimated cost of ₹ 25,34,137/- (excluding GST) with completion period of 05 (Five) Months for SITC part.

The tendering process is online at CPP-portal URL address <https://etenders.gov.in/eprocure/app> or www.aai.aero. Prospective Tenderers may download and go through the tender document.

Prospective Tenderers are advised to register themselves at CPP-portal, obtain 'Login ID' and 'Password' and go through the instructions available in the Home Page after log in to the CPP- portal <https://etenders.gov.in/eprocure/app> or www.aai.aero. They should also obtain Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. The process normally takes 03 days' time. The tenderer may also take guidance from AAI Help Desk Support through path [aai.aero/tender/e-tender/help desk support](http://aai.aero/tender/e-tender/helpdesk/support).

- (i) For any technical related queries please call the Helpdesk. The 24 x 7 Help Desk details are as below: Tel: 0120-4711508, 0120-4001002, 0120-4001005, 0120-6277787

E-mail: support-eproc@nic.in

International bidders are requested to prefix 91as country code.

Tenderers are requested to mention the URL of the Portal and Tender ID in the subject while emailing any issue along with the contact details.

Before submitting queries, bidders are requested to follow the instruction given in **“Guidelines to Bidders”** and get their computer system configured according to the recommended settings as specified in the portal at **“System Settings for CPPP”**.

- (ii) For any further technical assistance with regard to functioning of CPP portal the tenderer may contact to the following AAI help desk numbers on all working days only between

Sl. No.	Support Persons	Escalation Matrix	E-mail Address	Contract Numbers	Timings*
1	Technical Help Desk Team	Instant Support	eprochelp@aai.aero	011-24632950 Ext. 3512	0800-2000 Hrs. (MON – SAT)
2	JE (IT)	After 4 Hrs. of Issue	etendersupport@aai.aero or vaibhav_g@aai.aero	011-24632950 Ext. 3523	0930-1800 Hrs. (Mon – Fri)

3	Sr. Manager (IT)	After 12 Hrs.	shripatim@aai.aero	011-24632950 Ext. 3509	0930-1800 Hrs. (MON-FRI)
4	Jt. GM (IT)	After 24 Hrs.	Sunil.km@aai.aero	011-24632950 Ext. 3506	0930-1800 Hrs. (MON-FRI)
5	General Manager (IT)	After 03 Days.	gmit@aai.aero	011-24657900	0930-1800 Hrs. (MON-FRI)

*The help desk services shall remain closed on all Govt. Gazetted Holidays.

Tender processing fee of ₹. 1,180/- (i/c GST), non-refundable will be required to be paid online on CPP portal only.

Earnest Money Deposit (EMD) of ₹. 76,024/- will be required to be paid online on CPP portal only.

- Following 2 envelopes shall be submitted through online at CPP-portal by the tenderer as per the following schedule: -

CRITICAL DATE SHEET

Publishing Date	21/07/2026 from 10:00 Hrs.
Bid Document Download / Sale Start Date	21/07/2026 from 10:30 Hrs.
Clarification Start Date	21/07/2026 from 10:30 Hrs.
Clarification End Date	27/07/2026 up-to 11:00 Hrs.
Bid Submission Start Date	21/07/2026 from 10:30 Hrs.
Bid Submission End Date	12/08/2026 from 10:00 Hrs.
Bid Opening Date (Envelope- I)	13/08/2026 from 11:00 Hrs.
Bid Opening Date (Envelope- II)	27/08/2026 from 15:00 Hrs.

Note: If the bidder has any query related to the Bid Document of the work, they should use 'Seek Clarification' on CPP portal to seek clarifications. No other means of communication in this regard shall be entertained.

Envelope-I (Technical Bid and Pre-qualification): - Bid containing following:

A. Technical Bid containing the following: -

- Scanned copy of Tender Acceptance Letter on Bidder's Letter Head (**Form - F**).

- ii) Scanned copy of Permanent Account Number (PAN) and GST Registration Number.
- iii) Scanned copy of 'Undertaking' regarding Blacklisting/ Debarment" on Bidder's Letter Head. **(Form - G)**
- iv) Scanned copy of details of similar works completed during last seven years supported with completion certificate issued by client. **(Form - A)**
- v) Scanned copy of Financial Information. **(Form - B)**
- vi) Scanned copy of Net Worth. **(Form - C)**
- vii) Scanned copy of Undertaking for Imparting Training by OEM as per **(Form - H)**
- Viii) Scanned copy of Duly filled proforma of Technical Parameters of Elevators as per **(Form - I).**
- ix) Bidder shall submit scanned copy of Undertaking' on Company's Letter Head that ***"I/ We will deploy sufficient plant and machinery as per the requirement of work in consultation with the Engineer-in-Charge (E-I-C) to achieve the milestones/targets and overall completion within the time period."***
- x) Bidders other than propriety firm shall submit, scanned copy of Authorization Letter/Power of Attorney along with copy of Certificate of Incorporation of the Company under Companies Act showing CIN/LLPIN/Name of Directors of the Company & Copy of Board Resolution regarding Authority to assign Power of Attorney. Proprietary firm shall submit scanned copy of Authorization Letter/Power of Attorney only if the tender is processed by a person other than proprietor.
- xi) PQ Performa duly filled.
- xii) Digitally signed Tender document

B. Qualifying requirements of contractors / tenderers containing the following:

- i) Should have successfully completed or substantially completed three works, each of ₹ 10,13,655/- or two works, each of ₹ 12,67,069/- or one work of ₹ 20,27,310/- in single contract of similar nature i.e. **"Works involved with SITC of Passenger Elevators"** during last 07 (seven) years ending last day of month previous to the one in which tenders are invited.

The details of similar works completed during last seven years in the given format. Form-A with supporting documents issued by client.

Note:

1. *The Experience Certificates of works completed pre GST era, Completion amount will be divided by 1.12 (to exclude pre GST taxes) to make it at par with experience certificates of post GST era but excluding GST.*
2. ~~*The Tenders invited for Annual Rate Contracts for O&M/ AMC/ CMC works, agency having experience of completed AMC contract of more than one year shall be counted for the value of work for a completed one year on pro rata basis. However, the agency who has completed one year of work in running AMC contract of more than one year, may be counted for the value of work for a completed one year on pro rata basis.*~~
3. *Experience gained by executing work on back-to-back contract/ Sub-contract basis is acceptable in the following conditions:*
 - (a) *Work should be actually executed by the second agency (sub-contractor) with due concurrence of the owner as tripartite agreement/ written approval. It should be backed by valid agreement and experience certificate.*
 - (b) *Payments received by second agency should be reflected in TDS certificates.*
4. *Experience gained in composite works for the specialized nature of works were executed by main contractor either by in-house expertise & experience or by engaging the specialized agencies with the approval of main client as per contract conditions. In such cases, main contractor as well as specialized agency both get the experience certificate for the same work from their respective client(s) i.e. main contractor for composite work along with specialized works from owner and specialized agency for specialized work(s) from the main contractor. In this situation, the experience certificate of either specialized agency or main agency having in-house expertise & experience, who has actually executed the specialized work(s), shall be considered for Technical /Pre-qualifying criteria in similar specialized nature of work(s).*

5. Substantial completion shall be based on 80(eighty) percent of awarded cost or more value wise works completed under the contract. Substantial completion should not be defined in terms of percentage completion and it should be based on functional consideration. Certificate (Issued by Client) for 'substantial completion' of project / work / asset should contain two parts.

- a. Part -I shall contain 'financial value of work done'
- b. Part-II shall contain 'certificate of functional completion of project / work / asset'.

“The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to date of bid opening (Cover-I/ Technical bid).

- i) Client certificate for experience should show the nature of work done, the value of work, date of start, date of completion as per agreement, actual date of completion and satisfactory completion of work. **Tenderers showing work experience certificate from non-government/non-PSU organizations should submit copy of tax deduction at sources (TDS) certificate(s) along with a certificate issued by registered Chartered Accountant, clearly specifying the name of work, total payment received against the work and TDS amount for the work.**
- ii) The bidder to be either original equipment manufacturer (OEM) of Elevator from preferred makes as per list of preferred makes (Page No. 233- 246) or their authorized representative. In case OEM, proof of being OEM shall be submitted. In case of authorized representative, letter from Elevator OEM authorizing the bidder to be submitted.
- iii) Should have Average Annual Financial Turnover of Rs. 8,97,084/- on construction works during last three years ending 31st march of the previous financial year. The financial information shall be submitted in the given format (**Form – B**). Tenderers showing continuous losses during the last three years in the balance sheet shall be summarily rejected.
- iv) The tenderer should have minimum net worth of Rs. 3,80,121/- issued by certified Chartered Accountants. The certificate should be submitted in the given format (**Form – C**).

~~*For start-ups bidders and Sub-contractors, for repair works estimated cost of upto RS.30 lakhs, the requirements regarding General Construction Experience, particular Construction Experience and Available Bid Capacity may not be insisted upon provided the bidders fulfill other criteria regarding Financial/Personnel/Equipment capabilities. However, to avoid overstretching of their resources, no such contractors may be allowed to hold more than 2(Two) contracts under relaxed credentials, at any given time.~~

Envelope-II: - The Financial e-Bid through CPP portal.

All rates shall be quoted in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the tenderers. Tenderers are required to download the BOQ file, open it and complete the blue coloured (unprotected) cells with their respective financial quotes and other details (such as name of the tenderer). No other cells should be changed. Once the details have been completed, the tenderer should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the tenderer, the bid will be rejected.

3. Refund of EMD:

EMD deposited by all the bidders except the confirmed lowest bidder shall be returned within one week from the date of opening of the financial bid. EMD of the successful bidder shall be returned on receipt of Security Deposit equivalent to EMD amount/ performance bank guarantee.

4. Bid Submission:

The tenderer shall submit their application only at CPP Portal: <https://etenders.gov.in/eprocure/app>. Tenderer/Contractor are advised to follow the instructions provided in the tender document for online submission of bids. Tenderers are required to upload the digitally signed file of scanned documents as per Para 2. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

Uploading of application in location other than specified above shall not be considered. **Hard copy of application shall not be entertained.**

5. Not more than one tender shall be submitted by one tenderer or tenderers having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.

6. Tenderer who has downloaded the tender from Central Public Procurement Portal (CPPP) website <http://etenders.gov.in/eprocure/app>, shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with AAI.

7. Bids Opening Process is as below:

Envelope-I (Technical bid and Pre-qualification):

Envelope-I containing documents as per Para 2 (A) and (B) (uploaded by the tenderers) shall be opened on date & time mentioned in CRITICAL DATA SHEET.

If any clarification is needed from the tenderer about the deficiency in his uploaded documents in Envelope – I, he will be asked to provide it through CPP portal, if required. The tenderer shall upload the requisite clarification/documents within time specified by AAI, failing which it shall be presumed that bidder does not have anything to submit and bid shall be evaluated accordingly.

The intimation regarding acceptance/rejection of their bids will be intimated to the tenderers through CPP portal.

Envelope-II (Financial Bid):

Envelope-II containing financial bid of the tenderers found to be meeting the technical criteria and qualifying requirements shall be opened on date & time mentioned in CRITICAL DATA SHEET. **(In case the date and time for opening of Envelope-II (Financial bid) is required to be changed, the same shall be intimated through CPP Portal).**

8. AAI reserves the right to accept or reject any or all applications without assigning any reasons. AAI also reserves the right to call off tender process at any stage without assigning any reason.
9. AAI reserves the right to disallow the working agencies whose performance at ongoing project (s) is below par and usually poor and has been issued letter of restrain/Temporary or Permanent debarment/black listing by any department of AAI. **AAI reserves the right to verify the credential submitted by the tenderer at any stage (before or after the award the work). If at any stage, any information /documents submitted by the applicant is found to be incorrect/false or have some discrepancy which disqualifies the tenderer then AAI shall take the following action:**

- a) **Forfeit the entire amount of EMD submitted by the tenderer.**

- b) **The tenderer shall be liable for debarment for a period up-to two years from tendering in AAI, including termination of the contract apart from any other appropriate contractual/legal action.**
10. Consortium/JV companies shall not be permitted.
11. Purchase preference to Central Public Sector Undertaking shall be applicable as per the directive of Govt. of India prevalent on the date of acceptance.
12. Concessions to Indian Micro & Small Enterprises (MSEs) units registered with DIC/NSIC/KVIC/KVIB/Directorate of Handicraft and Handloom etc., to be given as per the provisions of Public Procurement Policy for MSEs order 2012 with up to date amendments, shall be applicable for tenders of supply/services and shall not be extended to construction work. **Since, this work is construction type of work, hence benefits to MSME/MSE shall not be applicable for this work.**
13. Tenderers have to submit Unique Document Identification Number (UDIN) generated documents like Financial information (Turnover with loss/ profit), Net worth Certificate etc. as per NIT conditions duly certified by CA and having UDIN. The documents submitted by bidders without UDIN shall not be entertained.
14. Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India, issued Public Procurement (Preference to Make in India), Order 2017 vide OM No. P-45021/2/2017-PP(BE-II) dated 16.09.2020 is applicable.
15. Requirement of registration by the Bidder from a country sharing land border with India based on order No. F No. 6/18/2019-PPD dated 23/07/2020 of Government of India, Ministry of Finance, Department of Expenditure (Public procurement Division) with up to date amendments, regarding restriction under Rule 144(xi) of the General Financial Rules (GFR) 2017 shall be applicable. Bidder shall submit scanned copy of 'Undertaking' on Company's letter head in this regard. (*Annexure- LBS*)

SD/-
(Debdeep Dutta)
Dy. General Manager Engg (E),
AAI, Bagdogra Airport

Encl.: Annexure-A: CHECK LIST (PQ Proforma)

Annexure-A CHECK LIST (PQ Proforma)

(TO BE UPLOADED BY THE BIDDER ALONG WITH TENDER APPLICATION)

Name of Work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

S. No.	Particulars (of Bidder)	ATTACHMENTS/ ENCLOSURES CHECK LIST (To be uploaded /enclosed)	
1.	Name & registered office Address of the Applicant.		
2.	Name, address, telephone, Fax No., e mail address of the authorized contact person of the agency for further communication.	Name:	
		Address:	
		Ph. No.:	
		Mobile No.:	
		E-Mail ID:	
3.	ENVELOPE-I: It shall contain the scanned copy of		
a)	EMD and Tender fee.	EMD- ₹ 76,024/- to be submitted online through payment gateway on CPP portal. TENDER Processing FEE- ₹ 1180/-to be submitted online through payment gateway on CPP portal.	EMD paid online. ☐ YES/ ☐ NO. Tender processing fee paid online. ☐ YES/ ☐ NO.
b)	Unconditional Acceptance Letter (Form – F)	Format given at Form-F of Tender document as per e-NIT	Scanned copy of duly signed & stamped Letter uploaded ☐ YES/ ☐ NO.
c)	Details of PAN card, GST registration Certificate	Enclose documentary proof in support of PAN and GST.	Self-attested scanned copy of PAN Card& GST certificate uploaded. ☐ YES/ ☐ NO.
d)	Scanned copy of ‘Undertaking’ regarding Blacklisting/Debarment on Company’s Letter-Head (Form – G)	Form-G of Tender document as per e-NIT.	Scanned copy of duly signed Undertaking uploaded. ☐ YES/ ☐ NO.
e)	Companies/proprietary firms to upload Authorization letter/ POA and other documents required as per NIT.	Bidders other than propriety firm shall submit, scanned copy of Authorization Letter/Power of Attorney along with copy of Certificate of Incorporation of the Company under Companies Act showing CIN/LLPIN/Name of Directors of the Company & Copy of Board Resolution regarding Authority to assign Power of Attorney. Propriety firm shall submit scanned copy of Authorization Letter/Power of Attorney only	Self-attested scanned copy uploaded. ☐ YES/ ☐ NO.
f)	Undertaking Regarding Deployment of Sufficient Men and Materials (I/C Plant and Machinery)	Tenderer should submit Undertaking as per e-NIT.	Scanned copy of Undertaking uploaded. ☐ YES/ ☐ NO.

g)	Scanned copy of undertaking For Imparting Training By OEM (Form – H)	Form-H of Tender document as per e-NIT.	Scanned copy of Undertaking uploaded. ☐ YES/ ☐ NO.
h)	Scanned copy of Duly filled proforma of Technical Parameters of Elevators (Form – I)	Form-I of Tender document as per e-NIT.	Scanned copy signed uploaded. ☐ YES/ ☐ NO.
i)	The bidder to be either original equipment manufacturer (OEM) of Elevator from preferred makes as per list of preferred makes (Page No. 233- 246) or their authorized representative In case OEM, proof of being OEM shall be submitted. In case of authorized representative, letter from Elevator OEM authorizing the bidder to be submitted.	Tenderer should submit proof/authorisation letter as per e-NIT.	Scanned copy of proof/authorisation letter uploaded. ☐ YES/ ☐ NO.
j)	PQ proforma Duly filled	Tenderer should submit scanned copy of PQ proforma Duly filled as in Page- 7 ENIT of tender document.	Scanned copy of PQ proforma Duly filled uploaded. ☐ YES/ ☐ NO.
k)	Work Experience Certificates from clients of having satisfactorily completed works of similar nature. (Form – A)	Details of similar nature works completed during last seven year showing the nature of work done, the value of work, date of start date of as per agreement, actual date of completion and satisfactory completion of works as per the e-NIT (Form-A). Completion Certificates should have the following details:	Self-attested scanned copy of Completion Certificates with PO and BOQ /Documents in support of e-NIT uploaded ☐ YES/ ☐ NO.
	(i) Three separate works each costing not less than Rs. 10,13,655/-	Name of client: -	
		Name of work: -	
		Completion Value: -	
		Date of Start: -	
		Date of completion as per agreement: -	
		Actual Date of completion of work: -	
	(ii) Two separate works each costing not less than Rs. 12,67,069/-	Name of client: -	
		Name of work: -	
		Completion Value: -	
		Date of Start: -	

		Date of completion as per agreement: -	
		Actual Date of completion of work: -	
	(iii) One work costing not less than Rs. 20,27,310/-	Name of client: -	
		Name of work: -	
		Completion Value: -	
		Date of Start: -	
		Date of completion as per agreement: -	
		Actual Date of completion of work: -	
l)	Whether experience from private clients?	Non-Government/ Non-PSU organizations as per e-NIT	Self-attested scanned copy of TDS certificates of stipulated value of works from clients, enclosed. (certified by CA having UDIN No): ☐ YES/ ☐ NO.
m)	Financial details for last 03 Years. (Form – B)	Form-B of Tender document as per e-NIT.	Self-attested scanned copy of Annual Report i.e. Abridged Balance Sheet and Profit & Loss A/c Statement Uploaded. (certified by CA having UDIN No): ☐ YES/ ☐ NO.
n)	Net worth certificate issued by CA. (Form – C)	Form-C of Tender document as per e-NIT.	Net worth certificates Uploaded (certified by CA having UDIN No): ☐ YES/ ☐ NO.
o)	Digitally signed Tender document.	As per e-NIT	Digitally Signed Scanned copy uploaded ☐ YES/ ☐ NO.
4	ENVELOPE-II (PRICE BID FOLDER): It shall contain.		
a)	Price/Financial e- Bid	To be quoted online through CPP portal www.etender.gov.in	Uploaded ☐ YES/ ☐ NO.

DECLARATION

I, (_____) hereby declare that the documents submitted/enclosed are true and correct. In case any document at any stage found fake/incorrect, my EMD may be forfeited and action for debarment from tendering in AAI, apart from any other appropriate contractual/legal action be taken.

**Signature with stamp
Authorized Signatory of the Agency**

**Place:
Date**

Instructions for Online Bid Submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

<https://etenders.gov.in/eprocure/app> .

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrollment**” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such

standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: *My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.*

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "online" to pay the tender fee / EMD as applicable as per the instructions specified in this tender document.
- 4) Bidder should submit the EMD as per the instructions specified in the tender document.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the blue colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Procedure for Online Collection of EMD and Tender Fee from Bidders

1. Bidder will login to the portal <https://etenders.gov.in/> with valid User ID (i.e. User ID mapped with Digital Signature Certificate) and follow the process of participation to the tender.
2. After Login search the tender in “Search Active Tender” tab with different criteria after that click on “set as favorite” to move on “My Tender”. Then click on “My tender” and view the tender details and click on proceed for Bid Submission.
3. For submission of online Tender Fee and EMD, click on Button as “Pay Online”
4. **In case of Tender Fee:** If the Bidder is exempted from the tender fee payment, then select the option to “Yes” other wise “NO” as per below screenshot:

5. **In case of EMD:** If Bidder is paying EMD through any of below options, Select the option “Yes” (as per below screenshot) and provide the details and upload copy as a proof.
 - Bank Guarantee (BG)/Swift Transfer (ST)
 - Exempted from EMD Payment,

Note: For submitting “EMD through BG/ST” or “Exemption from EMD payment” bidder must select “Yes” otherwise bidders will not have the option to pay EMD through Bank Guarantee. Once proceeded it is not possible to revert the option.

6. Select option “NO” (as per below screenshot) for proceeding for Online EMD payment.

After selecting the option, click on “Next” Button as per above screenshot. Further process to be followed as per subsequent screen.

National Informatics Centre	Payment Gateway	
<u>STEPS FOR MAKING TENDER PAYMENTS IN ETENDERS SYSTEM VIA SBI BANK GATEWAY</u> <i>(SBI AND NON SBI ACCOUNT HOLDERS)</i> Home Page. Login as a bidder into etenders.gov.in to proceed for payment.		
		
NIC-GePNIC	Version 1.09.06	Page 1

National Informatics Centre	Payment Gateway
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Step 1) Click “Pay Online” when you reach below page while Online Bid Submission.

BID MANAGEMENT

- User Management
 - My Accounts
 - My Documents
- Auction Management
 - My Auctions
 - Live Auctions
 - View Auction History
- Bid Management**
 - Search Active Tenders
 - My Tenders
 - Clarification
 - My Active Bids
 - Bid Opening (Live)
 - Short fall Documents
 - Online Payment Status
 - My Bids History
 - Short Fall Documents History
 - Archived Clarification
 - Tender Status
 - My Withdrawn Bids

My Tenders » 2018_LSGD_204397_1 » Transaction Message

Organization Chain : NIC|NIC Contracts
Tender Reference Number : PW3/23401/18
Tender ID : 2018_LSGD_204397_1
Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Bid Process List

S.No	Bid Process	Action
1	Profile	

Bid Payment Details

S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee
1	Tender Fee	2500.00 (INR)	0.00	2500.00 (INR)	0.00
2	Emd Fee	37500.00 (INR)	0.00	37500.00 (INR)	0.00

Pay Online
Encrypt&Upload

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NIC-GePNIC	Version 1.09.06	Page 2
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National Informatics Centre	Payment Gateway
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Step 2) Click “Confirm to Pay” to proceed with the payment gateway, as below.

Note: Please ensure that you have availed Tender Fee / EMD Exemption, if eligible. Further, there would not be any provision to change back, under any circumstances.

User Management
My Accounts
My Documents
Auction Management
My Auctions
Live Auctions
View Auction History
Bid Management
Search Active Tenders
My Tenders
Clarification
My Active Bids
Bid Opening (Live)
Short fail Documents
Online Payment Status
My Bids History
Short Fail Documents History
Archived Clarification
Tender Status
My Withdrawn Bids

BID MANAGEMENT
Offline/OnLine Payment Confirmation

Organization Chain : NIC|NIC Contracts
Tender Reference Number : PW3/23401/18
Tender ID : 2018_LSGD_204397_1
Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Bid Payment Details				
S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid
1	Tender Fee	2128.00 (INR)	0.00	2128.00 (INR)
2	Emd Fee	23100.00 (INR)	0.00	23100.00 (INR)

Portal Alert :

- Beyond this stage, you will not be able to edit Fee or Exemption details.
- Please confirm that the exemption and amount to be paid are correct.

I hereby confirm that the above payment details are correct.

Back
Confirm to Pay

Version:1.09.06 04-Feb-2018
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NIC-GePNIC

Version 1.09.06

Page 3

National Informatics Centre	Payment Gateway
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Step3) Verify that the Tender fee and EMD shown are correct, as per tender document. Then, select the payment option **SBI MOPS** and Submit, as below.

***Note:** In case of any mismatch in tender payments, with reference to tender documents, please contact TIA for clarifications.*

BID MANAGEMENT

User Management

+ My Accounts

+ My Documents

Auction Management

+ My Auctions

+ Live Auctions

+ View Auction History

Bid Management

+ Search Active Tenders

+ My Tenders

+ Clarification

+ My Active Bids

+ Bid Opening (Live)

+ Short fall Documents

+ Online Payment Status

+ My Bids History

+ Short Fall Documents History

+ Archived Clarification

+ Tender Status

+ My Withdrawn Bids

OnLine Payment Gateway

Organization Chain : NIC|NIC Contracts

Tender Reference Number : PW3/23401/18

Tender ID : 2018_LSGD_204397_1

Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Fee Type	Actual Fee	Exempted Fee	Fee To be Paid
Tender Fee	2,500	0	2,500
Emd Fee	37,500	0	37,500
Total Fee			40,000

Choose Payment Option

☒ SBI MOPS

Back
Submit

Version:1.09.06 04-Feb-2018
(c) 2008 Tenders NIC, All rights reserved.

National Informatics Centre	Payment Gateway
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Step 4) Check and Follow the Terms and Conditions, and then Submit, as below.

User Management
[My Accounts](#)
[My Documents](#)
Auction Management
[My Auctions](#)
[Live Auctions](#)
[View Auction History](#)
Bid Management
[Search Active Tenders](#)
[My Tenders](#)
[Clarification](#)
[My Active Bids](#)
[Bid Opening \(Live\)](#)
[Short fall Documents](#)
[Online Payment Status](#)
[My Bids History](#)
[Short Fall Documents History](#)
[Archived Clarification](#)
[Tender Status](#)
[My Withdrawn Bids](#)

BID MANAGEMENT
● **OnLine Payment Gateway**

Payment Verification

Organization Chain : NIC|NIC Contracts
Tender Reference Number : PW3/23401/18
Tender ID : 2018_LSGD_204397_1
Tender Title : PW3/23401/18 PRO.NO.604/18-19 DIVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Pay Model : SBI MOPS

✓ **Terms And Conditions.**

- You are being redirected to the SBI MOPS site.
- You have to complete the transaction with in the session time which is approximately 15 minutes.
- Money once transferred towards tender fee shall not be refunded at any point of time. This is applicable even in case you have not completed the tender process.
- Once payment is successfully completed, you will be automatically redirected back to e-Procurement site.
- It is the responsibility of the Individual to ensure that the payment is successfully completed and eProcurement system is not responsible for any malfunctions in the Bank payment gateway.
- please take print screen for bank acknowledgement page.

Back
Submit

Version:1.09.06 04-Feb-2018
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Step 5) Bidders may choose the type of transaction and proceed for payment.

STATE BANK MULTI OPTION PAYMENT SYSTEM
Please Select Appropriate Card Type To Avoid Failures (C-Credit Card Options/D For Debit Card)

Net Banking

SBI
Bank Charges: 11.8
Click Here

Other Banks
Bank Charges: 132.5
Click Here

Card Payments

Other Payments Modes

NEFT
NEFT RTGS
Bank Charges: 132.8
Click Here

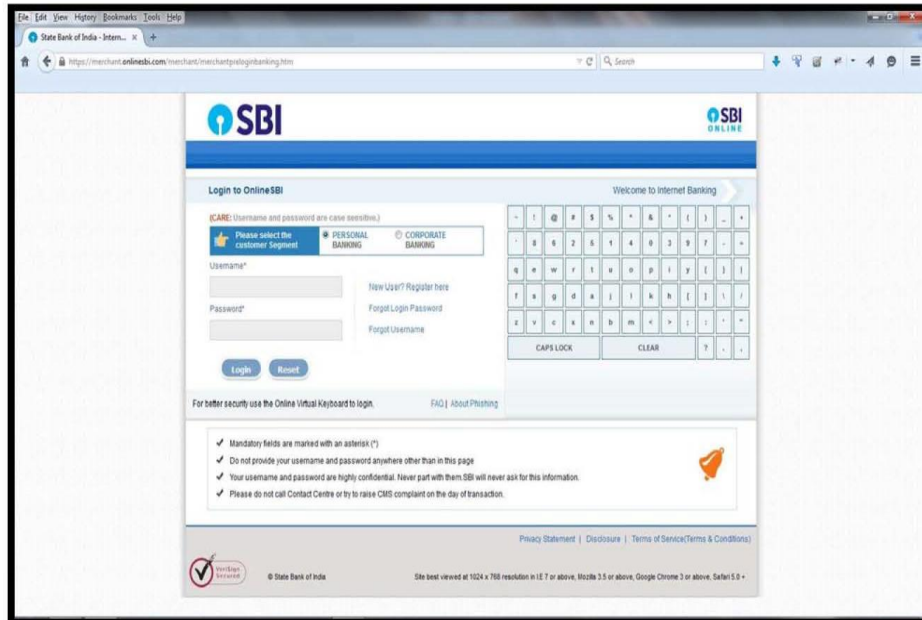
© State Bank of India
Site best viewed in I.E. 10 + Mozilla 30 + Google Chrome 30 +

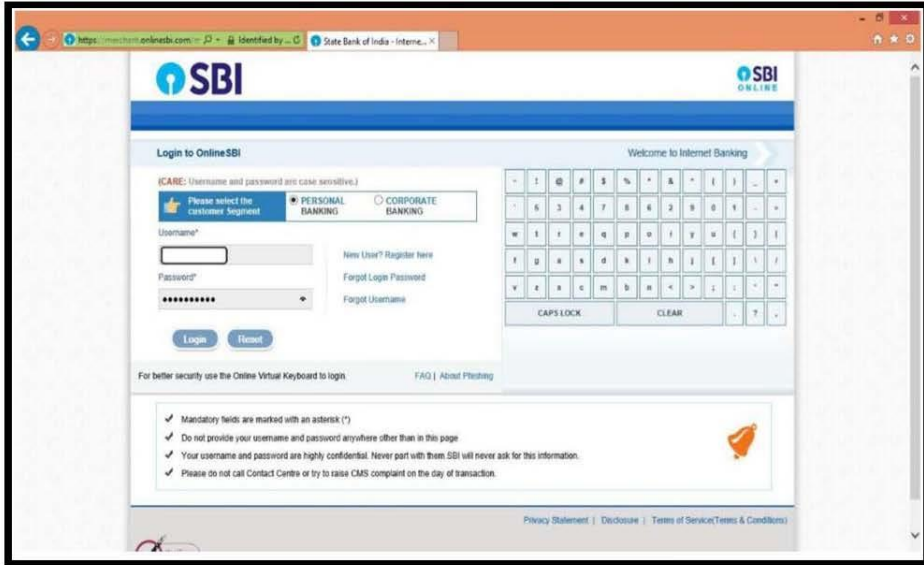
NIC-GePNIC	Version 1.09.06	Page 5
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Step 6) Once the Payment type is selected it navigates to the respective landing page.

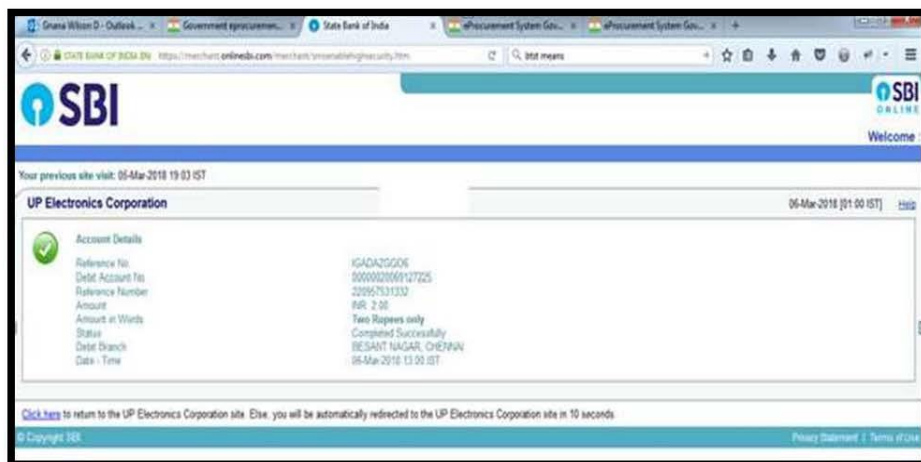
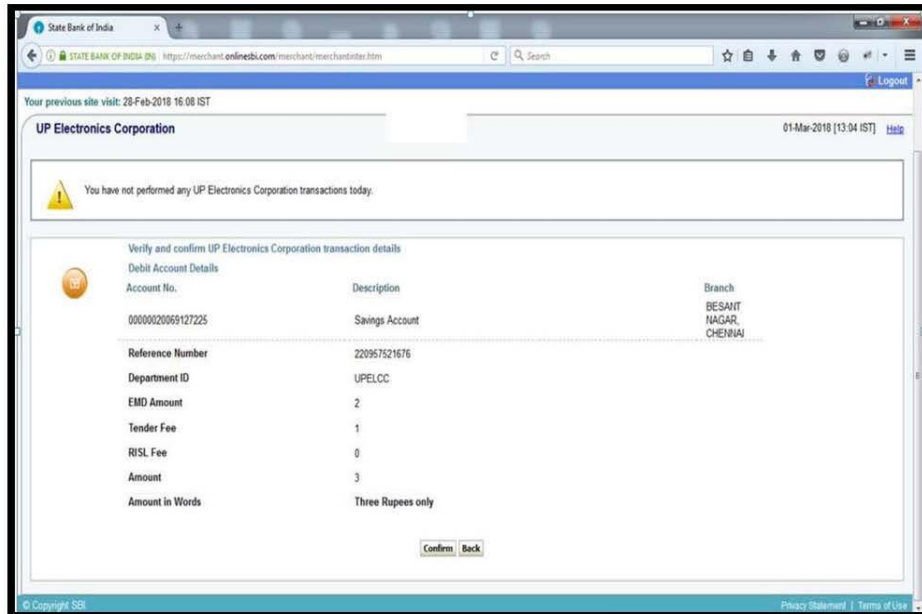
a) SBI

i. Bidders with SBI account may click **SBI** option to proceed to its Net Banking Page



National Informatics Centre	Payment Gateway
ii. Bidders may enter SBI Net banking user ID and Password and Click on Login to proceed. 	
NIC-GePNIC	Version 1.09.06
Page 7	

iii. Please ensure that your account has sufficient balance, before proceeding further. After checking the same, Click **Confirm** button as below, to transfer payment. After account debit, MOPS gateway will automatically re-direct to the eProcurement System, with the Success transaction.



National Informatics Centre	Payment Gateway
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iv. As in below, you will receive bank response immediately by verifying the payment status, whether **Success** or not. In case, payment was debited from account and further, **Payment Failure** is shown, immediately contact the eProcurement helpdesk, for resolution, before tender closing time.

Click **Next** to go to Bid Preparation details, as in screenshot.

User Management

- My Accounts
- My Documents

Auction Management

- My Auctions
- Live Auctions
- View Auction History

Bid Management

- Search Active Tenders
- My Tenders
- Clarification
- My Active Bids
- Short fall Documents
- Online Payment Status
- My Bids History
- Short Fall Documents History
- Archived Clarification
- Tender Status
- My Withdrawn Bids

BID MANAGEMENT

Bank Response On Payment Details

✔ Your Online transaction has been completed successfully.

Organization Chain : NIC|NIC Contracts

Tender Reference Number : PW3/23401/18

Tender ID : 2018_LSGD_204397_1

Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Bank Response On Payment Details

eProcurement Ref. Number : **220957531332**

PRN Number : **220957531332**

Bank / UTR Number : **IGADAZGG06**

Bank Name : **SBI Bank**

Status : **Success**

Status Description : **Completed successfully.**

Tender Fee in ₹ : 1

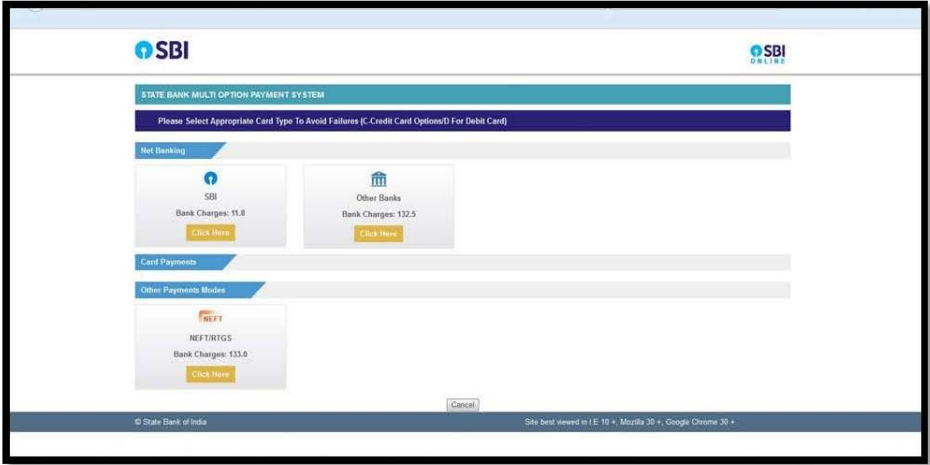
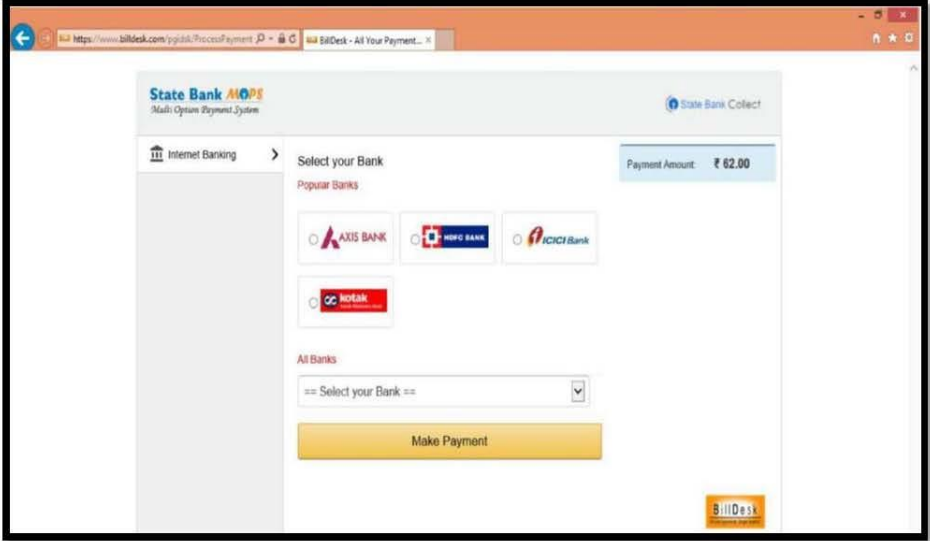
EMD Fee in ₹ : 1

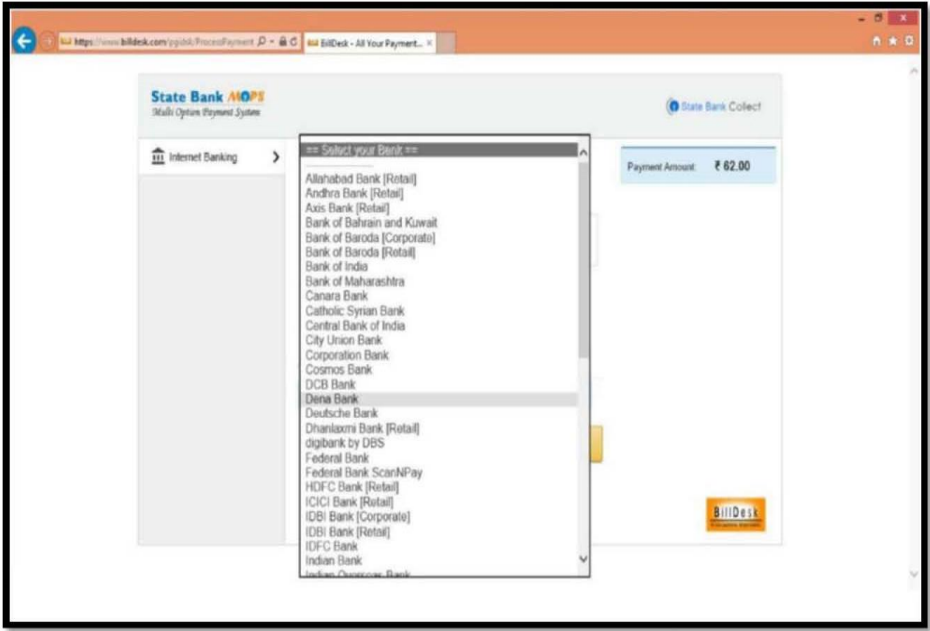
Total Fee in ₹ : 2

[Next](#)

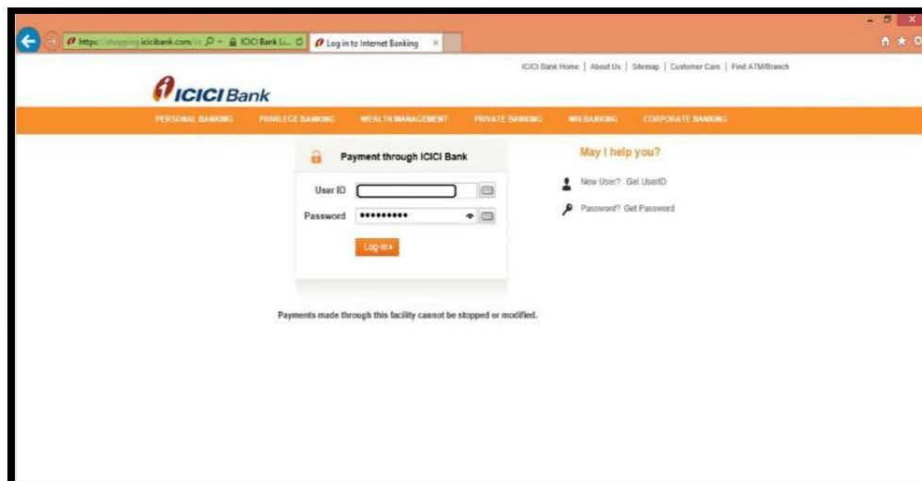
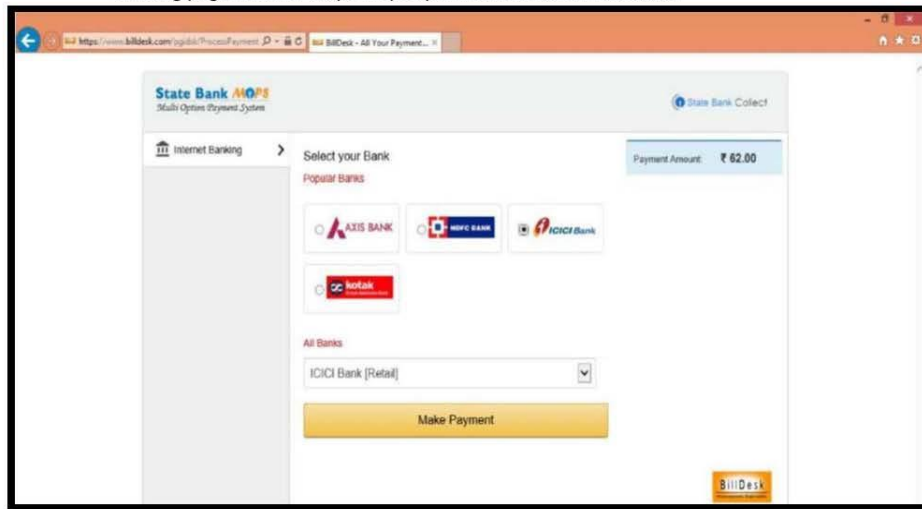
NIC-GePNIC	Version 1.09.06	Page 9
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National Informatics Centre	Payment Gateway																																										
v. Please ensure that the Pay Online option is not shown after successful payment, as below, for confirmation. From here, you may proceed with Encrypt and Upload to upload tender documents, and further submission process.																																											
BID MANAGEMENT My Tenders + 2018_KSITHM_203916_2 + Transaction Message Organization Chain : NIC NIC Contracts Tender Reference Number : PW3/23401/18 Tender ID : 2018_LSGD_204397_1 Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="6">Bid Process List</th> </tr> <tr> <th>S.No</th> <th>Bid Process</th> <th colspan="4">Action</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Profile</td> <td colspan="4"> </td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="6">Bid Payment Details</th> </tr> <tr> <th>S.No</th> <th>Fee Type</th> <th>Actual Fee</th> <th>Exempted Fee</th> <th>Fee To Be Paid</th> <th>Paid Fee</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Tender Fee</td> <td>1.00 (INR)</td> <td>0.00</td> <td>0.00</td> <td>1.00 (INR)</td> </tr> <tr> <td>2</td> <td>Bid Fee</td> <td>2.00 (INR)</td> <td>0.00</td> <td>0.00</td> <td>2.00 (INR)</td> </tr> </tbody> </table> Encrypt&Upload		Bid Process List						S.No	Bid Process	Action				1	Profile					Bid Payment Details						S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee	1	Tender Fee	1.00 (INR)	0.00	0.00	1.00 (INR)	2	Bid Fee	2.00 (INR)	0.00	0.00	2.00 (INR)
Bid Process List																																											
S.No	Bid Process	Action																																									
1	Profile																																										
Bid Payment Details																																											
S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee																																						
1	Tender Fee	1.00 (INR)	0.00	0.00	1.00 (INR)																																						
2	Bid Fee	2.00 (INR)	0.00	0.00	2.00 (INR)																																						
NIC-GePNIC	Version 1.09.06	Page 10																																									

National Informatics Centre	Payment Gateway
b) OTHER BANKS : i. Bidders with other bank account may click Other Banks option to proceed to SBI Net Banking Page	
	
You may select the appropriate Bank from selection page. As an example, we are proceeding with ICICI Bank in the provided dropdown box of All Banks.	
	
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National Informatics Centre	Payment Gateway
	
NIC-GePNIC	Version 1.09.06
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- ii. After selecting ICICI Retail Banking, Click **Make Payment** Button to proceed to its internet banking page. Further steps may depend on the Bank Procedure.



National Informatics Centre	Payment Gateway
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Make a Payment

You now have the option of paying from either your savings account or Pockets wallet.

Payment Details

Pay From:

Pay To: State Bank of India - INR Credit [BI]

Amount (INR): 52.00

Remarks:

[Click here to view terms & conditions.](#)

Notes:

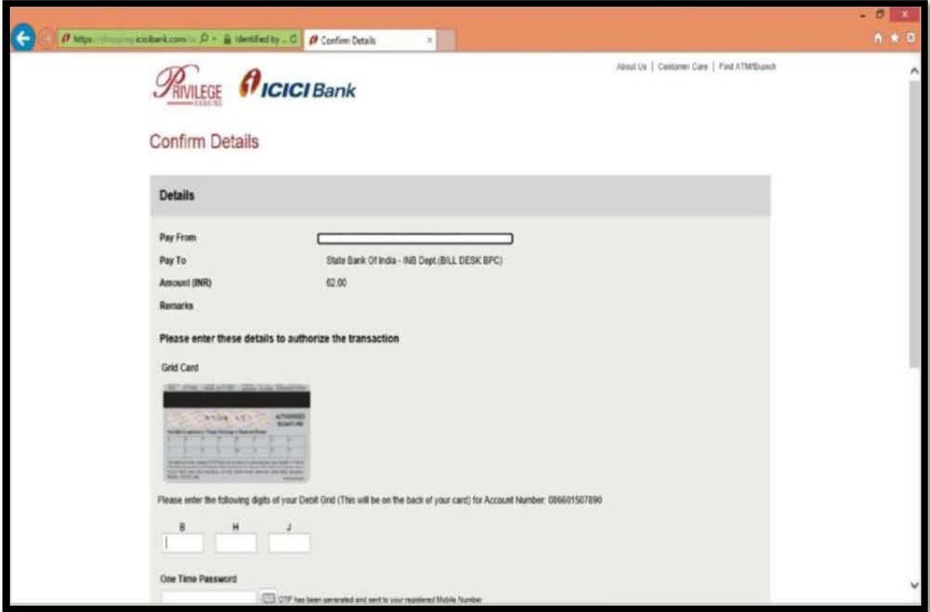
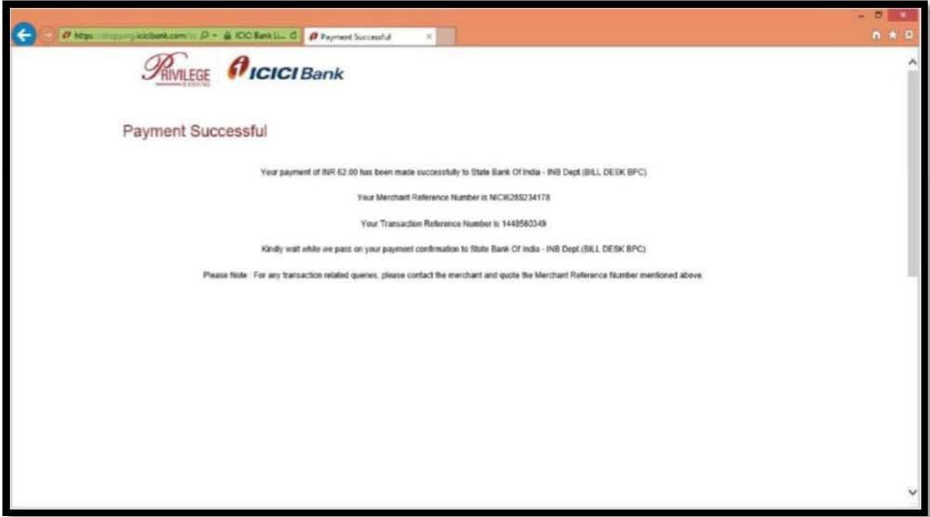
1. By clicking on the 'Pay' button, you are agreeing to the terms and conditions as given above.
2. After clicking the 'Pay' button, please wait for sometime until we pass on your payment details to the seller.
3. Please do not refresh or close the browser window.
4. Please check the status of the payment with the merchant after 7 days of transaction date. In case the merchant does not update the payment within 7 days, please contact our [24x7 Customer Care](#) for further assistance.

