

Plot No. 19, Sector 16A, Noida - 201301, U.P.

Phone: 0120 -2419000, 2419200

Fax: 0120-2488310

E-mail: corp_c&p@oilindia.in
Web Site: www.oil-india.com

OIL INDIA LIMITED (OIL) invites **Domestic Competitive Bids (LCB)** from competent experienced Service Providers through its E- procurement portal

"https://etender.srm.oilindia.in/irj/portal" for the following works / services:

Tender No.	CLI7392P22 Dated 16.07.2021					
GeM Availability Report ID:	GEM/GARPTS/16072021/SUE0TME7GNP1					
Description of Work / Service	INTERIOR DECORATION, FURNISHING, ELECTRICAL APPLIANCES, AND HORTICULTURE WORK FOR REDEVELOPMENT OF OIL'S PROPERTY AT M-125, GREATER KAILASH-II, NEW DELHI.					
Type of Bid	Single Stage Two Bid System					
Bid Submission Mode	Bid should be uploaded in OIL's e-Procurement portal.					
Bid Closing Date & Time	24.08.2021 (14:00 HRS : Server Time)					
Technical Bid Opening Date & Time	24.08.2021 (15:00 HRS : Server Time)					
Priced Bid Opening Date & Time	Will be intimated to the eligible bidder(s) nearer time.					
Bid Opening Place	Office of the General Manager (C&P), Oil India Limited, Plot No. 19, Sector-16A, Noida-201 301, Uttar Pradesh					
Bid Validity	Minimum 120 days from the original date of Technical bi opening					
Bid Security (EMD)	NIL. However, bidders to submit a "Bid Security Declaration" accepting that if they withdraw or modify their Bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the NIT, they will be suspended for the period of two years. This suspension of two year shall be automatic without conducting any enquiry.					
Bid Security Validity	Minimum 150 days from the original date of Technical bid opening					
Amount of Performance Security	3% of contract value excluding GST					

- **2.1** For participation, applicants already having User ID & Password for OIL's E-procurement portal need to register against the IFB in OIL's E-procurement portal for participation.
- **2.2** Bidders without having E-tender Login ID and Password should complete their online registration at least **seven (7) days** prior to the scheduled bid closing date and time of the tender. For online registration, Bidder may visit the OIL's E-tender site https://etender.srm.oilindia.in/irj/portal. Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.
- **2.3** No physical Bid documents will be provided.
- **3.0** The link to OIL's E-