Customer Service
Customer Care Numbers

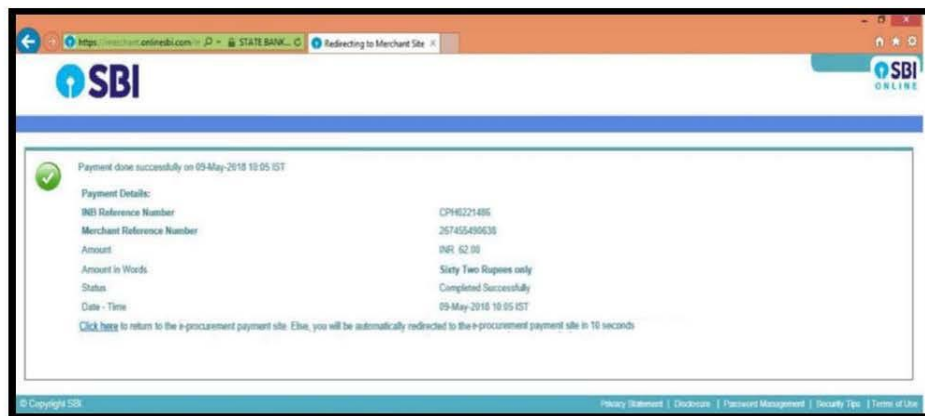
Useful Links
Get User ID | Sign Up Bank | Online Banking | Savings Account | PPF | Personal Finance Tools | Petrol Center | Credit Card Tracker | Mobile Banking | Credit

Visit Other ICICI Bank Sites
ICICI Group | ICICI Foundation | ICICI Lombard | General Insurance | ICICI Securities | ICICI Prudential Life Insurance | ICICI Prudential AMC | ICICI Ventures | ICICI Direct | ICICI Financial Consulting | ICICI Home Finance | ICICI The Bank of Transactions | Carros | Bahrain | Canada | Germany

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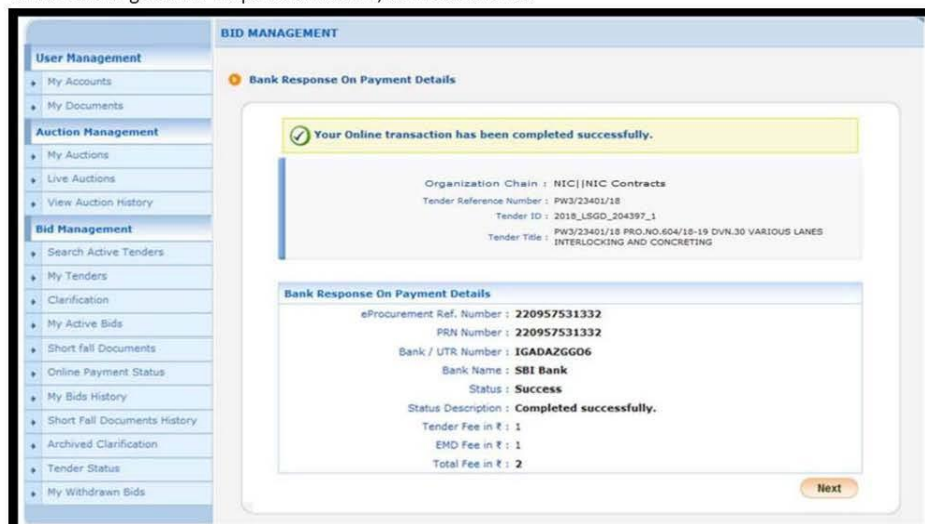
National Informatics Centre	Payment Gateway
 The screenshot shows the ICICI Bank 'Confirm Details' page. It displays transaction details: Pay From (empty), Pay To (State Bank Of India - INB Dept.(BILL DESK BPC)), Amount (INR) (62.00), and Remarks (empty). Below this, it prompts the user to enter details to authorize the transaction, including a Grid Card image and a request to enter the last three digits of the card (086801567896). There are input fields for these digits and a One Time Password field.	
 The screenshot shows the ICICI Bank 'Payment Successful' page. It confirms the payment of INR 62.00 to State Bank Of India - INB Dept.(BILL DESK BPC). It provides the Merchant Reference Number (NICR260234178) and the Transaction Reference Number (1443563349). It also includes a note to wait for a payment confirmation from the State Bank Of India and a disclaimer to contact the merchant for any queries.	
NIC-GePNIC	Version 1.09.06
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- iii. After, successful payment, system will direct you to payment confirmation page.



- iv. As in below, you will receive bank response immediately by verifying the payment status, whether Success or not. In case, payment was debited from account and further, **Payment Failure** is shown, immediately contact the eProcurement helpdesk, for resolution, before tender closing time.

Click **Next** to go to Bid Preparation details, as in screenshot.



v. Please ensure that the **Pay Online** option is not shown after successful payment, as below, for confirmation. From here, you may proceed with **Encrypt and Upload** to upload tender documents, and further submission process.

BID MANAGEMENT

My Tenders > 2018_KSETM_203916_2 > Transaction Message

Organization Chain : NIC|NIC Contracts
Tender Reference Number : PW3/23401/18
Tender ID : 2018_LSGD_204397_1
Tender Title : PW3/23401/18 PRO.NO.604/18-19 DVN.30 VARIOUS LANES INTERLOCKING AND CONCRETING

Bid Process List

S.No	Bid Process	Action
1	Profile	

Bid Payment Details

S.No	Fee Type	Actual Fee	Exempted Fee	Fee To Be Paid	Paid Fee
1	Tender Fee	1.00 (INR)	0.00	0.00	1.00 (INR)
2	Emd Fee	2.00 (INR)	0.00	0.00	2.00 (INR)

[Encrypt&Upload](#)

C) NEFT/RTGS

(i) Bidders may choose the type of transaction and proceed for payment.

SBI ONLINE

STATE BANK MULTI OPTION PAYMENT SYSTEM

Please Select Appropriate Card Type To Avoid Failures (C-Credit Card Options/D For Debit Card)

Net Banking

SBI
Bank Charges:
[Click Here](#)

Other Banks
Bank Charges: 59.0
[Click Here](#)

Card Payments

Other Payments Modes

NEFT
NEFT/RTGS
Bank Charges: 0.0
[Click Here](#)

[Cancel](#)

© State Bank of India. Site best viewed in I.E. 10 +, Mozilla 3.0 +, Google Chrome 3.0 +

(ii) Please click the check Box to proceed to the payment and click on the Confirm Button.

National Informatics Centre	Payment Gateway
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Disclaimer Clause

SBI does not have any control over third party websites and accepts no responsibility or liability for any of the material contained on those servers. You will be using such third party websites at your own risk and responsibility and SBI will not be responsible for any loss, damage, costs & charges, direct or indirect incurred by you, arising out of or in connection with your access to the external website or for any deficiency in the products and services of the third party or for the failure or disruption of the website of the third party.

SBI is not in any way liable for the contents of any linked websites or webpages. By integrating with an external website or web page, SBI shall not be deemed to endorse, recommend, approve, guarantee, indemnify or introduce any third parties or the services/products they provide on their websites. Please note SBI is only facilitating the online transaction and will not be a party to any contractual arrangements entered into between you and the provider of the external website unless otherwise expressly specified or agreed to by SBI. Such external websites are governed by their respective policies.

☐ I have read and accepted the terms and conditions stated above
(Click Check Box to proceed for payment)

© Copyright SBI

Your site visit: 18-Sep-2018 (11:46 IST)

e-procurement payment

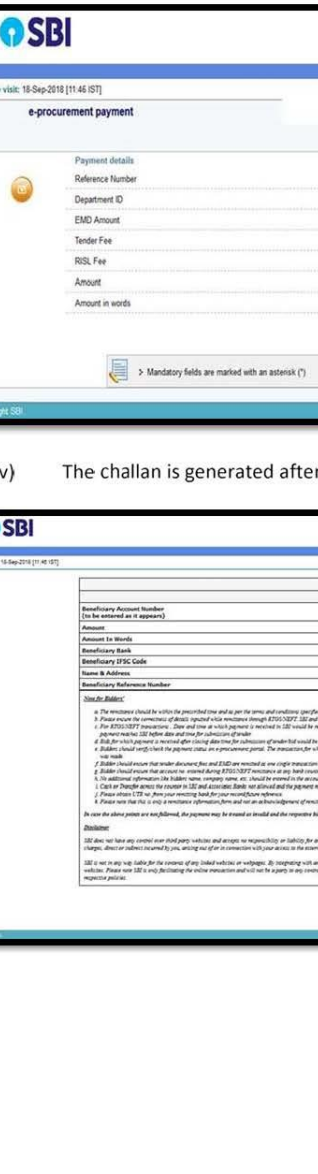
	Payment details	
Reference Number		117725193159
Department ID		AAA
EMD Amount		3
Tender Fee		2
RISL Fee		0
Amount		5
Amount in words		Five Rupees only
Confirm Reset		

[Click here](#) to abort this transaction and return to the e-procurement payment site

Mandatory fields are marked with an asterisk (*)

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Privacy Statement | Disclosure | Password Management | Security Tips | Terms of Use

(iv) Click **Confirm** button as below, to transfer payment.



(v) The challan is generated after successful transaction.



National Informatics Centre	Payment Gateway
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(vi) The Downloaded challan of the e-procurement RTGS/NEFT Remittance Information

e-procurement payment RTGS/NEFT Remittance Information Form	
Beneficiary Details	
Beneficiary Details	
Beneficiary Account Number (to be entered as it appears)	PSEGACPJ8923167
Amount	Rs. 5
Amount In Words	Five Rupees only
Beneficiary Bank	State Bank of India
Beneficiary IFSC Code	SBIN0017676
Name and Address	e-procurement payment
Beneficiary Reference No	117725193159
Instructions for remitting Banks: a. This form is valid for remittance through non-SBI branches. b. Beneficiary account no. is alpha-numeric and case sensitive. It should be entered as it appears above. c. Amount to be remitted should not be higher or lesser and should be the same as shown above.	
Note for Bidders: a. Bidder should ensure that account no. entered during RTGS/NEFT remittance at any bank counter or Internet banking site is the same as it appears in this remittance form. Bidder should not truncate or add any other detail to the above account number. b. No additional information like bidder name, company name, etc. should be entered in the account no. column along with account no. for RTGS/NEFT remittance. c. Account to Account transfers or Cash payments are not allowed and are invalid mode of payments. Hence, this remittance form is to be used only for RTGS or NEFT payment. d. Bidder should ensure that tender document fees and EMD are remitted as one single transaction and not separate. The remittance should be within the prescribed time and as per the terms and conditions specified in tender. e. Please ensure the correctness of details inputted while remittance through RTGS/NEFT. Please also ensure that your banker keys in the Account Number (which is case sensitive) as displayed in this form. SBI and Merchant should ensure that the details are correctly inputted. f. For RTGS, the purpose of remittance should be relevant for the purpose of the tender. Therefore, bidders should make the remittance before date and time for submission of tender. g. Bids for which Payment is received after closing date/time for submission of tender/bid would be rejected.	

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GUIDELINES TO BIDDERS

1. Item rate Tenders are invited through e-tendering portal on behalf of Chairman, Airports Authority of India, for the work as mentioned in Schedule E, the estimated cost of the work is mentioned at Schedule E. This estimate however is given merely as rough guide.
2. The e-Tenders shall be in prescribed Form.
3. The works are required to be completed within the period as mentioned at clause 5 in Schedule F.
4. Not more than one tender shall be submitted by a contractor or by a firm of contractors. Two or more concerns in which an individual is interested, as proprietor and/or partner shall not tender for the execution of the same works. If they do so, all such tenders shall be liable to be rejected.
5. The Accepting Authority as mentioned at serial No. 2 (VIII) in schedule F shall be the Accepting Officer here in after, referred to as such for the purpose of this contract.
6. Tender documents consisting of plans, specifications, Schedule(s) of quantities of the various classes of work to be done, the conditions of contract and other necessary documents will be available on e-tendering portal. However, to participate in the tender/to submit the tender document, the tenderer must pay tender fee of Rs. 1180/- (i/c GST) (Non- refundable) and EMD of amount ₹ 76,024/-through online only.
7. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their Tenders as to the nature of the ground and sub soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require, working conditions including space for stacking of materials, installation of T & P, rates of various materials to be incorporated in works, conditions affecting accommodation and movement of labours etc. and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or effect their Tender. A Tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
8. Submission of a Tender by a Tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the works to be done and of conditions and rates at which stores, tools and plant, etc if any, will be issued to him by Airports Authority of India, local conditions, local material rates and other factors bearing on the execution of the works.
9. All rates shall be quoted in the standard BOQ format uploaded in the portal.
10. Tenders shall be received through e-tendering portal up-to the date and time as mentioned as per Critical Data Sheet of E-NIT.
11. Notification of Award of contract will be made in writing to the successful Bidder by the Accepting Authority or his representative. The contract will normally be awarded to the qualified and responsive Bidder offering lowest evaluated bid in conformity with the requirements of the specifications and contract documents and the Accepting Authority shall be the sole judge in this regard. The Accepting Authority does not bind himself to accept the lowest or, any tender or go give any reason for his decision.
 - 11.1. A responsive bidder is one who submits priced Tender and accepts all terms and conditions of the specifications and contract documents.

11.2. A major modification is one which affects in any way the quality, quantity and period of completion of the work or which limits in any way the responsibilities or liabilities of the Bidder or any right of AAI, as required in the specifications and contract documents. Any modification in the terms and conditions of the Tender which are not accepted to AAI shall also be treated as a major modification.

11.3. The Accepting Authority reserves to himself the right of accepting the whole or any part of the Tender and Tenderer shall be bound to perform the same at his quoted rates.

12. Canvassing in connection with Tenders is strictly prohibited and the Tenders submitted by the Tenderers who resort to canvassing will be liable to rejection.

13. The Tender for works shall remain open for acceptance for a period of ninety days from the date of opening of financial bid of tenders. If any Tenderer withdraws his Tender before the said period or makes any modifications in the terms and conditions of the Tender which are not acceptable to the Department, then Airports Authority of India shall without prejudice to any other right or remedy, be at liberty to forfeit tenderer for one year and shall not be eligible to bid for AAI tenders from date of issue of suspension.

14. On acceptance of the Tender, the name of the accredited representatives(s) of the contractor who would be responsible for taking instructions from the Engineer-in-charge shall be communicated to the Engineer-in-charge.

15. The site for the work is available.

16. Queries, Replies and Clarifications:

16.1. If the bidder has any query related to the Tender Document of the work they should use 'Clarification' tab in CPPP e-tendering portal to seek clarifications. No other means of communication in this regard shall be entertained. No query received after due date shall be entertained. Last date and time for making query is stipulated in the critical dates and NIT.

16.2. Once the bidder has submitted the digitally signed file of tender document along with unconditional acceptance as an attachment, he is not permitted to upload any additional file or put any remark(s)/conditions(s) in/ along with the Tender Document (Except unconditional rebate on quoted rates).

17. PRICES

17.1. The rates to be quoted by the bidder should be inclusive of all taxes, duties, cess, fee, royalty charges etc. levied under any statute but exclusive of GST.

17.2. GST shall be paid to the contractor for any taxable supply / services against a valid tax invoice as per the terms and conditions of the contract.

17.3. In case of change in rate of tax or any provision relating to levy of tax after last date of submission of bid resulting in increase in burden of tax on the contractor, the contractor shall be entitled to receive any compensation for such increase in quantum of tax payable by the contractor. Similarly, recovery shall be made from the contractor on account of decrease of rate of tax or any provision relating to levy of tax.

18. PQ Performa is also required to be uploaded in Envelope I. [as mentioned in ENIT Annexure-A CHECK LIST (PQ Proforma)]

19. GUIDE TO BG SUBMISSION AND VERIFICATION

19.1. BG VERIFICATION THROUGH SFMS OF ICICI BANK

- The prospective bidders shall submit BG in accordance with the following bank details:

CORPORATE NAME: AIRPORTS AUTHORITY OF INDIA

BANK NAME: ICICI BANK

IFSC CODE: ICIC0000007

**BG ADVISING MESSAGE: IFN 760COV (BG ISSUE)
IFN 767COV (BG AMEDMENT)**

**UNIQUE IDENTIFIER CODE: AAIBAGDOGRA to be mentioned in
Field 7037 of the BG advising message.**

- While submitting the documents to BG issuing bank, the bidder will also submit letter to the issuing bank as per the format provided on Annexure-8 at page 8 | ANX of tender document.
- While submitting the original BG document, the bidder shall ensure to attach the copy of SFMS (Structured Financial Messaging System) BG confirmation message sent by the BG issuing bank to ICICI bank.

19.2 ADVISORY FOR APPLICANT AND ITS BG ISSUING BANK BRANCH:

It is to be noted that along with physical BG, AAI have also activated an online facility to view the issued BG cover message transmitted to ICICI Bank through SFMS platform.

- For availability of BG in this platform, it is necessary that BG issuing/amending bank send the BG advice in the form of message format IFN 760COV (BG issuance) / IFN 767COV (BG amendment) via SFMS as provided by RBI.
- In the event of BG issuing/amending bank not sending the message IFN 760COV/ IFN 767COV or committing any error while capturing the details at least in the below field, BG confirmation through online portal would not be updated.
- Bidder shall notify their bank (BG issuing branch) to update below details at time of submission of BG issuance/amendment request to their respective banks:
BG advising message: **IFN 760COV / IFN 767COV via SFMS.**
IFSC CODE: **ICIC0000007**
Corporate name: **Airports Authority of India**
Field number: **7037**
Particulars) to be mentioned in Row 1) Unit identifier number: **AAI BAGDOGRA**

Please note that the issuing bank while issuing/amending the BG, should ensure that the above information is correctly captured in the message i.e. IFN 760COV/ IFN 767COV.

Note: If a bidder observes a discrepancy in-between Guidance to Bidder & ENIT, the bidder should follow instructions of ENIT in such cases.

FORM - A

DETAILS OF SIMILAR WORKS SUCCESSFULLY COMPLETED OR SUBSTANTIALLY COMPLETED DURING THE LAST SEVEN YEARS ENDING ON 30.06.2026.

Sl. No.	Details of Work	W-1	W-2	W-3
i)	Name of work /Project and Location			
ii)	Name and Address of Client			
iii)	Awarded Cost of work (In Rs. Lakhs)			
iv)	Date of Commencement as per Contract			
v)	Stipulated date of Completion			
vi)	Actual date of Completion			
vii)	Completion Cost/Actual work done			
viii)	Whether the work was done on back to back basis Yes/No.			

**SIGNATURE (S) OF BIDDER(S)
(WITH STAMP)**

Note: The contractor should give list of only of eligible category works of requisite amount with supporting documents issued from client. (viz. Work Order along-with BOQ/SOQ & Completion Certificate)

FINANCIAL INFORMATION

Name of the firm / contractor:

1. Financial Analysis - Details to be furnished turnover on construction works with profit / loss as per figure in balance sheet account for the last three years duly certified by the Chartered Accountant as submitted by the applicant to the Income - Tax Department.

Figure in Lakhs Rs.

Sl. No.	Particulars	Financial Year (Last three years)		
		FY – 22-23	FY – 23-24	FY – 24-25
1	Turn-Over on Construction Works			
2	Profit/(loss) after Taxes (Standalone)			

2. Financial arrangements for carrying out the proposed work.

Unique Document Identification Number (UDIN)

Signature of Chartered
Accountant with seal

SIGNATURE (S) OF BIDDER(S)

Note: The bidder should give information strictly in above format.

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTED ACCOUNTANT

This is to certify that as per audited balance sheet and profit & loss account during the financial year **2024-2025**, the Net Worth of M/s. (Name & registered address of Individual/Firm/Company), as on (the date of certificate) is Rs..... after considering all liabilities. It is further certified that Net Worth of the company has not eroded by more than 30% in last three years ending on 31st March (the relevant year*)

Unique Document Identification Number (UDIN)

Signature of Chartered Accountant

.....

Name of Chartered Accountant

.....

Membership of ICAI

Date and Seal

SIGNATURE (S) OF BIDDER (S)

*The relevant year shall be the financial year ending 31st March preceding the calendar year of bid submission or 31st March of the financial year preceding the previous financial year, if the balance sheet of the previous financial year has not been audited.

TENDER ACCEPTANCE LETTER
(To be given on Contractor's Letter Head)

Date:

To,
The DGM (Engg. -Elect.)
Office of The Airport Director,
Bagdogra Airport,
Airports Authority of India.

Subject: Acceptance of Terms & Conditions of Tender.

(Tender Id No.: _____)

Name of Work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:- Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

Dear Sir,

1. I/We have downloaded/obtained the tender documents(s) for the above mentioned 'Tender/Work' from CPP Portal web site(s) namely: <http://etenders.gov.in/eprocure/app> as per your advertisement, given in the above-mentioned website(s)
2. I/We hereby certify that I/We have inspected the site and read the entire terms and conditions of the tender documents, corrigendum(s) and reply to query if any made available to me/us which shall form part of the contract agreement and I/We shall abide hereby by the terms/conditions/clauses contained therein.
3. I/We hereby unconditionally accept the tender conditions of AAI's tender documents in its totality/ entirety for above mentioned work.
4. I/We declare that I/We have not paid and will not pay any bribe to any officer of AAI for awarding this contract at any stage during its execution or at the time of payment of bills, and further if any officer of AAI asks for bribe/gratification, I will immediately report it to the Appropriate Authority in AAI'.
5. I/We hereby submitted that I/We paid/submitted the required earnest money as per NIT conditions.
6. I/We certify that all information/documents furnished by our Firm is true & correct and in the event at any stage, the information/documents is found to be incorrect/untrue or found violated, then we shall be liable for debarment from tendering in AAI without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

UNDERTAKING REGARDING DEBARMENT/BLACKLISTING
(To be given on Contractor's Letter Head)

Name of Work : Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-
Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after
2 years DLP).

I/We (name and post of authorized signatory) on behalf of
..... (Name of firm) do here by solemnly affirm and declare as follows:

- i) Our firm is not restrained/debarred/blacklisted by AAI OR Central /State Govt. Depts. /PSUs/World Bank/ ADB etc. and the debarment is not in force as on last date of submission of proposal.
- ii) None of Proprietor/ Partners/ Board Members/ Directors of M/s. (Name of firm) has remained Proprietor/ Partners/ Board Member/ Director in any firm which stands debarred / blacklisted by AAI or Central / State Govt. Depts. / PSUs/ World Bank/ ADB etc. and the debarment is not in force as on last date submission of proposal.
- iii) Our firm understands that at any stage, if above statements are found to be false, our firm shall be liable for debarment from bidding in AAI, apart from any other appropriate contractual legal action including debarment/ blacklisting, termination of the contract etc. as deemed fit.

Date:

[Signature and name of authorized signature of the firm]

Place:

UNDERTAKEING FOR IMPARTING TRAINING BY OEM

(To be printed on Company's Letter head)

(TO BE SUBMITTED WITH ENVELOPE-I)

To,

The DGM (Engg. -Elect.)
Office of The Airport Director,
Bagdogra Airport,
Airports Authority of India.

Name of work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

I/We(Name of the company/firm)
.....hereby undertake that I/We will impart proper field as well as class room training through OEM on operation & routine maintenance and on safety procedures of the installations/equipments installed under above referred work to the manpower engaged by specialized agency selected by AAI immediately after completion of SITC work of our contract agreement / completion of O&M work included in our contract agreement (strikeout which is not applicable) within our quoted cost of SITC work & nothing shall be charged extra.

Place:

Date:

Signature and name of the authorized signatory of the firm

TECHNICAL PARAMETERS OF ELEVATORS

(To be printed on Company's Letter head)

(TO BE SUBMITTED WITH ENVELOPE-I)

S. No	DESCRIPTION	Elevators Location (No.): RCC Antenna Tower Katihar (01 No.)	
		AAI Requirement	Agency's Compliance
1	Type of Elevator	Passenger Elevator (Stainless steel door)	
2	Operation	Simplex	
3	Control	AC VVVF	
4	Operation W / Wo Attendant	With & With-out Attendant.	
5	Capacity		
I	Rated Load (Kg)	544	
II	Weight of Material for Interior of the Car	By lift supplier	
III	No. of Persons	8	
6	Machine	Gearless	
7	Speed (MPS) Rated	1 MPS	
8	Travel	25-30 Mtr Approx	
9	Stops And Openings		
I	No. of Stops	5	
II	No. of Openings	5	
III	Same Side	Yes	
10	Car Size In (MM) (Inside Dimensions)	As per vendor standard	
11	Well/Shaft Dimension (MM) (W x D) (Inside Dimensions)	2300X2300	
	HOIST WAY SIZE (MM) (W x D) (Inside Dimensions)	2300X2300	
12	Door Operation	Automatic with door monitor	
13	Car Way Entrance (MM)	By Lift Supplier	
14	Height Of Lift Car In MM	2300	
15	Machine Room	MRL type	
I	Location	Top	
II	Size (mm)	NA	
16	Pit Depth In MM	1550	
17	Overhead In MM	4800	
18	Noise Level In Cabin (Running Car)	As per vendor standard complying IS Specification.	
19	Interior Finishes		
I	Finish	Transparent fire-resistant glass. (If applicable in current / updated IS code)	

		Rear and side wall - SS Linen finish (16 SWG)	
II	Flooring	Granite of superior finish (material approval to be taken from AAI) with 20 mm recess for Lift manufacturer. To be provided by Lift manufacturer.	
III	Ceiling	As per vendor standard	
20	Cooling in Elevator	Axial blower	
21	Ventilation	As per vendor standard	
22	Signals		
I	Illuminated Hall Button With Digital Car Position Indicator	Yes	
II	2 Nos. Illuminated Car Operating Panel	Yes	
III	DIGITAL CAR POSITION INDICATOR (G, 1 st , 2 nd , 3 rd , 6 th)	Yes	
IV	BATTERY OPERATED ALARM BELL & EMERGENCY LIGHT : MIN 30 MIN BACK UP	Yes	
V	Overload Warning Indicator In Car	Yes	
VI	Built-In Intercom For 2 Way Communication	Yes	
VII	Fireman's Switch On Ground Floor: One Per Group	Yes	
VIII	Interior Handrail (3 Sides)	Yes	
IX	Illumination In The Car With Led Light Fitting.	Yes	
X	Provision of installation of CCTV in side lift car	Yes	
23	OTHER FEATURES		
I	ELECTRONIC CHIMES SOUND IN THE CAR (To Indicate Respective Floor)	Yes	
II	Provision To Integration With Fire Alarm Panel & BMS	Yes	
III	SPEAKER & PROVISION FOR MUSIC & PA SYSTEM	Yes	
24	SAFETIES AND PROTECTION		
I	Over Load Warning	Yes	
II	Infra-Red Full Length Door Detector	Yes	
III	Slack Rope Safety Switch	Yes	
25	OTHER MAJOR FEATURES		
I	Lift Shaft Wall	PCC in all side.	
II	Acceleration	Lift acceleration / deceleration shall be site adjustable range with in a limit of 0.6 m/s ² -1.5m/s ² , although max speed will be 1 mps (rated)	

III	Vibration Level	Horizontal and vertical vibration level will be keep nearly 20 - 25cm/Sqmm but not within 13cm/Sqmm during all riding and door opening	
IV	Power Saving	Maximum saving to reach upto 20% to 30% depending on traffic density on the lift	
V	Emergency Button In Cop	Emergency button required in car operating panel	
VI	Voltage Variation Limit	VVVFD shall control applicable for an input voltage variation level of (+/-) 10% but controller operation shall have (+) 10% to (-) 20% voltage variation limit with inbuilt stabilizer	
VII	Emergency Crancking	Remotely manual brake release system for manual cranking shall available at MR.	
VIII	Buffer	Spring buffer with 15% design speed consideration	
IX	Automatic Rescue Device (ARD)	Yes for all	
X	Operation & Energy Management Features	Lift and all relevant operation shall be as per Technical Spec.	
XI	Performance & Lift Ride Quality	Shall be as per Technical Spec.	
XII	Safety	Safety norms and protection shall be followed as per Technical Spec.	
XIII	Availability of OEM's own Testing Tower (35 Mtr. Travel Height minimum)	OEM must have its own Testing Tower for checking of satisfactory performance of elevator system during Factory Acceptance Test.	

Performa for declaration by Bidder for compliance of order on Restriction under Rule 144(xi)
of the General Financial Rules (GFRs)-2017

(Scanned copy to be submitted by Bidder in Cover-I on letter head of Company/Firm)

Name of Work: _____

Tender ID: _____

I, the undersigned, _____ (full names), do hereby declare, in my capacity as _____ of M/s _____ (**Name of company/Firm**) _____ that:

- 1) I am competent to swear this undertaking on behalf of M/s _____ (**Name of company/Firm**) _____
- 2) I have read the Order(s) on the subject of Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order(s).
- 3) I certify that M/s _____ (**Name of company/Firm**) _____ **is not from such a country / is from such a country, has been registered with the Competent Authority (strike out whichever is not applicable)**. I hereby certify that this BIDDER fulfils all requirements in this regard and is eligible to be considered [**Where applicable, evidence of valid registration with the Competent Authority is attached**].
- 4) I understand that the submission of incorrect data and / or if certificate/ declaration given by M/s _____ (**Name of company/Firm**) _____ is found to be false, this would be a ground for immediate termination and further legal action in accordance with law as per Clause 12 of the Public Procurement Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017.

Signature and name of the authorized signatory of the firm
with Rubber Stamp

Date:

Place:



GENERAL CONDITIONS OF CONTRACT

2017

AIRPORTS AUTHORITY OF INDIA

AIRPORTS AUTHORITY OF INDIA

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GENERAL GUIDELINES

1. This book of “General Conditions of Contract” is applicable to both types of tenders i. e.” Percentage rate tenders and Item rate tenders”. Accordingly, alternative provisions for conditions Nos. 4, 10 & 12 of the General Rules and Directions are given in this book. The appropriate alternatives will be applicable in specific cases depending on whether this is used for percentage rate tenders or item rate tenders
2. Notice Inviting Tender, Schedules A to F, special conditions/specifications and drawings only will be issued to intending bidders. The standard form will not be issued along with the Tender Documents but the same shall form part of the agreement to be drawn and signed by both parties after acceptance of tender.
3. All blanks are confined to Notice Inviting Tender and Schedules A to F.
4. Authority approving the Notice Inviting Tenders (NIT) shall fill up all the blanks in Notice Inviting Tender and in Schedules B to F before issue of Tender documents.
5. The intending bidders will quote their rates in Schedule A.
6. The proforma for registers and Schedules A to F are only for information and guidance. These are not to be filled in the Standard Form. The Schedules with all blanks, duly filled, shall be separately issued to all intending tenderers.

AIRPORTS AUTHORITY OF INDIA

~~Percentage Rate Tender~~/Item Rate Tender & Contract for Work

Airport: **Katihar MSSR Station**

Branch: **Electrical Engineering**

Office of: **Dy. Gen. Manager (E-E), O/o The Airport
Director, Bagdogra Airport**

(A) **Tender for the work of:** Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

(i) To be submitted/ uploaded **as per date & time mentioned in Critical Data sheet Page 2 | E N I T.**

(ii) ~~To be opened in presence of tenders who may be present on _____ at
_____ hrs. in the office of _____~~

~~Issued to _____ *~~

~~Signature of officer issuing documents _____ *~~

~~Designation _____ *~~

~~Date of issue _____ *~~

*(ii) Not applicable for e-tendering

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of contract, Special conditions, Schedule of Rates & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I / We hereby tender for the execution of the work specified for the Chairman Airports Authority of India within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such material as are provided for, by and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for Ninety (90) days from the date of opening of financial bid in 3/2 bid system and not to make any modifications in its terms and conditions.

I / We undertake and confirm that for eligibility of similar work(s) has / have not been got executed on back to back basis through another contractor. Further that, if such a violation comes to the notice of AAI, then I/We shall accept the decision of AAI if we are debarred for tendering in AAI in future works. Also, if such a violation comes to the notice of AAI before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.

I / We further undertake and confirm that information/ documents submitted by us are genuine, and if at any stage such documents/ information found false, then we shall be liable for debarment from tendering in AAI, and any other appropriate legal action.

A sum of **₹ 76,024/- (Rupees Seventy Six Thousand Twenty Four Only)** is hereby submitted online through payment gateway on CPP portal against Earnest Money Deposit. If I/we, fail to furnish the prescribed performance bank guarantee within prescribed period, I/we agree that the said Chairman, A.A.I. or his successors in office shall without prejudice to any other right or remedy, be at liberty to take appropriate action as per terms of contract. Further, if I/ we fail to commence work as specified, I/we agree that Chairman, A.A.I. or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money absolutely, otherwise the said earnest money shall be retained by AAI towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of earnest money or Performance Guarantee or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I / We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

(* To be deleted which are not applicable)

Date:

Signatures of Contractor:

Witness:

Postal Address

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by competent authority on behalf of the Chairman, Airports Authority of India for sum of Rs.

_____ (Rupees _____).

The letters referred to below shall form part of this contract Agreement: -

- (i)
- (ii)
- (iii)

For & on behalf of Chairman, Airports
Authority of India
Signature-----

Designation-----

Date-----

AIRPORTS AUTHORITY OF INDIA

General Rules & Directions

1.	General Rules & Directions	All work proposed for execution by contract are notified in a form of invitation to tender pasted in public places /CPP Portal and signed by the officer inviting tender or by publication in Newspapers and posted on AAI web-site and CPP Portal https://etenders.gov.in/ and www.aai.aero (for reference only). This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of Officer inviting tender during office hours.
2.		In the event of the e tender being submitted by a firm, it must be digitally signed. Such tender will be treated as signed tender. For physical tender it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of-attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
2. (A)		In case of the tender submitted by a Joint Venture / Consortium, a copy of joint venture / consortium agreement in the specified proforma defining the lead partner should be submitted. The lead partner shall sign all the documents in respect of the works. The documents signed by any other person or firm other than the lead partner shall not be entertained.
3.		Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm. Bank details shall be furnished by the firm through an application duly signed by all partners for payment to the firm through bank transfer.
4.	Applicable for item Rate Tender only.	Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenderers, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes. The rate(s) must be quoted in decimal coinage. Amount must be quoted in full Rupees by ignoring 50 paise and considering more than 50 paise as Rupee one. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors will be asked to submit revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of

		revised offer. If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Jt. GM (Engg) / DGM (Engg) / AGM (Engg) / Sr. Manager (Engg) in-Charge of major and minor component(s) work and the lowest contractors those have quoted equal amount of their tenders. In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted earlier at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited. In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractor. Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work. Note: Till the time software supports the above provisions, revised offers from tenderers forming the tie shall be obtained and procedure prescribed for "Restricted call of tenders" shall be adopted (for e-tenders).
4. (A)	Applicable for Percentage Rate Tender only.	In case of Percentage Rate Tenders, tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if; 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub-head of the tender. 2. The percentage above / below is not quoted in figures & words both on the total amount of tender or any section / sub-head of the tender. 3. The percentage quoted above/below is different in figures and words on the total amount of tender or any section / sub-head of the tender. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes. In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more bidders is same, such lowest bidders will be asked to submit revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above / below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited. If the revised tendered amount of two more bidders received in revised offer is again found to be equal, the lowest tender, among such bidders, shall be decided by draw of lots in the presence of Jt. GM (Engg) / DGM (Engg) / AGM (Engg) /

		Sr. Manager (Engg) in Charge of work & the lowest bidders those who have quoted equal amount of their tenders. In case all the lowest bidders those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each bidder. Bidders, whose earnest money is forfeited because of non submission of revised offer, shall not be allowed to participate in the re tendering process of the work. Note: Till the time software supports the above provisions, revised offers from tenderers forming the tie shall be obtained and procedure prescribed for “Restricted call of tenders” shall be adopted.
4. (B)		In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractor is same, such lowest contractor will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub section/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section /sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited. If the revised tendered amount of two more contractors received in revised offers is again found to be equal, the lowest tender, among such contractor, shall be decided by draw of lots in the presence of Jt.GM (Engg) / DGM (Engg), AGM (Engg) / Sr. Manager (Engg) in -Charge of major & minor component(s) of work & the lowest bidders those who have quoted same tendered amount of their tenders. In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each bidder. Bidders, whose earnest money is forfeited because of non- submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
5.		The officer inviting tender or his duly authorized representative, will open tenders in the presence of any intending bidders who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule – I. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
6.		The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
7.		The receipt of an accountant or clerk for any money paid by the bidder towards tender fee will not be considered as any acknowledgement or payment to the officer inviting tender and the bidder shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized cashier.
8.		The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending bidder without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.

9.		The bidders shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them. The unsuccessful bidders shall return all the drawings given to them.
9(A).		Use of correcting fluid anywhere in tender document is not permitted. Such tender is liable for rejection. If there is any correction it should be cut with a straight line and should be initialed and cello tape to be provided on all the rates quoted in case of physical tenders.
10.	Applicable for Item Rate Tender Only.	In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below / above the rates quoted is liable to be rejected. Rates quoted by the bidder in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, - If a discrepancy is found between rates in figures and in words, then the rates which correspond with the amount worked out by the bidder shall unless otherwise proved be taken as correct. - If the amount of an item is not worked out by the bidder or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. - Where the rates quoted by the bidder in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. - In event no rate has been quoted for any item(s) leaving space blank both in figure(s) and word(s) or cancelled the quoted rate in figure(s), and word(s) but the amount corresponding to the item(s) is worked out by the bidder and added to the grand total, then rate(s) of the item(s) shall be derived from the amount(s) quoted by the contractor against such item(s). - In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the bidder has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly. Sub Para i to iv above shall not be applicable in case of e-tendering.
	Applicable for percentage rate tender only.	In case of percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the bidder in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. However, if the bidder has worked out the amount of the tender and if any discrepancy is found in the percentage quoted in words and figures, The percentage which corresponds with the amount worked out by the bidder shall, unless otherwise proved, be taken as correct. If the amount of the tender is not worked out by the bidder or it does not correspond with the percentage written either in figures or in words, then the percentage quoted by the bidder in words shall be taken as correct. Where the percentage quoted by the bidder in figures and in words tally but the amount is not worked out correctly, the percentage quoted by the bidder will, unless otherwise proved, be taken as correct and not the amount.
11.		In the case of any tender where unit rate of any item / items appears unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
12.	Applicable for Item Rate Tender only.	All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in



		figures and in words. In case of figures, the word 'Rs' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
12(A).	Applicable for percentage rate tender only.	In Percentage Rate Tender, the tenderer shall quote percentage below / above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs' should be written before the figure of rupees and work 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word 'Rupees' should precede and the word 'Paise' should be written at the end. (quoting of rates in Paise is not applicable in e-tenders)
13	Acceptance of abnormally low quoted bid (Capital & Revenue Expenditure Contract)	An Abnormally Low Bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the contract at the offered price. Processing of such bid shall be as follows: i) The Bid Manager shall seek written clarification from the lowest Bid with approval of the tender accepting authority, including detailed price analyses of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bids document. ii) If, after evaluating the price analyses, the Tender Accepting Authority determines that the Bidder has substantially failed to demonstrate its capability to deliver the contract at the offered price, then the bid/ proposal may be rejected. iii) Such contracts should be closely monitored that find payments in such cases do not abnormally increases due to extra items. Further, there is no abnormal increase in quantities of the item for which contractors have initially quoted very high rates.
13A		In case the contractor does not carry out the work on ALQ items as per schedule or as per NIT specifications, the Engineer in charge shall issue a letter to the contractor to comply its obligations as per NIT, for ALQ items. Engineer in charge shall also give one reminder after 10 days of 1 st letter and if contractor still do not start the work on ALQ items, then bank guarantee i.e. QPBG should be encashed and work should be got executed through another agency at his risk and cost.
14		i. The bidder, whose tender is accepted, will be required to furnish performance uarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of Fixed Deposit Receipts or Guarantee Bonds of any cheduled Bank but not co-operative or Gramin Bank, in accordance with the prescribed form, provided confirmatory advice is enclosed.



		ii. The bidder, whose tender is accepted, will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the contract amount of the work. iii. In works where condition of submission of Performance Guarantee is not applicable, the security deposit @ 10% of the tendered value shall be deducted. iv. The Security deposit (under ii & iii above) will be collected by deductions from the running bills of the contractor at the rates mentioned above and the earnest money deposited at the time of tenders, will be treated as a part of the Security Deposit. v. Security deposit will also be accepted in form of Fixed Deposit Receipts / Guarantee Bonds of any Scheduled Bank but not co-operative or Gramin Bank in accordance with the prescribed form, provided confirmatory advice is enclosed. vi. ## Note refer in Page 58 GCC
15.		On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
16.		1. Rates to be quoted by the parties should be inclusive of all taxes, duties, CESS, fee, royalty charges etc. 2. However GST, as applicable, shall be paid to the contractor, for any taxable supply / services / construction rendered by the agency to AAI, against a valid GST invoice as per terms and conditions of the contract. 3. In case supplies /services / works involve imports; the same should be identified separately. Basic Custom Duty & IGST will be paid directly by AAI by utilizing EPCG license / Duty Credit Scrip under service Export from India Scheme (SEIS) of Govt. of India.
17.		The contractor/ bidder shall give a list of AAI employees related to him.
18.		The tender for the work shall not be witnessed by a contractor or contractors / bidders who himself / themselves has / have tendered or who may and has / have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.



19.		The tender for composite work includes, in addition to building work, all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.			
20.		The contractor/ bidder shall submit list of works completed in last 5 years*as well as which are in hand (In progress) in the following format for assessing bidding capacity of the bidders:-			
	Name of work	Name and particulars of Office where work is being executed	Value of work	Position of works in progress	Remarks
	1	2	3	4	5
21		The contractor/bidder shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Executive Director (Engg.) may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.			
22		If complete site is available for work, the work shall be completed in the manner specified here in special condition of contract and NIT specifications.			
23		Note: In such case para 23 below may be deleted by NIT approving authority If complete site is not available for taking up the work, the same shall be made available in phases. The scope of work covered in each phase, time for completion of work in each phase and methodology of taking over completed work in phased manner has been specified under special conditions of contract. The completion time for each phase shall be applicable as indicated in tender documents. The work shall also be taken over by Engineer In Charge in phases. The warranty for the works executed in each phase shall be applied independently w.e.f. date of completion /taking over of individual phase. Note: In such case para 22 above may be deleted by NIT approving authority			

Note: The additional clause i.e. 14(vi) is appended below:

Clause 1B: Additional Performance Security

- (a) The contractor shall submit an irrevocable additional performance security in the form of an irrevocable Insurance Surety bond, demand draft, bank guarantee issued from Scheduled Commercial Bank (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-Operative/Regional Rural Banks, if the Bid price offered by the selected bidder is lower than 10% of the estimated cost put to tender, This clause shall be binding and enforceable in relation to all works, irrespective of their nature, scope, or value.
- (b) Performance security should be furnished within 30 days of issue of Letter of Intent and before award of work. In case the contractor fails to deposit performance guarantee within the stipulated period, tender shall be stand cancelled without any notice and further, EMD shall be forfeited and the contractor shall be liable for debarment upto a period of two (02) years.
- (c) The Performance Guarantee shall be initially valid up-to the stipulated date of completion plus 180 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of buildings and services / any other work thereafter, 50% of Performance Guarantee shall be retained as Security Deposit as per contract conditions. The same shall be returned on successful completion of commitment year wise proportionately.
- (d) The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the AAI is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- (i) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the contractor to pay the Chairman, AAI any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- (e) In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Chairman, AAI.

Additional Performance Security Amount and Treatment:

The additional performance security shall be calculated as below:

- (i) **Where the bid price is below 10% but not below 20% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.25% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the additional bid performance security being 0.25% and this additional performance security percentage shall be applied on the bid price.
- (ii) **Where the bid price is below 20% but not below 25% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.50% for every percentage of bid price below 20% of the project cost put to bid starting at 21% with the additional bid performance security being 0.50% and this additional performance security percentage shall be applied on the bid price.
- (iii) **Where the bid price is below 25% but not below 30% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.75% for every percentage of bid price below 25% of the project cost put to bid starting at 26% with the additional bid performance security being 0.75% and this additional performance security percentage shall be applied on the bid price.
- (iv) **Where the bid price is below 30%**, the additional performance security percentage shall be incremented by 1% for every percentage of bid price below 30% of the project cost put to bid starting at 31% with the additional bid performance security being 1% and this additional performance security percentage shall be applied on the bid price.
- (v) The additional performance security percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price is 0.5% or more.
- (vi) All matters pertaining to validity, extension, claims, forfeiture, and any other conditions in relation to the additional performance security shall be governed by the provision as mentioned above.

CONDITIONS OF CONTRACT

Definitions:

1.		The contract means the documents forming the tender and acceptance thereof and the formal agreement / agreements executed between the competent authority(s) on behalf of the Chairman, Airports Authority of India and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together, shall be deemed to form one contract / two contracts and shall be complimentary to one another. Contractor has to sign two agreements, one consisting BOQ for Civil works and another one for SITC and O&M / AMC / AICMC part. Engineer-in charge could be common for both the agreements. Separate invoices for the civil /construction works and SITC / O&M / AICMC / AMC works have to be raised by the agency referring to the respective agreements to facilitate AAI to claim input tax credit on such SITC / O&M / AICMC / AMC works as mentioned in Schedule 'F' para 2(v).
2.		In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them :-
		i. The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional. ii. The site shall mean the land / or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract. iii. The Contractor / tenderer / bidder shall mean the individual, firm or company whether incorporated or not, Joint Venture / Consortium undertaking the works and shall include the legal personal representative of such individual or the persons constituting such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company. iv. The Chairman means the Chairman Airports Authority of India and his Successors. v. The Engineer-in-Charge means the Engineering Officer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of the Chairman, Airports Authority of India as mentioned in Schedule 'F' hereunder. vi. AAI or Airports Authority of India shall mean the Chairman Airports Authority of India. vii. The terms Member (Planning) means the head of Department of Engineering, Airports Authority of India. viii. Accepting Authority shall mean the authority mentioned in Schedule 'F'. ix. Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, terrorism, military or usurped power, any acts of Airports Authority of India, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Airports Authority of India of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Airports Authority of India's faulty design of works. x. Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the prevailing cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits. Provided that no extra overheads and profits shall be payable on the parts of works assigned to other agency(s) by the contractor as per terms of contract.

		xi. Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender. xii. Department means Airports Authority of India, which invites tender on behalf of Chairman, Airports Authority of India. xiii. Tendered value means the value of the entire work as stipulated in the letter of award.
3.	Scope and Performance	Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
4.		Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
5.		The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
6.	Works to be carried out	The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule – A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
7.	Sufficiency of Tender	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
8.	Discrepancies and Adjustment of Errors	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
8.1		In the case of discrepancy between the Schedule of Quantities, the Specifications and / or the Drawings, the following order of preference shall be observed: -
		i. Description of Schedule of Quantities. ii. Particular/ technical Specification and Special Condition, if any. iii. Drawings. iv. C P W D Specifications. v. Indian Standard Specifications of B I S / IRC Code of Practice / ASTM standards. vi. Sound Engineering practice as directed by the Engineer-in-charge, whose decision in this regard shall final and binding on the contractor.
8.2		If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
8.3		Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from

		the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
8.4	Payment for similar items with different quoted rates in different subheads of the contract agreement	If the contractor has quoted different rates for the same item appearing in two or more subheads, then the lowest of the rates quoted shall only be considered for payments during execution of work. In case of deviation of quantity of such item, payments shall be made at the lowest quoted rate for quantity executed up-to the deviation limit specified in the contract. Beyond the deviation limit the rate shall be derived as per relevant contract provision.
9.	Reverse Auction for purchase tenders	AAI may opt for reverse auction in case of purchase tender if value of supplies put to tender is more than Rs.2Cr.
10.	Signing of Contract	The successful tenderer / contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, shall sign either single or Two agreements, as the case may be , one consisting BOQ for Civil works and another one for SITC and O&M / AMC / AICMC part.
i)		i. The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto. ii. Standard AAI Form as mentioned in Schedule 'F' consisting of : a. Various standard clauses with corrections upto the date stipulated in Schedule 'F' along with annexures thereto. b. AAI Safety Code. c. Model Rules for the protection of health, sanitary arrangements for workers employed by AAI or its contractors. d. AAI Contractor's Labour Regulations. e. List of Acts and omissions for which fines can be imposed. iii. No payment for the work done will be made unless contract in form of agreement is signed by the contractor.

CLAUSES OF CONTRACT

CLAUSE 1

	Performance Guarantee	This clause is applicable for the works for which the estimated cost put to tender is more than Rs.5 crores.
		i. The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the Tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of award letter. The guarantee shall be in the form of Insurance Surety Bonds, Account payee Demand Draft, or Bank Guarantee (including e-Bank Guarantee) from any of the scheduled commercial Banks (i.e. Indian or Foreign Banks included in the second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative / Regional Rural Banks) in accordance with the form annexed hereto (Appendix XI).
		ii. Performance guarantee should be furnished within 30 days of issue of award letter. In case the contractor fails to deposit performance guarantee within the stipulated period, no payment will be released to the contractor for the work done in respect of 1 st running account bill. Moreover, interest @10% per annum on performance guarantee amount would be levied (non-refundable) for delayed period of submission.
		iii. The Performance Guarantee shall be initially valid upto the stipulated date of completion plus 180 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of buildings and services / any other work thereafter, 50% of Performance Guarantee shall be retained as Security Deposit as per contract conditions. The same shall be returned on successful completion of commitment year wise proportionately.
		iv. The Engineer in Charge shall not make a claim under the performance guarantee except for amounts to which the AAI is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of: a. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer in Charge may claim the full amount of the Performance Guarantee. b. Failure by the contractor to pay the Chairman, AAI any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
		v. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Chairman, AAI.

CLAUSE 1 A

	Recovery of Security Deposit	The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit AAI at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by AAI by way of Security deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in the form of Bank Guarantee (including e-Bank Guarantee) from any of the Commercial Bank (i.e Indian or Foreign Banks included in the second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative/Regional Rural Banks). In case a Guarantee Bonds of any Bank is furnished by the contractor to the AAI as part of the security deposit and the Bank is unable to make payment against the said Guarantee Bond, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the AAI to make good the deficit. In works where condition of submission of performance guarantee is not applicable, the security deposit at the rate of 10% (Ten Percent) of gross amount of each running bill shall be deducted instead of 5%, till the sum will amount to security deposit of 10% of the contract value of work. Other conditions shall remain same as stated above. All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising therefrom, or from any sums which may be due to or may become due to the contractor by AAI on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in fixed deposit receipts, Insurance Surety Bonds, Account Payee Demand Draft or Bank Guarantee from any of the Commercial Bank (if deposited for more than 12 months) endorsed in favour of the Airports Authority of India, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above. The security deposit as deducted above can be released against bank guarantee issued by any Commercial Bank (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative/Regional Rural Banks), on its accumulations to a minimum of Rs. 5 lakh to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lakh. Note 1: Provided further that the validity of Bank Guarantee shall be in conformity with provisions contained in the clause 17 which shall be extended from time to time depending upon extension of contract under provision of Clause 2 & Clause 5. Note 2: Note 1 above shall be applicable for both clause 1 and 1 A.
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Clause 1 B: Additional Performance Security:

- (a) The contractor shall submit an irrevocable additional performance security in the form of an irrevocable Insurance Surety bond, demand draft, bank guarantee issued from Scheduled Commercial Bank (i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-Operative/Regional Rural Banks, if the Bid price offered by the selected bidder is lower than 10% of the estimated cost put to tender, This clause shall be binding and enforceable in relation to all works, irrespective of their nature, scope, or value.
- (b) Performance security should be furnished before award of work. In case the contractor fails to deposit performance guarantee within the stipulated period, tender shall be stand cancelled without any notice and further, EMD shall be forfeited and the contractor shall be liable for debarment upto a period of two (02) years.
- (c) The Performance Guarantee shall be initially valid up-to the stipulated date of completion plus 180 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of buildings and services / any other work thereafter, 50% of Performance Guarantee shall be retained as Security Deposit as per contract conditions. The same shall be returned on successful completion of commitment year wise proportionately.
- (d) The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the AAI is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- (i) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in- Charge may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the contractor to pay the Chairman, AAI any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- (e) In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Chairman, AAI.

Additional Performance Security Amount and Treatment:

The additional performance security shall be calculated as below:

- (i) **Where the bid price is below 10% but not below 20% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.25% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the additional bid performance security being 0.25% and this additional performance security percentage shall be applied on the bid price.
- (ii) **Where the bid price is below 20% but not below 25% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.50% for every percentage of bid price below 20% of the project cost put to bid starting at 21% with the additional bid performance security being 0.50% and this additional performance security percentage shall be applied on the bid price.
- (iii) **Where the bid price is below 25% but not below 30% of the project cost put to bid**, the additional performance security percentage shall be incremented by 0.75% for every percentage of bid price below 25% of the project cost put to bid starting at 26% with the additional bid performance security being 0.75% and this additional performance security percentage shall be applied on the bid price.
- (iv) **Where the bid price is below 30%**, the additional performance security percentage shall be incremented by 1% for every percentage of bid price below 30% of the project cost put to bid starting at 31% with the additional bid performance security being 1% and this additional performance security percentage shall be applied on the bid price.
- (v) The additional performance security percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price is 0.5% or more.
- (vi) All matters pertaining to validity, extension, claims, forfeiture, and any other conditions in relation to the additional performance security shall be governed by the provision as mentioned above.

	Compensation for Delay	If the contractor fails to maintain the required progress in terms of clause 5 or to complete the Work and clear the site on or before the contract or justified extended date of completion as per clause 5(excluding any extension under clause 5.5) as well as any extension granted under clause 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the AAI on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of Tendered Value of the work for every completed day/month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified.
	i) Compensation for delay of work	If the completion of work is delayed due to reasons attributed to contractor, AAI shall be entitled for compensation for delay as detailed below: (i) For works costing up-to Rs. 10.00 Lac: 1.0% (one percent) of tendered value per week of delay or lesser amount as decided by the competent authority subject to a maximum of 10% of contract value. (ii) For the works costing more than Rs 10 Lac: 0.5% (half percent) of tendered value per week of delay or lesser amount as decided by the competent authority subject to a maximum of 10% of the tendered value.
		Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the Sectional part of work as mentioned in schedule 'F' for which a separate period of completion is originally given. In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extended period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub-clause 5.2, the contractor shall be liable to pay compensation for such delay. Provided that compensation during the progress of work beyond the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated / justified extended date for such part work or if delay affects any other works / services. This is without prejudice to right of action by Engineer in Charge under clause 3 for delay in performance and claim of compensation under that clause.

		In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in schedule 'F', after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after of determination of contract. The amount of compensation may be adjusted or set off against any sum payable to the Contractor under this or any other contract with AAI. In case, the contractor does not achieve a particular milestone mentioned in schedule F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied as above. With holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.
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Clause 2A

	Incentive for early completion	In case, the contractor completes the work ahead of stipulated date of completion so provided in "Schedule -F", a bonus @ 1 % (one per cent) of the tendered value per month computed on per day basis, shall be payable to the contractor, subject to a maximum limit of 5% (five per cent) of the tendered value. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Bonus/Incentive shall be applicable for the contract completed before stipulated dated of completion and shall not be applicable for the extended beyond the stipulated period even with the justified hindrance and without any action of compensation for delay. <u>This clause shall not be applicable for the work which estimated cost put to tender is less than Rs. 50.00 Cr.</u>
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Clause 2B

	Release of withheld amount against compensation for delay.	Withheld amount towards compensation for delay over and above Rs. 50.00 lacs, can be released against Bank Guarantee (on the format given at Appendix-1) or in the form of fixed deposit receipts or guarantee bonds of any Scheduled Bank but not Co-operative or Gramin Bank, pending finalization of case of extension of time by competent authority as per delegation of powers. Concerned Executive Director (Engg) will authorize such action on receipt of proposal from the Engineer-In-Charge through proper channel.
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Clause 3

	When Contract can be Determined	Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and / or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:
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		i. If the contractor having been given a notice by the Engineer-in-Charge in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter. ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence and continues to do so after a notice in writing of seven days from the Engineer- in-Charge. iii. If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date on or before such date of completion, and the Engineer in Charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer in Charge, the contractor will be unable to complete the same or does not complete the same within the period specified. iv. If the contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge. v. If the contractor shall offer or give or agree to give to any person in AAI service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for AAI. vi. If the contractor shall enter into a contract with Airports Authority of India in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-charge. vii. If the contractor shall obtain a contract with AAI as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits any breach of Integrity Pact. viii. If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors. ix. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order. x. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
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		xi. If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer-in-Charge. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Chairman, AAI shall have powers : a. To determine the contract as aforesaid so far as performance of work by the Contractor of work is concerned (of which determination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the AAI. b. After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor or any other means to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work. In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.
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CLAUSE 3 A

		In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract by giving notice to the other party stating the reasons. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded within 30 days. Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the contract by either party
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CLAUSE 4

	Contractor liable to pay compensation even if action not taken under Clause-3	In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/ or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.
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CLAUSE 5

	Time and Extension for Delay	The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, AAI shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee absolutely.
5.1		After the Contract is awarded, within 15 days, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Engineer in charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer in-Charge and the Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'. Project Management shall be done. a. For works costing upto Rs. 5.00 Cr. — CPM/ PERT Chart

		b. Works costing more than Rs. 5.00 Cr. By using Project Management Software like Primavera / MS Project or any other software with the approval of Engineer in charge. c. Contractor shall submit monthly progress reports (2 copies) highlighting status of various activities and physical completion of work. PROGRAMME CHART i. The Contractor shall prepare an integrated programme chart in Project Management Software for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the programme within the stipulated period or earlier and submit the same for approval to the Engineer in Charge within fifteen days of award of the contract. A recovery of Rs. 2500/- (for works costing upto Rs. 5.00 Crores) / Rs. 5000/- (for works costing more than Rs. 5.00 Crores) shall be made on per day basis in case of delay in submission of the above programme. ii. The programme chart should include the following: a. Descriptive note explaining sequence of the various activities. b. Network (PERT / CPM / BAR CHART). c. Programme for procurement of materials by the contractor. Programme for deployment of machinery / equipment's having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor. In addition to above, to achieve the progress of work as per programme, the contractor must bring at site adequate shuttering material required for cement concrete and R.C.C. works etc. for three floors within one month from the date of start of work till the completion of RCC work as per requirement of work. The contractor shall submit shuttering schedule adequate to complete structure work within laid down physical milestone. iii. If at any time, it appears to the Engineer in Charge that the actual progress of work does not conform to the approved programme referred above or after rescheduling of milestones, the contractor shall produce a revised programme within 7 (seven) days, showing the modifications to the approved programme to ensure timely completion of the work. The modified schedule of programme shall be approved by the Engineer in Charge. A recovery of Rs. 2500/- (for works costing upto Rs.5.00 Crores) / Rs. 5000/- (for works costing more than Rs.5.00 Crores) shall be made on per day basis in case of delay in submission of the modified programme. iv. The submission for approval by the Engineer in Charge of such programme or such particulars shall not relieve the contractor of any of the duties or responsibilities under the contract. This is without prejudice to the right of Engineer in Charge to take action against the contractor as per terms and conditions of the agreement. v. The contractor shall submit the progress report using MS Project / Primavera software with base line programme referred above for the work done during previous month to the Engineer in charge on or before 5th day of each month failing which a recovery Rs. 2500/- (for works costing upto Rs.5.00 Crores) / Rs. 5000/- (for works costing more than Rs.5.00 Crores) shall be made on per day basis in case of delay in submission of the monthly
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		progress report.
5.2		If the work(s) be delayed by:- i. Force majeure, or an act of terrorism ii. Abnormally bad weather, or iii. Serious loss or damage by fire, or iv. Civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or v. Delay on the part of other contractors or tradesmen engaged by Engineer in Charge for executing work not forming part of the Contract, or vi. Non-availability of stores, which are the responsibility of AAI to supply or vii. Non-availability or break down of tools and Plant to be supplied or supplied by AAI or viii. Any other cause which, in the absolute discretion of the Engineer in Charge is beyond the Contractor's control. then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer in Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer in charge to proceed with the works. All correspondence with the agency and concerned stakeholders during execution of works will be taken into consideration for evaluation of hindrances causing delay, for grant of extension of time by the Competent Authority.
5.3		Request for rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the authority indicated in schedule 'F'. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
5.4		In any such case the Engineer in Charge with the approval of authority indicated in Schedule 'F' may give a fair and reasonable extension of time and reschedule the Milestones for completion of work. Such extension or re-scheduling of the milestone shall be communicated to the contractor by the Engineer in charge in writing, within 1 month or 4 weeks of the date of receipt of such request respectively. Non-application by the contractor for extension of time / re-scheduling of milestones shall not be a bar for giving a fair and reasonable extension / re-scheduling of milestones by the Engineer in charge with the approval of authority indicated in schedule 'F' and this shall be binding on the contractor.

CLAUSE 6

	Measurements of Work Done	Engineer in charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done. All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract. All measurements and levels shall be taken jointly by the Engineer in Charge or his authorised representative and by the contractor or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer in Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties. If for any reason the contractor or his authorised representative is not available and the work of recording measurements is suspended by the Engineer in-
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		Charge or his representative, the Engineer-in-Charge and the Department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorised representative does not remain present at the time of such measurements after the contractor or his authorised representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer in Charge or his representative shall be deemed to be accepted by the Contractor. The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed. The contractor shall give, not less than seven days' notice to the Engineer-in-Charge or his authorised Representative of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer in Charge or his authorised representative of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer in Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed. Engineer-in-Charge or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels. It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.
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Clause 6 A

	Computerized Measurement Book	Computerized measurement is mandatory for works costing more than Rs 5.00 Lacs. However in case of works costing lesser than Rs. 5.00 Lacs Engineer-in- Charge may decide for adopting computerized measurement if required, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract. All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per
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		the format of the department so that a complete record is obtained of all the items of works performed under the contract.
		All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorised representative as per interval or program fixed in consultation with Engineer-in- Charge or his authorised representative. After the necessary corrections made by the Engineer-in- Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked <i>from</i> the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the department a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorised representative would thereafter check this MB, and record the necessary certificates for their checks / test checks. The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or overwriting in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the department. Thereafter, the MB shall be taken in the records of Engineer-in-charge, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Engineer-in-charge for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department. The contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the "bill. Thereafter, this bill will be processed by the Engineer-in-charge and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements. The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements / levels by the Engineer-in-charge or his representative. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general of local custom. In the case of item which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed. The contractor shall give not less than seven days' notice to the Engineer-in- Charge or his authorized representative of the work before covering up or otherwise placing beyond the reach of checking and / or test checking the measurement of any work in order that the same be checked and / or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and / or test checking measurement and shall not cover up and place beyond reach of measurement any work without

		consent in writing of the Engineer-in-charge or his authorized representative of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and / or test checking measurements without such notice having been given or the Engineer-in charge's consent being obtained in writing the same shall be uncovered at the contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.
		Engineer-in-charge or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels. It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defect's liability period.

CLAUSE 7

	Payment on Intermediate Certificate to be regarded as Advances	No payment shall be made for work, estimated to cost Rs. One lac or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. One lac, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount of ad-hoc payment not less than 75% of the net amount of the bill under check, shall be made within 10 working days of submission of the bill by the contractor to the Engineer-in-Charge or his Authorized Engineer together with the account of the material issued by the department, or dismantled materials, if any. The remaining payment is also to be made after final checking of the bill within 28 working days of submission of bill by the contractor. In case delay in payment of the intermediate bills after 30 days of submission by the contractor, provided the bill submitted by the contractor found to be in order, a simple interest @ prevailing rate of interest of General Provident Fund shall be paid to the contractor from the date of expiry of prescribed time limit. All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is are in accordance with the contract and
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		specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract. Pending consideration or extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority. The Engineer-in-Charge in his sole discretion on the basis of a certificate from the Asstt Manager / Manager (Engg) to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill(s) to be submitted by the contractor within 10 days of the interim payment. The case of delay in submission of the bill by the contractor a simple interest @ 10%(percent) per annum on the advance payment made shall be paid to the AAI from the date of the expiry of prescribed 10 days
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CLAUSE – 7A

		No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge
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CLAUSE 8

	Completion Certificate and Completion Plans	Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete for 'Civil Construction Works' until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangement as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof. a. For electrical and mechanical capital works: The contractor shall remove the rubbish from the site. Following conditions must be met before recording completion certificate: Submits completion plan, maintenance manual, manufactures catalogue and gives performance test for system. b. For repair works: The performance of the repaired system has been tested and found satisfactory. c. For AMC work: The system has been tested for its performance/ completeness and taken over by AAI / next agency for operation and maintenance.
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CLAUSE 8 A

	Contractor to keep site clean	When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing colour washing, painting etc., on walls, floor, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. Where the work is done without waiting for the actual completion of all the other items of work in the contract, in case the contractor fails to comply with the requirements of this clause, the Engineer-in-charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-charge shall give ten days notice in writing to the contractor.
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CLAUSE 8 B

	Completion Plans to be Submitted by the Contractor	The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 2013 and (Part -II External) 1994 or latest available specifications, as applicable within thirty days of the completion of the work. The contractor shall submit completion plan for building works, all services, and obtain occupancy certificate from local bodies on the basis of completion drawings within a period of 30 days from the date of completion. The contractor shall also submit catalogues of all equipment's and maintenance manual for the complete E & M systems. If contractor fails to submit completion plans of all works, he shall be liable to pay compensation @ 0.5% of the tendered value of works costing up to Rs. 5 Crores subject to maximum of Rs. 1.00 Lac and 0.25% for works costing more than Rs. 5 crores subject to maximum of Rs. 1.5.Lac. The decision of Project-in-charge in this regard shall be final and binding on the contractor.
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CLAUSE 9

	Payment of final bill	The corrected final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and for those items which are in dispute, on account of quantity and/ or rates shall be paid at approved quantity and/ or rates by the Engineer-in- charge, within three months, period reckoned from the date of receipt of the bill by the Engineer-in charge or his authorized representative, complete with account of materials issued by the Department and dismantled materials.												
		<table> <thead> <tr> <th>Sl.</th><th>Value of work</th><th>Time limit</th></tr> </thead> <tbody> <tr> <td>1</td><td>If the Tendered value of work is up to Rs. 50 lac</td><td>2 months</td></tr> <tr> <td>2</td><td>If the Tendered value of work is more than Rs.50 lac and up to Rs. 2.5 Crore:</td><td>3 months</td></tr> <tr> <td>3</td><td>If the Tendered value of work exceeds Rs.2.5 Crore:</td><td>6 months</td></tr> </tbody> </table>	Sl.	Value of work	Time limit	1	If the Tendered value of work is up to Rs. 50 lac	2 months	2	If the Tendered value of work is more than Rs.50 lac and up to Rs. 2.5 Crore:	3 months	3	If the Tendered value of work exceeds Rs.2.5 Crore:	6 months
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		If the final bill is submitted by the contractor within the period specified above and payment of final bills is made by the AAI within above prescribed time limit, if delay in payment, a simple interest @ prevailing rate of interest of General Provident Fund shall be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor is found to be in order. <i>The Final bill shall be prepared for both L1 & L2 bidders for all tendered items (excluding Extra Items based on market rate) and payment shall be made on the basis of lower of the two.</i>
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CLAUSE 9 A

	Payment of contractor's bills to Banks	Payments due to the contractor and refund of various nature may, if so desired by him and wherever possible in banks be made through electronic payment mechanism instead of direct to him, provided that the contractor furnishes to the Engineer-in- Charge. - Informations as per proforma attached. - An authorization in the form of a legally valid document such as power of attorney conferring authority on the bank to receive payments and - His own acceptance of the correctness of the amount made out as being due to him by Authority or his signature on the bill or other claim preferred against Authority before settlement by the Engineer-in-charge of the account or claim by payment to the bank. While the receipt given by such banks shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly receipted and discharged through his bank. Nothing herein contained shall operate to create in favour of the bank any rights or equities vis-à-vis the Airports Authority of India.
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CLAUSE 10

	Materials supplied by Authority	Materials which Authority will supply are shown in Schedule 'B' which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The contractor shall be bound to procure them from the Engineer-in-charge. As soon as the work is awarded, the contractor shall finalise the programme for the completion of work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings/ or schedule of quantities of the work. The contractor shall give in writing his requirement to the Engineer-in-charge, which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement. Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills, the contractor shall certify that balance of materials supplied is available at site in original good condition. The contractor shall submit along with every running bill (on account or interim bill) material-wise reconciliation statements supported by complete calculations
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		reconciling total issue, total consumption and certified balance (diameter / section-wise in the case of steel) and resulting variations and reasons thereof. Engineer in charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 42 at any stage of the work if reconciliation is not found to be satisfactory. The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as necessary. Notwithstanding anything to the contrary contained in any other clause of the contract and all stores / materials so supplied to the contractor or procured with the assistance of the AAI shall remain the absolute property of Authority and the contractor shall be the trustee of the stores/ materials, and the said stores/ materials shall not be removed/ disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer in charge or his authorised agent. Any such stores / materials remaining unused shall be returned to the Engineer in charge in as good a condition in which they were originally supplied at a place directed by him, at a place of issue or any other place specified by him as he shall require, but in case it is decided not to take back the stores / materials the contractor shall have no claim for compensation on any account of such stores / materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores / materials. On being required to return the stores / materials, the contractor shall hand over the stores/ materials on being paid or credited such price as the Engineer in charge shall determine, having due regard to the condition of the stores / materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the Engineer in charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to account for contravention of the terms of the licenses or permit and / or for criminal breach of trust, be liable to Authority for all advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Authority within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of completion of work exceeds 12 months, but if a part of the materials only has been supplied within the aforesaid period, then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Engineer in charge whose decision in this regard shall be final and binding on the contractor. The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good / original condition at the time of completion or determination of the contract shall be returned to the Engineer in charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading transporting, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place of issue.
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CLAUSE 10 A

	Materials to be provided by the contractor and Mandatory Tests	1. The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the Authority. 2. The contractor shall, at his own expense and without delay supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty (30) days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received. 3. The Contractor shall at his cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. 4. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials. 5. The contractor shall, at his cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges including testing charges. The Engineer-in-Charge or his authorized representative shall always have access to the works and to all workshops and places where work component is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access. 6. The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor 7. The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.
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CLAUSE 10 B

(1)	Secured Advance on Nonperishable materials	1. The Contractor, on signing an indenture in the form to be specified in Appendix –XX, shall be entitled to be paid during the progress of the execution of the work upto 75% of the assessed value of any materials which are in the opinion of the Engineer in charge nonperishable, non-fragile and noncombustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and / or protected against damage by weather or other causes but which have not at time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered/ deducted from the next payment made under any of the clause or clauses of this contract. Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer in charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer in charge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high risk materials such as ordinary glass, sand, petrol, diesel.
(II)	Mobilization Advance	Mobilization advances not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within six months of the order to commence the work. Such advance shall be released in two or more installments to be determined by the Engineer in Charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-charge to the contractor on a request made by the contractor to the Engineer in Charge in this behalf. The second and subsequent installments shall be released by the Engineer in Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment(s) to the satisfaction of the Engineer in Charge. Before any instalment of advance is released, the contractor shall execute Bank Guarantee Bonds not more than 6 (six) in number from commercial Bank for the amount equal to 110% of the amount of advance and valid for the period till recovery of advance. This (Bank Guarantee from commercial Bank on prescribed format for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

	Interest on Mobilization advance	The mobilization advance in bear simple interest at the rate as mentioned in Schedule F per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance.
	Recovery of Mobilization advance	Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first ten percent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty percent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment. If the circumstances are considered reasonable by the Engineer in Charge¹ the period mentioned for request by the contractor in writing for grant of mobilization advance may be extended at the discretion of the Engineer in Charge.

CLAUSE 10 C

	Payment on Account of Increase in Prices/ Wages due to Statutory Order(s)	If after submission of tender, if the price of any material incorporated in the work and/ or wages of labour increases as a direct result of the coming into force of any fresh, law or statutory rule or order (but not due to any variation of rate in GST applicable on such material(s) being considered under this clause) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of Clause 5 of the contract without any action under Clause 2, then the amount of the contract shall accordingly be varied. If after submission of the tender, the price of any material incorporated in the works and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any variation of rate in GST applicable on such material(s) being considered under this clause), Authority shall in respect of materials incorporated in the works and/or labour engaged on the execution of the work after the date of coming into force of such law, statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any, for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of Clause 5 of the contract without any action under Clause 2.
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		Engineer-in-charge shall call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages. The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/ or wages of labour, give notice thereof to the Engineer-in-charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply. For this purpose, the labour component of 85% of the value of the work executed during period under consideration shall not exceed the percentage as specified in Schedule F, and the increase or decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled mazdoor, fixed under any law, statutory rule or order. The cost of work for which escalation applicable is same as cost of work done shall be worked out as below: (a) Gross value of work done up to this quarter: (A) (b) Gross value of work done up to the last quarter: (B) (c) Gross value of work done since previous quarter (C)= (A-B) (d) Full assessed value of Secured Advance fresh paid in this quarter: (D) (e) Full assessed value of Secured Advance recovered in this quarter: (E) + (f) Full assessed value of Secured Advance for which escalation is payable in this quarter, (F)= (D-E) (g) Advance payment made during this quarter: (G) (h) Advance payment recovered during this quarter: (H) (i) Advance payment for which escalation is payable in this Quarter (I)= (G-H) (j) Amount paid based on prevailing market rates due to deviations/variations as per Clause 12 during this quarter: (J) Then, M = C-F+I+J N = 0.85 M (k) Less cost of services rendered at fixed charges as per Clause 34 and recovered during the quarter (L) (l) Less cost of Engineering Consultancy Services rendered at fixed charges as per BOQ and paid during the quarter (X). Cost of work for which escalation is applicable W=N-(L+X) Provided always that: (a) Where provisions of clause 10C are applicable, provisions of clause 10 CC will not be applicable and; (b) Where provisions of clause 10 CC are applicable, provisions of clause 10C will not be applicable.
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CLAUSE 10 CA

Payment due to variation in prices of – materials after receipt of tender	If after submission of the tender, the price of materials specified in Schedule-F increases/ decreases beyond the base price(s) as indicated in schedule F for the work, then the amount of the contract shall accordingly be varied and provided further that any such variations shall be effected for stipulated period of contract including the justified period extended under the provisions of clause 5 of the contract without any action under Clause 2. However for work done/ during the justified period extended as above, it will be limited to indices prevailing at the time of updated stipulated date of completion considering the effect of extra work (Extra time to be calculated on pro-rata basis only as cost of extra work X stipulated period / tendered cost). The increase / decrease in prices of cement, steel reinforcement, structural steel, Bitumen and POL shall be determined by the Price indices issued by the Director General, CPWD. For other items provided in the Schedule 'F', this shall be determined by the All India Wholesale Price Indices of materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry. Base price for cement, steel reinforcement, structural steel and POL shall be as issued under authority of Director General, CPWD applicable for Delhi including Noida, Gurgaon, Faridabad and Ghaziabad and for other places as issued under the authority of Zonal Chief Engineer, CPWD and base price of other materials issued by concerned Zonal Chief Engineer and as indicated in Schedule 'F'. In case, price index of a particular material is not issued by Ministry of Commerce and Industry then the price index of nearest similar material as indicated in Schedule F shall be followed. The amount of the contract shall accordingly be varied for all such materials worked out as per the formula given below for individual material: Adjustment for component of individual material. $V = P \times$ $\frac{Q \times CI - CI_0}{CI_0}$ where, V = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered P = Base price of material as issued under authority of DG, CPWD or concerned Zonal Chief Engineer CPWD and as indicated in Schedule 'F'. For Projects and original works Q = Quantity of material brought at site for bonafide use in the works since previous bill excluding any such quantity consumed in the deviated quantity of items beyond deviation limit and extra/substituted item, paid/to be paid at rates derived on the basis of market rates under clause 12.2 For maintenance works Q = Quantity of material brought at site for bonafide use in the works since previous bill including any such quantity consumed in the deviated quantity of items beyond deviation limit paid at agreement rates and extra/substituted item being scheduled items, but excluding nonscheduled extra/substituted item paid/to be paid at market rates under clause 12.2
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		CI0 – Price index for cement, steel reinforcement bars, structural steel and POL as issued by the DG, CPWD and corresponding to the time of base price of respective material indicated in schedule 'F'. For other items, if any provided in Schedule 'F', All India Wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce and corresponding to the time of base price of respective material indicated in Schedule 'F'. CI – Price index for cement, steel reinforcement bars, structural steel and POL as issued under the authority of DG, CPWD for period under consideration. For other items, if any, provided in Schedule 'F' All India Wholesale Price Index for the material for the period under consideration as published by Economic Advisor to Government of India, Ministry of Industry and Commerce. If actual purchase price of material is less than base price P and $CI \geq CI0$ then, this clause shall not be applicable. Note: i. In respect of justified period extended under the provisions of Clause 5 of the contract without any action under clause 2, the index prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on prorata basis only as cost of extra work X stipulated period/ tendered cost) shall be considered. Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of materials covered in this Clause. If during progress of work or at the time of completion of work, it is noticed that any material brought at site is in excess of requirement, then amount of escalation if paid earlier on such excess quantity of material shall be recovered on the basis of cost indices as applied at time of payment of escalation or as prevailing at the time of effecting recovery, whichever is higher. iii. Cement mentioned wherever in this clause includes cement component used in RMC brought at site from outside approved RMC plants, if any. iv. The date wise record of ready mix concrete shall be kept in a register and cement consumption for the same shall be calculated accordingly. If built up steel items are brought at site from workshop, than the variation shall be paid for structural steel up to the period when the built up item/finished product is brought at site.
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Clause 10CC

	Price Adjustment for Works	If the prices of materials and/ or wages of labour required for execution of work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions: i. The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any. ii. The cost of work on which escalation will be payable shall be reckoned as below: a. Gross value of work done up to this quarter: (A) (b) Gross value of work done up to the last quarter: (B) (c) Gross value of work done since previous quarter (C)= (A - B) (d) Full assessed value of Secured Advance fresh paid in this quarter: (D) (e) Full assessed value of Secured Advance recovered in this quarter: (E) (f) Full assessed value of Secured Advance for which escalation Payable in this quarter, (F)= (D - E) (g) Advance payment made during this quarter: (G) (h) Advance payment recovered during this quarter: (H) (i) Advance payment for which escalation is payable in this Quarter (I)= (G - H) (j) Amount paid based on prevailing market rates due to deviations/variations as per Clause 12 during this quarter: (J) Then, $M = C + F + I - J$. $N = 0.85 M$ k. Less cost of services rendered at fixed charges as per Clause 34 and recovered during the quarter (L) l. Less cost of Engineering Consultancy Services rendered at fixed charges as per BOQ and paid during the quarter (X). Cost of work for which escalation is applicable $W = N - (L + X)$ * Cost of Design & Detailing shall be treated as civil work for EPC contract. Components for materials, labour, etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule F. The decision of the Engineer in charge in working out such percentage shall be binding on the contracts. (iii). The following principles shall be followed while working out the payment/recovery on account of variation of prices of materials and/ or wages of labour. of Design & Detailing shall be treated as civil work for EPC contract.
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		(a) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills paid during the three calendar months of the said quarter. The date of submission of bill finally by the contractor to the department shall be the guiding factor to decide the bills relevant to the quarterly interval. The first such payment shall be made at the end of three months after the month (excluding the month in which the work order issued) and thereafter at three months' interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion. (b) The indices as defined below (excluding LI) relevant to any quarter/period for which such compensation is to be paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to the date of completion after the quarter covered by the last such instalment of payment, is less than three months, the indices shall be the average of the indices for the months falling within that period. (c) The minimum wage of an unskilled Mazdoor shall be the higher of the wage notified by Government of India, Ministry of Labour and that notified by the local administration both relevant to the place of work and the period of reckoning. (d) The escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials is paid under this clause. If such revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rates only for work done in subsequent quarters. (e) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled Mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component. In the event the price of materials and/or wages of labour required for execution of the work decreases, there shall be a downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formula herein stated below under this Clause IOCC shall mutatis mutandis apply. The contract price shall be adjusted for increase or decrease in rates and prices of labour, cement, steel reinforcement bar, fuel and lubricants and other input materials as per percentage of materials/labour specified in schedule F and in accordance with the principles, procedures and formulae specified below: (a) Price adjustment for change in cost shall be paid in accordance with the following formulae: (i) For Construction: $Vw = W * (1/100) * [Cp * (Cr - Co)/Co + Lp * (Lr - Lo)/Lo + CMP * (CMr - CMo)/CMo + EMP * (EMr - EMo)/EMo + Fp * (Fr - Fo)/Fo + Sp * (Sr - So)/So + BP * (Br - Bo)/Bo]$ (ii) For Maintenance: $Vw = W * (1/100) * [LP * (Lr - Lo)/Lo + CMP * (CMr - CMo)/CMo + EMP * (EMr - EMo)/EMo + Bp * (Br - Bo)/Bo]$
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		Where, W=cost of work done as per para (ii) above. Vw (Variation of cost of Work) =Increase or decrease in the cost of works during the period under consideration due to change in the rates for relevant components. Percentage components of materials &labour as specified in the schedule F are defined as under:- C_p—Cement component, L_p—Labour component, CM_p—Civil component of other construction materials, EM_p—E & M i/c IT and AS component of construction materials F_p—POL (Diesel) component S_p—Reinforcement steel bars/TMT bars/structural steel (including strands and cables) component B_p—Bitumen Component Indices for various components of materials & labour to be used for the purpose of this Clause are defined as under:- C_o— Wholesale Price Index for Pozzolana Cement published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of last date of receipt of tender including extension, if any. C_i— Wholesale Price Index for Pozzolana Cement published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration. L_o— Minimum daily wage in rupees of an unskilled adult mazdoor, fixed under any law, statutory rule or order as on the Last date of receipt of tender including extension, if any. L_i— Minimum wage in rupees of an unskilled adult mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration. CM_o— Price Index for civil components of other construction materials valid for the month of the last date of receipt of tender including extension, if any, as published by AAI. CM_i— Price Index for civil components of other construction materials for the period under consideration, as published by AAI. EM_o— Price Index for E & M components of construction materials valid for the month of the last date of receipt of tender including extension, if any, as published by AAI. EM_i— Price Index for E & M components of construction materials for the period under consideration, as published by AAI. F_o— Wholesale Price Index of HSD (High Speed Diesel) published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.
		Fr— Wholesale Price Index of HSD (High Speed Diesel) published a. The by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration. So— Wholesale Price Index of Mild Steel long products published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any Sr— Wholesale Price Index of Mild Steel long products published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration. Bo— Wholesale Price Index of Bitumen published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any Br— Wholesale Price Index of Bitumen published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration. —

CLAUSE 10 D

	Dismantled Material AAI Property	The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work etc. as property of AAI and such materials shall be disposed of to the best advantage of Authority according to the instructions in writing issued by the Engineer-in-charge.
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CLAUSE 11

	Work to be executed in accordance with specifications, drawings, orders etc.	The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect to the work signed by the Engineer in charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department specified in Schedule F or in any Bureau of Indian Standard or any other published standard or code or Schedule of Rates or any other printed publication referred to elsewhere in the contract. The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The contractor shall take full responsibility for adequacy suitability and safety of all the works and methods of construction.
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CLAUSE 12

	Deviations / variations extent and pricing	The engineer-in-charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineering- charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.
12.1		The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value being ordered, be extended, if requested by the contractor, as follows: i. In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus ii. 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the engineer-in-charge.
12.2	Deviation, Extra Items and Pricing	In the case of extra item(s) (items that are completely new, and in addition to the items contained in the contract) the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-charge shall within Six weeks of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

	Deviation, substituted items pricing	In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para. (i) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). (ii) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
	Deviation, Deviated Quantities, Pricing	In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.
12.3		The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.
12.4		The contractor shall send to the Engineer-in-Charge once every three months, an up-to-date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge, which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Executive Director Engineering may authorize consideration of such claims on merits.
12.5		For the purpose of operation of Schedule F, the following works shall be treated as works relating to foundation unless & otherwise defined in the contract: - For Buildings: All works up to 1.2 meters above ground level or up to floor 1 level whichever is lower. - For abutments, piers and well staining: All works up to 1.2 m above the bed level. - For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/tanks and other elevated structures: All works up to 1.2 m above the ground level.

		iv. For roads, apron, runway & taxi track all items of excavation, filling GSBC and including treatment of sub-base. v. For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 meters above the ground level. vi. For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
12.6		Any operation incidental to or necessarily has to be in contemplation of tenderer while filing, tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

	Foreclosure of contract due to Abandonment or Reduction in Scope of Work	If at any time after acceptance of the tender or during the progress of work the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works. The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure; i. Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks. ii. AAI shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however AAI shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by AAI, cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor. iii. If any materials supplied by AAI are rendered surplus, the same except normal wastage shall be returned by the contractor to AAI at rates not exceeding those at which these were originally issued, less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to AAI stores, if so required by AAI, shall be paid.
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		iv. Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable. v. Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary. The contractor shall, if required by the Engineer- in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition. The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the AAI as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer- in-Charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the AAI from the contractor under the terms of the contract. In the event of action being taken under clause 13 to reduce the scope of work, the contractor may furnish fresh Performance Guarantee on the same conditions, in the same manner and at the same rate for the balance tendered amount and initially valid upto the extended date the completion or stipulated date of completion if no extension has been granted plus 180 days beyond that. Wherever, such a fresh Performance Guarantee is furnished by the contractor, the Engineer in Charge may return the previous Performance Guarantee.
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CLAUSE 14

	Carrying out part Work at risk & cost of contractor	a. If contractor: - At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; or - Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer- in-Charge; or - Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge. b. The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to AAI, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to: - Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or - Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.
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		c. The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and executed at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by AAI because of action under this clause shall not exceed 10% of the tendered value of the work. d. In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor. e. Any excess expenditure incurred or to be incurred by AAI in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by AAI as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to AAI in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days. f. If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract/ provisions of law. In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.
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CLAUSE 15

	Suspension of Work	i. The contractor shall, on receipt of the order in writing of the Engineer-in- Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons: a. on account of any default on the part of the contractor or; b. for proper execution of the works or part thereof for reasons other than the default of the contractor; or c. For safety of the works or part thereof. The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
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		ii. If the suspension is ordered for reasons (b) and (c) in sub-para (i) above (but not attributed to contractor): - the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25% for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and; - If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days. - If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reasons (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by AAI or where it affects whole of the works, as an abandonment of the works by AAI, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by AAI, he shall have no claim to payment of any compensations on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.
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CLAUSE 15 A

	Compensation in case of delay due to late supply of stipulated material by AAI.	The contractor shall not be entitled to claim any compensation from AAI for the losses suffered by him on account of delay by AAI in the supply of materials in Schedule 'B' where such delay is covered by the difficulties relating to supply of wagons, force majeure or any reasonable cause beyond the control of AAI. This clause 15 A will not be applicable for works where no material is stipulated for issue by AAI.
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CLAUSE 16

	Action in case Work not done as per Specifications	All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorize subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the AAI or any organization engaged by the Department of Quality Assurance and of the Chief technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself. If it shall appear to the Engineer-in -charge or his authorized subordinates in charge of the work or to the Executive Director-In-charge of quality assurance or his subordinate officers or the officers of the organization engaged by the AAI for quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs.10 lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default. In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'F' may considered reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.
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CLAUSE 17

	Contractor Liable for Damages, defects during maintenance period	If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in-charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineering-charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer-in-charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later. In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.
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CLAUSE 18

	Contractor to Supply Tools & Plants etc.	The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in charge's stores) machinery, tools & plants as specified in Schedule F. in addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefor to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and / or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.
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CLAUSE 18 A

	Recovery of Compensation paid to Workmen	In every case in which by virtue of the provisions sub-section(i) of Section 12, of the Workmen's Compensation Act, 1923, AAI is obliged to pay compensation to a workman employed by the contractor, in execution of the works, AAI will recover from the contractor, the amount of the compensation so paid, and, without prejudice to the rights of the AAI under sub-section(2) of Section 12, of the said act, AAI shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by AAI to the contractor whether under this contract or otherwise. AAI shall not be bound to contest any claim made against it under subsection(1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to AAI full security for all costs for which AAI might become liable in consequence of contesting such claim.
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CLAUSE 18 B

	Ensuring Payment and Amenities to Workers if Contractor fails	In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) act 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, AAI is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the AAI Contractor's Labour Regulations or under the Rules framed by AAI from time to time for the protection of health and sanitary arrangements for workers employed by AAI Contractors, AAI will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the AAI under sub section (2) of Section 20, sub section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, AAI shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by AAI to the contractor whether under this contract or otherwise AAI shall not be bound to contest any claim made against it under sub section (1) of Section 20, sub section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the AAI full security for all costs for which AAI might become liable in contesting such claim.
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CLAUSE 19

	Labour laws to be complied by the Contractor	The contractor shall obtain a valid license under the contract labour (R&A) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986. The contractor shall also comply with the provisions of the building and other construction workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non execution of the work.
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CLAUSE 19 A

	No labour below the age of fourteen years shall be employed on the work.
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CLAUSE 19 B

	Payment of wages	Payment of wages: i The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the AAI Contractor's Labour Regulation or as per the provisions of the Contract Labour (Regulation and Abolition) act, 1970 and the contract labour (Regulation and Abolition) Central Rules, 1971 wherever applicable. ii The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work,
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	including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him. iii In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Airports Authority of India contractor's Labour Regulations made by AAI from time to time in regard to payment of wages wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable. iv. The following deductions shall be permissible to be made by the Engineer-in- Charge. a. The Engineer-in-charge concerned shall have the right to deduct from the moneys due to the contractor or any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non- observance of the Regulations. b. Under the provision of Minimum Wages (Central) Rule 1950 the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-charge concerned. In the case of Union Territory of Delhi, however, as the all-inclusive minimum daily wages fixed under Notification of the Delhi Administration No.: F.12(162)MWO/DAB/43884-91, dated 31.12.1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise. v. The contractor shall comply with the provisions of the Payment of wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rule made thereunder from time to time. vi. The contractor shall indemnify and keep indemnified Authority against payments to be made under and for the observance of the laws aforesaid and the AAI Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors. vii. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract. viii. Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise. ix. The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.
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CLAUSE 19 C

		In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per AAI Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs. 200/- for each default and in addition, the Engineer-in charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.
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CLAUSE 19 D

		The contractor shall submit by the 4th and 19th of every month, to the Engineer-in charge a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively: i. the number of labourers employed by him on the work, ii. their working hours, iii. the wages paid to him, iv. the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and v. the number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them Failing which the contractor shall be liable to pay to AAI, a sum not exceeding Rs. 200/- for each default or materially incorrect statement. The decision of the Engineer-in charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and shall be binding on the contractor.
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CLAUSE 19 E

		In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by AAI from time to time for the protection of health and sanitary arrangements for workers employed by the AAI and its contractor.
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CLAUSE 19 F

		Leave and pay during leave shall be regulated as follows: 1. Leave: i. In the case of delivery - maternity leave not exceeding 8 weeks, 4 weeks upto and including the day of delivery and 4 weeks following that day. ii. In the case of miscarriage - upto 3 weeks from the date of miscarriage. 2. Pay: i. In the case of delivery – leave pay during maternity leave will be at the rate of women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater. ii. In the case of miscarriage – leave pay at the rate of average daily earning
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		calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage. 3. Conditions for the grant of Maternity Leave: No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave. 4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in appendix – III and IV, and the same shall be kept at the place of work.
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CLAUSE 19 G

		In the event of the contractor (s) committing a default or breach of any of the provisions of the Airports Authority of India Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filling any statement under the provisions of the above Regulations and Rules which is materially incorrect, he / they shall, without prejudice to any other liability, pay to the AAI a sum not exceeding Rs.200/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties. Should it appear to the Engineer-in-Charge that the contractor (s) is / are not properly observing and complying with the provision of the AAI Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R&A) Central Rules 1971, for the protection of health and sanitary arrangements for work – people employed by the contractor (s) (hereinafter referred as “the said Rules”) the Engineer-in-Charge shall have power to give notice in writing to the contractor (s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor (s) shall fail within the period specified in the notice to comply with and/ observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor (s). The contractor (s) shall erect, make and maintain at his / their own expense and to approved standards all necessary huts and sanitary arrangements required for his / their work –people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor (s) requiring that the said huts and sanitary arrangements be remodeled and / or reconstructed according to approved standards, and if the contractor (s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor (s).
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CLAUSE 19 H

		The contractor (s) shall at his / their own cost provided his / their labour with a sufficient number of huts (hereinafter referred to as the camp) on the following specifications on a suitable plot of land to be approved the Engineer-in-Charge. i. Facility to be provided a. The minimum height of each hut at the eaves level shall be 2.10m (7ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer. b. The contractor shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6' x 5') adjacent to the hut for each family.
		c. The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women. d. The contractor (s) shall construct sufficient number of bathing and washing places one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened. ii. Specifications a. All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in- Charge in case of sun-dried bricks, the walls should be plastered with mud gobri on both sides. The floor may be kutcha but plastered with mud gobri and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with the thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water – tight. b. The contractor (s) shall provide each hut with proper ventilation. c. All doors, windows and ventilators shall be provided with suitable leaves for security purposes. d. There shall be kept an open space of at least 7.2 m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed. iii. Water Supply The contractor (s) shall provided adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor (s) shall also at his / their own cost make arrangements for laying pipe lines for water supply to his / their labour camp from the existing mains wherever available and shall pay all fees and charges therefor. iv. The site selected for the camp shall be high ground, removed from jungle. v. Disposal of Excreta: The contractor (s) shall make necessary arrangement for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor (s) shall make arrangements for the removal of the excreta through the Municipal Committee / authority and inform it about the number of labourers employed so that arrangements may be made by such Committee / authority for the removal of excreta. All charges on this account shall be borne by the contractor and paid direct by him to the

		Municipality / authority. The contractor shall provide one sweeper for every eight seats in case of dry system. vi. Drainage The contractor (s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy. vii. The contractor (s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers. viii. Sanitation The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.
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CLAUSE 19 I

		The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual work premises, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. Assistant Manager/Junior Executive will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service center, to apprise the residents about the same.
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CLAUSE 19 J

		It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy upto 5% of tendered value of work may be imposed by the General Manager Engg. Whose decision shall be final both with regard to the justification and quantum and be binding on the contractor. However, the Executive Director Engg., through a notice may require the contractor to remove the illegal occupation any time on or before construction and delivery.
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CLAUSE 19 K

	Employment of skilled / semiskilled workers	The contractor shall at all stages of work deploy skilled / semi-skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute / Industrial Training Institute/National Institution of Construction Management and research (NICMAR) National Academy of Construction, CIDC or any similar reputed and recognized Institute managed / certified by State / Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled / semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer –in- Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs.100 per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding. Provided always, that the provision of this clause shall not be applicable for works with estimated cost put to tender being less than Rs.5 crores.
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CLAUSE 19 L

	Contribution of EPF and ESI	The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployment of labour will be done through biometric attendance system or any other suitable method by the Engineer in charge. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of the submission of documentary proof of payment provided same are in order
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CLAUSE 19 M

	Compliance of NGT guidelines	The contractor is required to follow latest NGT guidelines at the construction site and any violation of such guidelines will be in his account.
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CLAUSE 20

	Minimum Wages Act to be Complied with	The contractor shall comply with all the provision of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970 amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.
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CLAUSE 20(A)

	Employees Provident Fund & Miscellaneous Provision Act 1952/Jammu & Kashmir Employees Provident Funds (and Miscellaneous Provisions) Act, 1961 and State Insurance (ESI) Act, 1948.	The Contractor shall comply with all the provisions of the Employees Provident Fund & Misc. Provisions Act, 1952/ Jammu & Kashmir Employees Provident Funds (and Miscellaneous Provisions) Act, 1961 and ESI Act, 1948, amended from time to time and rules framed thereunder. Some of the provisions are given below: a. The contractor shall intimate his PF Account Code No. allotted by Regional PF Commissioner and ESI Registration No. allotted by ESI Corporation after award of work and shall continue to have valid PF Account Code No. and ESI Registration No. till actual completion of the contract. b. The contractor shall provide a list of contract Workers engaged for contract work along with their PF Account No. & ESI Registration No. c. The contractor by 20th of every month shall provide a monthly statement showing recoveries of contribution and proof of remittance of provident fund contribution to RPFC and ESI contributions to ESI Corporation in respect of Workers engaged in contract work. d. The contractor shall provide copies of PF & ESI challans of monthly contributions in respect of contract workers engaged for contract work on month to month basis. AAI reserves the right to withhold minimum amount as detailed under, from the
		running account payments, if PF / ESI contributions are not paid by the contractor and proof to that effect have not been produced regularly on due dates. To withhold 3% for building work & 1.5% for road/pavement work of the total amount of work done during the period considered.
		ESI & EPF amount paid to the statutory authorities by the contractor shall be reimbursed on actual basis on submission of documentary evidence.

CLAUASE 21

	Work not to be sublet. Action in case of insolvency	The contract shall not be assigned or sublet without the written approval of Engineer-in-Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of AAI in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineers in Charge on behalf of the AAI shall have power to adopt the course specified in Clause 3 hereof in the interest of AAI and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.
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CLAUASE 22

		All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of AAI without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.
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CLAUSE 23

	Changes in firm's Constitution to be intimated	Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken and the same consequences shall ensue as provided in the said Clause 21.
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CLAUSE 24

		All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
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CLAUSE 25

	Dispute Resolution Mechanism and Arbitration	All disputes or differences which may arise out of or in connection with or incidental to the Agreement(s) including any dispute or difference regarding the interpretation of terms and conditions of any clause(s) thereof shall be dealt with as provided hereinafter: (i) Through Mediation: All dispute(s), at the first instance, shall be referred to the Mediation Committee of Independent Experts (MCIE) or individual mediator for mediation as per AAI Mediation Policy and applicable laws. All cost of mediation, shall be borne equally by the parties. In case either party withdraws from the Mediation or the dispute(s) is not resolved within 120 days of reference to the Mediation, then the aggrieved party may invoke arbitration through sub para (ii) within 30 days from the date of receipt of Partial Settlement Agreement or Failure Report. (ii) Adjudication through Arbitration: In case no final settlement has been arrived at between the parties after mediation or partially settled as per sub Para (i) above, the unresolved dispute(s), on invocation by the aggrieved party shall be referred for adjudication by arbitration. Arbitration is restricted to disputes with a value of less than Rs. 10 Crores. The dispute shall be referred to a Sole Arbitrator to be appointed by Chairman / Member, AAI, after obtaining consent of the other party, as per format annexed at Annexure-A. Unless the contract has already been repudiated or terminated, the parties shall, in every case, continue to proceed to perform their respective obligations under the agreement. Arbitration proceedings shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996, as amended from time to time. Fee payable to the Arbitrator(s) shall be as per Schedule-IV of the Arbitration & Conciliation Act, 1996 and shall be borne by both the parties equally. No dispute shall be referred for resolution under this clause through arbitration in matters for which eviction & recovery procedure is provided under Chapter -VA of the Airports Authority of India Act, 1994. AAI empanelled Arbitrators and Mediators list is available on AAI website Homepage under 'Important links Section'. Link for receiving Requests for Mediation is also available under the same section on AAI website. In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs) /Port Authorities inter-se and also between CPSEs and Government Departments /Organizations (excluding disputes relating (to Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM No. DPE-02/0001/2023- AMRCD-FTS-13578 dated 8th December 2025 and the decision of AMRCD on the said dispute will be binding on both the parties.
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Annexure- 'A'

To,

The Chairman/Member/Regional Executive Director,
Airports Authority of India

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SUB: Request for appointment of arbitrator under Clause of the agreement dated for

Sir/Madam,

1. We state that(contractor/agency) was awarded work/concession of
..... at Airport/ (other location of Airports Authority of India through Award Letter dated
2. Dispute related to arose between us (contractor/agency) and AAI.
3. On (date), dispute was referred to Mediation as per AAI Mediation Policy and any settlement on the following claims/disputes was not reached between the parties:
 - (i)
 - (ii)
 - (iii)
4. A concise statement along with claim in respect of each of such dispute is attached herewith.
5. In view of the above, we invoke arbitration under clause of the Agreement between us and AAI and as per proviso to Section-12(5) of the Arbitration & conciliation Act, 1996, we hereby agree and request the Chairman/Member/Regional Executive Director AAI to appoint arbitrator from AAI's panel of arbitrators.
6. I/We also give my/out consent for appointing any of an arbitrator from AAI's approved panel of arbitrators, **as per paragraph-5 above.**

Thanking you,
(.....)
Authorized Signatory of
Encl: AS above.

CLAUSE 26

	Contractor to indemnify AAI against Patent Rights	The contractor shall fully indemnify and keep indemnified the Chairman AAI against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay and royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against AAI in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the AAI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.
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CLAUSE 27

	Lump sum Provisions in Tender	When the estimate on which a tender is made, includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items ,or if the part of work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump- sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provision of the clause.
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CLAUSE 28

	Action where no specifications are specified	In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.
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CLAUSE 29

	With-holding and lien in respect of sums due from contractor	i. Whenever any claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the AAI shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the AAI shall be entitled to withhold the security deposit if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the AAI shall be entitled to withhold and have lien to retain to the extent of such claimed amount or amounts referred to above from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in Charge of the AAI or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in- Charge or AAI will be kept withheld or retained as such by the Engineer-in- Charge or AAI till the claim arising out of or under the contract is determined by the arbitrator. (if the contract is governed by the arbitration clause) or by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the AAI shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise
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		ii. AAI shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by contractor under the contract or any work claimed to have been done by the him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for AAI to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by AAI to the contractor, without any interest thereon whatsoever. Provided that the AAI shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Executive Director Engineering / General Manager Engineering on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Executive Director Engineering / General Manager Engineering.
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CLAUSE 29 A

	Lien in respect of claims in other Contracts	i. Any sum of money due and payable to the contractor (including the security deposit refundable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the AAI or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or AAI or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the AAI or with such other person or persons. ii. It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the AAI will be kept withheld or retained as such by the Engineer-in-Charge or the AAI or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.
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CLAUSE 30

	Employment of coal mining or controlled area labour not permissible	i. The contractor shall not employ coal mining or controlled area labour falling under any category whatsoever or in connection with the work or recruit labour from area within a radius of 32 km (20 miles) of the controlled area. Subject as above the contractor shall employ imported labour only i.e., deposit imported labour or labour imported by contractors from area, from which import is permitted. ii. Where ceiling price for imported labour has been fixed by State or Regional Labour Committees not more than that ceiling price shall be paid to the labour by the contractor. iii. The contractor shall immediately remove any labourer who may be pointed
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		out by the Engineer-in-Charge as being a coal mining or controlled area labourer. Failure to do so shall render the contractor liable to pay to AAI a sum calculated at the rate of Rs.10/- per day per labourer. The certificate of the Engineer-in -Charge about the number of coal mining or controlled area labourer and the number of days for which they worked shall be final and binding upon all parties to this contract. iv. It is declared and agreed between the parties that the aforesaid stipulation in this clause is one in which the public are interested within the meaning of the exception in Section 74 of Indian Contract Act, 1872. Explanation :- Controlled area mean the following areas: Districts of Dhanbad, Hazaribagh, Jamtara- Sub-Division under Santhal Pargana Commissionery, District of Bankuara, Birbhum, Burdwan, District of Bilaspur. Any other area which may be declared a Controlled Area by or with the approval of the Central Government.
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CLAUSE 31

	Unfiltered water supply	The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions. i. That the water used by the contractor (s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge. ii. The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor (s) if the arrangements made by the contractor (s) for procurement of water are in the opinion of the Engineer-in- Charge, unsatisfactory.
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CLAUSE 31A

	Departmental water supply, if available	Water if available may be supplied to the contractor by the department subject to the following conditions:- i. The water charges @1% shall be recovered on gross amount of the work done. ii. The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply. iii. The Department do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor (s) to make alternative arrangements for water at his/their own cost in the event of any temporary break down in the AAI's water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.
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CLAUSE 32

	Alternate water arrangements	i. Where there is no piped water supply arrangement and the water is taken by the contractor from the wells or hand pump constructed by the AAI, no charge shall be recovered from the contractor or that account. The contractor shall, however, draw water at such hours of the day that it does not interfere with the normal use for which the hand pumps and well are intended. He will also be responsible for all damage and abnormal repairs arising out of his use, the cost of which shall be recoverable from him. The Engineer-in-Charge shall be the final authority to determine the cost recoverable from the
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		contractor on this account and his decision shall be binding on the contractor. ii. The contractor shall be allowed to construct temporary wells in AAI land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
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CLAUSE 33

	Return of Surplus materials	Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of AAI either by issue from AAI stocks or purchase made under orders or permits or licenses issued by AAI, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the AAI and return, if required by the engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such prices as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to action for contravention of the terms of the license or permit and / or for criminal breach of trust, be liable to AAI for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.
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CLAUSE 34

	Hire of plant & Machinery	i. The Contractor shall arrange at his own expense all tools, plant, machinery and equipment(hereinafter referred to as T&P) required for execution of the work except for the Plant & Machinery listed in Schedule 'C' and stipulated for issue to the contractor. If the contractor requires any item of T&P on hire from the T&P available with the AAI over and above the T&P stipulated for issue, the AAI will, if such item is available, hire it to the contractor at rates to be agreed upon between him and the Engineer-in-charge. In such a case, all the conditions hereunder for issue of T & P shall also be applicable to such T&P as is agreed to be issued. ii. Plant & Machinery when supplied on hire charges shown in Schedule 'C' shall be made over and taken back at the departmental equipment yard / shed shown in Schedule 'C' and the contractor shall bear the cost of carriage from the place of issue to the site of work and back. The contractor shall be responsible to return the plant and machinery with condition in which it was handed over to him, and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation and otherwise during transit including damage to or loss of plant and for all losses due to his failure to return the same soon after the completion of the work for which it was issued. The Engineer-in-charge shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor.
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		iii. The plant and machinery as stipulated above will be issued as and when available and if required by the contractor. The contractor shall arrange his programme of work according to the availability of the plant and machinery and no claim, whatsoever, will be entertained from him for any delay in supply by the department. iv. The hire charges shall be recovered at the prescribed rates from and inclusive of the date the plant and machinery made over upto and inclusive of the date of the return in good order even though the same may not have been working for any cause except major breakdown due to no fault of the contractor or faulty use requiring more than three working days continuously (excluding intervening holidays and Sundays) for bringing the plant in order. The contractor shall immediately intimate in writing to the Engineer-in-charge when any plant or machinery gets out of order requiring major repairs as aforesaid. The Engineer-in-charge shall record the date and time of receipt of such intimation in the log sheet of the plant or machinery. Based on this if the breakdown before lunch period or major breakdown will be computed considering half a day's breakdown on the day of complaint. If the breakdown occurs in the post lunch period of major breakdown will be computed starting from the next working day. In case of any dispute under this clause, the decision of the Executive Director (Engg) /General Manager (Engg) shall be final and binding on the contractor. v. The hire charges shown above are for each day of 8 hours (inclusive of the one hour lunch break) or part thereof. vi. Hire charges will include service of operating staff as required and also supply of lubricating oil and stores for cleaning purposes. Power fuel of approved type, firewood, kerosene oil etc. for running the plant and machinery and also the full time chowkidar for guarding the plant and machinery against any loss or damage shall be arranged by the contractor who shall be fully responsible for the safeguard and security of plant and machinery. The contractor shall on or before the supply of plant and machinery sign an agreement indemnifying the Department against any loss or damage caused to the plant and machinery either during transit or at site of work. vii. Ordinarily, no plant and machinery shall work for more than 8 hours a day inclusive of one hour lunch break. In case of an urgent work however, the Engineer-in-charge may, at his discretion, allow the plant and machinery to be worked for more than normal period of 8 hours a day. In that case, the hourly hire charges for overtime to be borne by the contractor shall be 50% more than the normal proportionate hourly charges (1/8th of the daily charges) subject to a minimum of half day's normal charges on any particular day. For working out hire charges for over time, a period of half an hour and above will be charged as one hour and a period of less than half an hour will be ignored. viii. The contractor shall release the plant and machinery every seventh day for periodical servicing and / or wash out which may take about three to four hours or more. Hire charges for full day shall be recovered from the contractor for the day of servicing / wash out irrespective of the period employed in servicing. ix. The plant and machinery once issued to the contractor shall not be returned by him on account of lack of arrangements of labour and materials, etc. on his part, the same will be returned only when they are required for major repairs or when in the opinion of the Engineer-in-charge, the work or a portion of work for which the same was issued is completed. x. Log Book for recording the hours of daily work for each of the plant and machinery supplied to the contractor will be maintained by the Department and will be countersigned by the contractor or his authorised agent daily. In
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		case the contractor contests the correctness of the entries and / or fails to sign the Log Book, the decision of the Engineer-in-charge shall be final and binding on him. Hire charges will be calculated according to the entries in the Log Book and will be binding on the contractor. Recovery on account of hire charges for road rollers shall be made for the minimum number of days worked out on the assumption that a roller can consolidate per day and maximum quantity of materials or area surfacing as noted against each in the annexed statement (see attached annexure). xi. In the case of concrete mixers, the contractors shall arrange to get the hopper cleaned and the drum washed at the close of the work each day or each occasion. (a) In case rollers for consolidation are employed by the contractor himself, log book for such rollers shall be maintained in the same manner as is done in case of departmental rollers, maximum quantity of any items to be consolidated for each roller-day shall also be same as in Annexure to Clause 34(x). For less use of rollers, recovery for the less roller days shall be made at the stipulated issue rate. xii. The contractor shall be responsible to return the plant and machinery in the condition in which it was handed over to him and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation or otherwise or during transit including damage to or loss of parts, and for all losses due to his failure to return the same soon after the completion of the work for which it was issued. The Engineer-in-charge shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor. xiii. The contractor will be exempted from levy of any hire charges for the number of days he is called upon in writing by the Engineer-in-charge to suspend execution of the work, provided AAI's plant and machinery in question have, in fact, remained idle with the contractor because of the suspension. xiv. In the event of the contractor not requiring any item of plant and machinery issued by AAI though not stipulated for issue in Schedule 'C' any time after taking delivery at the place of issue, he may return it after two days written notice or at any time without notice if he agrees to pay hire charges for two additional days without, in any way, affecting the right of the Engineer-in-charge to use the said plant and machinery during the said period of two days as he likes including hiring out to a third party.
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CLAUSE 35

	Condition relating to use of asphaltic materials	i. The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the tar or bitumen used. ii. The contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula, before the process of painting is started and shall hypothecate it to the Engineer in Charge. If any bitumen or tar remains unused on completion of the work on account of lesser use of materials in actual execution of for reasons other than authorised changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer in Charge shall be made and the material return to the contractors. Although the materials are hypothecated to AAI, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer in Charge in writing.
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		iii. The contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work and the portion of the security deposit relating asphaltic work shall be refunded after the expiry of this period.
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CLAUSE 36

	Employment of Technical Staff and employees	Contractors Superintendence, Supervision, Technical staff & Employees i. The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract. The Contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer in Charge, the name (s), qualifications experience, age, address (s) and other particulars along with certificates, of the principal technical representative to be charge of the work and other technical representative (s) who will be supervising the work. Minimum requirement of such technical representative (s) and their qualifications and experience shall not be lower than specified in schedule 'F'. The Engineer in Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative (s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative (s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative (s) shall be appointed by the contractor soon after receipt of the approval from Engineer in charge and shall be available at site before start of work. All the provisions applicable to the principal technical representative under the clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative (s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required to the Engineer in Charge and / or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative (s) shall be deemed to have the same force as if these have been given to the contractor. The Principal Technical Representative and other technical representatives shall be actually available at site fully during all stages of execution work, during recording / checking / test checking of measurements of works whenever so required by the Engineer in Charge and shall also note down instructions conveyed by the Engineer in Charge or his designated representative (s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements / checked measurements / test checked measurements. The representative (s) shall not look after any other work. Substitutes, duly approved by engineer in Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative (s) by more than two days. If the Engineer in Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative (s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as
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		specified in Schedule 'F' and the decision of the Engineer in Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical Principal technical representative and / or other technical representative (s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibility satisfactorily, the Engineer in Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative (s) is / are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative (s) (in the form of copy of Form -16 or CPF deduction issued to the Engineer employed by him) along with every running account bill / final bill and shall produce evidence if at any times so required by the Engineer in Charge. ii. The contractor shall provide and employ on the site only such technical assistants as are skilled, and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work. The contractor shall provide and employ skilled, semi-skilled and unskilled labour as is necessary for proper and timely execution of the work. The Engineer in Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer in Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer in Charge and the persons so removed shall be replaced as soon as possible by competent substitutes. iii. The contractor shall not change his engineer/supervisory staff after approval of the Engineer In Charge. If Contractor wants to replace any of his staff due to unavoidable circumstances, he will seek permission of Engineer In Charge indicating reasons for such change, qualification and experience of the alternative employee suggested by him. The qualification and experience of the alternative staff shall not be inferior to the person employed earlier.
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CLAUSE 37

	Levy/Taxes/ Royalty/ Land License fee payable by Contractor	1. Taxes: a. Rates to be quoted by the parties should be inclusive of all taxes, duties, CESS, fee, royalty charges etc. levied under any statute but exclusive of GST for all the items. b. However GST, as applicable, shall be paid to the contractor, for any taxable supply / services / construction rendered by the agency to AAI, against a valid GST invoice as per terms and conditions of the contract. c. In case supplies / services / works involve imports; the same should be identified separately. Basic Custom Duty & IGST will be paid directly by AAI by utilizing EPCG license / Duty Credit Scrip under Service Export from India Scheme (SEIS) of Govt. of India.
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		2. Royalty: - The contractor shall at his own expense, provide all materials required for the works other than those which are to be supplied by AAI. The contractor shall deposit royalty and obtain necessary permit for collection of stone, sand, red bajri, kankar etc. from the local authority in the matter and will abide by the notification issued by Central Govt. / State Government / Local State Authorities as applicable from time to time in this regard. The contractor is also bound to allow deduction from his bills any difference in statutory taxes/royalty and penalty proposed by Local State Authorities to AAI till finalization of settlement of all demands in this regard by Central / State Govt. - This will also be applicable to forest produce. - If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the AAI and does not any time become payable by the contractor to the State Government. Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the AAI and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor. 3. License fee for land - The contractor shall be liable to pay license fee for the land allotted by AAI for installation of plants, labour camp, cement godown and site office at AAI prevailing rates of license fee for unpaved land at the time of call of tender. - In addition a security deposit at the rate of Rs 500/- per sqm in the form of DD/BG shall also be deposited by the contractor. In case contractor do not deposit security deposit same shall be deducted from Ist Running Account Bill. - Such security deposit shall be released only after allotted land has been fully vacated by the contractor to entire satisfaction of Engineer-in- Charge.
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CLAUSE 38

Conditions for reimbursement of levy/taxes if levied after receipt of tenders	1. Rates to be quoted by the parties should be inclusive of all taxes, duties, CESS, fee, royalty charges etc. levied under any statute applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase or decrease shall be made for any variation in the rate of GSI Building and Other Construction Workers Welfare Cess or any tax, levy or Cess applicable on inputs. However, effect of variation, as per Govt. order after the last date of receipt of tender including extension if any, in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy or Cess applicable on output of the works contract shall be adjusted on either side, increase or decrease. Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or Cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes / levies / Cess. Provided further that such increase in tax / levy / Cess including GST shall not reimbursed if made in the extended period of contract for which the contractor
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		alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F. 2. The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of AAI or the Engineer-in-Charge and further shall furnish such other information /document as the Engineer-in-Charge may require from time to time. 3. The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or Cess, give a written notice thereof to the Engineer-in-charge that the same is given pursuant to the condition, together with all necessary information / documents relating thereto.
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CLAUSE 39

	Termination of contract on death of contractor	Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-charge on behalf of the AAI shall have the option of terminating the contract without compensation to the contractor.
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CLAUSE 40

	If relative working in AAI then the contractor not allowed to tender.	The contractor shall not be permitted to tender for works in AAI wherein his near relative is posted as an Officer responsible for award and execution of work. He shall also intimate the names of persons who are working with him in any capacity or / are subsequently employed by him and who are near relatives to any officer of AAI. Any breach of this condition by the Contractor would render him, the contract liable to be rejected at any stage. NOTE: By the term “near relatives” is meant wife, husband, parents and grand parents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.
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CLAUSE 41

	No any officer in Department of Engineering to work as contractor within one year of retirement	Engineer or any officer employed in engineering or administrative duties in an engineering department of AAI shall not work as a contractor or employee of contractor for a period of one year after his retirement from AAI service without the prior permission of AAI in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of AAI as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.
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Integrity Pact and Independent External Monitor.

~~All tenderers shall have to submit an undertaking as per Appendix XVIII along with tender documents. AAJ shall appoint Independent External Monitor(s) to oversee effective implementation of Integrity Pact for such works / supplies. For this purpose, a panel of Independent External Monitors shall be constituted by the Authority in concurrence with Central Vigilance Commission (CVC).~~

- i. ~~The Contractor / Supplier shall have to act in accordance with the conditions laid down in the integrity pact.~~
 - a. ~~Signing of Integrity Pact is mandatory for every Bidder / Contractor in this procurement / bid process the signed original pact to be send to the office of Bid Manager and should reach before the due date mentioned in NIT.~~
 - b. ~~The Bidder / contractor shall commit itself to ensure taking all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre contract or post contract stage as specified in section 3 of the integrity pact.~~
 - c. ~~Any breach of the aforesaid provisions by the Bidder or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder) shall entitle the authority to take all or any one of the action as specified in section 6 of the integrity pact.~~
- ii. ~~In case any violation of above conduct is established, AAI reserves right to take following actions.~~
 - a. ~~If contractor commits a violation of its commitments and obligations under the Integrity Pact Program during bidding process, he shall be liable for disqualification from tender process and forfeiture of his Earnest Money Deposit / Bid Security.~~
 - b. ~~In case of violation of the Integrity Pact after award of the contract, Authority is entitled to terminate the contract and shall be entitled to demand and recover from the contractor damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit or Performance Bank Guarantee, whichever is higher.~~
 - c. ~~Authority may initiate appropriate proceedings against the contractor.~~
 - d. ~~Contractor will be liable to pay damages as determined by the Authority.~~
 - e. ~~Contractor against whom an action for violation of its commitments and obligations has been taken earlier again commits a violation, the Authority is entitled to debar such contractor for future tender / contract processes for a period as deemed fit.~~
 - f. ~~A violation is considered to have occurred if the Authority is fully satisfied with the available documents and evidence submitted along with Independent External Monitor's recommendations / suggestions that no reasonable doubt exist in the matter.~~
- iii. ~~Person signing IP shall not approach the Courts while representing the matters to IEMs and he / she will await their decision in the matter.~~

CLAUSE 42

Return of material and recovery for excess material issued.	i. After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance (see Clause 10), Theoretical quantity of materials issued by the AAI for use in the work shall be calculated on the basis and method given hereunder; a. Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule 'F'. In case any item is executed for which standard co-efficient for the consumption of cement or bitumen are not available in the above mentioned schedule / statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer in Charge. b. Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorised by Engineer in Charge, including authorised lappings, chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and category wise separately. c. Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables pig lead and G.I. / M.S. sheets shall be taken as quantity actually required and measures plus 5% for wastage due to cutting into pieces (except in the case of G.I./M.S. sheets it shall be 10%), such determination & comparison being made diameter wise & category wise. d. For any other material as per actual requirements. ii. Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorised variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer in Charge within fifteen days of the issue of written notice by the Engineer in Charge to this effect shall be recovered at the rates specified in Schedule 'F', without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer in Charge in regard to theoretical quantities of materials, which should have been actually used as per the Annexure of the standard schedule of rates and recovery at rates specified in Schedule 'F' shall be final and binding on the contractor. For non-scheduled items, the decision of the Engineer in charge regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor. g. The said action under this clause is without prejudice to the right of the AAI to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications. h. For materials brought by the contractor for use in item of work at site, similar theoretical consumption shall be prepared and submitted to the Engineer in Charge for verification. If it is found that material consumed in the work is less than the theoretical consumption after taking into account permissible minus variation, the recovery for corresponding material shall be effected as per rates specified in schedule 'F' under Clause 42.
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CLAUSE 43

	Compensation during warlike situations / act of terrorism	The work (whether fully constructed or not) and all materials, machines, tools and plants scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation or act of terrorism, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer- in-Charge, such payments being in addition to compensation upto the value of the work original executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in charge upto Rs.5,000/- and by the Executive Director Engg. concerned for a higher amount. The contractor shall be paid for the damages / destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in- Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract. Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operation (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Engineer-in- Charge (b) for any material etc. not on the site of the work or for any tools plant, machinery, scaffolding, temporary building and other things not intended for the work. In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer – in - charge.
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CLAUSE 44

	Apprentices Act provisions to be complied with	The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Executive Director Engg. / General Manager (Engg.) may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
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CLAUSE 45

	Release of security deposit after labour clearance	Security Deposit of the work shall be refunded if no labour complaint has been received from the labour officer till the due date of its payment. If a labour complaint is received during this period the Engineer-in-charge shall after issue of notice in this regard to the contractor, withheld the amount required to settle the complaint from his security deposit and refund the balance amount
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CLAUSE 46

	Contractor's Liability and Insurance of Works	i. From commencement to completion of the Works, the Contractor shall take full responsibility for the case thereof and for taking precautions to prevent loss or damage and to minimize loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the Works or any part thereof and all AAI's T & P from any cause whatsoever (save and except the Excepted Risks) and shall at his own cost repair and make good the same so that at completion, the Works and all AAI's T & P shall be in good order and condition and in conformity in every respect with the requirements of the Contract and instructions of the Engineer-in-Charge. ii. In the event of any loss or damage to the Works or any Part thereof or to any T & P, to any material or articles at the Site from any of the Excepted Risks the following provisions shall have effect: a. The Contractor shall, as may be directed in writing by the Engineer-in-Charge, remove from the Site any debris and so much of the works as shall have been damaged, taking to AAI's store such AAI's T & P, articles and/or materials as may be directed; b. The contractor shall, as may be directed in writing by the Engineer-in-Charge, proceed with the erection and completion of the Works under and in accordance with the provisions and Conditions of the Contract; and iii. Provided always that the Contractor shall not be entitled to payment under the above provisions in respect of so much loss or damage as has been occasioned by any failure on his part to perform his obligation under the Contract or not taking precautions to prevent loss or damage or minimize the amount of such loss or damage. iv. Without limiting its obligations and responsibilities under other clauses of General Conditions of Contracts, the contractor at his own cost shall insure, in the joint name of AAI and the contractor, against all losses or damages from whatever cause, arising (other than the accepted risks) for which he is responsible under the terms of the contract and in such manner that the AAI and the contractor are covered during the period of construction of works and any loss or damage occasioned by the contractor in the course of any operation carried out by them for the purpose of complying with its obligations of defects liability clause hereof; a. All works including temporary works to their full value executed from time to time. b. The construction materials and equipment's to their full value brought on to the site by the contractor. v. The Contractor shall indemnify and keep indemnified AAI against all losses and claims for injuries or damage to any persons or any property whatsoever which may arise out of or in consequence of the construction and maintenance of Works and against all claims, demands proceedings, damage costs, charges and expenses whatsoever in respect of or in relation thereto. vi. Before commencing execution of the work, the Contractor shall, without in any way limiting his obligations and responsibilities under this condition, insure at his own cost against any damage, loss or injury which may occur to any AAI property, or to any person for at least the minimum amount of Rs. 1.00 lakh with unlimited number of occurrences (including any employee of AAI) by or arising out of carrying out of the Contract. vii. The contractor shall at all times indemnify AAI against all claims, damages or compensation under the provisions of Payment or Wages Act, 1936,
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		Minimum Wages Act, 1948, Employer's Liability Act, 1938, the Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947 and the Maternity Benefit Act, 1961 or any modifications thereof or any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other persons in or about the Works, whether in the employment of the Contractor or not, his agents or servants, and also against all costs, charges and expenses of any suit, action or proceedings arising out of such accident or injury and against all sum or sums which may with the consent of the Contractor be paid to compromise or compound any claim. Without limiting his obligations and liabilities as above provided, the Contractor shall insure against all claims, damages or compensation payable under the Workmen's Compensation Act, 1923 or any modification thereof or any other law relating thereto. viii. All insurance mentioned above shall be effected with any subsidiary of the General Insurance Company of India or by a company approved by the Insurance Regulatory Authority of India. ix. The aforesaid insurance policy / policies shall provide that they shall not be cancelled till the Engineer-in-Charge has agreed to their cancellation in writing. x. The Contractor shall prove to the Engineer-in-Charge from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period. A self-certified copy of such policies is required to be submitted to the Engineer-in-charge. xi. The Contractor shall ensure that similar insurance policies are taken out by his subcontractors (if any) and shall be responsible for any claims or losses to AAI resulting from their failure to obtain adequate insurance protection in connection thereof. The contractor shall produce or cause to be produced by his subcontractor (if any) as the case may be, the relevant policy or policies and premiums receipts as and when required by the Engineer-in-Charge. A self-certified copy of such policies is required to be submitted to the Engineer-in-charge. xii. If the Contractor and /or his subcontractor (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the Contract then and in any such case AAI may, without being bound to, effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount equivalent to 150% of premium or premiums as may be by AAI from any moneys due or which may become due to the Contractor or recover the same as a debt due from the Contractor only after issuing notice to contractor in this regard. Engineering-In-Charge shall ensure that all applicable insurances shall be in force without any break as per contract requirement to avoid any losses to AAI on account of non-availability of insurance policies and/or break in insurances policies. xiii. In case contractor takes Contractor All Risk (CAR) Policy in joint name of AAI and Contractor for full tendered value along with third party liability (max of 10% of tendered value or as applicable as per Insurance Regulatory Authority of India) then there is no requirement for taking separate insurance by sub-contractors. However, workmen compensation policy is required to be taken separately by main contractor and sub-contractor for workers employed by them.
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CLAUSE 47

Composite Contract and responsibilities of main agency	i. The tenders have been called for composite work consisting of civil construction and other associated specialized works. The pre qualification criteria shall be applicable for each subhead of work independently. The agency meeting PQ criteria for the main work shall be considered for execution of composite work. However the agency shall be allowed to
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		execute only those specialized subheads of works for which bidder meet PQ criteria individually. ii. The main contractor shall be permitted to execute only those works (covered under one or more subhead) for which he meets all requirements of pre-qualification including financial, technical and technological requirement specified in the PQ criteria. iii. Main contractor will associate expert agencies for the execution of specialized works under various subheads for which he himself has failed to meet PQ criteria. In such case he will appoint his associate for the execution of each specialized work with the approval of the NIT approving authority. The main contractor shall intimate the names of only those agencies who fully meet the PQ criteria for each specialized work for the acceptance of the department. iv. Main contractor shall not be permitted to change their associate agencies in the course of execution of work. If change of agency is inevitable then a request shall be submitted to the engineer in charge in writing giving full justification for change of agency. The proposal should include name of the alternate agency along with his financial, technical capabilities and work experience in the appropriate field. Such change shall be allowed only after receiving approval from the competent authority.
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	Composite contract-Tripartite agreement	This clause is applicable for the works for which the estimated cost put to tender is more than Rs.500.00 crores. i. The main contractor shall finalise his rates, terms and conditions and mode of execution of work with specialised agencies for all works covered in various subhead of works on receipt of work order but specifications, preferred makes of materials and performance of system shall remain as specified in tender document. ii. The main contractor shall arrange an agreement between department, main contractor and associated agencies for all subheads on receipt of work order from the engineer in charge. Main contractor and expert agency shall be jointly responsible for quality of work and performance of the system. iii. Main contractor shall submit list of associated agency for each specialized work within 1/12th of stipulated completion period or within one month from issue of work order whichever is later along with documentary evidence for financial soundness, technical capabilities and their experience for executing similar specialized works along with his application seeking acceptance for the name of associated agency. Approval / rejection for the name of associated agency shall be accorded thereafter by NIT approving authority within a period of 15 days each subhead wise. iv. The main contractor shall submit duly signed tripartite agreement on the format provided by AAI within 2/12th of stipulated completion period or 60 days whichever is later for acceptance and signature of department. The extension of time for signing of this agreement shall not be generally permitted. The signing time shall only be extended if handing over of site is delayed due to reasons beyond control of the contractor.
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	Conditions of composite contract	i. Main contractor shall be responsible for submission of earnest money. ii. The mobilization advance shall be paid to main contractor as per terms and conditions of contract and indicated under Clause 10 B. The first installment of mobilization advance shall be corresponding to the value of work which shall be executed by the main contractor. The subsequent mobilization advances corresponding to value of work covered in each subhead shall be released on signing of each Tripartite Agreement with expert agency for the same. iii. The security deposit shall be deducted from the running bills of main contractor after adjustment of full earnest money. iv. Main contractor shall be responsible for completion of work as per time schedule indicated in the NIT. The compensation for the delay shall be levied on the main contractor only. v. The coordination meetings called by AAI or its representative shall be attended by associated expert agencies as and when required. Expert agency shall be responsible for technical soundness, quality of work and adherence to tender specifications. The main contractor as well as associated agency shall be responsible for rectification of deficiencies noticed in specialized work.
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	Payment Conditions for Composite Contract	i. It will be the responsibility of main contractor to finalize expert agencies for the execution of works covered under all subheads of NIT and get the tripartite agreements signed as per NIT requirement at an early date. The main contractor shall not be paid for value of work covered under second running bill & subsequent bills till all Tripartite Agreements are signed by all agencies concerned. ii. The main contractor must fill the ratio of work which shall govern the ratio of direct payment to the expert agency and to the main contractor for each subhead of work in schedule F. This ratio may also be indicated in tripartite agreement. Thus direct payment to each expert agency shall be released in the same ratio from the net payment (after all deductions). iii. The running bill for specialized work shall be processed as per terms and conditions of the contract. All deductions like security deposit, income tax and part rate for incomplete work or due to any other reason shall be made as per contract conditions from each running bill. In case the ratio as desired under (ii) is not filled by the main contractor AAI will make payment of 75% of the net payable amount to the expert agency directly and balance 25% shall be paid to the main contractor.
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Clause 48

	Escrow Account	i. All payments for the works estimated cost more than Rs.500 Cr shall be made only through Escrow Account opened by the contractor. However for works costing less than Rs.500 Cr., it shall be at the discretion of Technical Sanctioning authority to opt for Escrow account or not. The bank charges for Escrow Account shall be borne by contractor. The detailed conditions of Escrow Account shall be drawn in consultation with associated bank. ii. Mobilization advance for mobilization of resources and purchase of plant & machinery shall be credited directly to the escrow account opened for this contract through bank transfer as per terms and condition of contract. The agency shall be able to utilize 25% (or as decided by TS authority) of each installment of mobilization advance to meet minor expenses like construction of site office, purchase of office equipment and other minor works, while release of balance 75% fund shall be regulated by the department. The contractor shall seek prior concurrence of Engineer in Charge for release of payment to the supplier etc. through Escrow Account by the Bank. Funds against cheque issued by contractor shall be released by Bank on receipt of written consent from Engineer in Charge. iii. Payment received and credited against each RA Bill, can be utilized 25% directly by the contractor for minor expenses like salary, stationary, office expenses etc. AAI shall exercise control for release of payment by contractor for balance 75%. iv. The Contractor shall submit his proposal to the Engineer in Charge/Authority for utilization of funds made available by AAI (75% against each RA bill)
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		a. Name of agency for whom payment is proposed to be released. b. Details of work executed/material supplied by agency to whom he intends to release payment. c. Nature of advance payment if any, has to be released to the supplier for supply of material for the project only. d. Documentary evidence in support of his claim. v. Engineer in charge will examine and approve full / part of such payments as per agency's request within maximum of three working days. The terms and condition of Escrow Account shall be finalized with bank according to terms and conditions of contract. Bank shall release payment against such cheques only after written consent of authorised officer of AAI is received. vi. Contractor shall be permitted to close Escrow Account on receipt of final payment for the work/project or on receipt of letter for foreclosure of work by the AAI. All balances and liabilities against this Escrow Account shall be left at the disposal of the contractor.
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Note: In case of difference or ambiguity in Hindi and English version anywhere, the English version will prevail.

AIRPORTS AUTHORITY OF INDIA

SAFETY CODE

1. Suitable Scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
2. Scaffolding of staging more than 3.6m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding on staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm.(3ft.)
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11 $\frac{1}{2}$ ") for ladder upto and including 3m. (10ft.) in length. For long ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30cm. (1 foot) of length. Uniform step spacing of not more than 30cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the site or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person on which may, with the consent of the contractor, be paid to compensate any claim by any such person.
7. a. **Excavation and Trenching** – All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30m. (100ft.) in length or fraction thereof, Ladder shall extend from bottom of the Trench to at least 90cm (3fts) above the surface of the ground. The side of the trenches which are 1.5 m. (5 ft.) 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. The excavated material shall not be placed within 1.5 m. (5 ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
- b. **Safety Measures for digging bore holes:** -
 - i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
 - ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer-in-charge of the work;
 - iii. Suitable fencing should be erected around the well during the drilling and after the installation of

- the rig on the point of drilling, flags shall be put 50 Mtr all around the point of drilling to avoid entry of people/animals;
- iv. After drilling the bore well, a cement platform (0.50 Mtr x 0.50 Mtr x 1.20 Mtr) 0.60 Mtr above ground level and 0.60 Mtr below ground level should be constructed around the well casing;
 - v. After the completion of the bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - vi. After the bore well is drilled the entire site should be brought to the ground level;
7. Demolition – Before any demolition work is commenced and also during the progress of the work,
 - i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
 8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
 - i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
 - iii) Those engaged in welding works shall be provided with welder's protective eye-shields.
 - iv) ~~Stone-breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.~~
 - v) ~~When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures are adhered to:-~~
 - a) ~~Entry for workers into the line shall not be allowed except under supervision of the Sr. Superintendent (Engg.) or any other higher officer.~~
 - b) ~~At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.~~
 - c) ~~Before entry, presence of toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.~~
 - d) ~~Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with oxygen kit.~~
 - e) ~~Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.~~
 - f) ~~The area should be barricaded or condoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.~~
 - g) ~~No smoking or open flames shall be allowed near the blocked manhole being cleaned.~~
 - h) ~~The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.~~
 - i) ~~Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer in Charge may decide the time upto which a worker may be allowed to work continuously inside the manhole.~~

- ~~j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.~~
- ~~k) Air blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.~~
- ~~l) The workers engaged for cleaning the manholes / sewers should be properly trained before allowing to work in the manhole.~~
- ~~m) The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.~~
- ~~n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.~~
- ~~o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.~~
- ~~p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer in Charge regarding the steps to be taken in this regard in an individual case will be final.~~
- (vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-
 - a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 - c) Overall shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- 9. An additional clause (viii)(i) of AAI Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:
 - i) White lead, sulphate of lead or product containing these pigments, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - v) Overall shall be worn by working painters during the whole of working period.
 - vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of AAI. viii) AAI may require, when necessary medical examination of workers.
 - ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:
 - i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - ii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rules in force in the Republic of India.

**MODEL RULES FOR THE PROTECTION OF
HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS
EMPLOYED BY AAI OR ITS CONTRACTORS**

1. APPLICATION

These rules shall apply to all buildings and construction works in charge of AAI in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

(i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.

(ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment.

(a) For work places in which the number of contract labour employed does not exceed 50 Each first –aid box shall contain the following equipments:

1. 6 small sterilized dressings
2. 3 medium size sterilized dressings
3. 3 large size sterilized dressings
4. 3 large sterilized burn dressings
5. 1 (30 ml) bottle containing a two per cent alcoholic solution of iodine.
6. 1 (30 ml) bottle containing salvolatile having the dose and mode of administration indicated on the label.
7. 1 snakebite lancet.
8. 1 (30 gms) bottle of potassium permanganate crystals.
9. 1 pair scissors.
10. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institute, Government of India.
11. 1 bottle containing 100 tablets (each of 5 gms) of aspirin.
12. Ointment for burns.
13. A bottle of suitable surgical antiseptic solution.

(b) For work places in which the number of contract labour exceed 50. Each first-aid box shall contain the following equipments.

1. 12 small sterilized dressings.

2. 6 medium size sterilized dressings.
 3. 6 large size sterilized dressings
 4. 6 large size sterilized burn dressings.
 5. 6 (15 gms) packets sterilized cotton wool.
 6. 1 (60 ml). Bottle containing two per cent alcoholic solution iodine.
 7. 1 (60 ml) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 8. 1 roll of adhesive plaster.
 9. 1 snake bite lancet.
 10. 1 (30 gms) bottle of potassium permanganate crystals.
 11. 1 pair scissors.
 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institute / Government of India.
 13. A bottle containing 100 tablets (each of 5 gms) of aspirin.
 14. Ointment for burns.
 15. A bottle of suitable surgical antiseptic solution.
- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) a person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- i) 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.
- ii) 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.
- iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well

which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.

- iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- i) Latrines shall be provided in every work place on the following scale namely:
 - a) Where female are employed, there shall be at least one latrine for every 25 females.
 - b) Where males are employed, there shall be at least one latrine for every 25 males.
- ii) 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 the first 100, and one for every 50 thereafter.
- iii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- iv) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- v) (a) Where workers of both sexes are employed, there shall be displayed outside 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.
(b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- vi) There shall be at least one urinal for male workers upto 50 and one for female workers upto fifty employed at a time, provided that where the number of male or female workmen, 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.
- vii) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
(b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- viii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- ix) Disposal of excreta: Unless otherwise arranged for 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 of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 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).
- x) 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 on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 meters (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sq.m. (6 sft) per head. Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. CRECHES

- 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 the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19 H (ii) a, b & c.
- 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 the play room and sufficient number of cots and beddings in the bed room.
- iv) The contractor shall provide one ayaa 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 exceed 50.
- v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- i) In every work place where the work regarding the employment of contractor labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract 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 lighted 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 in each year. Provided that 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) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- viii) Suitable arrangements shall be made for the collection and disposal of garbage.
- ix) The dining hall shall accommodate at a time 30 per cent 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 square metre (10 sft) per diner to be accommodated as prescribed in sub-Rule (ix).
- xi) (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number. (b) Washing places for women shall be separate and screened to secure privacy.

- xii) Sufficient tables stools, chairs or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule (ix).
- xiii) (a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment necessary for the efficient running of the 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 equipments.
- xiv) The food stuffs 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 any 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 equipments provided for the canteen.
 - c) The cost of purchase, repairs and replacement of equipments 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 equipments provided for the canteen.
- xvii) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

- 11.** The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

AAI may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof.

AIRPORTS AUTHORITY OF INDIA

Contractor's Labour Regulations

1. SHORT TITLE

These regulations may be called the AAI Contractors Labour Regulations.

2. DEFINITIONS

(i) **Workman** means any person employed by AAI or its contractor directly or indirectly through a subcontractor with or without the knowledge of the AAI to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person: -

- a) Who is employed mainly in a managerial or administrative capacity: or
- b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
- c) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer. No person below the age of 14 years shall be employed to act as a workman.

(ii) **Fair Wages** means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.

(iii) **Contractors** shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.

(iv) **Wages** shall have the same meaning as defined in the Payment of Wages Act.

3. i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
- iii) a) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
- b) Where the minimum wages prescribed by the Central/State Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
- c) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

4. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix' VIII'.

5. PAYMENT OF WAGES

- (i) The contractor shall fix wage periods in respect of which wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- (iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (vi) Wages due to every worker shall be paid to him direct or to other person authorised by him in this behalf.
- (vii) All wages shall be paid in current coin or currency or in both.
- (viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- (ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgement.
- (x) It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Senior Superintendent Engg or authorised representative of the Engineer-in-Charge who will be required to be present at the place and time of disbursement of wages by the contractor to workmen.
- (xi) The contractor shall obtain from Engineer in charge or the authorised representative of the Engineer-in-Charge a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:
 "Certified that the amount shown in column No. has been paid to the workman concerned in my presence onat....."

Note: In case of payment of wages paid through bank, the contractor shall submit a copy of bank statement for relevant period duly signed by him.

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- (i) The wages of a worker shall be paid to him without any deduction of any kind except the following:
 - a) Fines
 - b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - d) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - e) Any other deduction which the Central Government may from time to time allow.
- (ii) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.

Note: An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-XII.

- (iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- (v) No fine imposed on any worker shall be recovered from him by installment, or after the expiry of sixty days from the date on which it was imposed.
- (vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

- (i) The contractor shall maintain a Register of persons employed on work on contract in Form XIII of the CL(R&A) Central Rules 1971 (Appendix VI)
- (ii) The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix VII).
- (iii) The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VIII)
- (iv) **Register of accident** - The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars :
 - (a) Full particulars of the labourers who met with accident.
 - (b) Rate of Wages
 - (c) Sex
 - (d) Age
 - (e) Nature of accident and cause of accident
 - (f) Time and date of accident
 - (g) Date and time when admitted in Hospital
 - (h) Date of discharge from the Hospital
 - (i) Period of treatment and result of treatment
 - (j) Percentage of loss of earning capacity and disability as assessed by Medical officer
 - (k) Claim required to be paid under Workmen's Compensation Act.
 - (l) Date of payment of compensation
 - (m) Amount paid with details of the person to whom the same was paid
 - (n) Authority by whom the compensation was assessed.
 - (o) Remarks
- (v) The contractor shall maintain a **Register of Fines** in the Form XII of the CL(R&A) Rules 1971 (Appendix-XIII).
The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-XII)
- (vi) The contractor shall maintain a **Register of deductions for damage or loss** in Form XX of the CL (R&A) Rules 1971 (Appendix-XIV)
- (vii) The contractor shall maintain a **Register of Advances** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XV)
- (viii) The contractor shall maintain a **Register of Overtime** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XVI).

8. ATTENDANCE CARD-CUM-WAGE SLIP

- (i) The contractor shall issue an **Attendance card-cum-wage** slip to each workman employed by him in the specimen form at (Appendix-IX)
- (ii) The card shall be valid for each wage period.
- (iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- (iv) The card shall remain in possession of the worker during the wage period under reference.

- (v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- (vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. EMPLOYMENT CARD

The contractor shall issue an **Employment Card** in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-X).

10. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a **Service certificate** in Form XV of the CL(R&A) Central Rules 1971.

11. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of Urban Development in this behalf.

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The Labour Officer or any person authorised by Central Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or subcontractor in regard to such provision.

13. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer-in-Charge concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer-in-Charge after G.M. Engg. has given his decision on such appeal.

(i) Engineer-in-Charge shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the G.M. Engineer as the case may be.

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Engineer-in-Charge concerned within 30 days from the date of decision, but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by :
 - a) An officer of a registered trade union of which he is a member.
 - b) An officer of a federation of trade unions to which the trade union referred to in Clause (a) is affiliated.

- c) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- (ii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by :
 - a) An officer of an association of employers of which he is a member.
 - b) An officer of a federation of associations of employers to which association referred to in Clause (a) is affiliated.
 - c) Where the employers is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorised by the Central Government on his behalf .

17. SUBMISSION OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

18. AMENDMENTS

The Central Government/AAI may from time to time add to or amend the regulations and on any question as to the application/interpretation or effect of those regulations the decision of the General Manager (Engg.) concerned shall be final.

APPENDIX-I

FORM OF BANK GUARANTEE IN LIEU OF SECURITY DEPOSIT & AMOUNT WITHHELD AGAINST COMPENSATION FOR DELAY IN INDIVIDUAL CONTRACT (on Non-Judicial Stamp Paper of Rs.100/-)

[Refer Clause 1A and 2B]

To
The Airports Authority of India

.....
.....

1. In consideration of the Airport Authority of India having its head office at New Delhi [hereinafter called the “AAI” which expression shall unless repugnant to the subject or context include its administrator, successors and assigns) having agreed under the terms and condition of Contract Agreement No.dated made between.....and AAI in connection with the work of..... (hereinafter called the said contract) to accept Deed of Guarantee as herein provided for Rs.....(Rupees.....only) from a Nationalized Bank in lieu of the Security deposit to be made by the contractor or lieu of the amount withheld towards compensation for delay pending final extension of time to be made from the contractors contained in the said Contractor. We, the.....bank (hereinafter referred to as “the said Bank” and having our registered office at.....do hereby undertake and agree to identify and keep indemnified AAI from time to time to the extent of Rs..... (Rupees..... only) against any loss or damage, cost,, charges and expenses caused to or suffered by or that may be caused to or suffered by AAI by reason of any breach or breaches by the said Contractor of any of the terms and condition contained in the said contract and to unconditionally pay the amount claimed by AAI on demand and without demur to the extent aforesaid.
2. We..... Bank, further agree that AAI shall be the sole judge of and as to whether the said Contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by AAI on account thereof and the decision of AAI that the said Contractor has committed such breach and breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered of that may be caused to or suffered by AAI from time to time shall be final and binding on us.
3. We, the said Bank, further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contracts and till all the dues of AAI under the said contract or by virtue of any of the terms and conditions governing the said contract including compensation for delay if any as decided by AAI, have been fully paid and its claims satisfied or discharged and till the Accepting Authority of the contract certifies that the terms and condition and accordingly Contract have been fully and properly carried out by the said contractor and accordingly discharges this guarantee subject, however that AAI shall have no claim under this Guarantee after 90(Ninety) days from the date of expiry of the defects Liabilities periods or Final /Extension of Time grated by AAI as provided available in agreements clause no.....as provided in the said Contract, i.e.....(date) or from the date of cancellation of the said contract, as the case may be, unless a notice of the claim under this Guarantee has been served on the Bank before the expiry of the period in which case the same shall be enforceable against the Bank notwithstanding the fact, that the same is enforced after the expiry of the said period.

4. AAI shall have the fullest liberty without affecting in any way the liability of the bank under this Guarantee or Indemnity from time to time to vary any of the terms and conditions of the said contract or to extend time of performance by the said Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of terms and conditions governing the said contract or securities available to AAI and the said Bank shall not be released from its liability under these present by any exercise by AAI of any liberty with reference to the matters aforesaid or by reason of time being given to the said contractor or any other forbearance, act or omission on the part by AAI or any indulgence by AAI to the said Contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the Bank from its such liability.
5. It shall not be necessary for AAI to proceed against the contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, notwithstanding any security which AAI may have obtained or obtain from the Contractor at the time when proceedings are taken against the Bank hereunder be outstanding or unrealized.
6. We, the said Bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of AAI in writing and agree that any charge in the Constitution of the said Contract or the said Bank shall not discharge our liability hereunder.

In presence of

Dated this _____ Day of _____

WITNESS

1.

2.

For and on behalf of (The Bank)
 Signature _____
 Name & Designation _____
 Authorization No. _____
 Name & Place _____
 Bank's Seal _____

The above Guarantee is accepted by Airports Authority of India.

For and on behalf of Airports Authority of India

Signature _____

Name _____

Designation _____

Dated _____

APPENDIX 1A**FORM OF BANK GUARANTEE AGAINST EARNEST MONEY DEPOSIT**

WHEREAS, contractor _____ (Name of contractor) (hereinafter called “the contractor”) has submitted his tender dated _____ (date) for the construction of “_____” (name of work) (hereinafter called “the TENDER”).

KNOW ALL PEOPLE by these presents that we _____ (name of bank) having our registered office at _____ (hereinafter called “the bank”) are bound unto _____ (Name of Senior Manager) (hereinafter called “the Engineer in charge”) in the sum of Rs. _____ (Rs. In words _____) for which payment well truly to be made to the said Engineer in charge the bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the Bank this _____ day of _____ 20_.

THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender.
- (2) If the contractor having been notified of the acceptance of his tender by the engineer in charge.
 - a) Fails or refuses to execute the form of Agreement in accordance with the instructions to contractor, if required —
OR
 - b) Fails or refuses to furnish the performance guarantee, in accordance with the provisions of tender document and instructions to contractor;
OR
 - c) Fails or refuses to start the work, in accordance with the provisions of the contract and instructions to contractor,
OR
 - d) Fails or refuses to submit fresh bank guarantee of an equal amount of this bank guarantee against security deposit after award of contract.

We undertake to pay to the engineer in charge either up to the above amount or part thereof upon receipt of his first return demand, without the engineer in charge having to substantiate his demand, provided that in his demand the engineer in charge will note that the amount claimed by him is due to him owing to the concurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date* _____ after the deadline for submission of tender as such deadline is stated in the instructions to contractor or as it may be extended by the engineer in charge, notice of which extension (s) to the bank is hereby waived. Any demand in respect of this guarantee should reach the bank not later than the above date.

DATE

SIGNATURE OF THE BANK

WITNESS SEAL
(SIGNATURE NAME AND ADDRESS)

*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

PROFORMA FOR MANDATORY TESTS TO BE ATTACHED WITH RUNNING ACCOUNT BILLS

Contractor.....

No.....

[illegible]

Signature of Sudt. (Engg)

Signature of Manager / AM (Engg)

APPENDIX-III**REGISTER OF MATERNITY BENEFITS (Clause 19 F)**

Name and address of the contractor.....

Name and location of the work.....

Name of the employee	Father's/husband's name	Nature of employment	Period of actual employment	Date on which notice of confinement given
1	2	3	4	5

Date on which maternity leave commenced and ended

Date of delivery/miscarriage	<u>In case of delivery</u>		<u>In case of delivery</u>	
	Commenced	Ended	Commenced	Ended
6	7	8	9	10

Leave Pay paid to the employee

<u>In case of delivery</u>		<u>In case of miscarriage</u>		Remark
Rate of leave pay	Amount paid	Rate of leave pay	Amount paid	
11	12	13	14	15

APPENDIX-IV

SPECIMEN FORM OF THE REGISTER, REGARDING MATERNITY BENEFIT ADMISSION TO THE CONTRACTOR'S LABOUR IN AIRPORTS AUTHORITY OF INDIA WORKS(CLAUSE 19F)

Name and address of the contractor -----

Name and location of the work -----

- 1) Name of the woman and her husband's name
- 2) Designation
- 3) Date of appointment
- 4) Date with months and years in which she is employed.
- 5) Date of discharge/dismissal, if any
- 6) Date of production of certificates in respect of pregnancy.
- 7) Date on which the woman informs about the expected delivery.
- 8) Date of delivery/miscarriage/death.
- 9) Date of production of certificate in respect of delivery/miscarriage.
- 10) Date with the amount of maternity/death benefit paid in advance of expected delivery
- 11) Date with amount of subsequent payment of maternity benefit
- 12) Name of the person nominated by the woman to receive the payment of the maternity benefit after the death.
- 13) If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month thereof and the date in the register.
- 14) Signature of the contractor authenticating entries in the register.
- 15) Remarks column for the use of Inspection Officer.

APPENDIX-V**Labour Board**

Name of work

Name of Contractor-----

-----Address of Contractor -----

Name and address of A. A. I. Division -----

Name of A. A. I. Labour Officer -----

Address of A. A. I. Labour Officer -----

Name of A.A.I Labour Officer-----

Sl. No.	Category	Minimum wage fixed	Actual wage paid	Number present	Remark
---------	----------	-----------------------	---------------------	-------------------	--------

Weekly holiday -----

Wage period -----

Date of payment of wages -----

Working hours -----

Rest interval-----



Form-XIII
[See rule 2(1)]
[Part-A: For all Establishments]
Register of Workmen Employed by Contractor

APPENDIX-VI

Name and address of contractor.....

Name and address of establishment which contractor is carried on.....

Name and location of work.....

Name and address of Principal Employer.....

Name of the Establishment-----**Name of Owner**-----**LIN**-----

Sl. No.	Employee Code	Name	Surname	Gender	Father's/Spouse Name	Date of Birth#	Nationality	Education Level	Date of Joining	Designation
1	2	3	4	5	6	7	8	9	10	11

Category Address *(HS/S/SS/US)	Type of Employment	Mobile	UAN	PAN	ESIC IP	LWF	AADHAAR	Bank A/c Number	Bank	Branch (IFSC)	Present Address	Permanent
12	13	14	15	16	17	18	19	20	21	22	23	24

Servie Book No.	Date of Exit	Reason for Exit	Mark of Identification	Photo	Specimen Signature/Thumb Impression	Remarks
25	26	27	28	29	30	31

*(Highly Skilled/Skilled/Semi Skilled/Un Skilled)

#Note: In case the age is between 14 to 18 years, mention the nature of work, daily hours of work and Intervals of rest in the remarks Column.

APPENDIX-VII

Form-XVI
[See Rule 78(1) (a) (i)]

Muster Roll

Name and address of contractor.....

Name and address of establishment which contractor is carried on.....

Name and location of work.....

Name and address of Principal Employer..... For the month of fortnight.....

Sl. 1	Name of work Man 2	Se x 3	Father's/ Husband's 4	Date					Remark
				1	2	3	4	5	



FORM B
[See Rule 78(1) (a) (i)]

APPENDIX-VIII

FORMAT FOR WAGE REGISTER

Name and address of contractor.....

Name and address of establishment which contractor is carried on.....

Name and location of work.....

Name and address of Principal Employer.....For the month of fortnight.....

Rate of Minimum Wages and since the date.....				
	Highly Skilled	Skilled	Semi-Skilled	Un Skilled
Minimum Basic				
DA				
Overtime				

Name of the Establishment_____Name of Owner_____LIN_____Wage period

From_____To_____ (Monthly/Fortnightly/Weekly/Daily/Piece Rated)

Sl. No. in Employee register	Name	Rate of Wage	No. of Days worked	Overtime hours worked	Basic	Special Basic	DA	Payments Overtime	HRA	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12



Deduction								Net Payment	Employer Share PF Welfare Found
PF	ESIC	Society	Income Tax	Insurance	Others	Recoveries	Total		
13	14	15	16	17	18	19	20	21	22

Receipt by Employee/Bank Transaction ID	Date of Payment	Remarks
23	24	25



FORM C

FORMAT OF REGISTER OF LOAN/ RECOVERIES

Name of Establishment _____ LIN _____

Sl. Number In Employee register	Name	Recovery Type (Damage/loss/fine/advance/loans)	Particulars	Date of damage/Loss*	Amount
1	2	3	4	5	6

Whether show cause issued*	Explanation heard in presence of*	Number of Installments	First Month/Year	Last Month/Year	Date of Complete Recovery	Remarks
7	8	9	10	11	12	13

*Applicable only in case of damage/loss/fine



Form-XVII [See Rule 78 (2) (a)]

Register of wages

Name and address of contractor.....

Name and address of establishment which contractor is carried on.....

Name and location of work.....

Name and address of Principal Employer.....For the month of fortnight.....

Amount of wages															
S. No	Name of workman	Serial no in the register of workman	Description/ nature of work done	No. of days worked	Units of work done	Daily rates of wages/ piece rate	Basic wages	Dearness Allowance	Over-time	Other cash payment nt. (indicate nature)	Total	Deduction if any (indicate nature)	Net amount paid	Sig. or thumb impression of the work men	Initial contract or his representative
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



WAGE CARD

APPENDIX-VIIIA

Wages Card No.....

Name and Address of Contractor.....Date of issue.....

Name and location of work..... Designation.....

Name of workman..... Month/Fortnight.....

Rate of Wages.....

	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	31
										<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>8</u>	<u>0</u>

Morning

Rate

Evening

Amount

Initial

Received from.....the sum of Rs. on account of my wages

Signature

The Wage Card is valid for one month from the date of issue

19/Form-XIX
78 (2)
[See rule 78 (1) (b)]

APPENDIX-IX

Wages Slip

Name and address of contractor.....

Name and Father's/Husband name of workman.....

Name and location of work.....

For the week/Fortnight/Month ending.....

1. No. of days worked.....

2. No. of units worked in case of piece rate workers.....

3. Rate of daily wages/piece rate.....

4. Amount of overtime wages.....

5. Gross wages payable.....

6. Deduction, if any.....

7. Net amount of wages paid.....

Initials of the contractor or his representative



APPENDIX-X

14/Form-XIV [See rule 76] **Employment Card**

Name and address of contractor.....

Name and address of establishment under which is carried.....

Name of work and location of work.....

Name and address of Principal Employee.....

1. Name of the workman.....

2. SI. No. in the register of workman employed.....

3. Nature of employment/designation.....

4. Wage rate (with particulars of unit in case of piece work).....

5. Wage period.....

6. Tenure of employment.....

7. Remark.....

Signature of Contractor

APPENDIX-XI**FORM OF PERFORMANCE SECURITY (GUARANTEE)**

Bank Guarantee Bond
(On Non-Judicial Stamp Paper of Rs100/-)

1. In consideration of the Chairman, AAI (hereinafter called “AAI”) having offered to accept the terms and conditions of the proposed agreement between
 [hereinafter called the said contractor(s)] for the work (hereinafter “the said agreement”) having agreed to production of a irrevocable Bank Guarantee for Rs. (Rupeesonly) as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.
 We..... (Indicate the name of the Bank) (hereinafter referred to as “the Bank”) hereby undertake to pay to the Chairman, AAI an amount not exceeding Rs. (Rupees.....only) on demand by AAI.

2. We..... (Indicate the name of the Bank) do hereby undertake to pay the amounts due to payable under this Guarantee without any demure, merely on a demand from AAI stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees.....only).

3. We, the said Bank, further undertake to pay the Chairman, AAI any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) In any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.

4. We.....(Indicate the name of bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of AAI under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-In-Charge on behalf of AAI certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5. We..... (indicate the name of the bank) further agree with AAI that AAI shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by AAI against in the said contractor(s) and to forebear and enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extensions being granted to the said contractor(s) or for any forbearance, act of omission on the part of AAI or any indulgence by the AAI to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to securities would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We..... (Indicate the name of the bank) lastly undertake not to revoke this guarantee except with the previous consent of AAI in writing.
8. This guarantee shall be valid upto unless extended on demand by AAI. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

In presence of

Dated this _____ Day of _____

Witness

- 1.
- 2.

For and on behalf of (The Bank)
 Signature _____
 Name & Designation _____
 Authorization No. _____
 Name & Place _____
 Bank's Seal _____

The above Guarantee is accepted by Airports Authority of India. For and on behalf of Airports Authority of India

Signature _____
 Name _____
 Designation _____
 Dated _____

Note: * Date of validity should be schedule date of completion + Six months.

APPENDIX-XI-A

Format for Letter of undertaking from the Depositor to Bank

(To be submitted along with Security Deposit / Earnest Money / Performance Guarantee to
Airports Authority of India)

(To be submitted in the Letter head of the firm)

The Branch Manager,
.....Bank,
.....

Sub: - My / Our Bank Guarantee bearing No.....dated for amount..... Issued in
favour of Airport Authority of India A/c.....

Sir,

The subject Bank Guarantee is obtained from your bank for the purpose of **Security Deposit / Earnest Money / Performance Guarantee** on account of contract awarded / to be awarded by M/s Airports Authority of India to me / us.

I hereby authorized the Airport Authority of India in whose favour the deposit is made to close the subject Bank Guarantee before maturity/ on maturity toward adjustment of dues without any reference /consent /notice from me / our side and the bank is fully discharged by making the payment to Airport Authority of India.

Signature of the Depositor

Place:

Date:

APPENDIX-XII

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with rule 7(v) of the AAI Contractor's Labour Regulations to be displayed prominently at the site of work both in English and local Language.

1. Wilful insubordination or disobedience, whether alone or in combination with other.
2. Theft fraud or dishonesty in connection with the contractors beside a business or property of AAI.
3. Taking or giving bribes or any illegal gratifications
4. Habitual late attendance.
5. Drunkenness lighting, riotous or disorderly or indifferent behavior
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked
8. Habitual Indiscipline
9. Causing damage to work in the progress or to property of the AAI or of the contractor.
10. Sleeping on duty.
11. Malingering or slowing down work.
12. Giving of false information regarding name, age, father's name, etc.
13. Habitual loss of wage cards supplied by the employer's
14. Unauthorized use of employer's property of manufacturing or making of unauthorized particles at the work place
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Department and for which the contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorised by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employer during the working hours within the premises.

**APPENDIX-XIII**

Form-XVII

[See Rule 78 (2) (d)]

Register of Fines

Name and address of contractor.....

Name and address of establishment which contractor is carried on.....

Name and location of work.....

Name and address of Principal Employer.....

Sl. No.	Name of workman	Father's/ Husband's Name	Designation nature of employment	Act or action for which fine imposed	Date of Offence	Whether workman showed cause against fine	Name of person in whose presence employee's explanation was heard	Wage period and wages payable	Amount of the imposed	Date on which fine realized	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

**APPENDIX-XIV**

Form-XVII
[See Rule 78 (2) (d)]
Register of Deduction for Damage or Loss

Name and address of contractor.....

Name and address of establishment under which contract is carried on.....

Name and location of work.....

Name and address of Principal Employer.....

Sl. No.	Name of workman	Father's Husband's Name	Designation /nature of employment	Particular of Damages or Loss	Date of damages or loss	Whether workman showed cause against deduction	Name of person in whose presence employee's explanation was heard	Amount of deduction imposed	No. of installments	Date of recovery		Remark
										First Installment	Last Installment	
1	2	3	4	5	6	7	8	9	10	11	12	13

**APPENDIX-XV**

Form-XXII
[See Rule 78 (2) (d)]
Register of Advances

Name and address of contractor.....

Name and address of establishment under which contract is carried on.....

Name and location of work.....

Name and address of Principal Employer.....

Sl. No.	Name of workman	Father's Husband's Name	Designation /nature of employment	Wage period and wages payable	Date and amount of advance paid	Purpose for which advance paid	Number of installment by which advance to be repaid	Date and amount of each installment repaid	Date on which last installment was repaid	Remark
1	2	3	4	5	6	7	8	9	10	11

**APPENDIX-XVI**

Form-XXIII

[See Rule 78 (2) (e)]

Register of Overtime

Name and address of contractor.....

Name and address of establishment under which contract is carried on.....

Name and location of work.....

Name and address of Principal Employer.....

S. No	Name of workmen	Father's/Husbands Name	Sex	Designation/nature of employment	Date on which overtime worked	Total overtime worked at project in case of piece rate	Normal rate of wages	Overtime rate of wages	Overtime earning	Rate on which overtime paid	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

APPENDIX-XVII

NOTICE FOR APPOINTMENT OF ARBITRATOR

[Refer Clause 25]

To

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

Dear Sir,

In terms of clause 25 of the agreement, particular of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual/Prop. Firm /Partnership Firm/Ltd. Co.
3. Full address of the applicant.
4. Name of the work and contract number in which arbitrator sought.
5. Name of the office which entered into contract.
6. Contract amount in the work.
7. Date of contract.
8. Date of initiation of work.
9. Stipulated date of completion of work.
10. Actual date of completion of work (if completed).
11. Total number of claim made.
12. Total amount claimed.
13. Date of intimation of final bill (if work is completed).
14. Date of payment of final bill (if work is completed).
15. Amount of final bill (if work is completed).
16. Date of request made to ED for decision.
17. Date of receipt of ED's decision.
18. Date of appeal.
19. Date of receipt of decision on our appeal.

Specimen signature of the applicant
(Only the person/authority who
Signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.
- 2.
- 3.
- 4.

Yours faithfully

(Signature)

Copy to:

1. The Engineer-in-charge.....,
.....

~~APPENDIX XVIII~~

INTEGRITY PACT

The integrity pact shall be signed by both the parties in the following format

“This Pact made thisday of between Airports Authority of India, a body corporate constituted by the Central Government under the Airports Authority of India Act, 1994 and having its Corporate Office at Rajiv Gandhi Bhawan, New Delhi, and offices atin India, hereinafter called the Authority (which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman, or Member, Executive Directors, Airport Directors, officers or any of them specified by the Chairman in this behalf, and shall also include its successors and assigns) of the one part

AND

.....represented by of the other part, hereinafter called the “Bidder/Contractor” (which term shall unless excluded by or is repugnant to the context be deemed to include its heirs, representatives, successors and assigns of the Bidder/Contractor)

WHEREAS the Authority intends to award, under laid down organizational procedures, tender/ contract for..... The Authority, while discharging its functions on business principles, values proper compliance with all relevant laws and regulations, and the principles of natural justice, ethics, equity, fairness and transparency in its relations with the Bidders/ Contractors.

WHEREAS the Authority is desirous to make its business mechanism more transparent, thus to ensure strict adherence of the aforesaid objectives/goals, the Authority hereby adopts the instrument developed by the renowned international non-governmental organization “Transparency International” (T I) headquartered in Berlin (Germany). The Authority will appoint an Independent External Monitor (IEM) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

AND WHEREAS the Bidder is submitting a tender to the Authority for In response to the NIT (Notice Inviting Tender) dated Contractor is signing the contract for execution ofNOW, therefore, To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to Enabling the Authority to obtain the desired said stores/equipment/execution of works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling Authority to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Authority will commit to prevent corruption, in any form, by its officials by following transparent procedures. The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

1. Commitments of the Authority;

- 1.1 The Authority undertakes that no official of the Authority, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The Authority will, during the pre-contact stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the Authority will report to the appropriate authority office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
- 1.4 In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the Authority with full and verifiable facts and the same is prima facie found to be correct by the Authority, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Authority and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Authority the proceedings under the contract would not be stalled.

2. Commitments of Bidders/Contractor.

The Bidder/Contractor commits itself to take all measures necessary to prevent corrupt practice, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following.

- 21 The Bidder/Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Authority, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 22 The Bidder/Contractor further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Authority or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Authority for showing or

forbearing to show favour or dis favour to any person in relation to the contract or any other contract with the Authority.

- 23 The Bidder / Contactor has not entered and will not enter with other bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specification, certifications, subsidiary contracts, submission or non-submission of bids or any actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 24 The Bidder/Contractor shall, when presenting his bid, disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 25 The Bidder/Contractor shall when presenting his bid disclose any and all the payments he has made or, is committed to or intends to make to agents/brokers or any other intermediary, in connection with this bid/contract.
- 26 The Bidder/Contractor further confirms and declares to the Authority that the BIDDER is the original manufacturer/integrator/ authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Authority or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 27 The Bidder/Contractor, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made or has committed to or intends to make to officials of the Authority or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 28 The Bidder/Contractor will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 29 The Bidder/Contractor will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 210 The Bidder / Contactor shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Authority as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder / Contractor also undertakes to exercise due and adequate care lest any such information is divulged.
- 211 The Bidder/Contractor will inform to the Independent External Monitor.
 - i) If he receives demand for an illegal/undue payment / benefit.

- ii) If he comes to know of any unethical or illegal payment/benefit.
- iii) If he makes any payment to any Authority's associate(s)
- 2.12 The Bidder/Contactor commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.13 The Bidder/Contactor shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 2.14 If the Bidder/Contractor or any employee of the Bidder/Contractor or any person acting on behalf of the Bidder/ Contractor, either directly or indirectly, is a relative of any of the officers of the Authority, or alternatively, if any relative of an officer of the Authority has financial interest/stake in the Bidder's/Contractor's firm, the same shall be disclosed by the Bidder/Contractor at the time filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 2.15 The Bidder/Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Authority.
- 2.16 That if the Bidder/ Contractor, during tender process or before the award of the contract or during execution of the contract/work has committed a transgression in violation of section 2 or in any other form such as to put his reliability or credibility as Bidder/Contractor into question, the Authority is entitled to disqualify him from the tender process or to terminate the contract for such reason and to debar the BIDDER from participating in future bidding processes.

3. Previous Transgression

- 3.1 The Bidder/Contractor declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify Bidders's exclusion from the tender process.
- 3.2 The Bidder/Contractor agrees that if it makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason and he may be considered for debarment for future tender/contract processes.
- 3.3 That the Bidder/Contractor undertakes to get this Pact signed by the subcontractor (s) and associate(s) whose value of the work contribution exceeds Rs 0.5 Cr. (Rupees zero point five Cr.) and to submit the same to the Authority along-with the tender document/ contract before contract signing.
- 3.4. That sub-contractor(s)/ associate(s) engaged by the Contractor, with the approval of the Authority after signing of the contract, and whose value of the work contribution exceeds Rs 0.5 Cr. (Rupees Zero point five Cr.) will be required to

sign this Pact by the Contractor, and the same will be submitted to the Authority before doing/ performing any act/ function by such subcontractor(s) / associate(s) in relation to the contract/ work.

3.5 That the Authority will disqualify from the tender process all Bidder(s) who don't sign this Pact or violate its provisions or fails to get this Pact signed in terms of policy of authority

3.6 That if the Contractor(s) does/ do not sign this Pact or violate its provisions or fails to get this Pact signed in terms of policy of authority. Authority will terminate the contract and initiate appropriate action against such Contractor(s).

4. Earnest Money, Security Deposit, Bank Guarantee, Draft, Pay order or any other mode and its validity i/c Warranty Period, Performance Guarantee/Bond.

While submitting bid, the BIDDER shall deposit an EMD / SD / BG / DRAFT / PAY ORDER ETC I/C WARRANTY PERIOD, PG/BOND, VALIDITY etc., which is as per terms and conditions and details given in NIT / tender documents sold to the Bidders.

5. Sanctions for Violations/Disqualification from tender process and exclusion from future Contacts.

5.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the Authority to take all or any one of the following actions, wherever required:

- i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- ii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- iii) If the Authority has disqualified / debarred the Bidder from the tender process prior to the award under section 2 or 3 or 4, the Authority is entitled to forfeit the earnest money deposited/bid security.
- iv) To recover all sums already paid by the Authority, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the Authority in connection with any other contract or any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

- v) To en-cash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
- vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the Authority resulting from such cancellation/rescission and the Authority shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- vii) To debar the BIDDER from participating in future bidding processes for a minimum period of three years, which may be further extended at the discretion of the Authority.
- viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
- ix) In case where irrevocable Letters of Credit have been received in respect of any contract signed by the Authority with the BIDDER, the same shall not be opened.
- x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- xi) That if the Authority have terminated the contract under section 2 or 3 or 4 or if the Authority is entitled to terminate the contract under section 2 or 3 or 4, the Authority shall be entitled to demand and recover from the contractor damages equivalent to 5% of the contract value or the amount equivalent to security deposit or performance bank guarantee, whichever is higher.
- xii) That the Bidder / Contractor agrees and undertakes to pay the said amount without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish to the satisfaction of the Authority that the disqualification / debarment of the bidder from the tender process or the termination of the contract after award of the contract has caused no damage to the Authority.

5.2 The Authority will be entitled to take all or any of the actions mentioned at para 5.1 above.

5.3 (i) to (xii) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

- 5.4 That if the Bidder/Contractor applies to the Authority for premature revocation of the debarment and proves to the satisfaction of the Authority that he has installed a suitable and effective corruption prevention system and also restored/recouped the damage, if any, caused by him, the Authority may, if thinks fit, revoke the debarment prematurely considering the facts and circumstances of the case, and the documents/evidence adduced by the Bidder/Contractor for first time default.
- 5.5 That a transgression is considered to have occurred if the Authority is fully satisfied with the available documents and evidence submitted along with Independent External Monitor's recommendations/suggestions that no reasonable doubt is possible in the matter.
- 5.6 The decision of the Authority to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent External Monitor(s) appointed for the purpose of this Pact.
6. Allegations against Bidders/Contractors/ Sub-Contractors/ Associates:
That if the Authority receives any information of conduct of a Bidder/ Contractor or Sub- Contractor or of an employee or a representative or an associate of the Bidder, Contractor or Sub- Contractor which constitute corruption, or if the Authority has substantive suspicion in this regard, the Authority will inform the Vigilance Department for appropriate action.
7. **Independent External Monitor(s),**
 - 7.1. That the Authority has appointed competent and credible Independent External Monitor(s) for this Pact.
 - 7.2 The task of the Monitor(s) is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact. He will also enquire into any complaint alleging transgression of any provision of this Pact made by the Bidder, Contractor or Authority.
 - 7.3. That the Monitor(s) is not subject to any instructions by the representatives of the parties and would perform his functions neutrally and independently. He will report to the Chairperson of the Board of the Authority.
 - 7.4 That the Bidder / Contractor accepts that the Monitor(s) has the right to access without restriction to all project documentation of the Authority including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation including minutes of meeting. The same is applicable to Sub - Contractors and Associates. The Monitor is under obligation to treat the information and documents of the Authority and Bidder/ Contractor / Sub- Contractors/ Associates with confidentiality.
 - 7.5. That as soon as the Monitor notices, or believes to notice, a violation of this Pact, he will so inform the management of the Authority and request the management

to discontinue or heal the violation, or to take other relevant action. The Monitor(s) can in this regard submit his recommendations/ suggestions. Beyond this, the Monitor(s) has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- 7.6 That the Authority will provide to the Monitor(s) sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the Authority and the Contractor / Bidder. The parties offer to the Monitor(s) the option to participate in such meetings.
- 7.7 That the Monitor(s) will submit a written report to the Chairperson of the Board of the Authority within 2 weeks from the date of reference or intimation to him by the Authority and, should the occasion arise, submit proposals for correcting problematic situations.
- 7.8 That if the Monitor(s) has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti- Corruption Laws of India and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Department, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 7.9 The word 'Monitor' would include singular and plural.

8. Facilitation of Investigation.

In case of any allegation of violation of any provisions of this Pact or payment of commission, the Authority or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such Examination.

9. Law and Place of Jurisdiction.

That this Pact is subject to provisions under Indian Law. The place of performance and jurisdiction is the Corporate Headquarter /the Regional Headquarter / office of the Authority, as applicable.

10. Other Legal Actions

- 10.1 That the changes and supplements as well as termination notice need to be made in writing.
- 10.2 That if the Bidder / Contractor are a partnership or a consortium, this Pact must be signed by all the partners and consortium members or their authorized representatives.

11. Pact duration (Validity)

- 11.1 That this Pact comes into force when both the parties have signed it. It expires for the Contractor 12 months after the final payment under the respective contract, and for all other Bidders 3 months after the contract is awarded.
- 11.2. That if any claim is made / lodged during this period, the same shall be binding and continue to be valid despite the lapse of this Pact as specified herein before, unless it is discharged/determined by Chairman of the Authority.
- 11.3 That should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12. Company Code of Conduct

Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behavior) and a compliance program for the implementation of the code of conduct throughout the company.

13. The parties hereby sign this Integrity Pact at _____ on _____

Buyer

Name of the Officer
Designation
Deptt./Ministry/PSU
Witness

1. _____

2. _____

Bidder

CHIEF EXECUTIVE OFFICER
Witness

1. _____

2. _____

APPENDIX-XIX

(To be filled by Contractor)
(CLAUSE-47)

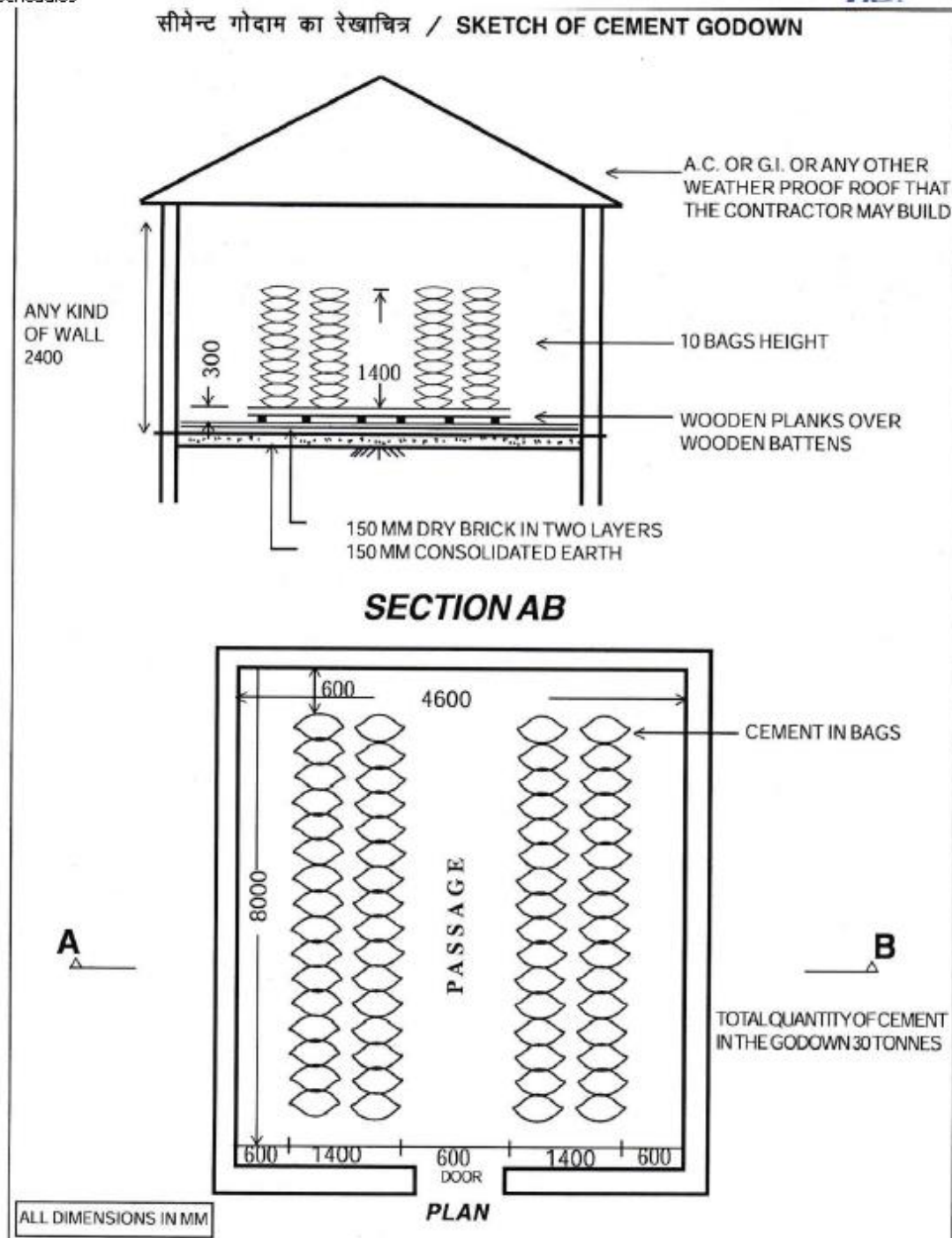
Ratio of direct payment to the specialized : ... % of the net payment to be made to
Specialized agency in case of composite contract agency

Sl.	Sub-head	Nature of work	% of the net payment to be made to Specialized agency
1	Sub-head I		

Note:

1. NIT approving authority must ensure that all sub-heads of works are covered in above table. The bidder must indicate percentage payable to specialized agency in case of all sub-heads.
2. If % is not filled in by the contractor against one or more subhead in this schedule, then 75% of the net payment admissible as per AAI for the subhead under consideration shall be paid directly to specialized agency in case of composite contract.

Schedules



SKETCH OF CEMENT GODOWN

SCHEDULES

SCHEDULE 'A'

All rates shall be quoted in the format provided and no other format is acceptable. The price bid has been given as a standard BOQ format at page no. **01 | B O Q to 01 | B O Q** with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the blue coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the File name. if the BOQ file is found to be modified by the bidder, the bid will be rejected and EMD shall be forfeited.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sl. No.	Description of Item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of Issue
1	2	3	4	5

NOT APPLICABLE

Sl.No. 1	Description 2	Hire charges per day 3	Place of Issue 4

Extra schedule for specific requirements/ documents for the work, if any. ----- **NOT APPLICABLE**

Reference to General Condition of contract

Name of Work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:- Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

Estimated cost of work	: Rs 25,34,137/-
i. Earnest Money	: Rs 76,024/-
ii Performance Guarantee:	: Not Applicable.
iii Security deposit:	: 10% of contract value

SCHEDULE 'F'**GENERAL RULES & DIRECTION**

Officer inviting tender : **Dy. General Manager (Engg-E)**

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3	a: 15% b: 100% (for foundation Items)
--	--

Definitions:

Office inviting tender	:	Engineering Electrical Dept. O/o The Airport Director, Bagdogra Airport-734421
2(v) Engineer-in-Charge	:	Dy. General Manager (Engg-E)
2(viii) Accepting Authority	:	Dy. General Manager (Engg-E)
2(x) Percentage on cost materials & Labour to cover all overheads & Profits	:	15%
2(xi) Standard schedule of rates	:	Market Rates
2(xii) Department	:	AAI, Engineering Electrical

Clause 1

(i)	Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance	within 30 Days
(ii)	Maximum allowable period of extension	As per Clause 1

Clause 2

	Authority for fixing compensation under Clause 2	As per DOP
--	--	------------

Clause 2A

	Whether Clause 2A shall be applicable	No
--	---------------------------------------	----

Clause 5

	Number of days from the date of issue of letter of acceptance for reckoning date of start	10 th day after issue of work order.
--	---	---

Mile Stone(s) as per table given below:

Sl.No.	Description of Milestones (Physical)	Time allowed in days (from date of start)	Amount to be withheld in case of non-achievement of milestone.

Time allowed for execution of work.: 05 (Five) Months

Authority to decide:

- i. Extension of time..... : As per DOP
- ii. Rescheduling of milestone..... : As per DOP
- iii. Shifting of date of start in case of delay in handing over of site..... : As per DOP

Clause 6, 6A

Clause applicable – (6 or 6A) : 6A Applicable

Clause 7

Gross work to be done together with net payment/adjustment of advances for material collected, if any since the last such payment for being eligible to interim payment.	Rs.: 15,00,000.00 excluding Final Bill.
--	---

Clause 10A0000**Testing equipment to be provided by the contractor at site lab**

All the Testing equipments required for conducting test for building/ pavement works as per CPWD, Morth, IRC and AAI specifications as applicable.

Clause 10 B(II)

	Whether Clause 10B(II) shall be applicable	No
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Clause 10C: Applicable

Component of labour expressed as percent of value of work: _____%

Schedules
Clause 10 CA



Materials covered under this clause	Nearest Material (other than cement*, reinforcement bars, structural steel & Bitumen) for which All India Wholesale Price index is to be followed	Base price and its corresponding period of all the materials covered under clause 10CA
1. Cement (OPC/ PPC)		Base price for cement and reinforcement steel to be determined as issued under authority of DG (Works), CPWD or concerned Zonal Chief Engineer, CPWD as on last date of receipt of tender. In case base price for cement, reinforcement steel and Bitumen as to be issued by CPWD is not available concerned ED (Engg) empowered to determine the same.
2. Reinforcement steel bars (TMT)		
3. Structural Steel		
4. Bitumen		

***Note:**

1. Includes cement component used in RMC brought at site from outside approved RMC plants, if any.
2. Base price and its corresponding period of all the materials covered under clause 10CA is to be mentioned at the time of approval of NIT. In case of recall of tenders, the base price may be modified by adopting latest base price and its corresponding period.

Clause 10 CC

Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column	18 Months
--	-----------

Schedule of component of other materials, Labour, POL etc. for price escalation.

Component of civil (except material covered under clause 10 CA) / Electrical construction materials express as percentage total value of workXm%.

Component of labour, expressed as % of total value of work.....Y.....%.

Component of POL, expressed as % of total value of work.....Z.....%

Note: Xm.....% should be equal to (100) — (material covered under clause 10 CA i.e. cement, steel and Other materials specified in clause 10 CA + component of labour + component of POL).

Clause 11

Specification to be followed for execution of work	(a) IEC (b) IE Rules (c) BS/IS (d) A A I Technical specification. (e) OEM/Manufacturer's Specification. (f) Sound Engineering Practice.
--	---

Clause 12

12.2 & 12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for buildings, pavements and all other works above foundation level.	15% (Fifteen Percent)
12.5	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	100% (Hundred Percent)
	Overall Deviation i/c extra items, if any.	30% (Thirty Percent)

Clause 16

	Competent Authority for deciding reduced rates	As per DOP
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Clause 18**Mandatory machinery tools & plants to be deployed by the contractor at site:**

To be provided as per NIT and other Machinery required for timely completion of work.

Clause 25

Place of Arbitration: As Per GCC.

Clause 36(1)**Requirement of Technical Representative(s) and recovery rate**

Sl. No.	Minimum Qualification of Technical Representative (For main Work)	Discipline	Designation (Principal Technical representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36	
						Figures Rs.	Words
N/A							

- a. ~~Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.~~
- b. ~~Diploma holder with minimum 10 year relevant experience with a reputed construction company can be treated at par with Graduate Engineer for the purpose of such deployment subject to the condition that such diploma holder should not exceed 50% of requirement of degree engineers~~

Clause 37

Licence Fee for unpaved land : Not Applicable

Clause 41(b)

Integrity Pact applicable : No

Clause 42

(i)	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates	DSR 2016 printed by C.P.W.D with up-to-date correction slips till last date of submission of tender, technical specifications & BOQ.
(ii)	Variations permissible on theoretical quantities	
a.	Cement for works with estimated cost put to tender not more than Rs.5 lakhs.	3% plus/minus
	For works with estimated cost put to tender more than Rs.5 lakhs	2% plus/minus
b.	Steel Reinforcement and structural steel section for each diameter, section and category	2% plus/minus
c.	Bitumen	2.5% plus only & NIL on minus side
d.	All other materials	

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl. No.	Description of items	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond permissible variation	Less — use beyond the permissible variation*
1.	Cement		
2.	Steel reinforcement		
3.	Structural Sections		
4.	Bitumen issued free		
5.	Bitumen issued at stipulated fixed price		

* ——— Provided work is considered technically sound. Otherwise work has to be re-executed as per direction of Engineer in-charge

Clause 48

Escrow Account: Not applicable.

Annexure to clause 34 (x)

Annexure to clause 34 (x) showing quantities of materials for areas of surfacing to be considered for working out minimum period for which hire charges of road roller are to be recovered.

Sl.No.	Material of surfacing	Quantity or areas
1.	Consolidation of earth subgrade	1860 Sq.m
2.	Consolidation of stones soling 15 cm to 22.5 cm thick	170 Cu.m
3.	Consolidation of brick soling 10 cm to 20 cm thick	230 Cu.m
4.	Consolidation of wearing coat of stone ballast 7.5 cm to 11.5 cm thick	30 Cu.m
5.	Consolidation of wearing coat of brick ballast 10 cm thick	60 Cu.m
6.	Spreading and consolidation of red bajri 6mm	1860 Sq.m
7.	Painting one coat using stone aggregate 12.5mm nominal size	
	(a) @ 1.65 m ³ per 100 m ² and paving bitumen A 90 or S 90 @ 2.25 Kg per m ² or	
	(b) @ 1.50 m ³ per 100 m ² and bitumen emulsion or Road tar @ 2.25 Kg per m ²	930 Sq.m.
8.	Painting two coats using	
	(a) For first coat, stone aggregate 12.5 mm nominal size	
	(i) @ 1.50 m ³ per 100 m ² and paving bitumen A 90 or S 90 @ 2 Kg per m ² or	
	(ii) @ 1.35 m ³ per 100 m ² and bitumen emulsion @ 2 Kg per m ² 600 Sq.m. or	
	(iii) @ 1.25 m ³ per 100 m ² with road tar @ 2.25 Kg per m ²	600 Sq.m.
	(b) For 2nd Coat, stone aggregate 10 mm nominal size 0.9 Cu.m. per 100 Sq.m. with	
	(i) 1kg of paving bitumen A 90 or S 90 or bitumen emulsion per Sq.m. or	
	(ii) 1.25 Kg. of road tar, per Sq.m. 600 Sq.m.	600 Sq.m.
9.	Re painting with stone aggregate 10 mm nominal size 0.9 Cu.m. per 100 Sq.m. with	
	(i) 1kg of paving bitumen A 90 or S 90 per Sq.m. ;k or	
	(ii) 1.25 kg of bitumen emulsion per Sq.m. 1670 Sq.m.	1670 Sq.m.



10.	2-cm premix carpet surfacing using 2.4 m ³ of stone aggregate 10 mm nominal size per 100 m ² and binder including tack coat, the binder being hot cut back bitumen or bitumen emulsion in specified quantities.	930 Sq.m
11.	2.5-cm premix carpet surfacing using 3 m ³ of stone aggregate 10 mm nominal size per 100 m ² and binder including tack coat, the binder being hot cut back bitumen or bitumen emulsion in specified Quantities.	930 Sq.m
12.	4-cm thick bitumen concrete surfacing using stone aggregate 3.8 Cu.m. (60% 20mm nominal size and 40% 12.5 mm nominal size) per 100m ² and coarse sand 1.9 Cu.m. per 100m ² and hot cut back bitumen over a tack coat of hot cut back bitumen.	460 Sq.m.
13.	5-cm thick bitumen concrete surfacing using stone aggregate 4.8 Cu.m. (60% 25 mm nominal size and 40% 20 mm nominal size) per 100m ² and coarse sand 2.4 Cu.m. per 100m ² and hot cut back bitumen over a tack coat of hot cut back bitumen.	370 Sq.m.
14.	6-cm thick bitumen concrete surfacing using stone aggregate 5.8 Cu.m. (60% 40 mm nominal size and 40% 25 mm nominal size) per 100m ² and coarse sand 2.9 Cu.m. per 100m ² and hot cut back bitumen over a tack coat of hot cut back bitumen.	280 Sq.m.
15.	7.5-cm thick bitumen concrete surfacing using stone aggregate 7.3 Cu.m. (60% 50 mm nominal size and 40% 40 mm nominal size) per 100m ² and coarse sand 3.65 Cu.m. per 100m ² and hot cut back bitumen over a tack coat of hot cut back bitumen.	230 Sq.m.
16.	2.5-cm bitumastic sheet using stone aggregate 1.65 Cu.m. (60% 12.5 mm nominal size 40% 10 mm nominal size) per 100 Sq.m. and coarse sand 1.65 Cu.m. per 100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen.	750 Sq.m.
17.	4-cm bitumastic sheet, using stone aggregate 2.6 Cu.m. (60% 12.5 mm nominal size, 40% 10 mm nominal size) per 100 Sq.m. and coarse sand 2.5 Cu.m. per 100 Sq.m. and hot cut back bitumen over a tack coat of hot cut back bitumen.	560 Sq.m.
18.	Laying full grouted surface using stone aggregate 40 mm nominal size 6.10 Cu.m. per 100 Sq.m. with binder, binding with 20 mm to 12.5 mm nominal size stone grit. 1.83 Cu.m. per 100 Sq.m. and seal coat of binder and stone grit 10 mm nominal size, 1.07 Cu.m. per 100 Sq.m., the binder being hot bitumen or tar as specified.	460 Sq.m.
19.	Laying full grouted surface using stone aggregate 50 mm nominal size 9.14 Cu.m. per 100 Sq.m. with binder, binding with stone grit 20 mm to 12.5 mm nominal size 1.83 Cu.m. per 100 Sq.m. and seal coat of binder and stone grit 10 mm nominal size, 1.07 Cu.m. per 100 Sq.m., the binder being hot bitumen or tar,	370 Sq.m.
20.	4-cm thick premix macadam surfacing using stone aggregate 25 mm nominal size 4.57 Cu.m. per 100 Sq.m. and hot bitumin binding with stone aggregate 12.5 mm nominal size 1.52 Cu.m. per 100 Sq.m. and seal coat of hot bitumen and stone aggregate 10 mm nominal size 1.07 Cu.m. per 100 Sq.m.	560 Sq.m.
21.	5-cm thick premix macadam surfacing using stone aggregate 25 mm nominal size 6.10 Cu.m. per 100 Sq.m. and hot bitumin binding with stone aggregate 12.5 mm nominal size 1.52 Cu.m. per 100 Sq.m. and seal coat of hot bitumen and stone aggregate 10 mm nominal size 1.07 Cu.m. per 100 Sq.m.	460 Sq.m.

SPECIAL CONDITIONS OF **CONTRACT**

SPECIAL CONDITIONS OF CONTRACT

1. General:

- a)** This Special condition of Contract shall be read in conjunction with General Conditions of Contract, Technical Specifications and any other documents forming part of this contract wherever the context so requires.
- b)** Notwithstanding the sub-division of the documents into these separate sections and volume every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the CONTRACT so far as it may be practicable to do so.
- c)** Where any portion of the General Condition of Contract is at variance with any provisions of the Special Conditions of Contract, the provisions of the Special Conditions of Contract shall be deemed to override the provisions of the General Conditions of Contract.
- d)** All types of minor civil works like plastering/minor re-construction/modification etc. of front wall for installation of elevator door as per requirement to be executed by the agency. However, required wall panelling/fixing of new tiles etc. considering aesthetic point of view will be taken care by AAI.

2. Scope of Work: The scope of work in this Tender cover- Design, supply, installation, supervision, testing & commissioning of Elevator system at Katihar MSSR Station. It includes all materials, labour, tools, engineering, supervision, installation, calibration, adjustments as required for commissioning of 01 No. of elevator as per site condition.

The scope of work shall briefly cover the following:

- i. Design, Supply, Handling, Assembling, Installation, Testing & Commissioning of MRL type Machine Room less type 08 passengers Elevator system with automatic centre opening stainless-steel door as per specifications contained under this tender & generally in accordance with approved drawing, specifications etc. as required.
- ii. Design, Supply, Installation, Testing & Commissioning of VVVF type drive unit, ARD, MRD control panel unit etc. at MSSR station.
- iii. All types required works to be executed at the newly constructed RCC MSSR station for the new elevator system.
- iv. Complete maintenance of entire installed system including all types of spare parts during Defect Liability Period (DLP) of 02 years & All-Inclusive Comprehensive Maintenance Contract (AICMC) for 05 years. (i.e. after 02 years of DLP)

3. Training after completion of SITC Work: Operation and routine maintenance of elevator system shall be looked after by the experienced & trained manpower engaged by AAI immediately after completion of Supply Installation Testing & Commissioning (SITC) work. Successful bidder shall have to impart proper field as well as class room training to the operating manpower engaged by AAI for operation & routine maintenance and on safety procedure of Elevator system.

An undertaking as per **FORM - H** shall also be submitted by the successful bidder for imparting the training for Operation & Routine Maintenance of installation time to time for entire life span of the installation to the Operating agencies engaged by AAI for the purpose within the quoted cost of SITC and nothing shall be payable on this account.

Final bill of the bidder for SITC work shall be released only after imparting the training by the bidder to the specialized agency persons engaged by AAI for Operation & Routine Maintenance.

4. Work Programme:

- i) The work is required to be carried-out in the Katihar station.** The activities will have to be planned well in advance so that necessary arrangement will have to be done and the work will have to be carried out within the specified period mentioned therein. **Within 15 days of receiving the Work Order the contractor shall furnish milestone chart for completion of work within the stipulated time and as per conditions of the contract.**
- ii)** The agency has to submit the design drawing/item of works to be executed for each site complying all technical specification of agreement part, before execution of work and after consultation with AAI engineers.
- iii)** Site to the contractor may be made available in phases in such a way that there is least obstruction to the station working. The contractor shall have to abide by these instructions and nothing extra shall be paid on this account.
- iv)** No additional payment shall be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work Schedule even though the time schedule is approved by the Engineer-in-Charge.
- v)** The approval to the revised schedule resulting in completion date beyond the stipulated date of completion shall not automatically amount to grant of extension of time to the Contractor.
- vi)** Cleaning, dressing of work place including all ancillary works connected with this work shall be responsibility of the Contractor and the price quoted by them shall be deemed to have included in the quote.
- vii)** The quantity of materials indicated in BOQ is tentative, the quantities of materials as actual as per site requirement shall be got approved by the contractor from the EIC before procurement. The contractor shall carry out and complete the said work under this contract in every respect in accordance with this contract documents and under the directions of EIC. Necessary test instruments shall be provided by the contractor without any extra cost.

5. Layout & Working Drawings:

- i)** Within 20 days on award of work, the successful tenderer shall prepare and furnish the working drawings for approval to the Engineer-In-Charge. Such drawings and designs shall be based on BOQ items, technical specifications, and OEM specifications, norms and regulations and as per available space of site.
- ii)** As Built Drawings (03 sets hard copy) on completion of work shall be submitted by the contractor along with complete inventory, technical catalogues, operational maintenance manual, guarantee card etc. as provided by OEM.

6. Inspection of Site: The Contractor shall visit the site before tendering and get acquainted with the conditions at site. The Contractor shall be deemed to have included in his tendered rates, allowances for all preliminary work connected with the work and all other conditions that affect the work. The working site is at newly construction of RCC MSSR station at Katihar. Strict precaution must be exercised by the Contractor to avoid interference with operation of this station. The contractor shall abide by all rules and regulation laid down in this regard by AAI /CISF/ BCAS.

7. Admission to Site & Precautions during execution of work:

- i)** The station belongs to AAI. The contractor is expected to finish the work by adequate planning with Engineer-In-Charge. All men materials and vehicles shall be permitted to enter the aerodrome area with prior intimation to AAI.

- ii) The contractor shall ensure that his men shall work in areas/zones allotted to them. The contractor's staff/workmen shall follow all the rules promulgated from time to time by the concerned authorities such as prohibition of smoking, keeping specified routes etc.
- iii) Any person found violating the security rules laid down by the authorities will be expelled from the area without assigning any reason whatsoever and contractor shall have no claim on this account.
- iv) The contractor shall provide caution boards at site designated by the Engineer-In-Charge. One supervisor has to be present at site all the time during work execution.
- v) The contractor shall remove all the dismantle materials etc. on completion of the work and leave the site in a neat and tidy state.
- vi) There are various agencies working in airport area. The tenderer is responsible for ascertaining all relevant coordination/ information with other agencies including AAI for smooth and safe progress of work. The cost of all measures necessary to ensure complete co-operation/co-ordination between contractors/works/airport agencies shall be deemed to be included in the quote.
- vii) The contractor shall be responsible for any damage, resulting from his activities, either to buildings, structures, **existing** fixtures fittings, underground cable, hard surface areas, water/telephone lines, other installations, roads etc. The contractor shall restore, replace or repair any such damage to the complete satisfaction of the Engineer-In-charge and in default the Engineer-In-charge may make good by any other means and deduct the expenses from contractor.
- viii) The skilled manpower involved for execution / ITC work shall be authorized by OEM and have valid electrical/technical working license.
- ix) Within 15 days of award of work, the contractor shall submit his PF account code no. allotted by regional PF commissioner and ESI registration no. allotted by ESI Corporation for the purpose of labour engaged by contractor for ITC work failing which no payment will be released to the contractor.
- x) ***Arrangement to be done for proper barricading of work site each day after completion of work with complete satisfaction of AAI Engineers for avoidance of any accident/mis-happening considering the work site is at RCC Anneta Tower at Katihar MSSR Station. Necessary caution board of required nos. / sizes to be placed after completion of work in each day. Nothing shall be paid extra in this respect to the agency.***

8. Factory Inspection:

- i) Authorized representatives of AAI shall carry out factory acceptance test (FAT) of materials before dispatch from the works/factory. Sufficient advance intimation (15 days) shall be given by the contractor to enable AAI representatives to carry out inspection at specified date. Travelling, boarding and lodging expenses for factory inspection of AAI inspectors shall be borne by AAI. However, in the event of re- testing/non-acceptance of the material/equipment or any portion of equipment, the cost of re-inspection including the travelling, boarding and lodging expenses of AAI inspector shall be borne by the contractor.
- ii) AAI shall have full power to inspect any part of the work, the materials and workmanship at the contractor's work or at any other place from which the material or equipments obtained. Under specific conditions/reasons AAI may waive off factory inspection. Acceptance of any material or equipment shall in no way relieve the contractor of his responsibility for meeting the requirements of the specifications.
- iii) Routine type tests for the various items of equipment as specified in technical specifications shall be performed at the contractor's/ manufacturer's works and test certificate furnished. All tools, instrument, plants, manuals, IS/IEC and labour/operating personnel require for the test shall be provided by the contractor at his own cost.
- iv) The Engineer-In-Charge may at his discretion, check the OEM's test result by independent Govt. / Govt. Accredited laboratory/agency. The cost of independent testing, transportation packing etc. shall be borne by the contractor.
- v) ***The OEM of passenger elevator system must have own Testing Tower for checking of satisfactory performance of elevator system during FAT by AAI officials. This can be considered as must condition for***

eligibility criteria for participation of tender. Necessary compliance in this regard to be issued as mentioned in FORM – I.

9. Mode of Dispatch for Items: The successful tenderer shall be solely responsible to ensure the following:

- ❖ Sound packing of equipment/components.
- ❖ Supply of the items by the due date as per commitment.
- ❖ Insurance.
- ❖ Forwarding and transportation of equipment/components up to the site.
- ❖ Receipt of built & invoice of materials at site in good condition.
- ❖ Warranty cards as offered by OEM.

10. Prices: The rates quoted shall be in Indian rupees inclusive of all taxes & duties, Labour CESS, packing, unpacking, insurance, transportation, loading, unloading, handling, incidental charges, local levies etc. but exclusive of GST. The rates, once awarded, are firm throughout the contract period. Goods and Service Tax/Turn Over Tax/Octroi /Royalty /Construction Employee Welfare CESS/ or any other duty levied by custom authorities in respect of import or any material or any other tax on material, Labour, service, or contract in respect of this work contract including payment to local/Govt./statutory authorities shall be payable by the contractor and Airports Authority of India will not entertained any claim what so ever in this respect. Construction employee welfare CESS will be deducted at the time of making payment of running account bill as per prevailing rates of the respective states. Only GST will be reimbursed based on submission of actual tax invoice.

11. Payment Terms:

i) For Supply, Installation, Testing & Commissioning items:

70% of the item rate on pro-rata basis on delivery of material in good condition at site and approved by AAI.

20% of the item rate on pro-rata basis on installation & testing of the system at site and approved by AAI.

10% on Commissioning and Handing over of equipment/installation.

ii) For purely Supply items:

90% against supply of item at site and approved by AAI.

10% against commissioning & handing over.

iii) For purely Installation items:

85% against Installation of item at site and approved by AAI

15% on testing, Commissioning & Handing over.

All the payments shall be subject to deduction of security deposit, applicable taxes i.e. Income Tax, Labour Cess, GST etc. as per statutory requirements. Contractor shall submit Valid GST invoice, purchase bill, test certificates and other related documents to process the bill for payment.

12. Defect Liability Period: It shall be for a period of 24 Months from the certified date of completion of the work. Security Deposit for SITC work shall be released after the completion of DLP only.

13. Contract Agreement:

i) The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100/- and cost of the stamp paper shall be borne by the Contractor.

ii) Contractor's tender including the letters of clarifications between the contractor and the AAI prior to the award of contract shall form a part of the Contract Agreement to the extent they have been accepted by AAI.

14. Completeness of Tender: All sundry fittings, assemblies, accessories hardware items, end terminations for electrical connections as required and all other sundry which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

15. Insurance: In case of non-compliance of Clause No 46 of GCC by agency **Withhold / deduction amounting to 50% of material value to be made from each bill will be applicable.**

16. Difference between first lowest bidder and other bidders: Final bill will be worked out at the accepted Bid rates and also with the quoted rates of L2 bidder. The amount of final bill to be paid will be restricted to the lowest of both the bidders.

17. Stores & Materials:

i) No storage accommodation will be arranged by AAI, Contractor shall make all such arrangements at his own cost. AAI may give open space for store. The contractor shall be responsible for watch & ward, safe custody of materials till the installation is commissioned and handed over to AAI.

ii) All materials required for satisfactory completion of the work shall be arranged by contractor from his own sources. No claim whatsoever shall be entertained by the Authority on account of delay in either providing or non-availability of these materials in the market.

iii) All the materials required for this work should conform to relevant specifications. The copies of Purchase Vouchers & Gate Passes should be produced along with the materials. The test certificates, routine test certificates and acceptance test certificates are also to be submitted.

iv) The contractor shall take away the balance of any materials left at the site after commissioning of the system. The cost, if already paid, for such items shall be deducted from the subsequent running bills. AAI shall not be liable to pay for any of the incidental charges connected with the above.

18. All equipment, materials used in the work shall be brand new, quality product, free from manufacturing defects & complying with technical specifications. Wherever conforming to the relevant IS/BS specifications, the material shall be ISI marked / stamped. The material to be used in the work shall be subject to the prior approval of E-I-C. As the quantity of materials indicated in BOQ is tentative, the quantities of materials as actual as per site requirement shall be got approved by the contractor from the Engineer-In-Charge before procurement.

The copies of purchase voucher and other documents should be produced along with the materials during supply. All defective/damaged supplied materials shall be replaced with the good ones without any extra cost. All sundry, assemblies, accessories, hardware items, foundation bolts, etc. as required and all other sundry items which are useful and necessary for proper assembly and efficient working of the various component of the work shall be deemed to have been included in the tender whether such items are specifically mentioned in the tender documents or not.

19. Tools, Plants & Testing Equipments: All required tools, plants & testing equipment required for executing this work shall be arranged by the contractor.

20. Default, Risk & Cost: In the event of default by contractor, AAI reserves the right to got any of the works done through any other agency / agencies in full are part at the risk and cost of the contractor under the following circumstances.

- i) Non – completion of work, lack of response.
- ii) Suspension of work, lack of response.
- iii) Poor quality of materials, work/workmanship.
- iv) Labour disputes.
- v) Noncompliance of tender requirements.

21. Bye-Laws:

i) The contractor shall comply with all bye-laws and regulations of local and statutory authorities having jurisdiction over the works and shall be responsible for payment of all fees and other charges and for giving and receiving of all necessary notices and keeping the Engineer-In-Charge, informed of the said compliance with the bye-laws, payments made, notices issued and received.

ii) The contractor shall indemnify the AAI against all claims in respect of patent rights, design, trademarks of name or other protected rights in respect of any plant, machine, work or materials used for or in connection with the work or temporary works and from and against all claims, demands proceedings, cost, charges and expenses whatsoever in respect of or in relation thereto. The contractor shall defend all actions arising from such claims and shall himself pay all royalties license fees, damages, costs and charges of all and every sort that may be legally incurred in respect there to.

22. Sufficiency of The Tender: The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of quantities or in bills/schedule of quantities which rates and prices shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper execution and completion of the works. All sundry fittings, assemblies, accessories hardware items, foundation bolts, termination legs for electrical connections as required and all other sundry which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the tender, when such items are specifically mentioned in the tender documents or not.

23. Safety of Personnel & Equipment: All the precautions, safety measures shall be taken for the equipment and working personnel. Proper and sufficient safety measures to be taken to ensure safety of station working personnel. Necessary safety barricading to be done in areas of work in building to prevent any unwanted entry in working areas.

24. Security Norms/Guidelines: Contractor is to abide all rules and regulations of AAI / BCAS / CISF norms of security. Contractor shall obtain necessary entry pass/ token/ identity card for work force from AAI/BCAS/CISF etc. who is in charge of security matters (as per requirement). It is the responsibility of the Contractor to fulfil all the relevant formalities viz. police verification, photographs, addresses and keeping in safe custody etc. and bear the fee, if any.

25. Water & Power Supply:

- i) Contractor shall make his own arrangements for water supply/power supply for the work and his staff and workmen.
- ii) Electricity, if available with AAI shall be provided on charges at prevailing rates, however the contractor has to make own arrangement to take supply from designated supply point, provision of energy meter/cable/wire etc.

iii) Power supply after complete installation shall be provided by AAI for testing, commissioning and trial run of conveyors without charging of unit consumption.

26. Handing Over/ Certified Date of Completion: Upon the satisfactory commissioning, of the entire work shall be handed over officially and completion date recorded by Engineer-in-charge with all the prescribed formalities for handing over. This date shall be reckoned, as the certified date of completion and the defects liability period shall commence from this date. Until the handing over of the installation, the responsibility lies with the contractor for safety, upkeep etc.

Agency has to take Lift licence from State Authority before handing over the entire system and cost of same shall be borne by the agency, nothing will be paid extra in this regard. Final bill will be paid subject to getting Lift licence from State Authority.

27. Site Order Book: A site order book shall be maintained and will be made available in the office of EIC at site. All the instructions to carry out the works defects, to be attended by the contractor shall be recorded in the site order book by EIC or his authorized representative and the contractor has to acknowledge the recorded instruction and should act within allotted time frame. Failing which work shall be carried out on firm risk and cost without giving any further notice. The expenditure as incurred shall be debited from their running bill / final bill.

28. Guidelines for quoting in BOQ Item No 2.1 to 2.5: *By default, bidding / entering price for these items are disabled. Rates will be auto-calculated based on pre-decided percentage as mentioned in respective item description. (i.e. from BOQ Item 2.1 to 2.5). First year rate (i.e. 2.1) is auto-calculated against amount of BOQ Item No 1 based on pre-decided percentage. For last 4 years (i.e. from 2.2 to 2.5), rates are auto-calculated from its preceding year based on pre-decided percentage enhancement.*

However, for deciding L1 in financial evaluation the total amount including AICMC will be taken into account.

SPECIAL CONDITIONS OF CONTRACT (SCC) FOR

DEFECT LIABILITY PERIOD of 02 YEARS (i.e. AFTER COMPLETION OF SITC WORK)

1. **General:** The contractor shall guarantee that the entire elevator system including units, assemblies, subassemblies, control panels etc. shall be free from any defects due to the defective materials, bad workmanship and that the system shall not be less than the guaranteed values. The Warranty/DLP shall be valid for a period of 24 months for the entire system from the actual date of completion of the SITC work.

During the Defects Liability period contractor shall ensure availability of minimum manpower at site if required to check the routine and schedule maintenance of Elevator to avoid any breakdown and hampering of the operation. The cost of manpower is deemed to be included in the quoted amount. In addition to this the agency has to depute service engineer **Bi-Monthly/Half-Yearly/Yearly** for maintenance purpose during DLP (02 years).

The contractor, without any charges whatsoever to AAI, shall replace any major/minor parts found defective of entire system during the DLP of 02 years. Necessary spares, test equipment, tools etc. required maintenance during this warrantee period shall be made available free of any cost to the Authority. The warrantee / extended warrantee shall be for whole system and not limited to parts replaced. The services of the OEM of any component, if required during this period, for such work shall also be made available without any cost to AAI.

Any failure (partial or complete) of the system or system related equipment leading to complete failure of the system shall be considered as failure of the system. In this regard the decision of engineer in charge shall be final & binding.

In case of continuous and frequent breakdowns observed by AAI, then AAI shall proceed to take up the rectification works at the contractor's risk and expense without prejudice to any other right.

All inspection, replacement, or rectification carried out by the contractor during the maintenance period shall be at the cost, charges and expenses of the contractor subject to the same conditions as in the contract.

The contractor shall be wholly responsible for any delay in supply of material. If during contract period any operational hindrance happened due to un-availability of materials then suitable penalty will be imposed and the decision of Engineer-in-Charge in this regard shall be final and binding to the contractor.

2. Scope of Work includes the followings:

i) Maintenance of all the installations for a period of 02 years including supply of consumables & spares.

ii) During the DLP contractor shall ensure availability of minimum manpower at site if required to check the routine and schedule maintenance of Elevator to avoid any breakdown and hampering of the operation. The cost of manpower is deemed to be included in the quoted amount. In addition to this the agency has to depute service engineer **Bi-Monthly/Half-Yearly/Yearly** for maintenance purpose during this period (02 years). Preventive maintenance shall be done as per maintenance schedule to be decided by AAI in association with contractor. Corrective maintenance shall be done on all days including holidays.

However, no additional payment will be made to the agency during DLP period and any additional cost related to maintenance/ spares/services rendered in DLP period is deemed to have been included in the SITC cost by bidder during tendering.

The following activities shall be under the scope of successful bidder:

- a) Maintaining the entire elevator system including all types of assemblies/sub-assemblies and accessories.
- b) Maintaining 100% serviceability of elevator system at all times.
- c) Carrying out preventive maintenance/checks as specified including attending repairs/ breakdowns of faulty units, trouble shooting of faults, minor welding works, work shop lathe works, rewiring of panels if required etc.
- d) Periodical / Preventive Maintenance works:
 - Minimum preventive maintenance to be carried-out during **Bi-Monthly/Half Yearly/Yearly** visit is to be done as per (**Annexure -C**) and as updated time to time.
 - In addition to above preventive maintenance /overhauling to be done as per OEM's recommendations.
- e) Undertaking periodical safety checks and Maintenance of Records / documents and submission of Reports.
- f) Timely submission of breakdown & scheduled (bi-monthly/half-yearly/annual) service visit report for detailed preventive maintenance activities carried out.
- g) Meeting the requirement of labour regulations / registration, Local laws / by — laws etc., providing insurance for the employees.
- h) Yearly overhauling of entire elevator system including related accessories. This maintenance shall be carried out once in a year as per OEM recommendation and the firm shall submit its program of overhauling on starting of every year. The program shall be complied as committed by the agency. However major overhauling must be carried out during non-seasonal months as decided by AAI.

3. AAI shall provide electricity free of cost during the AICMC period of complete Elevator system.

4. **PMI Schedule:** Preventive Maintenance Inspection Schedule to be submitted by the tenderer as per OEM specified for the respective elevator system which has to be carried out in time specified by the EIC. In addition to this preventive maintenance activities for the system(s) as appended in **Annexure-C** shall also to be followed. Frequency of certain preventive maintenance activities can be changed by EIC as per guidelines issued from AAI headquarter and any additional activities can be added from time to time.

5. **Penalty/ Recovery:**

a) **Compensation towards breakdown:** A sum of Rs. 500/- per day shall be recovered if any of the minor parts of Elevator system is not operative on account of any fault continuously for a period of more than 2 days, provided elevator is available for service and Rs. 2000/- per day per breakdown beyond 2 days towards un-serviceability of major equipment which affects the serviceability of the elevator. If the fault rectification is likely to take time on account of any reason beyond the control of the Contractor, then the firm must confirm in writing to the Engineer-in-Charge. The recovery amount can be waived off if the reasons of delay given by the Contractor are found satisfactory. The decision of the Engineer-in-Charge shall be final and binding on the contractor.

b) Penalty towards noncompliance of Bi-Monthly/ Half Yearly/ Annual Servicing: If agency fails to complete the above maintenance activities, a penalty will be levied asunder:

1. Bi-Monthly Servicing: Rs. 10,000/- for passenger elevator system.
2. Half yearly Servicing: Rs.15,000/- for passenger elevator system.
3. Annual Servicing/Overhauling activities: Rs.30, 000/- for passenger elevator system.

The recovery amount can be waived off if the reasons of delay given by the Contractor are found satisfactory. The decision of the Engineer-in-Charge shall be final and binding on the contractor.

6. Submission of Service Report & release of Security Deposit: The agency has to submit Bi-Monthly/ Half Yearly/ Annual Service report as applicable to the Engineer-in-Charge to ensure that the system is working at its optimum performance criteria. Security Deposit for SITC work will only be released after completion of 02 years of DLP subject to fulfilling NIT criteria and submission of documents.

7. Payment for O&M and AICMC:

- (i) Payment against O&M in case building/ facility put in use without recording work completion certificate. The O&M and AICMC period stipulated in the contract shall only start from the date of completion of work. However, in case the building / facility put in Operation/use without recording final work completion, the agency has to deploy minimum manpower as decided by E-1-C. The cost of deployed manpower for this period shall be reimbursed on production of documentary evidence.
- (ii) If the system is not in operation during the currency of AICMC period, agency shall continue to carry out all schedule maintenance i.e. weekly, monthly, half yearly etc. to keep the system in serviceable condition. During this period the only 75% of quoted rate of AICMC shall be paid to the agency.

8. Training:

Operation and Routine Maintenance (O&M) of equipment's/installations shall be carried out through an experienced specialized agency engaged by AAI immediately after completion of SITC work/ O&M work included in the scope of work (strikeout which is not applicable).

Successful bidder (either directly or through their authorized agency) shall impart proper field as well as class room training to the agency engaged by AAI for Operation & Routine Maintenance and safety procedure of equipment's / installations to keep the installation in good working condition at the time of commissioning or thereafter as and when required.

An undertaking as per '**FORM-H**' shall be submitted by the bidder for imparting the training on Operation and Routine Maintenance (O&M) of installation /equipment to the specialized agency engaged by AAI for the purpose within the quoted cost of SITC work & nothing extra shall be payable on this account.

Final Bill of the bidder for SITC work / O&M work included in the scope of work (strikeout which is not applicable) shall be released only after imparting the training by the OEM to the specialized agency engaged by AAI for Operational and Routine Maintenance.

9. If the main OEM who has executed the SITC work discontinues their business/ operation During the contract period: -

If the main OEM who has executed the SITC work discontinues their business/ operation in India, the AICMC as well as Operation & Routine Maintenance (for remaining period of the contract) shall be executed by OEM's authorized Indian representative, on original Agreement Terms & Conditions, under Tripartite Agreement executed among AAI, OEM and their authorized Indian representative and payment shall be made to the OEM/ OEM's authorized Indian representative as per provisions of the Tripartite Agreement.

SUPPLEMENTARY CONDITIONS AND PARTICULAR SPECIFICATIONS FOR ALL INCLUSIVE COMPREHENSIVE MAINTENANCE CONTRACT(AICMC) OF ELEVATOR FOR 05 YEARS (i.e. AFTER COMPLETION OF DLP OF 02 YEARS)

Within last 15 days of certified date of completion of DLP, the contractor shall enter into a supplementary agreement with Engineer-in-Charge of AAI for All Inclusive Comprehensive Maintenance Contract (AICMC) for 05 years of entire passenger elevator system including all types of assemblies/sub-assemblies/accessories installed/fixed during main SITC work.

1. Brief Details of Installation to be Maintained:

- i) Passenger Elevator system (including all assemblies/sub-assemblies).
- ii) All types of installations/equipments (viz. VVVF drive unit, ARD, MRD, UPS, Control Panel etc.) installed at RCC Antenna Tower Katihar.
- iii) All types of installations/parts/sub-parts installed at hoist way or elevator pit.

2. Scope of Work includes the followings:

- i) AICMC of passenger elevator system including all installations as detailed above (Sl. No:1) for a period of 05 years including supply of consumables & spares.
- ii) During the AICMC Period contractor shall ensure availability of minimum manpower at site if required to check the routine and schedule maintenance of passenger elevator system to avoid any breakdown and hampering of the operation. The cost of manpower is deemed to be included in the quoted amount. In addition to this the agency has to depute service engineer **Bi-Monthly/Half-Yearly/Yearly** for maintenance purpose during AICMC period (05 years). Preventive maintenance shall be done as per maintenance schedule to be decided by AAI in association with contractor. Corrective maintenance shall be done on all days including holidays.

The following activities shall be under the scope of successful bidder:

- a) Maintaining the passenger elevator system including all types of related assemblies/sub-assemblies.
- b) Maintaining 100% serviceability of all the system at all times.
- c) Carrying out preventive maintenance/checks as specified including attending repairs/ breakdowns of faulty units, trouble shooting of faults, minor welding works, work shop lathe works, rewiring of panels if required etc.
- d) Periodical / Preventive Maintenance works:
 - As per enclosed AAI preventive maintenance schedules (**Annexure -C**) and as updated time to time.
 - As per OEM's recommendations.
- e) Undertaking periodical safety checks and Maintenance of Records / documents and submission of Reports.
- f) Timely submission of breakdown & scheduled (bi-monthly/half-yearly/annual) service visit report for detailed preventive maintenance activities carried out.
- g) Meeting the requirement of labour regulations / registration, Local laws / by — laws etc., providing insurance for the employees.
- h) Yearly overhauling of entire passenger elevator system including related accessories. All major overhauling of all types of assemblies/sub-assemblies and replacement of the same if required for safe & satisfactory operation of the system with complete satisfaction of EIC. This maintenance shall be carried out once in a year and the

firm shall submit its program of overhauling on starting of every year. The program shall be complied as committed by the agency. However major overhauling must be carried out during non-seasonal months as decided by AAI.

i) AAI shall provide electricity free of cost during the AICMC period of complete conveyor system.

3. **PMI Schedule:** Preventive Maintenance Inspection Schedule to be submitted by the tenderer as per OEM specified for the respective Elevator system which has to be carried out in time specified by the EIC. In addition to this preventive maintenance activities for the system(s) as appended in **Annexure-C** shall also to be followed. Frequency of certain preventive maintenance activities can be changed by EIC as per guidelines issued from AAI headquarter and any additional activities can be added from time to time.

4. **Labour Regulations:** The Contractor shall abide by the provisions of all applicable laws including the Minimum Wages Act, Labour Laws in respect of the services to be rendered under this contract. It is to be clearly understood by the contractor and intimated by him to his employees deployed for the purpose that this service agreement shall not constitute any relationship of employer/ employee between AAI on the one hand and employees of the contractor on the other.

5. **Spares:** The spare parts required for the maintenance during AICMC period shall be arranged free of cost. Agency has to keep at site minimum required critical spares which are to be decided with consultation with EIC at the starting of contract. The contractor shall be wholly responsible for any delay in supply of material. If during contract period any operational hindrance happened due to un-availability of materials then suitable penalty will be imposed and the decision of engineer-in-charge in this regard shall be final and binding to the contractor.

6. **Essential Services:** The AAI reserves the right to immediately step in and carryout a part or whole of the work entrusted under this Contract in risk & cost basis in case of any default or unsatisfactory performance by the Contractor without resorting to the formalities of issuing notices, etc. for rescinding the Contract and the Contractor would have no claim for compensation in such case.

7. **Duration of Contract:** This contract shall be for a total period of 05 years. AAI reserves the right to extend the period of contract for a period up to 06 (Six) months on the same terms and conditions (rate for the extended period shall be of same as in 5th year of AICMC period), if required after completion of the contract period subject to satisfactory completion of contract. AAI reserves the right to terminate the contract fully or partially with immediate effect without giving any reasons thereof.

8. Additional Responsibilities: The Contractor shall arrange as and when required the following:

- i. All the additional tools and manpower required for attending breakdowns of the **Lift/elevator**. & all the consumable material like grease, Kerosene/ Oil/ Petrol/ Carbon Tetra Chloride, dhotis, cotton waste and other such items as required for servicing/ repairing which are in the scope of contractor.
- ii. If additional manpower is required in case of any breakdowns, the same has to be arranged which is in the scope of Contractor. Nothing extra shall be paid to the agency in this respect.
- iii. Any damage caused to the site or to equipment or any AAI's property same shall be made good by the Contractor at his own cost.
- iv. In case of any defect, if any part to be replaced that to be informed to AAI before replacement. The dismantled materials shall be the property of the contractor.
- v. Contractor will visit the site periodically and as and when called by AAI. On his visit they should meet the Engineer-in - Charge and his representatives and will report about satisfactory working of all **elevator**/systems.

9. Penalty/ Recovery:

a) Compensation towards breakdown: A sum of Rs. 500/- per hour shall be recovered if any of the minor system of passenger elevator system under contract is not operative on account of any fault continuously for a period of more than 08 (Eight) hours, provided elevator is available for service and Rs. 2000/- per day per breakdown beyond 2 days towards un-serviceability of major equipment which affects the serviceability of elevator system. If the fault rectification is likely to take time on account of any reason beyond the control of the Contractor, then the firm must confirm in writing to the Engineer-in-Charge. The recovery amount can be waived off if the reasons of delay given by the Contractor are found satisfactory. The decision of the Engineer-in-Charge shall be final and binding on the contractor.

b) Penalty towards noncompliance of Bi-Monthly/ Half Yearly/ Annual Servicing: If agency fails to complete the above maintenance activities, a penalty will be levied asunder:

1. Bi-Monthly Servicing: Rs. 10,000/- for passenger elevator system.
2. Half yearly Servicing: Rs.15,000/- for passenger elevator system.
3. Annual Servicing/Overhauling activities: Rs.30, 000/- for passenger elevator system.

The recovery amount can be waived off if the reasons of delay given by the Contractor are found satisfactory. The decision of the Engineer-in-Charge shall be final and binding on the contractor.

10. Submission of Service Report & Payment Terms: The agency has to submit Bi-Monthly/ Half Yearly/ Annual Service report as applicable to the Engineer-in-Charge before each RA Bill payment to ensure that the system is working at its optimum performance criteria. RA Bill to the agency to be made on Bi-Monthly basis after fulfilling all the criteria and submission of documents.

11. Security Deposit: Security deposit for AICMC period shall be released after a period of 06 months from the date of annual successful completion of AICMC (e.g. Security deposit deducted for 1st year AICMC bill shall be released after 06 months during running of 2nd year AICMC and similarly for subsequent years).

12. Other Conditions: Any material taken out from the building shall have necessary permission from the security personnel/Competent Authority in the form of a Gate pass. In case of any material being brought in, necessary records shall be maintained in a separate register.

13. The Contractor shall be responsible for his employees, welfare statutory requirements as per rules, applicable in case of PF, ESI. Bonus or any other statutory provision that may be enforced from time to time. Any labour or staff related problems/ disputes will be the sole responsibility of Contractor. All the labour laws shall be complied by the Contractor.

a) The Contractor shall at all times indemnify and keep AAI indemnified against all claims which may arise out of or relating to this work and which may be referred against AAI and shall take all risks and accident or damage which may occur at the site of work or to the work from whatever cause it may be.

b) The Contractor should have necessary tie up with the manufacturers of the major critical equipment for special repairs and supply of genuine spare parts as and when required.

c) Any staff member found incompetent/unsuitable or misbehaving or not complying with the instructions shall be withdrawn immediately under the instructions of Engineer-in-Charge and his pass shall be surrendered. Replacement shall be deployed immediately and necessary pass shall be arranged.

d) All works/services are to be carried out as per AAI/OEM recommendations and code of practices including safety codes and as per instruction of Engineer-in-Charge as applicable.

Annexure-C

Minimum preventive maintenance schedule

I. Bi-Monthly/Half Yearly/Yearly

A. Passenger Elevator (Lift)

1. Check of all the push buttons for their operation like landing push buttons, stop button, emergency lights, emergency alarm, car door closing / opening mechanism, landing door closing / opening mechanism, door sensor etc.
2. Check of car at each floor.
3. Check abnormal sound or abnormal vibration during car movement.
4. Check landing indicator at each floor and indicator inside the car.
5. Check shaft lighting, lighting & fan inside the car.
6. Check cleanliness inside the lift machine room.
7. Proper functioning of exhaust fan inside the machine room.
8. Check communication system in the lift car.

Note:-

- *In addition to above, Other periodical checks shall be carried out strictly as per manufacture's recommendations and record shall be maintained.*
- Agency has to submit the Bi-Monthly/Half Yearly/Yearly preventive maintenance schedule/ any other OEM recommended maintenance schedule after award of work for approval from EIC.

TECHNICAL **SPECIFICATIONS**

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS FOR TRACTION ELEVATORS / LIFTS

This section provides the technical requirement of Electric Traction type with Machine Room **Less**, Stainless Steel Passenger Elevators with stainless steel door, their components, safety devices, etc. All features shall be according to the standards / codes listed below. The contractor shall be responsible to check and ensure dimensions of hoist ways before manufacturing, the requirements of statutory laws and local codes of Electrical / Elevators inspector and the equipment offered are suitable for the space available. Annexure- I specifies technical and features requirement for elevators.

1.0 STANDARDS / CODES:

(a) The following Standard Specifications and Codes of Practice, **currently applicable and updated as of date irrespective of dates given below**, shall apply to the Elevators and the work covered by this contract.

National Building Code of India	NBC - 2016
Code of Practice for installation, operation and maintenance of electric passenger & goods lifts.	IS-14665 (Part 2) Sec-1 : 2000
Code of practice for installation, operation and maintenance of electric service lifts.	IS-14665 (Part 2) Sec-2 : 2000
MRL Code of Practice	IS-15785:-2007
Safety Rules Section-1 Passenger and Good lifts	IS-14665 (Part 3) Sec-1 : 2000
Safety Rules Section-2 – Service lifts	IS-14665 (Part 3) Sec-2 : 2000
Outline dimension for electric lifts.	IS-14665 (Part-1) : 2000
Inspection Manual for Electric lifts	IS-14665 (Part 5) : 1999
Electric Traction lifts – Components	IS-14665 (Part 4) Sec-1 to 9 : 2001
Installation And Maintenance of lifts For Handicapped Persons (Code of Practice)	IS 15330 :2003
Specification for lifts cables.	IS-4289 (Par-1) : 1984 Reaffirmed 1991
Specification for hot rolled and slit steel tee bars.	IS-1173-1978 Reaffirmed 1987
Method of loading rating of worm gear.	IS-7443-1974 Reaffirmed 1991
Code of practice for selection of standard worm and helical gear box.	IS-7403-1974 Reaffirmed 1991
Isometrics screw threads.	IS-4218-(Part-II)1976 Reaffirmed 1996
Degree of protection provided by enclosure for low voltage switchgear and control gear.	IS-2147-1962
Classification of insulating materials for electrical machinery and apparatus in relation to their thermal stability in service.	IS-1271-1985 Reaffirmed 1990
Code of practice for earthing.	IS-3043-1987
Electrical installation Fire Safety of Building.	IS-1646-1997
PVC insulated electric cable for working voltage up to and including 1100 volts.	IS-694-1990

Code of practice for electrical wiring and installation	IS-732-1989
PVC insulated (Heavy Duty) electric cables for working voltage up to and including 1100 volts.	IS-1554-1988 (Part-1)
Flexible steel conduits	IS-3480-1966
Accessories for rigid steel conduit for electrical wiring	IS-3837-1976
Boxes for the enclosure of electrical accessories	IS-5133-1969 (Part 1)
Guide for safety procedures and practices in electrical work	IS-5216-1982 (Part-1)
Conductors for insulated electric cables and flexible cords	IS-8130-1984
Miniature Circuit Breakers	IS-8828-1996
Rigid steel conduits for electrical wiring (Second revisions)	IS-9537-1981
Methods of test for cables	IS-10810-1998
Earth Leakage Circuit Breakers.	IS-12640-1988
Molded Case Circuit Breakers	IS-13947-1993
General requirement for switchgear and control gear for voltage not exceeding 1000 volts.	IS-13947-1993
1100 volt grade XLPE insulated armored cables	IS 7098
Specifications for hoist way door-locks	IS 7754-1975
Rules for design, installation, testing and operation of lifts, escalators and moving parts.	IS 1735-1975
Seismic Zone: Comply with code requirements for seismic risk zone-III	IS: 1893-Part 1 & 2 -2002 / NBC 2016
Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Passenger and goods passenger lifts	IS 17900 IS 15785
Safety rules for the construction and installation of lifts. Examinations and tests. Design rules, calculations, examinations and tests of lifts components	IS 17900 IS 15785
Remote alarm on passenger and goods lifts	IS 1466 IS 15785
Accessibility to lifts for persons including persons with disabilities	IS 15300
Fire fighters lifts	EN 81-72
Behavior of lifts in the event of fire	EN 81-73
Safety Code for lifts and Escalators	EN 81-80
Electromagnetic Compatibility	EN 12015 & EN 12016
Maintenance Instructions for lifts and Escalators	EN 13015
Life Safety Code	NFPA 101

(b) In addition, the relevant clauses of the following, as amended up to date shall also apply:

- The Indian Electricity Rules 1956
- The Indian Electricity Act 1910
- Local Fire safety regulations
- Building Bye Laws
- CPWD specification for Lifts and Escalators work
- Any applicable local lift / elevators act / rule for design and installation of the elevators

(c) In the event of a conflict between any of the above applicable or reference standards, the more stringent requirements shall take precedence.

1.1 TECHNICAL PARAMETERS: Technical parameters sheets in Annexure-I give specific technical requirements for Passenger, Service & Goods and Fireman elevators required under this contract.

1.2 DESIGN: The design of the equipment shall match the design & performance requirements as specified below.

1.2.1 PROVEN DESIGN: The elevators contractor shall develop the design based on the below specifications and on proven and reliable engineering practices. All sub systems & equipment shall be of proven design.

1.2.2 DESIGN CRITERIA: The design of the equipment offered should meet the following criteria:

- Usage of the latest state of the art technology.
- Design enhancements should not reduce the life cycle of equipment /components.
- Design life of at least 20 years
- Highest levels of reliability & equipment availability
- Lowest maintenance cost
- Modular design
- Minimum life cycle cost
- High traceability of components through unique bar coding / serial nos./tagging
- Lowest energy consumption
- Highest levels of safety
- Environment friendly
- Code compliance

1.2.3 DESIGN INTENT: The intent of this document is to make sure that the design of the elevators must follow the design criteria per above & to ensure the performance parameters to be met not only at the stage of handover but consistently year over year during the service life cycle. The elevators shall be provided with built in diagnostics to enable maintenance staff to reduce down times & also to demonstrate performance requirements to AAI.

2.0 SIZE & SPEED:

- (a) The capacity of the elevators shall be as specified in Annexure- I.
- (b) Elevators Speed shall be as specified in Annexure- I.

3.0 TRAVEL:

- (a) The travel of elevators shall be as mentioned in Annexure- I.
- (b) The size of the elevators hoist way shall be the same as specified in Annexure-I. (However, the sizes shall have to be physically verified at site before manufacturing of the Elevators material.)

4.0 DRIVING MECHANISM & ACCESSORIES:

4.1 ELEVATORS MACHINE: The elevators machine shall be suitable for 415 volts, 3 phase, 50 Hz AC supply with a voltage variation of $\pm 10\%$ and frequency variation of $\pm 5\%$ and shall be placed inside the top of hoist way either on the steel beams or self- supported on the rails as per the manufacturer's design.

The elevators machine shall have high efficiency equivalent to 82% or above, high power factor and low power consumption and shall be designed to withstand peak currents in elevators duties. Resilient anti-vibration mountings of suitable design shall be provided to minimize vibration transmission to the building structure. The assembly is to be designed & tested to sustain contract load plus 25% overload. The elevators shall have a gearless machine with permanent magnet consisting of motor traction sheave completely aligned on a single shaft. Gearless machine shall be AC PMSM (Permanent Magnet Synchronous Motor) gearless with VVVF drive. The sheave should have grooves / wedges for PVC coated traction belts / ropes as specified in MRL code of Practice IS-15785:2007. Requirements for permanent lifting hooks, hoisting beams and access hatches shall be indicated on the drawings by the elevators system, supplier / installer.

4.2 AC MOTOR: The AC self-lubricating motor shall be suitable for elevators use with high starting torque and low starting current. Thermistors shall be embedded in the stator windings to indicate the temperature rise in the motor. The AC motor shall have Class F insulation and shall be designed for not less than 180 starts per hour with a maximum temperature rise of 50°C over the ambient when run continuously for an hour without any additional or assisted cooling.

The elevators shall be provided with AC variable voltage variable frequency (VVVF), microprocessor-controlled motion and drive control system. The model No., name of manufacturer and country of origin shall be provided by the elevators system, supplier / installer.

4.3 ANTI-VIBRATION SUPPORTS: The whole traction machine shall be mounted on appropriate anti-vibration supports to minimize noise & vibration and to meet the ride quality parameters desired in this document.

4.4 BRAKE: The lift drive machinery shall be provided with an electro-magnetic brake or motor operated brake normally applied by means of springs in compression when the operating device is in off position. The brake shall be suitable curved over the brake drum or brake disc and provided with fire proof friction lining. The operation of brake shall be smooth, gradual and with minimum noise. The brake shall be designed to be of sufficient size and strength to stop and hold the car at rest with rated load. The brake should be capable of operation automatically by the various safety devices current failure and by the normal stopping of the car. The brake shall be released electrically

It shall also be possible to release the brake manually or electrically; such releases requiring the permanent application of manual force on switch or handle so as to move the lift car in short stops. For this purpose, suitable brake release equipment wherever necessary shall be supplied with each lift installation and the same shall be kept in safe custody to prevent misuse.

4.5 SUSPENSION ROPES / BELTS: Round strand steel wire ropes made from steel wire ropes having a tensile strength not less than 12.5 tonnes/cm² and of good flexibility shall be used for lift. Lubrication between the strands shall be achieved by providing impregnated hemp core. The lift ropes / coated steel belts (CSB) shall conform to IS 14665-(Part-4Sec-3):2001 / IS 15785: 2007 or currently applicable and updated IS code and the following factor of safety shall be adhered to. The minimum diameter of rope for cars and counter weight of passenger and goods lift shall be 8 mm.

Rope / CSB speed of passenger & goods lifts (m/s)	Factor of safeties
0.5 or less	8
Exceeding 0.5 to 1.0	8.6
Exceeding 1.0 to 2.0	10
Exceeding 2.0 to 3.5	11
Exceeding 3.5	12

4.6 COMPENSATING CHAINS / ROPES: Compensating chains or ropes shall be installed for the elevators if required to compensate the shifting mass of the suspension ropes. In case compensating ropes are used, a tension pulley with weight shall be provided with suitable guides mounted in the pit to ensure proper tensioning of the ropes. These Chains or Ropes shall not be a cause for any noise and suitable flame-resistant casing or jacket etc. shall be provided.

4.7 ALIGNMENT:

- (a) The brake plunger, collar, sleeve, motor, sheaves and all bearings shall be mounted and assembled so that proper alignment of these parts is maintained.
- (b) The assembly shall be reviewed and rectified when excessive noise is emitted during operation.

4.8 CAR SAFETY, COUNTERWEIGHT SAFETY AND GOVERNOR: Car and Counterweight safety shall be provided to stop the car or counterweight whenever excessive descending speed is attained.

Mechanical safety gear shall be mounted on and securely fastened to car / counterweight frame and actuated by a governor mounted in machine / shaft. Governor shall be directly driven by steel wire ropes.

The governor shall be mounted in the machine room. The manual tripping and resetting of the over speed governor shall be remotely controlled from machine room.

Safety gear shall hold car securely under maximum load (100% Rated Load) and governor tripping speed conditions. Jaws of gear shall engage guide rails through self-aligning shoes with surfaces carefully machined parallel to guide rail face. Pressure of jaws on the two guides shall be equal. Safety gear shall bring car to stop from governor tripping speed. Method of stopping shall be progressive as specified in Elevators Schedule. Deceleration shall be less than gravity.

Governor shall be accurately adjusted and sealed to electrically trip safety gear at a speed at least equal to 115% of car's specified speed. The maximum allowable tripping speed shall be as specified in IS-14665 or currently applicable and updated IS code. Operation of governor on over speed is also to open a switch disconnecting power from motor and break control circuits, which are to be open before safety gear is applied. Restoration of power shall not be possible until safety gear has been manually re-set. Double trip (downward and upward) protection shall be in accordance with IS-14665 or currently applicable and updated IS code. The elevators system supplier / installer shall submit required related type tests certificates to the Contractor.

A similar safety needs to be provided for counterweight as well in case of elevators with hanging pit/s and as a means for ascending car over speed protection. The governor tension weight shall be provided with a built-in switch to detect broken rope / belt.

4.9 DRIVING SHEAVES: Sheaves and pulleys shall be of hard alloy, cast iron, SG iron or steel and free from cracks, sand holes and others defects. They shall have machined rope grooves. The traction sheave shall be grooved to produce proper traction and shall be of sufficient dimension to provide for wear in the groove.

The deflector sheave shall be grooved so as to provide a smooth bed for the rope. The deflector or secondary sheave assemblies where used shall be mounted in proper alignment with the traction sheave. Such deflector sheaves shall have grooves larger than rope diameter as specified in clause 8.4 of IS 14665 (Part-4 Sec 3):2000 or currently applicable and updated IS code. The size of all the sheaves shall be in accordance with clause 8.4 of IS 14665 (Part-4 Sec 3):2000 or currently applicable and updated IS code. Wherever necessary suitable protective guards may be provided.

5.0 CONTROL SYSTEM:

5.1 CONTROLLER: The elevators shall have state of art microprocessor-based AC variable voltage variable frequency (ACVVVF) drive.

The elevators controller shall be wall / guiderail mounted, vertical, totally enclosed cubicle type with hinged doors on the front and / or the rear to provide easy access to all components in the controller. The cubicle shall be well ventilated such that the temperature inside never exceeds the safe limits of the components at ambient room conditions in the hoist way.

The controller shall operate within the supply voltage variation of +10% to 20% and frequency variation of $\pm 5\%$ of the nominal voltage. An inbuilt voltage stabilizer / SMPS shall be provided in the controller for the purpose. The controller shall be suitable protection against the following:

- Over current
- Under voltage
- Single phasing
- Phase reversal
- Earth leakage
- Over voltage
- Under voltage
- Spikes & Surges
- Heat Sink Over temperature
- Stall prevention (During acceleration, deceleration and constant speed operation)

Control panels & drive systems shall be designed to meet the requirements laid down by the EN 12015 standards relevant to Electro-Magnetic Compatibility (EMC).

Load compensation circuits shall also be included to further improve upon the levelling accuracy. The levelling shall be ensured within ± 5 mm.

An Automatic Phase reversal and Phase Failure Detection device shall be provided on the controller which shall be designed to protect the elevators equipment against phase reversal and phase failure.

The controller shall be designed to cut off the power supply, apply the brake and bring the car to a rest in the event of any of the above failures occurring. System should automatically restart when power is restored.

System memory should be retained in the event of power failure or disturbance. Elevators should not go in to correction mode or correction run to the lowest floor / highest floor to update its position & memory.

The acceleration and deceleration shall be adjustable at site using a service tool.

5.2 VVVF DRIVE UNIT: Elevators drive controls shall be A.C. Variable Voltage Variable Frequency (ACVVVF) Drive System with microprocessor-based site programmable controls.

In normal operation, the electromagnetic brake shall only be applied when the elevators have come to a complete standstill. The brake shall hold the elevators in position at every landing, and shall provide stopping without any jerking effect.

The VVVF Drive shall employ Sine wave PWM control & shall be designed to run at an ambient temperature of 50 °C and maximum relative humidity of 90%. The VVVF drive shall be vector with flow closed loop control always.

Shielded cables to be used to cover the path from inverter output terminal box to motor terminal box, this is required to reduce EMI or radio disturbances.

Input filters to be used at inverter input to reduce disturbance to power supply. To safe guard motor against these voltage spikes, VVVF drive shall consist of appropriate protection device at output of the inverter. Following protections shall be built in with the inverter:

- Motor overload / over torque
- Instantaneous over current
- Ground fault
- Under voltage
- Over voltage
- Output & Input phase loss
- Output short circuit
- Over speed
- Spikes & Surges
- Heat Sink Over temperature
- Stall prevention (During acceleration, deceleration and constant speed operation)

On fault occurrence, the VVVF drive shall store the status of all parameters prevailing at the time of fault occurrence etc. & the same shall be available to the user to assist him in the fault diagnosis.

5.3 UP / DOWN SELECTIVE COLLECTIVE AUTOMATIC OPERATION WITH OR WITHOUT ATTENDANT (SIMPLEX CONTROL SYSTEM): Individual elevators cars shall be provided with Simplex Control. The elevators shall respond to all registered hall calls and car calls automatically with the help of one button per Elevators stop inside car and UP & DOWN buttons in each landing except the terminal landings where only UP or DOWN buttons are provided. It shall respond to all registered hall calls and car calls in the direction of service. When no call is registered then after a pre-set adjustable period Elevators car shall come to designated floor and open the door for 30 seconds (adjustable time) and then park the car there with doors closed.

Apart from above, a two-position key-operated switch marked to indicate “ATT” (Attendant Operation) and “AUTO” (Automatic Mode) shall be provided. When the switch is in the position of “ATT” mode, the Elevators shall be in attendant mode. It will connect the hall button pushes to the annunciator provided in the car, to register the calls.

5.4 ENERGY EFFICIENCY: The control systems should incorporate energy control features to reduce the power consumption when the elevators are not in use or there is low demand; these include but not limited to:

Auto Fan / Car light Cutoff: Auto switch off feature to be provided for switching of the ventilation fan & car lights after 90 seconds of elevators being idle. This should be programmable at site to increase or decrease the timing. These have to switch ON automatically at the time of first landing call.

5.5 FIRE MAN OPERATION: All the elevators in the building shall be equipped with a control system to recall and operate cars in the event of fire any other emergency situations. This shall always be in line with the latest IS codes / EN codes / NFPA standards amended up to date even if the below description is found as different from the latest amended codes mentioned here.

(a) Operation Requirement of elevators(s):

All elevators(s) shall be provided with the following as a minimum:

- A two position ON / OFF fireman's switch which may be common to all elevators in a group control at evacuation floor (normally the main entrance floor) protected in a box with glass in front with suitable label indicating that it is the fireman switch.
- Audio & visual signal in car for Fire or any other emergency.

(b) Sequence of operation:

Return to Evacuation floor (Phase1):

- Shall start when the switch at the evacuation floor is turned to the 'ON' position or the signal indicating a fire received from the automatic fire detection and alarm system (if provided by the BMS) is on. The elevators(s) controlled by this switch shall cancel car calls and separate from landing calls and no landing or car calls shall be registered. The audio and visual signal in car shall be turned on. All heat and smoke sensitive door re-opening devices shall be rendered inoperative.
- If the elevators are travelling towards evacuation floor, it shall continue driving to that floor.
- If the elevators are travelling away from the evacuation floor, it shall reverse its direction at the nearest possible floor without opening its door and return non-stop to the evacuation floor.
- If the elevators are standing at a floor other than the evacuation floor, it shall close the doors & start travelling non-stop to the evacuation floor.
- When at the evacuation floor, the elevators will park with doors open.
- The audio signal is turned off after this drive.

Fireman's Service (Phase 2):

- The Phase 2 is started after Phase 1 if the fireman's switch is ON.
- The elevators do not respond to landing calls. All heat and smoke sensitive door reopening devices shall be rendered inoperative.
- When the car call button is pressed the doors start closing. If the button is released before the doors are fully closed, they reopen. The car call is registered only after the doors are fully closed.
- After registering a car call the elevators start driving to a call. If more than one car calls are registered, only the nearest call is answered & the remaining car calls will be cancelled at the first stop.
- At the floors the doors are opened by pushing the door open button. If the button is released before the doors are fully open, they reclose.
- The elevators return to normal service when it stands at the evacuation floor with door open & the fireman's switch is off or by an electric signal from the automatic fire detection system when it is reset.

(c) The breakdown or shut down of an elevators in a group of interconnected elevators shall not affect the return of the other elevators to the evacuation landing.

(d) The elevators will automatically be reset to normal operation by:

- An electrical signal from the automatic fire detection system when it is reset; or
- The reset of the manual grounding switch.

(e) The fireman's switch shall be located adjacent to the elevators opening at the evacuation floor and shall be at a height of approximately 1.8 m above the floor level.

(f) Electrical components / switchgears within the elevators hoist way and on the car, located within 1.0 m of any wall containing landing doors shall be protected from dripping and splashing water and shall have ingress protection class not less than IPX3.

5.6 AUTOMATIC RESCUE DEVICE: The Automatic Rescue Devices (ARD) meant for the purpose of bringing the lift car to the nearest landing doors. The ARD shall have the following specifications:

- ARD should move the elevators to the nearest landing in case of power failure during normal operation of elevators.
- ARD should monitor the normal power supply in the main controller and shall activate rescue operation within 10 seconds of normal power supply failure. It should bring the elevators to the nearest floor at a slower speed than the normal run. While proceeding to the nearest floor the elevators will detect the zone and stop. After the elevators has stopped, it automatically opens the doors and parks with door open. After the operation is completed by the ARD the elevators are automatically switched over to normal operation as soon as normal power supply resumes.
- In case the normal supply resumes during ARD in operation the elevators will continue to run in ARD mode until it reaches the nearest landing and the doors are fully opened. If normal power supply resumes when the elevators are at the landing, it will automatically be switched to normal power operation and start from there instead of getting into correction mode and going to lowest floor.
- All the elevators safeties shall remain active during the ARD mode of operation
- Audio / Visual alarm to be provided in car to announce ARD operation; voice synthesizer to make an announcement that elevators is running to floor level on emergency power and to exit upon arrival.
- The battery capacity should be adequate so as to operate the ARD at least seven times a day provided the duration between usage is at least 30 minutes.
- The ARD battery shall be dry and sealed maintenance free rechargeable type.

5.7 SEISMIC OPERATION AND SAFETY DEVICES: Seismic operation Control system with primary wave sensors for all the elevators needs to be provided. It could be one control device installed in each isolated zone of the buildings (separated by expansion joints). Upon detecting such wave & sensing the limit exceeding the programmed limit, the equipment shall direct the control system to bring the cars to the nearest floor and immediately open doors for safe exit. The electronic sensor should sense & measure acceleration across all three axis.

The elevators shall only be reset manually after the signal is clear and the maintenance personnel have inspected the elevators.

Upon Detection of a Seismic wave the control system shall provide for a signal to be sent to the BMS system.

Adequate protection such as protection wires, etc. as suggested in NBC-2016 shall be provided for Suspension ropes, governor ropes, travelling cables, compensating chains and ropes from swaying in the elevators hoist-way and getting entangled with the fixed brackets, sill, equipment, etc. inside the hoist way.

Car and Counterweight retaining devices as per NBC-2016 shall be provided for all the elevators to hold the Car and Counterweight frames within the guiderails during seismic movement.

A “counterweight derailment” device or “displacement switch” shall be installed on counterweight guide rails which are to be activated in case counterweight sections are dislodged from original position between the guiderails due to seismic movements.

An automatic reset shall not be possible in such case and the elevators shall remain inoperable until the counterweight sections and guiderails are inspected thoroughly and defects are rectified by the maintenance personnel.

6.0 STANDARD FEATURES TO BE INCLUDED:

6.1 AUTOMATIC BY-PASS: Load weighing devices located either on car top or under the car cage or on CSB shall be provided for all elevators. Whenever the load exceeds 80% of the capacity load of the elevators, the elevators shall ignore all landing calls and only respond to car calls. Landing calls which are bypassed shall not be canceled. The automatic load bypass device shall be field adjusted for 50%-80% of rated load.

6.2 OVER LOAD DEVICE: A load weighing devices shall operate when the load in the car exceeds the rated capacity. The operation of the device shall activate buzzer sound and flashing ‘overload’ signals. At the same time the car doors shall be prevented from closing. When the excess load has been removed from the car, the buzzer alarm shall stop automatically and the car shall function normally.

The sensitivity shall be 30 kg for Passenger elevators and 5% of the contract load for service elevators. The load sensing shall be achieved either by way of load sensors placed under car platform or rope / belt tension device as per manufacturers standard design. The load sensing device should be site- programmable / adjustment type.

6.3 AUTOMATIC SELF-LEVELING: All elevators shall be provided with automatic self-leveling feature that shall bring the elevators car level to within ± 5 mm for passenger / service elevators and ± 5 mm for freight elevators of the landing floor regardless of load or direction of travel. The automatic self-leveling feature shall take care for over / under travel.

6.4 ALARM BELL / BUZZER: An Emergency alarm bell / Buzzer, including wiring to be provided and connected to a properly marked push button in the car operating panel. The alarm bell shall be located at the Main Landing floor, at the floor landing outside and adjacent to hoist way or as per OEM recommendations.

The alarm sound shall be siren type audible from at least 50 meters from the Main landing, operated by Rechargeable Nickel / Cadmium maintenance free batteries to give a warning siren when the alarm button in the car is pressed momentarily.

6.5 SAFE LANDING FEATURE: If a car has stopped between floors due to some equipment malfunction, the controller checks the cause, and if it is considered safe to move the car, the car will move to the nearest floor at low speed and the doors will open.

6.6 AUTOMATIC DOOR OPEN TIME ADJUSTMENT: The time the doors are open will automatically be adjusted depending upon whether the stop was called from a hall call or a car call.

6.7 NEXT LANDING: If the elevators doors do not open fully at the destination floor, then the doors will close and the elevators will automatically move to its next destination.

6.8 INDEPENDENT SERVICE: Under this operation the car is withdrawn from the group control operation for independent use, such as transporting goods, carrying large number of people between floors or maintenance & at such times only responds to car calls. The elevators will remain parked on a floor with its doors open until a floor is selected and the door close button is held until the elevators starts to travel. The switch for this service shall be located inside the lockable service box in Car operating panel.

6.9 RETURN OPERATION: Using a key switch on the face plate at main lobby floor, an elevator can be taken out of the group control operation & brought to the main lobby floor (or other designated floor). The car will park on that floor with the doors open till independent operation begins.

6.10 CAR CALL CANCELLATION: This function allows passenger to cancel the selection of a floor which is accidentally pressed by pressing the button again.

7.0 CAR ENCLOSURE:

7.1 CAR FRAME: The car frame / sling shall be fabricated from steel angle or channel section and be separate from the elevator car. The safety gear positioned below the sling shall be of gradually applied type, which can be released by lifting the car. This safety gear shall be operated by an over speed governor located in the top of hoist way. The governor tension weight shall be provided with a built-in switch to detect broken rope / belt.

Sheet steel thickness for Car shall be at least 1.5 mm. Joints in all surfaces shall be coordinated. All fixings to be of the hidden secret type (cover strips at joints are not acceptable).

Platform shall be isolated type, constructed of steel, or steel and wood which is fireproofed on underside. Design and construct to accommodate load classification requirements. Protect underside of platform with sheet

steel covering at least 2.0 mm thick. Sill shall be anti-slip, with provision for car doors. Sill shall be of the type reducing the number of call backs related to entrance problems.

Every elevators car body shall be carried in a steel car frame assembly that shall have sufficient mechanical strength to resist the forces applied by the safety gear or impact of the car on the buffers. The deflection of the steel members carrying the platform shall not exceed 1/1000 of their span under static conditions when the rated load is evenly distributed on the platform. Every elevator shall be provided with an apron of at least 750 mm below car door. This apron should extend up to full width of the car door plus 150 mm on the either side. This apron must be rigidly braced with only countersunk screws & any fixings / mountings used shall be of steel.

The car roof shall be provided with a car top rail / balustrade in accordance with the requirements of EN 81-20 including a mid-rail & toe guard where applicable. A suitable warning notice for the fall hazard shall be placed.

At least four renewable guide shoes or shoes with renewable linings or sets of guide rollers shall be provided two at the top and two at the bottom of the car frame assembly.

7.2 CAR ENCLOSURE FINISHES: Car enclosures shall be stainless steel (SS 304) scratch resistant or Clear Tempered Glass (for Scenic Elevators) or as per design and technical specifications. All finishing materials shall be fireproof or fire-resistant conforming to applicable codes.

7.3 CAR CABIN CONSTRUCTION: Height of the enclosures shall be 2300 mm. The enclosure shall have recessed by 25mm to enable Civil Contractor to provide floor finish as approved by AAI. The weight to be allowed for flooring shall be as specified in Annexure- I. Enclosure shall have Stainless Steel false ceiling with LED cluster lights or as approved by AAI. The enclosure shall have fixtures and fittings including provision of car ventilation as detailed in Annexure- I. Landing door fire rating should be minimum 1 hour.

7.4 CABIN FAN: Noiseless pressure fan or blower shall be provided in each elevators cabin with supply grill matching with the interior of the car. The required no. of cabin fans shall be adequate for 20 air changes per hour with Car doors closed. Airflow in the car should be such that adequate amount of airflow reaches all parts of cabin. One of the blowers shall be connected through a rechargeable UPS to ensure continuous blower operation for at least 15 minutes in event of power failure.

7.5 EMERGENCY LIGHTS: In addition to normal lighting an emergency light unit using sealed Nickel / Cadmium / VRLA Maintenance free battery power pack with charger and LED light to operate automatically and to illuminate the car for minimum 30 minutes in case of power failure shall be provided in each elevator car.

An "Emergency light test" button to verify the proper functioning of car emergency lights shall be provided inside the service cabinet in the Car operating panel. When this button is pressed, the main car lighting should be disconnected and emergency car light should get illuminated thus verifying the proper functioning of emergency lights including rechargeable batteries.

7.6 GUIDE SHOES: Two number of guide shoes at the top and bottom shall be provided on the elevator car & counterweight.

7.6.1 Type of Shoes:

7.6.1.1 For passenger Lifts:

- a) For speed up-to 1.5 MPS sliding guide shoes shall be used. Sliding guide shoes for car shall be always flexible and for counterweight solid guide shoes can be used up-to 1.0 MPS.
- b) For speeds more than 1.5 MPS roller guide shoes shall be used for car and counterweight.

7.6.2 Flexible type / solid type sliding guide shoes: The car shall be provided with solid or spring-loaded swiveling guide shoes with renewable liners, where the lift car speeds are up-to and including 1 MPS. The cars with speeds beyond 1 MPS shall be provided with spring loaded guide shoes with renewable liners or the guide shoes shall be of roller type.

7.6.3 Roller type guide shoes: Lift with speed above 2.5 MPS shall be with roller type guide shoes. Each roller type shoe shall be of an approved type consisting of rollers assembled on a substantial metal base and mounted as to provide

continuous contact of all rollers with the corresponding guide rail surface under all conditions of load and operation. The rollers shall run on the three finished guide rail surfaces and shall operate quietly.

7.6.3.1 Mounting of guide shoes: Guide shoes shall be provided with adjustable mounting & shall be rigidly secured in accurate alignment at the top and bottom on each side of the car sling and counter weight frame construction. When oil buffers attached to the bottom of counter weight are used, additional guide shoe shall be provided on each of the buffer frame. The design of guide shoes and car safety device shall be coordinated so as to ensure the provision and installation of equipment with clearance as per OEMs.

8.0 CAR SIGNALS & OPERATION DEVICES:

8.1 FOR CARS WITH SIMPLEX / DUPLEX CONTROL: A flush type Stainless Steel "Car Operating Panel (COP)" with the following devices shall be fitted:

- Bank of call buttons corresponding to landings served. Tactile Braille LED illuminated Buttons.
- The push buttons should be tonal contrast to the COP & car panels finish
- Each push of any COP button shall provide a soft audible signal to confirm operation.
- Alarm button shall be provided with a yellow pictogram to indicate the alarm button provision.
- Fan / Blower switch.
- Door open button.
- Door close button.
- "Up" & "Down" direction indicators indicating travel direction
- Key operated switch for "Attendant" and "Automatic" operation.
- Provision in car to be connected with P.A. System, Fire Control Room, CCTV and BMS Control Room.
- Overload panel along with audio / visual indication.
- In case of service elevators & bed cum passenger elevators, provide door hold button, which extends normal door open period by up to 30 seconds. The extended time can be cancelled by actuation of door close button.
- Adequate space provision for access control card reader, if required.

(a) A load weighing device shall be provided to by-pass landing calls, should the load of the elevators reach 80% of the full contract load.

(b) The Fan / Blower switch shall be a tactile push type switch located inside the service cabinet of Car operating panel. Fan / Blowers shall be isolated with vibration isolators from the car and the sling. The "up" and "down" reversal buttons and key operated inspection switch shall be provided on a maintenance control device on top of the elevator car.

(c) In case of "Attendant" operation of the car indicator on the car station shall be provided for the attendant to know on which landing the call has been registered to answer that call.

(d) If the sole control of the elevators is to be retained on the car station, a car preference switch shall be provided to ignore all landing calls.

(e) A LCD / LED based / scrolling digital car position indicator with LED / LCD illumination shall be provided in each elevators car indicating the landing at which the car is stopped or passing. Car enclosure will be provided with arrangement for fixing of Internal Telephone. Car shall have a provision for communication with main control room / fire control room.

8.2 EMERGENCY INTERCOM: Each elevator shall be fitted with an intercom system to allow hands free conversation between the elevators car, Maintenance access panel and remote station. The microphone & speaker unit has to be concealed behind the COP in the elevators car & is activated by pressing the button which has an indication glowing when intercom is in operation. The master unit in the remote stations has to have an indicator for each elevator.

8.3 VOICE SYNTHESIZER: This shall be provided & needs to be of the digital type capable of site programming. Besides giving a choice of background music (with option at site to choose or reject) it should be capable of providing following messages in at least two languages per choice of the owner:

- Arrival at the floor & its designation.
- Door closing initiated.

- Elevators failed to start, please press the door open button
- ARD operation

Final messages list & wording to be specified / approved by AAI.

9.0 CAR & LANDING DOORS:

9.1 DOOR OPERATOR & LOCKS: Door operator shall be positive acting and powered by an A.C motor rigidly connected to the door and controlled by a VVVF unit. Operator shall simultaneously open the car and hoist way doors and maintain the doors fully open or closed at each door step. Door operators shall be suitable for Attendant / Automatic operation. The door operation shall ensure smooth opening of door without any jerk and closing of door without any banging noise.

The operator and closed loop VVVF control panel and its associated devices should be mounted on steel members forming part of the car sling & in no way shall the operator be fitted to the car enclosure. Direct door drives through PMSM motors driven through closed loop VVVF drive shall be the preferred method.

The equipment shall consist of a door operator unit on the elevator car operating the car door when the car is stopping at a landing. The car door and hoist way door shall be mechanically coupled and shall move simultaneously during opening and closing.

The car door and the hoist way door shall be power opened and power closed and shall be checked in opening and closing with an oil cushioning mechanism built into the gear unit if any, nylon / plastic gears will not be acceptable.

Each hoist way door shall be provided with an interlock, which will prevent movement of the car away from the landing until the doors are locked in the closed position.

An electric contact for the door shall be provided which shall prevent car movement away from the landing unless the door is in fully closed position.

The car door and the hoist way shall open automatically as the car is stopping at a landing. The closing of the car door must occur before the car can be started. Doors can be stopped and reversed during their closing motion.

9.2 DOOR HANGERS AND TRACKS: The car and the landing doors shall be provided with two-point suspension sheave type hangers complete with tracks. Sheaves and rollers shall be of steel with molded nylon collar and shall include shielded ball bearings. Tracks shall be of suitable steel section with smooth surface. The landing doors shall be complete with headers, sills, frames etc. as required.

9.3 CAR & HOIST WAY DOOR PROTECTION: A multiple beam full height infrared electronic door detector shall be provided to regulate the closing motion of the doors for entry of the passengers. When a person is entering the car while the doors are closing the detector shall sense the same and reverses the door closing to permit entry. The operation of detector shall be of non-contact type.

9.4 CAR & LANDING DOORS:

- The car & landing entrances for elevators shall be protected by automatic power operated, center opening / 2 Speed side opening, horizontal sliding doors with size and finish as per Annexure- I.
- Car entrance shall be protected by steel / glass doors (depending on the design) of the same size as landing doors. Elevators shall be provided with automatic doors.
- The door shall be provided with Multi beam Infra-red sensors, high speed door operators, sheave type two-point hangers, and tracks as specified.
- The thickness of the door panels shall be at least 1.5 mm and shall be of single skin construction.
- The face of the door panels shall maintain a fixed running clearance with respect to the architrave and / or door frame.
- Every landing door shall be provided with an emergency landing door unlocking device. When operated by an authorized person with the aid of a key to fit the unlocking triangle, the landing door shall be unlocked irrespective of the position of the elevator car for rescue purpose. When there is no “unlocking” action, the key shall only be able to stay in the locked position.
- In the case of coupled car and landing doors, the landing doors shall be automatically closed by means of

weight or springs when the car is outside the unlocking zone.

- A potential cause of accidents could be the attempt to open the landing door locks of lower floor in case car stops away from floor level. This attempt in panic may result in an accidental fall in to the elevators pit. In order to ensure that the trapped passengers do not attempt the above, the electromechanical latch should be so designed that it is inaccessible or invisible to the passenger in car. In addition to above, a car door lock mechanism shall be provided in accordance to EN 81-20 to prevent opening of the car door from inside the elevators car when it is not in close proximity to the landing doors.
- Each landing door shall be complete with locks, headers, sills, frames, rims, hanger supports with cover plates, etc. The finished work shall be strong, rigid & neat in appearance. Plain surface will be smooth & free from warp or buckle. Molded surfaces shall clean out, straight & true. Fastenings shall be concealed from the fascia side of the material.
- The elevator's landing doors will need to have a minimum fire resistance rating of 01(One) hours for integrity. Necessary certification from a nationally recognized testing laboratory approved within the governing jurisdiction shall be submitted by the Contractor before shipment.

10.0 LANDING SIGNALS AND OPERATION CONTROLS:

10.1 SIMPLEX / DUPLEX CONTROL:

Terminal Landings:

- LED illuminated type single push buttons with travel indication arrow in hairline finish stainless steel fascia plate.
- Color LCD / LED Dot Matrix type Digital car position indicator in hairline stainless steel fascia plate or as specified in the Annexure- I or as approved by AAI.
- Direction & position indicators requirement is mutually exclusive and both displays have to work simultaneously.

Intermediate Landings:

- Two LED illuminated type push buttons with travel indication arrow in hairline finish stainless steel fascia plate.
- Color LCD / LED Dot Matrix type Digital car position indicator in hairline stainless steel fascia or as specified in the Annexure- I or as approved by AAI.
- Direction & position indicators requirement is mutually exclusive and both displays have to work simultaneously.

The number of risers shall be as specified / approved by AAI. Surface mounted face plates will be preferred though the final approval on faceplate design shall be provided by AAI. The cover plates should be secured by semisecret fixings such as recessed captive grub or socket headed screws but not by visible screw heads. Options of face plates / buttons / indicators / hall lanterns to be submitted by elevators system supplier / installer for approval by AAI. The indicators should provide an angle of view of 140°.

10.2 ELEVATORS IDENTIFICATION PLATES:

Elevators identification numbers stating e.g. "ELEVATORS 15" shall be provided in the following locations for each elevator by the elevator contractor:

- All landing entrance headers
- Top of the COP in car
- On each elevators control panel
- Each Car top control station
- Each Machine
- Each safety governor
- Each pit switches

These may be painted except for the ones required for first two items above, which will need to be engraved on matching material to each item as approved by the architect.

11.0 ELEVATORS SHAFT & PIT:

11.1 LANDING FASCIA: Fascia panels of minimum 1.5 mm zinc coated mild sheet steel shall be fitted between the header of each entrance & the sill of the floor above. These fascia plates must be rigidly braced & any fixings / mountings used shall be of steel. Each fascia should be full width of entrance plus 150 mm at least on either side and only counter sunk screws will be accepted on the surface.

11.2 GUIDE RAILS: The Car and Counterweight guide rails shall be solid 'T' section, duly machined, tounded and grooved. The guide rails shall have sections, the properties of which shall comply with the requirement of the relevant IS / EN codes. The guides shall be capable of withstanding forces resulting from the application of the car or counter weight safety devices. The guide rails should be continuous throughout the entire travel and shall withstand without any deformation the action of safety gear with a fully loaded car.

Guide Rail brackets shall be fixed to the wall by anchor fasteners. Adequate steel brackets of suitable design and spacing shall be provided, so that guides shall not deflect more than 5 mm. under normal operation. When rail lengths exceed 30 Mtr., means shall be provided to absorb rail expansion and structural settlement.

11.3 BUFFERS: Suitable heavy-duty spring or oil buffers (depending on speed of the elevators) shall be placed below the car and counterweight in the pit and arranged to sustain any shock, should the elevators over travel past the terminal limits. Buffers shall be mounted on RCC foundation blocks. Dowels for the purpose shall be left while casting the pit floor. Clearance from underside of the car resting on a fully compressed buffer shall not be less than 1.20 Mtr. Buffers shall be designed for a design speed + 15%. The normal operation of the elevators shall depend on the return of the buffers to their normal extended position after operation.

11.4 SILLS: The sills to be provided should be Stainless Steel grooved / Aluminium grooved / Slot less, with self-supporting sill M.S. angle of adequate size.

11.5 COUNTER WEIGHT: The counter weight for lift cars shall be in accordance with clause 6 of IS 14665 (Part 4 Sec-3):2001 or currently applicable and updated IS code and shall be designed to balance the weight of empty lift car plus approximately 50 per cent of the rated load. It shall consist of cast sections firmly secured in relative movement by at least two numbers steel tie rods having lock nuts / split pins at each end and passing through each section and House in a rigid steel frame work. Cracked and broken sub weights shall not be accepted.

11.6 HITCH PLATES: The end of the elevator ropes shall be properly secured to the car and counter weight hitch plates as the case may be with adjustable rope shackles having individual tapers rabbit sockets, or any other suitable arrangement. Each elevators rope shackle shall be fitted with a suitable shackle spring, seat washer, shackle nut & lock & shackle nut split pin.

11.7 PAINTING: All elevators metal work shall be given one shop coat of rust inhibiting paint in the factory. Factory finished powder coated paint of desired shade is acceptable. Any damage caused during erection of the equipment shall be repaired to restore it to required finish.

12.0 SAFETY DEVICES: All safety devices statutorily required by IS / EN / NBC standards, including but not restricted to the following shall be provided:

12.1 TERMINAL AND FINAL LIMITS: Terminal limit switches shall be provided to slow down and stop the car automatically at the terminal landings, and final limit switches shall be furnished to automatically cut off power should the car travel beyond the terminal landings.

12.2 INTERLOCKING: Each Hoist way gate / Landing doors shall be provided with an approved interlock and which shall prevent the movement of the car away from the landing unless all gates are closed and locked. The interlock shall also prevent opening of gate except at the landing where the car is stopping or has stopped. Adequate interlocking is to be provided so that the car shall not move if the landing doors are even partially open and also the elevators is overloaded.

A car door lock mechanism shall also be provided in accordance to EN 81- 20 to prevent opening of the car door from inside the elevators car when it is not in close proximity to the landing doors.

12.3 SELF LEVELING: The elevators shall be provided with self-leveling features of ± 5 mm for passenger / service elevators and ± 5 mm for freight elevators.

12.4 ASCENDING CAR OVER SPEED PROTECTION: The elevators shall be provided with an ascending car over speed protection device conforming to EN 81-20. This device shall comprise a speed monitoring and reducing element which shall detect uncontrolled movement of the ascending car at a minimum of 115% of the rated speed and a maximum of 125% of the rated speed. This shall cause the car to stop, or at least reduce its speed to that for which the counterweight buffer is designed. The device shall not allow a retardation of the empty car in excess of 1gn during the stopping phase. The device shall act to the car or the counterweight or on the rope system or on the traction sheave.

The device shall operate an electrical safety switch to switch off the power supply to the elevators motor. This safety switch shall not be of auto resetting type.

12.5 UNINTENDED CAR MOVEMENT PROTECTION: The elevators shall be provided with a device to stop the unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position, as a result of failure in any single component of the elevators machine or drive control system upon which the safe movement of the car depends. The design and operation of such device shall conform to EN 81-20.

12.6 PIT LADDER & SWITCH: The elevators contractor shall provide fixed pit ladders between the bottom landing and the pit floor. These will be safe from all falling hazards.

Two pit stop switches, one at bottom landing level in the shaft & the other on the pit shall be provided, which, when in the STOP position, shall prevent any movement of the elevators car including movement during inspection operation, until both the switches are set in the run POSITION. The switch shall have a mushroom red head. It shall be locked off when pushed and reset manually.

First stop switch shall be accessible from the lower landing on opening of the landing door and the second switch from the pit floor.

Any switchgear or electrical equipment placed less than 1 m from the elevators pit floor shall be protected to IP 67 and any switch socket & lamp / light shall start from at least 0.5 m above the highest permissible water level in pit.

12.7 SAFETY ITEMS: Safety items that may be required by authorities shall be provided for each elevators; Contractor to cover the cost of these items in his quoted rates, nothing extra shall be paid on this account.

13.0 ELECTRICAL EQUIPMENT AND WIRING:

13.1 SCOPE: The scope of this section comprises supply, installation and wiring of all electrical equipment including control wiring. Power supply at 415 V, 3-phase, 50 Hz, 4 wire with double earthing shall be supplied by designated system Contractor and terminating in MCB (TPN) in sheet steel enclosure for each elevator. All further wiring to motors and controllers, hall buttons, alarm bell, car position indicators etc. shall be provided by the elevators system supplier / installer. All electrical installation shall be carried out as per standard practices of IS.

13.2 WIRING:

- All wires and cables shall be insulated with polyvinyl chloride base insulation rendered flame retardant low smoke halogen free (FRLSHF) armoured applicable for power supply cables and rated for 1100-volt service for power cable and suitable for use in dry and wet locations. Makes of wires and cables shall be as per attached list of approved makes in tender document and subject to the approval of AAI before delivery. Colour coding, numbering and ferruling to be in accordance with the requirements of standard specification.
- All control wiring shall be of copper. All electrical wires and cables shall be fire retardant low smoke emission

and halogen free type (FRLSHF).

- The control wiring shall be laid out neatly and clearly in cable sleeves and all terminals and cables shall be labelled or marked for identification.
- Wires and cables subject to movement and abrasion shall be protected by flexible galvanized steel conduit.
- A travelling cable for lighting control and signal circuit is permitted, if all the conductors of these travelling cables are insulated for maximum voltage running through any one conductor of this cable.
- The lengths of the travelling cable shall be adequate to prevent any strain due to movement of car. All cables shall be properly tagged by metallic / plastic tags for identification.
- Travelling cables shall be of flat type and shall run from a junction box on the top of the car to a junction box located in the shaft if applicable to controller system.
- Travelling Cables shall have fire retardant low smoke halogen free type (FRLSHF) and moisture resistant outer covering with a steel-supporting strand. Travelling cables shall be suitably suspended to relieve strains in individual conductors.
- Travelling cables shall be provided for telephone, signals, controls, lights, fans, alarm bell, emergency circuit, music and communication with control room etc.
- Provide 10% of the total capacity subject to a minimum of 5 wire pairs unutilized in the Travelling cable everywhere suitably distributed between various functions.
- Metal frames and all metal work of the elevators controller frame etc. shall be earthed with double earth leads taken to the earth bar. Looping shall be permitted if such routing is feasible. All other individual metallic framework of components etc. shall be loop earthed. All the elevators shall be provided with earthing arrangements as per IS 1860.

14.0 BMS COMPATIBILITY:

- (a) All the elevators shall be provided with necessary interfacing circuits for the BMS system in each Elevators controller, in order to achieve an integrated 'view' of the Elevators being monitored.
- (b) Ethernet Interfaces shall be provided for any Elevators signal outputs, in order to directly interface with the BMS system. Similarly, necessary Ethernet Interfaces points shall be provided for any BMS signal inputs to the elevators controllers. These signals shall be collectively referred to as the interfacing I/O points.
- (c) All field controllers shall connect to the Airport's Local Area Network via an RJ45 port which will be supplied by designated system contractor at a location to be defined by elevators system supplier / installer.
- (d) The designated system contractor for IT cabling shall supply a Cat 6 UTP patch cord.
- (e) Controller network communications shall comply with the TCP / IP standard IEEE 802.3i
- (f) Control and monitoring data which passes between the BMS and the elevators controller shall use a protocol which complies with one of the four standards listed below:
 - BACNet (BTL) certified
 - OPC Data Access Version 2.0
 - OPC Alarm & Events Version 1.02 OPC Historical Data Access OPC XML-DA
 - MODBUS
- (g) These I / O points shall include, but not limited to, the following:
 - Run / Stop Status
 - Fire emergency mode
 - Digital car position and direction indicator; Attendant / Independent Operation Status; Emergency Stop Operation Status
 - Safety switch tripped
 - Under Maintenance Mode Status
- (h) I/O points interface shall be provided near the Elevators controller for BMS. An Ethernet / IP network interface & gateways needed to interface between Elevators controller equipment & Airport's backbone network shall be provided in order to integrate the respective elevators controllers.
- (i) The Controller shall send the necessary information via the Ethernet / IP.

15.0 INTERFACE MANAGEMENT: The elevators system supplier / installer shall initiate and manage the design, development, installation and testing of the interface between the elevators and the BMS system, the CCTV system, the Access Control systems, the Fire alarm systems; the Public Address systems and the wireless communication system.

16.4 OTHER PERFORMANCE PARAMETERS: Some of the other performance parameters required are innumerate below:

Starting Current	1.2 – 1.5-time full load running current
Leveling accuracy and elevators	± 5 mm for Passenger / service
Stopping accuracy	± 5 mm
Acceptable Voltage Fluctuation	+ 10 to - 20%
Acceptable Frequency Fluctuation	+5 to -5%
Rate of acceleration / deceleration (M/S ²)	0.6 – 1.5 (Adjustable at site)
Maximum jerk (M/S ³)	0.7 – 1.5 (Adjustable at site)

16.5 MEASUREMENT OF ELEVATORS RIDE QUALITY: The Elevators system supplier / installer shall at no additional cost measure elevators car ride quality during the handing over of elevators for public usage and then annually for all elevators indicated, with specified ride quality parameters and forward printed results to AAI. The ride quality measurement shall be taken with a recently calibrated performance measuring tool, capable of displaying the test measurements on site, supplied by the Elevators system supplier / installer.

17.0 PROVISIONS FOR SPECIALLY-ABLED PASSENGERS: All the Elevators shall have accessible friendly features including but not limited to the following:

- Elevators control buttons in the COP at locations and height specified in IS 15330 – 2003
- Hall call buttons at locations and height specified in IS 15330 – 2003
- Hand rails shall be provided on the side walls of the Elevators at height & locations specified in IS: 15330 – 2003.
- An international symbol of access of the disabled shall be permanently and conspicuously displayed at each and every Elevators landing next to the Elevators entrance (to be provided by signage contractor).
- Braille notations indicating the floor levels shall be incorporated next to each button at the COP and hall call buttons.
- A digital voice system for announcing the car position, opening/closing of doors, direction of travel and messages shall be provided as per IS:15330 – 2003
- A laminated safety glass type mirror of at least half of the size shall be installed on rear panel at appropriate position as per IS: 15330 – 2003 In the event of a conflict between any of the above applicable or reference standards, the more stringent requirements shall take precedence.

18.0 TESTING: AAI reserve the right to inspect the elevators and its components during manufacturing, installation & post installation.

18.1 TESTING AT MANUFACTURER’S WORKS: Testing for the various items of equipment shall be performed by the elevators system supplier / installer and test certificates for various components including but not limited to the following shall be furnished as per IS-14665 or currently applicable and updated IS code:

- Hoist ropes
- Governor ropes
- Over speed governor
- Buffers
- Main motor & Door drive motor

- Safety gear
- Fire rating for doors
- Controller

High Voltage Test:

(a) The dielectric or electrical apparatus (excluding motors, generators and instruments which are tested in accordance with the appropriate Indian Standards wherever they exist) shall be capable of withstanding a test voltage of ten times in the working voltage with a maximum of 2000 volts when applied.

- Between the live parts and case of frame with all circuits completed.
- Between main terminals or equivalent parts with all circuits open.
- Between any live parts of independent circuits.

Note: Owing to the impracticability of applying test (ii), (iii) mentioned above on controllers and similar apparatus after controller wiring has been completed, these tests may be made at convenient stages of manufacture.

(b) (i) **Method of applying high voltage:** The test shall be made with alternating voltage of any convenient frequency, preferably between 49 and 60 cycles per second. The test voltage shall be of approximately sine-wave form during the application of voltage with peak value, as would be determined by spark gap by oscillograph or by any other approved method shall not be more than 1.45 times the rms value. The rms values of the applied voltage shall be measured by means of a voltmeter used with a suitably calibrated potential transformer or by means of voltmeter used in connection with a special calibrated voltmeter winding or testing transformer by any other suitable voltmeter connected to the output side of the testing transformer.

(ii) **Duration of high voltage test:** The test shall be commenced at a voltage of about third of test voltage which shall be increased to the full test voltage as rapidly as is consistent with the value being indicated by the measuring instrument. The full test voltage shall be maintained for one minute. At the end of this period, the test voltage shall be rapidly diminished to one third of its full value before switching off.

(a) Proto type Tests: One complete Elevator from the order with same specifications shall be available for the commencement of witness testing after Contract Award.

(i) A complete Elevator system including traction drive system, in addition to the controller, Elevators car enclosure, landing and car doors, protection devices and call fixtures shall be assembled on a test to undergo a comprehensive running and functional testing in accordance with the accepted test specification to verify compliance with the Specification.

(ii) The tests shall include the following minimum requirements:

- Verification of the suitability of the traction drive system
- Verification of the car operation and response to call fixtures, door operation including the safety edges, all indications and signalling features, and car top control features;
- Weight tests on safety gear and measurement of electrical readings and verification of the operating speed under various loading conditions;
- Verification of riding comfort and levelling accuracy under various load conditions.
- Verification of the fault indication and fault diagnosis features.
- Verification of the construction of the various control panels to the specification shall be done. Insulation resistance and high voltage tests shall be conducted in accordance with the test specification.
- Any additional testing as required by BS 5655 Part 10.
- A 12-hour duty cycle test, during which the Elevators shall run continuously with the contract load for 12 hours and shall travel up and down with intermediate stops such that the number of starts per hour as specified.
- Complete functional tests on the isolating transformer and ripple filter.
- Operation of the battery back-up device and the battery-operated power supply.
- Simulation of the emergency homing sequence during fire and power failure.

(b) Factory Inspection:

(i) AAI's authorized representative shall have full powers to examine the material and workmanship at the contractor's work or at any other place where the material or equipment is manufactured. Acceptance of any material or equipment shall in no way absolve the contractor of his responsibility for meeting the required specifications.

(ii) Routine tests for the various items of equipment shall be performed at the contractor's manufacturing works and test certificates shall be furnished. The contractor shall permit AAI's authorized representative to be present during any of or all the acceptance test in respect of the equipment / work.

(iii) Contractor shall give sufficient time notice for AAI's authorized representative for inspection at the original equipment manufacturers' factory in India or abroad. All the expenditures in connection with deputing of Officials would be borne by AAI. However, in case inspection results are not satisfactory or all materials are not offered for inspection by the contractor, the cost of second inspection incurred by AAI shall be recovered from the bill of the contractor.

(iv) The Elevators to be supplied under this contract shall be offered separately for factory inspection.

18.2 TESTS DURING INSTALLATION: Tests & inspections in stage may be always / randomly conducted for at least each of the following critical phases of work. This list is not inclusive but indicative. 48 hours' notice is required prior to completing these phases to enable AAI to carry out any checks deemed necessary. The following are the minimum requirements:

- Setting out the plum lines
- Erection and alignment of guide rails & rail brackets
- Erection & alignment of landing doors, sills, header, jambs etc.
- Positioning of hoist way equipment & controller etc.
- Erection / Fixing of landing fixtures.

18.3 POST INSTALLATION TESTS AT SITE: Post installation test at site shall be conducted by the elevators system supplier/installed in the presence of AAI as per IS 14665 PART 3 and PART 5 or currently applicable and updated IS code and the below is not an inclusive list. Also, the elevators system supplier / installer shall have to perform tests to confirm the performance parameters in the presence of AAI post installation and commissioning.

The tools & tackles required for such tests will have to be brought in by the elevators system supplier / installer. All test instruments shall be calibrated not more than one year prior to their use. The contractor may be asked to submit calibration certificates or other documents for proof of compliance.

(a) Levelling Test: Accuracy of the floor levelling shall be tested with the elevators empty, fully loaded. The elevators shall be run to each floor while travelling both in upward and downward directions and the actual distance of car floor above/ below landing floor shall be measured. In each case there shall not be any appreciable difference in these measurements for levelling at the floors when the car is empty and when it is fully loaded. The tolerances for levelling shall be as ± 5 mm for passenger/service elevators and +5mm for freight elevators.

(b) Safety Gear Test: Safety gear controlled by a governor should be tested with contract load and a contract speed, governor being operated by hand. Two tests should be made, however, with wedge clamps or flexible clamp safeties, one with contract load in the car and the other with 68 kg (equivalent to one person) in the car. The stopping distance obtained should be compared with specified figures and the guides, car platform, and safety gear should be carefully examined afterwards for signs of permanent distortion.

Counterweight safety gear should be tripped by the counterweight governor and the stopping distance noted. In this case, however the governor tripping speed should exceed that of the car safety governor but by no more than 10%.

During the safety gear test, car speed (from the governor or the main sheave) should be determined at the instant or tripping speed with that stated in IS / EN. The governor jaws and rope should be examined for any undue wear.

(c) Contract Speed: This should be measured with contract load in the car, with half load & with no load and should not vary from the contract speed by more than 10%. The convenient method is by counting the number of revolutions, made by the sheave or drum in a known time. Chalk mark on the sheave or drum and a stop switch will facilitate

timing but care must be exercised to ensure that no acceleration or retardation periods are included. If the roping is 2 to 1 the sheave speed is twice the car speed. Alternatively, the speed can be measured by a tachometer applied directly to shaft or a contact free tachometer immediately below the sheave.

(d) Elevators Balance: After the above test, some of the weight shall be removed until the remaining weights represent the figures specified by the bidder. With this condition car at half way travel the effort required to move the elevators car in either direction with the help of winding wheel shall be as nearly as can be judge by the same.

(e) Car and Landing Doors Interlocks: The elevators shall not move with any door open. The car door relay contact and the retiring release cam must be tested. The working of the door operation and the safety edges and light equipment if any provided shall also be examined.

(f) Controllers: The operation of the contactors and interlocks shall be examined and it shall be ascertained whether all requirements laid down in the specifications have been met.

(g) Normal Terminal Stopping Switches: This shall be tested by letting the car run to each terminal landing in turn, first with no load and then with contract load and by taking measurements, top and bottom over travels can be ascertained.

(h) Final Terminal Stopping Switches: The normal terminal stopping switches shall be disconnected for this test. It shall be ensured that these switches operate before the buffers are engaged.

(i) Insulation Resistance: This shall be measured (after removing the electronic PCB's and their connection) between power and control lines and earth and shall not be less than 5 mega-ohms when measured with D.C. voltage of 500 volts. Test certificates thus conducted in the controlled factory environment shall be submitted.

(j) Earthing: All conduits, switches, casing and similar metal work shall have earthing continuity.

(k) Ropes: The size, number construction and fastenings of the ropes should be carefully examined and recorded.

(l) Buffers: The car should be run on to its buffers at contract speed and with contract load in the car to test whether there is any permanent distortion of the car or buffers. The counterweight buffers should be tested similarly.

(n) A contract load test of each new lift shall be made before such lift is put into service. This test shall be made to determine whether the machinery and safety gear will operate satisfactorily within the specified limit with full load in the lift car.

(m) Integrated System Test: The elevators system supplier / installer shall co-ordinate and carries out interfacing and integrated testing together with other System-wide Contractors to ensure that the all integrated systems function as desired.

FROM - I

TECHNICAL PARAMETERS OF ELEVATORS

S. No	DESCRIPTION	Elevators Location (No.): RCC ANteena Tower Katihar (01 No.)	
		AAI Requirement	Agency's Compliance
1	Type of Elevator	Passenger Elevator (Stainless steel door)	
2	Operation	Simplex	
3	Control	AC VVVF	
4	Operation W / Wo Attendant	With & With-out Attendant.	
5	Capacity		
I	Rated Load (Kg)	544	
II	Weight of Material for Interior of the Car	By lift supplier	
III	No. of Persons	8	
6	Machine	Gearless	
7	Speed (MPS) Rated	1 MPS	
8	Travel	25-30 Mtr Approx	
9	Stops And Openings		
I	No. of Stops	5	
II	No. of Openings	5	
III	Same Side	Yes	
10	Car Size In (MM) (Inside Dimensions)	As per vendor standard	
11	Well/Shaft Dimension (MM) (W x D) (Inside Dimensions)	2300X2300	
	HOIST WAY SIZE (MM) (W x D) (Inside Dimensions)	2300X2300	
12	Door Operation	Automatic with door monitor	
13	Car Way Entrance (MM)	By Lift Supplier	
14	Height Of Lift Car In MM	2300	
15	Machine Room	MRL type	
I	Location	Top	
II	Size (mm)	NA	
16	Pit Depth In MM	1550	
17	Overhead In MM	4800	
18	Noise Level In Cabin (Running Car)	As per vendor standard complying IS Specification.	
19	Interior Finishes		
I	Finish	Transparent fire-resistant glass (If applicable in current / updated IS code)	

		Rear and side wall - SS Linen finish (16 SWG)	
II	Flooring	Granite of superior finish (material approval to be taken from AAI) with 20 mm recess for Lift manufacturer. To be provided by Lift manufacturer.	
III	Ceiling	As per vendor standard	
20	Cooling in Elevator	Axial blower	
21	Ventilation	As per vendor standard	
22	Signals		
I	Illuminated Hall Button With Digital Car Position Indicator	Yes	
II	2 Nos. Illuminated Car Operating Panel	Yes	
III	DIGITAL CAR POSITION INDICATOR (G, 1 st , 2 nd , 3 rd , 6 th)	Yes	
IV	BATTERY OPERATED ALARM BELL & EMERGENCY LIGHT : MIN 30 MIN BACK UP	Yes	
V	Overload Warning Indicator In Car	Yes	
VI	Built-In Intercom For 2 Way Communication	Yes	
VII	Fireman's Switch On Ground Floor: One Per Group	Yes	
VIII	Interior Handrail (3 Sides)	Yes	
IX	Illumination In The Car With Led Light Fitting.	Yes	
X	Provision of installation of CCTV in side lift car	Yes	
23	OTHER FEATURES		
I	ELECTRONIC CHIMES SOUND IN THE CAR (To Indicate Respective Floor)	Yes	
II	Provision To Integration With Fire Alarm Panel & BMS	Yes	
III	SPEAKER & PROVISION FOR MUSIC & PA SYSTEM	Yes	
24	SAFETIES AND PROTECTION		
I	Over Load Warning	Yes	
II	Infra-Red Full Length Door Detector	Yes	
III	Slack Rope Safety Switch	Yes	
25	OTHER MAJOR FEATURES		
I	Lift Shaft Wall	PCC in all side.	

II	Acceleration	Lift acceleration / deceleration shall be site adjustable range with in a limit of 0.6 m/s ² -1.5m/s ² , although max speed will be 1 mps (rated)	
III	Vibration Level	Horizontal and vertical vibration level will be keep nearly 20 - 25cm/Sqmm but not within 13cm/Sqmm during all riding and door opening	
IV	Power Saving	Maximum saving to reach upto 20% to 30% depending on traffic density on the lift	
V	Emergency Button In Cop	Emergency button required in car operating panel	
VI	Voltage Variation Limit	VVVFD shall control applicable for an input voltage variation level of (+/-) 10% but controller operation shall have (+) 10% to (-) 20% voltage variation limit with inbuilt stabilizer	
VII	Emergency Crancking	Remotely manual brake release system for manual cranking shall available at MR.	
VIII	Buffer	Spring buffer with 15% design speed consideration	
IX	Automatic Rescue Device (ARD)	Yes for all	
X	Operation & Energy Management Features	Lift and all relevant operation shall be as per Technical Spec.	
XI	Performance & Lift Ride Quality	Shall be as per Technical Spec.	
XII	Safety	Safety norms and protection shall be followed as per Technical Spec.	
XIII	Availability of OEM's own Testing Tower (35 Mtr. Travel Height minimum)	OEM must have its own Testing Tower for checking of satisfactory performance of elevator system during Factory Acceptance Test.	

LIST OF PREFERRED MAKES FOR ELECTRICAL ITEMS

Note: The following list of preferred makes is exhaustive. However, additional manufacturers or brands may be considered for any specified product or item, depending on market availability, delivery timelines and proven satisfactory performance in similar projects or works—preferably where such a make or product has been used in quantities constituting at least eighty percent (80%) of the estimated or proposed requirement for the relevant project or work. To establish performance, completion certificates, performance certificates and purchase orders accompanied by tax invoices will be considered, provided that the products comply with the technical specifications stipulated in the tender document.

ITEM CODE	ITEMS	PREFERRED MAKES (W.E.F. 10.07.2025)	CATEGORY FOR TEST CERTIFICATION/ INSPECTION
A.	PANEL, SWITCHGEARS AND RELATED ITEMS		
1	LT PANELS (TTA)	MAK / SHIV SHAKTI ENGINEERS / TECHNOCRAFTS / TENCO / KONTACT / ABB / RISHA / MARINE ELECTRICALS / POWERTECH SWITCHGEARS / ULTIMA / RITTAL/ URJAYANT/EXCEL CONTROL SYSTEMS / BALAJI ELECTRO CONTROLS PVT LTD / KRUTI / CMKL(CORE METAL) / KEPL(KHOKHAR) / LEGRAND (NOVATEUR) / CONQUERENT / MITSUBISHI / LS POWER / ZENIYA / NEPTUNE / LAURITZ KNUDSEN / / BCH / ADVANCE / TRICOLITE / SCHNEIDER / SUDHIR / EAP / TRISQUARE / MILESTONE / ADLEC / UNILEC / CONSOUL (RR ISPAT) / PEATON/ HAROLD/ SPC ELECTROTECH / SIEMENS	CATEGORY-I
2	LT PANELS / FEEDER PILLAR (PTTA) / BUS TRUNKING	EXPERT ENGINEERS / MAK / APPLICATION CONTROL PANEL / AMBIT / ADLEC / SHIV SHAKTI ENGINEERS / TECHNOCRAFTS / EXCEL CONTROL SYSTEMS / GLOBAL / SUPERTECH CONTROL SYSTEMS / SWITCHGEARS & FABRICATORS / KONTACT / MARINE ELECTRICALS / R.P. CONTROLS / GOURAV EnerGen / TENCO / POWERTECH SWITCHGEARS / HAROLD / BALAJI ELECTRO CONTROLS PVT LTD / URJAYANT / KRUTI / ASES / ITE-GURGAON (INDIAN TRANSFORMERS) / LEGRAND (NOVATEUR) / CONQUERENT / CORONET / RST ELECTRICALS PVT LTD / HPL / C&S / L.S POWER / ZENIYA / PRECISION / ABB / EAP / TRICOLITE / SUDHIR / SCHNEIDER / LAURITZ KNUDSEN / NEPTUNE / HENSEL / ADVANCE / KEPL(KHOKHAR) / PEATON / RISHA / TRISQUARE / CMKL (CORE METAL) / SPC ELECTROTECH / BCH / MILESTONE / YOGIJI DIGI (P) LTD/ ELINS / EVA / UNILEC /	CATEGORY-I

		HAROLD / ENGINEERS & ENGINEERS / SIEMENS/ ULTIMA/ NITYA	
3	AIR CIRCUIT BREAKERS	LS ELECTRIC / BCH / MITSUBHISHI / HPL / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / ABB // HAVELLS/ SCHNEIDER/ SIEMENS	CATEGORY-2
4	MOULDED CASE CIRCUIT BREAKERS (MCCB)	LS ELECTRIC / BCH / MITSUBHISHI / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / ABB // HAVELLS / INDO ASIAN (NOVATEUR) / HPL/ SCHNEIDER/ SIEMENS	CATEGORY-2
5	CHANGE OVER SWITCH/FUSE DISCONNECTOR SWITCH/ SWITCH FUSE UNITS	BENTEC / BCH / INDO ASIAN (NOVATEUR) / SOCOMEC / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / HPL/ ABB / HAVELLS / SIEMENS / SCHNEIDER	CATEGORY-2
6	METERS /MULTIFUNCTION METERS ANALOGUE/DIGITAL	ELMEASURE / KRYKARD / SELEC // ABB / BENTEC / SELEC // MITSUBHISHI / ABB / NEPTUNE / SOCOMEC / HPL / LAURITZ KNUDSEN / FINDER / SIEMENS / SCHNEIDER / CONSERVE / SECURE	CATEGORY-3
7	SELECTOR SWITCH, PUSH BUTTON SWITCH /EMERGENCY SWITCH	ABB/ TRINITY TOUCH / LAURITZ KNUDSEN / C&S/ BCH/ EATON / TEKNIC / SIEMENS / SCHNEIDER	CATEGORY-3
8	CT's / PT's	GLOBAL / KRUTI / WAGO / CG POWER / SELEC / NEMEK / ANANT POWER (ADVANCE) / KAPPA	CATEGORY-3
9	PROTECTIVE RELAYS (ALL TYPE)	P2 POWER / WAGO / SELEC / HAVELLS / MITSUBISHI / LAURITZ KNUDSEN / CG POWER // ABB / SIEMENS	CATEGORY-2
10	CONTACTORS	MITSUBHISHI / HPL / LAURITZ KNUDSEN / LEGRAND (NOVATEUR)/ SCHNEIDER	CATEGORY-3
11	TIMERS / TIME SWITCHANALOGUE/DIGITAL	HAVELLS / LAURITZ KNUDSEN / SELEC / BCH / ABB / LEGRAND (NOVATEUR) / EATON/ FINDER/ SIEMENS / SCHNEIDER/	CATEGORY-3
12	LED INDICATION LAMPS	EATON / OLIVE / ABB / LAURITZ KNUDSEN / C&S / BCH / VINAY LED / VAISHNOV / SCHNEIDER	CATEGORY-3
B.	SUBSTATION RELATED ITEMS		
13	TRANSFORMER UP TO 500 KVA (DRY/OIL)	POWERWARE / ITE, GURGAON / ESENNAR / PVJ POWER / TRANSCON / AMES IMPEX /POWER STAR / JAY BEE / RTS / CG POWER / SUDHIR / VOLTAMP / BHARAT BIJLEE / KOTSONS/ SCHNEIDER / KIRLOSKAR	CATEGORY-I
14	TRANSFORMER MORE THAN 500 KVA (DRY/OIL)	POWERWARE / ITE, GURGAON / ESENNAR / PVJ POWER / TRANSCON / AMES IMPEX /POWER STAR / JAY BEE / RTS / CG POWER / SUDHIR / VOLTAMP / KOTSONS/ SCHNEIDER / BHARAT BIJLEE / KIRLOSKAR / SIEMENS	CATEGORY-I

15	H T PANEL	APPLICATION CONTROL PANEL / SHIV SHAKTI ENGINEERS / ITE, GURGAON /TECHNOCRAFTS / TENCO / MARINE ELECTRICALS / PASCAL / KEPL(KHOKHAR) /CONQUERENT / RISHA / CORONET / L.S POWER / ZENIYA / EAP / CG POWER (CFPISL) / TRICOLITE / SUDHIR / LAURITZ KNUDSEN / ABB / TRISQUARE / SCHNEIDER / MILESTONE / EATON / ANANT POWER (ADVANCE) / ADLEC / SIEMENS	CATEGORY-I
16	BUS DUCT-SANDWICH	RISHA / ADVANCE / RR KABEL / LAURITZ KNUDSEN / / LEGRAND (NOVATEUR) / EAE / SCHNEIDER	CATEGORY-2
17	H.T /L.T.TERMINATION & JOINTING KIT.	DENSONS / CABSEAL@ (HARI CONSOLIDATED) / COMPAQ / RAYCHEM	CATEGORY-3
18	POWER CABLES ABOVE 1.1 KV	V-MARC / SBEE / SUYOG ELECTRICALS LTD / DICABS / APAR / GEMSCAB / HPL /RR KABEL / SPECIAL CABLES / JMW KABEL / PARAMOUNT / TIRIJPATI / KEC / POLYCAB /DYNAMIC / HAVELLS / KEI / UNISTAR / GLOSTER / RAVIN CABLES / NICCO	CATEGORY-I
19	POWER CABLES UP TO AND INCLUDING 1.1 KV	ALLCAB / AURAFLEX / V-MARC / VISHAL / SBEE / POLYCORE / VIN POWER / TORTEK /SUYOG ELECTRICALS LTD / GEMSCAB / RR KABEL / PLAZA / SPECIAL CABLES / KEI /JMW KABEL/ POLYCAB / AVOCAB (CHANDRESH) / DYNAMIC / PARAMOUNT / SVARN /RALLISON (LKB) / BCH / TIRUPATI / KEC / GRANDLAY / HPL / GLOSTER / BONTON / HAVELLS / UNISTAR / APAR/ RAVIN CABLES / NICCO	CATEGORY-I
20	CONTROL CABLES	GEMSCAB / ALLCAB / AURAFLEX IV-MARC / SBEE / POLYCORE / TORTEK / NICCO /SUYOG ELECTRICALS LTD / RR KABEL / PLAZA / SPECIAL CABLES / JMW KABEL / AVOCAB (CHANDRESH) / PARAMOUNT / SVARN / RALLISON (LKB) / BCH / BONTON /TIRIJPATI / KEI / KEC / GRANDLAY/ UNISTAR / NATCAB (KWALITY) / HPL / POLYCAB / DYNAMIC / ALOKE (ANKUR) / HAVELLS / GLOSTER / FINECAB / APAR / BATRA HENLAY/RAVIN CABLES	CATEGORY-I
21	TELEPHONE CABLE	POLY INFOCOM CABLES PVT LTD / ORBIT / DUCAB / RR KABEL / PLAZA / JMW KABEL / PARAMOUNT / ALOKE (ANKUR) / RALLISON (LKB) / BONTON / TIRUPAT / HAVELLS / KEI / KEC / KVV (INDUSTIRAL) / HPL / POLYCAB / NICCO	CATEGORY-2

22	CO-AXIAL/INSTRUMENTATION/FIBRE OPTIC/ CAT-6 / CAT6A CABLES	AURAFLEX / SBEE / TORTEK / SUYOG ELECTRICALS LTD / ORBIT / POLYCORE / POLY INFOCOM CABLES PVT LTD/ BATRA HENLAY / GEMSCAB / RR KABEL/ PLAZA/SPECIAL CABLES / JMW KABEL / POLYCAB / PARAMOUNT / LEGRAND(NOVATEUR)/SVARN / RALLISON (LKB) / BONTON / HAVELLS / KEI / ROSENBERGER / KEC / GRANDLAY / GLOSTER / SCHNEIDER / APAR	CATEGORY-2
23	GI / SS CABLE MANAGEMENT SYSTEM (CABLE TRAY-PREFABRICATED/PERFORATED / LADDER TYPE / WIRE MESH TYPE, ETC.)	GLOBAL / OBO BETTERMANN / MM ENTERPRISES / GLOBE / BEC / RMCON (RMC) / EXCEL CONTROL SYSTEMS / ADVANCE-ANANT / RMSCO (RAJASTHAN METAL)/ SUMIP / CTM / L.S POWER / LEGRAND (NOVATEUR) / INDIANA / MM ENGG / SLOTCO / MEM	CATEGORY-3
24	UNDER FLOOR RACEWAYS & ITS ACCESSORIES	OBO BETTERMANN / BEC / ADVANCE- ANANT / SPC ELECTROTECH / CTM / MM ENTERPRISES	CATEGORY-3
25	CAPACITORS	SELEC / NEPTUNE / LAURITZ KNUDSEN / P2 POWER / LEGRAND (NOVATEUR) / HAVELLS / TDK INDIA/ SCHNEIDER	CATEGORY-2
26	APFC PANEL/ ACTIVE & PASSIVE (HYBRID) PANEL	MAK / APPLICATION CONTROL PANEL / SHIV SHAKTI ENGINEERS / TENCO / RISHA /INPHASE POWER TECHNOLOGIES PVT LTD / GLOBAL / R.P. CONTROLS / ULTIMA / SUPERTECH CONTROL SYSTEMS / SWITCHGEARS & FABRICATORS (SGF) /POWERTECH SWITCHGEARS / HAROLD / AB POWER / URJAYANT / SELEC / EAP /CG POWER / P2 POWER / KEPL (KHOKHAR) / ITE-GURGON (INDIAN TRANSFORMERS) / CONQUERENT / BCH / ANANT POWER (ADVANCE) / RISHA /HAVELLS / CORONET / SPC ELECTROTECH / PEATON / L.S POWER / MILESTONE/ LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / / NEPTUNE / SCHNEIDER /NEPTUNE / P2 POWER / SELEC / ANANT POWER (ADVANCE) / SCHNEIDER / SPC ELECTROTECH / ADLEC / RST ELECTRICALS PVT LTD / TDK INDIA / TRICOLITE / AMBIT	CATEGORY-I
27	LIGHTENING PROTECTION SYSTEM (LPS) COMPLYING UPDATED IEC / NBC	JEF / OBO BETTERMANN / GROUND ECA3G / NEXPO POWER SOLUTIONS / CAPE / JMV / ABB / DEHN / PHEONIX / TERCEL	CATEGORY-3
28	EARTHING SYSTEM (CHEMICAL)	JEF / OBO BETTERMANN / GROUND ECA3G / TERCEL/ BEC / DEHN / ABB / JMV / NEXPO POWER SOLUTIONS / RMSCO (RAJASTHAN METAL) / CAPE / JK CHEMRODE / PROTEC-DHRUVA (DHRUVA) / APS	CATEGORY-3

29	SURGE PROTECTION DEVICES	OBO BETTERMANN / DSS / GROUND ECA3G / TERCEL / WAGO / HAVELLS / ABB / CAPE / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / DEHN / MERSEN / JMV / PHOENIX CONTACT / PROTEC ALLIED / SECOM / CITEL	CATEGORY-3
30	SCADA (HARDWARE & SOFTWARE, EXCEPT COMPUTER & ACCESSORIES)	LAURITZ KNUDSEN / WAGO / PHOENIX CONTACT / HONEYWELL / SCHNEIDER / SIEMENS	CATEGORY-2
31	SF6 CIRCUIT BREAKER/ VACUUM CIRCUIT BREAKER	EATON / VOLTAMP / LAURITZ KNUDSEN / PASCAL / EATON / CG POWER / ABB / SCHNEIDER/ SIEMENS	CATEGORY-2
32	SERVO / AUTOMATIC VOLTAGE STABILIZER	POWERWARE / KRYKARD / FUJI ELECTRIC / PVJ POWER / SELEC / ITE-GURGON (INDIAN TRANSFORMERS) / P2 POWER	CATEGORY-2
33	AUTO TRANSFER SWITCH (ATS)	EATON / HPL / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / SOCOMEC / HAVELLS / ASCO (SCHNEIDER)	CATEGORY-2
34	COMPACT SUB STATION	PVJ POWER / CORONET / ITE-GURGON (INDIAN TRANSFORMERS) / CONQUERENT / SUDHIR POWER / PEATON / L.S POWER / VOLTAMP / LAURITZ KNUDSEN / ABB / SCHNEIDER	CATEGORY-I
35	EMERGENCY LIGHT - LED (PORTABLE)	LIFE-GUARD / PROLITE	CATEGORY-3
36	CABLES GLANDS	HENSEL / POLYCAB / TRINITY TOUCH / ROXTEC / BRACO / MCI / (METAL/ CRAFT)	CATEGORY-3
37	LUGS & THIMBLES	WAGO / POLYCAB / TRINITY TOUCH	CATEGORY-4
38	SYNTHETIC / PVC INSULATING MATS	CPRI CERTIFIED FOR REQUIRED VOLTAGE LEVEL	CATEGORY-2
39	INSULATION TAPE (HT /	MODI's / BENLO / ANCHOR	CATEGORY-4
C.	DG SETS & RELATED ITEMS		
40	DIESEL ENGINE ABOVE 250 KVA	GREAVES COTTON / BAUDOUIN (SHANDONG) / MAHINDRA POWEROL / PERKINS / CUMMINS / KOEL / CATERPILLAR	CATEGORY-I
41	DIESEL ENGINE UPTO AND INCLUDING 250 KVA	GREAVES COTTON / BAUDOUIN (SHANDONG) / TMTL (TAFE MOTERS) / CUMMINS / MAHINDRA POWEROL / ASHOK LEYLAND / KOEL / CATERPILLAR	CATEGORY-I
42	ALTERNATOR	TDPS (TD POWER SYSTEM) / KIRLOSKAR / CATERPILLAR / GREAVES COTTON	CATEGORY-I
43	BATTERIES-LED ACID/LiION	CLN / EXIDE / AMARON	CATEGORY-3
44	BATTERY CHARGER	SELEC / VERTIV / DELTA	CATEGORY-2
45	UPS -ABOVE 10 KVA	DELTA / ORION / FUJI ELECTRIC / KRYKARD / 3EM / PROSTARM / UNILINE/ TMEIC / POWER ONE / RIELLO / ABB / SOCOMEC / EATON / SCHNEIDER / NUMERIC-LEGRAND/ VERTIV (EMERSON)	CATEGORY-3

46	UPS - UPTO 10 KVA	DELTA / ORION / FUJI ELECTRIC / KRYKARD / PROSTARM / RIELLO / UNLINE / ABB / POWER-ONE / DELTA / SOCOMEC / EATON / SCHNEIDER / NUMERIC-LEGRAND / VERTIV (EMERSON)	CATEGORY-3
D.	INTERNAL WIRING RELATED TEAMS		
47	MCB / ISOLATOR / MCBDB / RCCB / RCBO / ELCB	ANCHOR (PANASONIC) / ORIENT ELECTRIC / LAURITZ KNUDSEN / MITSUBHISHI / LEGRAND (NOVATEUR) / / HPL / ABB / POLYCAB / HAVELLS / SCHNEIDER / INDO ASIAN (NOVATEUR) / GM / MK HONEYWELL / BCH / EATON	CATEGORY-2
48	MS CONDUIT (ISI MARKED)	VPL / BEC / AKG / STEEL KRAFTS / TRINITY TOUCH / RMCON (RMG STEELS) / SUPER / JPC PIPES	CATEGORY-3
49	PVC CONDUIT (ISI MARKED)	VPL / FUSION / ASTRAL / SKYDA / BEC / NORPACK / MODI's / ANCHOR (PANASONIC) / POLYCAB / TRINITY TOUCH / AKG / GM / JPC PIPES	CATEGORY-3
50	INDUSTRIAL SOCKET IN SHEET STEEL ENCLOSURE WITH MCB/SWITCH	AJMERA ELECTROTECH LLP / LAURITZ KNUDSEN / POLYCAB / NEPTUNE-BALS / LEGRAND (NOVATEUR) / / BCH / HAVELLS / HPL / SCHNEIDER	CATEGORY-4
51	INSULATED COPPER WIRE	RAJNIGANDHA / GEMSCAB / ALLCAB / AURAFLEX / V-MARC / SBEE / UNISTAR / POLYCORE / TORTEK / BATRA HENLAY / RR KABEL / AKG / ANCHOR (PANASONIC) / BENTEC / JMW KABEL / POLYCAB / AVOCAB (CHANDRESH) / SVARN / PARAMOUNT / RALLISON (LKB) / HAVELLS / NATCAB (KUALITY) / BONTON / GRANDLAY / GLOSTER / BCH / PLAZA / APAR/ GM / PARAGON (ELEKTRON) / FINE-CAB/ ZENIUM	CATEGORY-2
52	SWITCHES/ SOCKETS/ TELEPHONE/ TV/ DATA SOCKET/ BOXES (MODULAR TYPE)	RR KABEL / ANCHOR (PANASONIC) / ORIENT ELECTRIC / INDO ASIAN (NOVATEUR) // POLYCAB / HPL / LAURITZ KNUDSEN / LEGRAND (NOVATEUR) / HAVELLS / GM / MK HONEYWELL / WESTERN VEGA / ABB	CATEGORY-3
53	SWITCHES/ SOCKETS/ TELEPHONE/ TV/ DATA SOCKET/ BOXES (PIANO TYPE)	ANCHOR (PANASONIC) / BENTEC / HAVELLS / HPL / POLYCAB / MK HONEYWELL / WESTERN VEGA	CATEGORY-3
E.	FIRE ALARM EQUIPMENTS		
54	FIRE / SMOKE DETECTOR/ MULTI CRITERIA DETECTOR/ FIRE ALARM PANEL /REPEATER PANEL/ HOOTER / MANUAL CALL POINT / RESPONSE INDICATOR/ FAULT ISOLATOR	NOTOFIRE / VELOX / SCHNEIDER / PANASONIC / EATON / HOCHIKI / RAVEL / SIEMENS / BOSCH / APOLLO / EDWARDS (UTC) / G + M / SCHRACK / HONEYWELL / KIDDE (UTC) / GST (UTC) / TYCO / ASES	CATEGORY-2

55	FIRE SURVIVAL CABLE	GEMSCAB / SBEE / FRTEK / BATRA HENLAY / RR KABEL / SEPCIAL CABLES SVARN / JMW KABEL / POLYCAB / ALOKE (ANKUR) / RALLISON (LKB) / KEC GRANDLAY / RAVEL / GLOSTER / KEI / BONTON / BOSCH / WREXHAM / FUSION POLYMER	CATEGORY-2
56	FIRE SIGNAGES	ASES / LIFE GUARD (UNITED FIRE) / EATON / FIRE SHIELD / BOSCH / RAVEL / DELITE / AUTOGLO (PROLITE)	CATEGORY-3
57	ASPIRATION SYSTEM	SHOOTFIRE (VIMAL FIRE) / HOCHIKI / BOSCH / RAVEL	CATEGORY-2
F.	LED LIGHT FIXTURE AND FANS		
58	LIGHT FIXTURE WITH LED - INDOOR	PYROTECH / GOLDWYN LED / KI KALINGIA / GM / NESSA / PLUS LIGHT TECH / LEGERO / MAGIK / LIGHTBOOK / LEKSA LIGHTING / R R KABEL (RR/ AARAYSTORM) / PANASONIC / EVEREADY / INSTAPOWER / POLYCAB / SURYA / HALONIX / HAVELLS / SIGNIFY / JAQUAR (JAQUAR LIGHTING) / HPL / BAJAJ / WIPRO / ORIENT / CROMPTON / REGENT	CATEGORY-2
59	LIGHT FIXTURE WITH LED - OUTDOOR/FAÇADE	PYROTECH / GOLDWYN LED / KI KALINGIA / GM / NESSA / PLUS LIGHT TECH / MAGIK / LIGHTBOOK / LEKSA LIGHTING / R R KABEL (RR/ AARAYSTORM) / PANASONIC / HPL / BENTEC (BENLO) / EVEREADY/ POLYCAB / K-LITE / SURYA / TRANSRAIL / HALONIX / HAVELLS / JAQUAR (JAQUAR LIGHTING) / SIGNIFY / INSTAPOWER / BAJAJ / WIPRO / ORIENT / CROMPTON / REGENT	CATEGORY-2
60	LINEAR LED/ CUSTOMISED/DECORATIVE LED LIGHT FIXTURE	PYROTECH / GOLDWYN LED / KI KALINGIA / GM / LIGHT FORMS / PLUS LIGHT TECH / LEGERO / MAGIK / WMEL / FORUS / HUBLIT / LIGHTBOOK / PANASONIC / POLYCAB / R R KABEL (RR/ AARAYSTORM) / EVEREADY / SURYA / HALONIX / HAVELLS / HPL / SIGNIFY / BAJAJ / WIPRO / ORIENT / CROMPTON / REGENT	CATEGORY-2
61	AVIATION WARNING /OBSTRUCTION LIGHT	PYROTECH / FORUS / KI KALINGIA / HARYANA GENERAL INDUSTRIES / VSTP / K-LITE / SURYA / TRANSRAIL / HPL / INSTAPOWER / BAJAJ / WIPRO / CROMPTON /	CATEGORY-3
62	CEILING/ WALL /EXHAUST/ PEDESTAL FAN (CONVENTIONAL / BLDC)	ORIENT ELECTRIC / RR KABEL / ANCHOR (PANASONIC) / POLYCAB / HALONIX / HAVELLS / ALMONARD / USHA / KHAITAN	CATEGORY-3
63	HVLS FANS	MARUT AIR / RR KABEL / RITE HITE	CATEGORY-3
G.	AIRCONDITIONING AND FIRE FIGHTING ACCESSORIES		
64	G I/ M S PIPE (ISI MARKED)	VPL / ITL / BEC / APL APOLLO / PRAKASH SURYA / JINDAL STAR / TATA / SAIL/ HIRA PIPES (RR ISPAT) /	CATEGORY-2

65	MANUAL VALVE - BUTTERFLY/ SLUICE /CHECK/ NRV / FOOT/GATE / GLOBE	LEHRY / SANT / VENUS / NEWAGE FIRE / CASTLE / ZOLOTO / VTM (VA VALVES) / EMERALD / ADVANCE VALVES / DIVINE /	CATEGORY-2
66	MOTORISED VALVE BALANCING /MODULATING / PICB / DELTA T / CONTROL / MIXING	SANT / VTM (VA VALVES) / CASTLE / DANFOSS / ZOLOTO / ANERGY	CATEGORY-2
67	SUCTION / POT / YSTRAINER	VENUS / CASTLE / ZOLOTO / ANERGY / SANT / VTM (VA VALVES) / EMERALD	CATEGORY-2
68	FLEXIBLE CONNECTION FOR SPRINKLER /SPRINKLER	LIFEGUARD (UNITED FIRE) / FIRE SHIELD / NEWAGE / EXFLAME / HD / SAFEFIRE	CATEGORY-2
69	FIRE HYDRANT LANDING VALVES/ INSTALLATION VALVE/ FIRE BRIGADE CONNECTION.	SHOOTFIRE (VIMAL) / LIFEGUARD (UNITED FIRE) / ZOLOTO / KALPEX (KALPATARU) /NEWAGE / EXFLAME / SAFEFIRE / HD / FIRE SHIELD	CATEGORY-2
70	FIRE HOSE PIPES/ FIRST AID HOSE REEL/ BRANCH PIPE / NOZZLE / COUPLINGS	SHOOTFIRE (VIMAL) / LIFEGUARD (UNITED FIRE)/ KALPEX (KALPATARU)/ NEWAGE / FIRE SHIELD / EXFLAME / SAFEFIRE	CATEGORY-2
71	FIRE EXTINGUISHERS	DSS / KANEX / SHOOTFIRE (VIMAL) / LIFEGUARD (UNITED FIRE) / CEASEFIRE / SAFEFIRE / AFS (ADVANCED) / KALPEX (KALPATARU) / EXFLAME / SUPREMEX / FIRE SHIELD / MINIMAX / SAFEX	CATEGORY-2
72	GAS BASED FIRE SUPPRESSION SYSTEM	SYNERGY & SYNERGY PLUS / FIRE-CEASE / FIRETREX / VIVINA / ASES / CEASEFIRE / SHOOTFIRE (VIMAL) / LIFEGUARD (UNITED FIRE) / KALPEX(KALPATARU) / FOAMTECH / SUPREMEX/ SIEMENS / FIRETREX (SVS)	CATEGORY-2
73	KITCHENHOOD GAS BASED SUPPRESSION SYSTEM	SYNERGY / FIRECEASE / FIRETREX / VIVINA / SHOOTFIRE (VIMAL) / UNITED / FOAMTECH / CEASEFIRE / KALPATARU /	CATEGORY-2
74	HIGH/LOW PRESSURE WATER MIST BASED FIRE SUPPRESSION SYSTEM	SYNEAQUAMIST / FIRETREX / SHOOTFIRE	CATEGORY-2
75	FLOW SWITCH/PRESSURE SWITCH	OMICRON / ANERGY / DANFOSS / EMERALD/ SWIZER	CATEGORY-3
76	FIREMAN AXE	LIFEGUARD (UNITED FIRE) / NEWAGE / FIRE SHIELD / ADVANCE	CATEGORY-3
77	DIESEL ENGINE DRIVEN PUMP FOR FIRE FIGHTING	TMTL (TAFE MOTERS) / KSB / WILO / GRUNDFOS / KIRLOSKAR / ASHOK LEYLAND / CATERPILLAR / MAHINDRA POWEROL	CATEGORY-2
78	PUMPS -VERTICAL/ HORIZONTAL / SUBMERSIBLE	HAVELLS / WILO / GRUNDFOS / ANDRITZ / KSB / KIRLOSKAR / XYLEM / AQUA ANS / MATHER & PLATT / CROMPTON	CATEGORY-2

79	MOTORS	LHP / ROTOMOTIVE / KSB / HAVELLS / TMEIC / GRUNDFOS / BCH / KIRLOSKAR / BHARAT BIJLEE / ALSTOM / SEIMENS / CROMPTON	CATEGORY-2
80	MOTOR STARTER	BENTEC / KSB / HAVELLS / L.S POWER / GRUNDFOS / PHOENIX / / BCH / SCHNEIDER / EATON / MOTOVARIO / SIEMENS / SCHNEIDER	CATEGORY-2
81	SINGLE PHASE PREVENTER / OVER LOAD PROTECTION/HIGH VOLTAGE/LOW VOLTAGE/EARTH FAULT PROTECTION	C&S / LAURITZ KNUDSEN / SELEC / SIEMENS	CATEGORY-3
82	G I SHEETS	JSW STEEL / TATA / HSL / SAIL	CATEGORY-2
83	GRILLS [DIFFUSERS	PRECISE / ASAWA INSULATION / MAPRO (AIR FLOW) / CRYSTAL / TRISTAR	CATEGORY-3
84	INSULATION MATERIAL ROCK WOOL/ GLASS WOOL	ENSAVE / ROCK INSUL / AEROLAM / SUNROCK (THERMOCARE ROCK WOOL) / INSUFLEX (THE SUPREME) / LIONROCK / POLYBOND / EPACK / TWIGA INSUL	CATEGORY-3
85	INSULATION MATERIAL XLPE/EPDW NITRILE RUBBER	AEROFOAM / PARAMOUNT / SAFARI / AEROLAM / INSUFLEX (THE SUPREME) / EPACK / SUNROCK (THERMOCARE ROCK WOOL) / INSUFLEX (THE SUPREME) / LIONROCK / POLYBOND / TWIGA INSUL	CATEGORY-3
86	PRE-INSULATED DUCT	ASAWA INSULATION / MECHEASY	CATEGORY-3
87	PRE-FABRICATED GI DUCT	ASAWA INSULATION / WAD / DUCTOFAB / WAVES / ZECO / ADVANCE VENTILATION	CATEGORY-3
88	FIRE DAMPERS	MAPRO (AIR FLOW) / GREENHECK / TRISTAR / RUSKIN / CARRIER	CATEGORY-2
89	AIR CURTAINS	EURONICS / MITZVAH / TECHNOCRATS / DOLPHY	CATEGORY-2
90	MODULATING MOTOR/FIRE DAMPER MOTOR	LHP / ANERGY / HONEYWELL / GRUNDFOS / BALEMO / SIEMENS	CATEGORY-2
91	AIR FILTERS (MERV/ESP/HEPA) FOR HVAC SYSTEM	MECHMAARK / ADITYA / 02 CURE / WAVES / HUMDIN / INTELLIGREEN	CATEGORY-3
92	THERMOSTATS / HUMIDISTATS	OMICRON / ANERGY / FINDER / DANFOSS / HONEYWELL	CATEGORY-3
93	THERMOMETERS/ PRESSURE GAUGE	OMICRON / ANERGY / EMERALD / FIEBIG	CATEGORY-3
94	INTEGRATED BUILDING MANAGEMENT SYSTEM /(IBMS)/BMS/SCADA SYSTEM (HARDWARE* & SOFTWARE, EXCEPT COMPUTER & ACCESSORIES)	SCHNEIDER / ENLITE / PANASONIC / WAGO PHOENIX / SIEMENS / AZBIL / LAURITZ KNUDSEN / TRIDIYM (* Includes all hardware of BMS)	CATEGORY-3

95	FIELD DEVICES (FOR IBMS/BMS/SCADA)	SELEC / OMICRON	CATEGORY-3
96	VFD DRIVE	YASKAWA / SELEC / FUJI / TMEIC / LAURITZ KNUDSEN / DANFOSS / SCHNEIDER / SIEMENS	CATEGORY-3
H.	AC PLANTS, AC UNITS & EQUIPMENTS		
97	AIR-CONDITIONER UNITS SPLIT / WINDOW / CASSETTE/ TOWER	HAVELLS / HITACHI (JOHNSON) / LG / BLUE STAR / DAIKIN/ VOLTAS / SAMSUNG / HAIER/ O GENERAL / PANASONIC / CARRIER	CATEGORY-2
98	PRECISION AIR CONDITIONING (PAC)	CLIMAVENTA / SWEGON BLUE BOX / SIDWAL	CATEGORY-3
99	PACKAGED AIRCONDITIONER	DAIKIN / HITACHI (JOHNSON) / VOLTAS / LG / SIDWAL / CARRIER / DAIKIN / BLUE STAR	CATEGORY-2
100	CHILLERS	KIRLOSKAR / DAIKIN / CARRIER / VOLTAS / BLUE STAR / LG / CLIMAVENETA/ TRANE / YORK/ SWEGON BLUE BOX/ DUNHAMBUSH	CATEGORY-I
101	AIR HANDLING UNITS (AHU)	CRYSTAL / CITIZEN / WAVES / EDGETECH / CARRIER / ZECO / HUMIDIN / TRISTAR	CATEGORY-I
102	FAN COIL UNIT (FCU)	WAVES / CRYSTAL / ZECO / CITIZEN / EDGETECH / CARRIER / DAIKIN / TRISTAR / YORK	CATEGORY-2
103	VRV/ VRF HVAC UNIT	LG / HITACHI (JOHNSON) / SAMSUNG / DAIKIN / VOLTAS / HAIER / CARRIER / BLUE STAR	CATEGORY-2
104	COOLING TOWER UP TO 200 TR.	DELTA / BELL COOLING TOWERS / MIHIR / PAHARPUR	CATEGORY-2
105	COOLING TOWER ABOVE 200 TR.	DELTA / BELL COOLING TOWERS / MIHIR / PAHARPUR	CATEGORY-2
106	EXPANSION TANK	ANERGY	CATEGORY-3
107	AIR & DIRT SEPARATOR	ANERGY	CATEGORY-3
108	FAN - AXIAL FLOW / INLINE / VENTILATION / PROPELLER / PLUG	DYNAIR-MAICO / DUSTECH/ KRUGER / WAVES / HUMIDIN / WOLTER / AIR FLOW / RR KABEL / CRYSTAL / GREENHECK	CATEGORY-2
109	R O SYSTEM [WATER SOFTENING PLANT	SURYA RO / DELTA / WAE / VENZA (MGROW)	CATEGORY-3
110	WATER COOLER	CLIMATROL / VOLTAS / ORIENT ELECTRIC / SIDWAL	CATEGORY-3
111	WATER DISPENSER	WAE / VENZA (MGROW) / VOLTAS	CATEGORY-3
112	DRINKING WATER FOUNTAIN	WAE / VENZA (MGROW) / OASIS	CATEGORY-3
I.	PA SYSTEM & RELATED ITEMS		
113	AMPLIFIERS	ATEIS / SCHRACK / HEINRICH / BOSCH / HONEYWELL / OPTIMUS / BOSE	CATEGORY-2
114	ANNOUNCEMENT MICROPHONES [CAR CALL CONSOLES	ATEIS / SCHRACK / HEINRICH / BOSCH / HONEYWELL / OPTIMUS / BOSE	CATEGORY-2

115	CONTROLLERS	ATEIS / SCHRACK / BOSCH / HEINRICH / HONEYWELL / OPTIMUS	CATEGORY-3
116	SPEAKER	ATEIS / SCHRACK / HEINRICH / BOSCH / NOTIFIRE / OPTIMUS / BOSE	CATEGORY-3
117	DIGITAL CALL STATION WORK STATION	AVTRON / ATEIS / HEINRICH / BOSCH / OPTIMUS	CATEGORY-3
118	EQUIPMENT RACK	HEINRICH / BOSCH / PRESIDENT / ORDEIN	CATEGORY-3
119	DVD/DVR /MP3 PLAYER	TYCO / HEINRICH / BOSCH / HONEYWELL / SIEMENS / OPTIMUS	CATEGORY-2
120	CABLE FOR MICROPHONE / SPEAKER	RR KABEL / JMW KABEL / POLYCAB / BONTON / BOSCH / HPL / KVVVS (INDUSTRIAL)	CATEGORY-2
121	DIGITAL LINE ARRAY SPEAKER	ATEIS / HEINRICH / BOSCH / BOSE / OPTIMUS	CATEGORY-2
122	CCTV CAMERA	AVTRON / TYCO ILLUSTRATE / HEINRICH / SIEMENS / BOSCH / HONEYWELL / ULTRAK / PELCO	CATEGORY-2
123	MONITOR /DISPLAY- LCD / LED / PLASMA	LG / PANASONIC / SAMSUNG / SONY	CATEGORY-2
124	COMPUTER /LAPTOP (FOR IBMS/BMS/SCADA)	HP / DELL / LENOVO / IBM	CATEGORY-4
125	COMPUTER ACCESSORIES (KEY BOARD/MOUSE)	HP / DELL / LENOVO / IBM	CATEGORY-4
J.	SOLAR PLANT & ACCESSORIES		
126	SOLAR INVERTER/ POWER CONDITIONING UNIT	SELEC / HAVELLS/ POWER ONE	CATEGORY-2
127	SOLAR MODULES	SWELECT / HAVELLS/ JAKSON	CATEGORY-2
128	DC CABLES	GEMSCAB / APAR / RR KABEL / SPECIAL CABLES / JMW KABEL / POLYCAB / HAVELLS / RALLISON (LKB) / KEC / HPL / GLOSTER / KEI / BONTON	CATEGORY-2
K.	MISCELLANEOUS & OTHER MECHANICAL ITEMS		
129	HAND DRIER	TECHNOCRATS / EURONICS / DOLPHY / ANAND AUTOMATIC SYSTEM	CATEGORY-3
130	DOUBLE WALL CORRUGATED HDPE PIPE/PLAIN HDPE PIPE	VPL / GANGOTRI / ASTRAL / CPE / BEC PLAST / KESHAV KRIPA / VALENS / TIRUPATI / PLASTOMATIC / GEMINI / HIMALYAN / MANGALAM	CATEGORY-3
131	AUTOMATIC SLIDING DOOR	HOUSYS / GEZE / NEPTUNE / S. ADITYA / DORMAKABA / TECHNOCRATS / AUTOINGRESS	CATEGORY-3
132	ELEVATOR	ORBIS / SCHINDLER / FUJITEC / INFRA / TRIO ELEVATOR / OMEGA ELEVATOR / ESCON / JOHNSON LIFTS / ECE / KONE / TKE / OTIS	CATEGORY-I

133	ESCALATOR/TRAVELATOR	ORBIS / SCHINDLER / TRIO ELEVATOR / OMEGA ELEVATOR / JOHNSON LIFTS / KONE TKE / OTIS	CATEGORY-I
134	BOLLARD	HOUSYS / AVIANS / SWARAJ / S. ADITYA / TECHNOCRATS / EURONICS / NEPTUNE BROSIS / FAAC	CATEGORY-3
135	BOOM BARRIER	HOUSYS / AVIANS / SWARAJ / S. ADITYA / DORMAKABA / TECHNOCRATS / BROSIS NEPTUNE / AUTOINGRESS / FAAC / SPEEDGATZ	CATEGORY-3
136	TROLLEY GATE	AVIANS / SWARAJ / S. ADITYA / TECHNOCRATS / DELITE / AUTOINGRESS / LOTUS	CATEGORY-3
137	TYRE KILLER/SPIKE BARRIER	HOUSYS / SWARAJ / S. ADITYA / TECHNOCRATS / NEPTUNE / BROSIS / FAAC / SPEEDGATZ	CATEGORY-3
138	UNDER VEHICLE SCANNING SYSTEM	HOUSYS	CATEGORY-3
139	EXTERNAL LIGHTING POLES/ DECORATIVE LIGHT POLE	SUBHAM / AMBIKA POLES / LYSAGHTPOLE™ / VAKRANGEE / VSTP / UTKARSH / RMSCO (RAJASTHAN METAL) / SKIPPER / BP PROJECTS / K-LITE / TRANSRAIL / PRAKASH SURYA (SURYA ROSHNI) / SUMIP / SIGNIFY / BAJAJ / WIPRO / CROMPTON / ORIENT ELECTRIC	CATEGORY-3
140	HIGH MAST	SUBHAM / AMBIKA POLES / VAKRANGEE / VSTP / LYSAGHTPOLE™ / UTKARSH / SKIPPER / BP PROJECTS / K-LITE / PRAKASH SURYA (SURYA ROSHNI) / TRANSRAIL / SIGNIFY / BAJAJ / WIPRO / ORIENT ELECTRIC / CROMPTON	CATEGORY-3
141	ALUMINIUM LADDERS / HYDRAULIC LADDERS	DELITE	CATEGORY-2
142	BOOM /SCISSOR/SPIDERJVERTICAL LIFT	MLIFT	CATEGORY-2
143	DASH FASTENERS	HILTI / FISCHER	CATEGORY-4
144	GEAR BOX	MGM VARVEL / iMAK	CATEGORY-3
145	GEARED MOTOR	LHP / LENZE / ROTOMOTIVE / MGM VARVEL / iMAK	CATEGORY-3
146	WEATHERPROOF JUNCTIONBOX	TRINITY TOUCH / SPELSBERG (CAPE) / RITTAL	CATEGORY-3
147	EV CHARGERS	P2 POWER / E-FUEL / AXONIFY TECH SYSTEMS PRIVATE LIMITED	CATEGORY-I
L.	GROUND LIGHTING ITEMS		
148	PAPI (NON-LED)	AMA/ VARDHMAN FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE REQUIREMENT OF ICAO/DGCA-CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I

149	LAMP (HALOGEN)	YOUYANG/ PHILIPS / OSRAM / NARVA / AS RECOMMENDED BY OEM	CATEGORY-3
150 (a)	AGL FITTING (LED)-ELEVATE	VARDHMAN / AMA FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE REQUIREMENT OF ICAO/DGCA- CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I
150 (b)	AGL FITTING (LED) INSET	FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE REQUIREMENT OF ICAO/DGCA- CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I
151 (a)	AGL FITTING (NONLED)- ELEVATED	VARDHMAN /AMA FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE EQUIREMENT OF ICAO/DGCA- CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I
151 (b)	AGL FITTING (NONLED)- INSET	FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE REQUIREMENT OF ICAO/DGCA- CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I
152	ALCMS / ILCMS	VARDHMAN FAA CERTIFIED / FAA COMPLIANCE (FOR INDEGENOUS MANUFACTURER) SUBJECT TO FULFILLING THE REQUIREMENT OF ICAO/DGCA- CAR AND APPROVAL AS PER SR NO.-3, PARA NO.-3 OF TC 03/2025	CATEGORY-I
153	ISOLATING TRANSFORMER	TRIO / CTC (CREATIVE TRADING) / VARDHMAN / AMA / BILDAL / ELECTROMACH / YOUYANG	CATEGORY-I
154	CONSTANT CURRENT REGULATOR (CCR)	VARDHMAN / AMA / HONEYWELL / YOUYANG / NASU SYSTEM	CATEGORY-I
155	5 KV GRADE AFL CABLE UNSHIELDED / SHIELDED	GEMSCAB / APAR / RR KABEL / ALOKE (ANKUR) / RALLISON (LKB) / JRD / KEI / GLOSTER	CATEGORY-I
156	1.1 KV GRADE SECONDARY LEAD FOR AFL CABLE	GEMSCAB / APAR / RR KABEL / AMA / ELECTROMACH / ALOKE (ANKUR) / RALLISON (LKB) / JRD	CATEGORY-2
157	PLUGS / RECEPTACLE / CONNECTOR	CTC (CREATIVE TRADING) / ELECTROMACH / ALOKE (ANKUR) / VARDHMAN / NEPTUNE / AMA / BILDAL / YOUYANG	CATEGORY-2

Note: This is mere enlistment as preferred make and is subject to the compliance of Technical Specification mentioned in tender.

CATEGORY REQUIREMENT OF TEST CERTIFICATE / INSPECTION

CATEGORY-I :

- a) Type test certificate for similar item done. If not one of the items offered is to be type tested.
- b) OEMs routine test certificate.
- c) Acceptance test to be conducted in the presence of AAI representative at OEMs factory.

CATEGORY-2 :

- a) Type test for similar done. If not, one of the items offered is to be type tested.
- b) OEMs routine test certificate.
- c) Visual and functional check by PMC / Engineering Consultant representative (AAI official in case of non-availability of PMC/ Engineering Consultant) at AAI airport site.

CATEGORY-3:

- a) OEM/ Dealer/ Contractor routine test certificate.
- b) Visual and functional check by PMC / Engineering Consultant representative (AAI official in case of non-availability of PMC/ Engineering Consultant) at AAI airport site.

CATEGORY-4:

- a) Visual and functional check by PMC / Engineering Consultant representative (AAI official in case of non-availability of PMC/ Engineering Consultant) at AAI airport site.

SCHEDULE OF QUANTITIES (SOQ)

Name of Work: Construction of MSSR RCC Antenna Tower at Katihar, Radar station. SH:-Provision of Passenger Elevator in Katihar MSSR Station including AICMC for 5 Years (after 2 years DLP).

Sl. No.	Description of Items	Unit	Qty
	Part A- Provision of Lift		
1	Supply, installation, testing & commissioning of Machine Room Less electric traction type Lifts at least 8 passengers, 544 KG Capacity, 5 Stops, 5 openings (G+4) and entrance at front side on all the serving floors, duplex mode operations, automatic centre opening stainless steel door, car enclosure provided with Stainless Steel Hairline finish panel on sides and with travel height of 25 mtrs (approx). The traction motor of machine room less Lift shall be of gearless type and placed inside the Lift hoist way suitable for operation on 415 V, 3 phase, 50 Hz AC supply, having AC Variable Voltage and Variable Frequency type traction control, minimum speed of 1.0 Mtr/sec, electromagnetic brake system, operating panel with luminous buttons, overload warning indicator, battery operated alarm bell, LED type emergency light, intercom suitable for hook up to AAI's EPABX, provision of installation of CCTV etc, infrared ray sensing door protection for full height, reverse phase relay on controller, fireman's switch at ground floor, digital car positions indicator in car and at all positions indicator in car and at all floors with UP/DOWN direction, light fixtures, ventilation fan, etc complete with all accessories including Automatic Rescue Device (ARD) and Manual Rescue Devie (MRD) in the event of power failure, with two years of Defect Liability Period(DLP) etc complete as required.	Job	1.00
	Part B- AICMC of Lift		
2	Annual Comprehensive Maintenance Contract for complete 8 passanger capacity machine room less traction type passenger elevators including all electrical/mechanical equipment, safety control installed under this contract above item no. 1 i/c carrying out monthly servicing and complete maintenance of all components as per OEM standards by providing trained service engineer with all tools and plant i/c attending all breakdown repairs complete as per instructions of Engineer-in-Charge as required.		
2.1	Year - 1 (6.38 % of SITC cost i.e. total of Sl. No:01)	Job	1.00
2.2	Year - 2 (5.00 % cumulative enhancement on Year - 1 AICMC cost)	Job	1.00
2.3	Year - 3 (5.50 % cumulative enhancement on Year - 2 AICMC cost)	Job	1.00
2.4	Year - 4 (6.00 % cumulative enhancement on Year - 3 AICMC cost)	Job	1.00
2.5	Year - 5 (6.00 % cumulative enhancement on Year - 4 AICMC cost)	Job	1.00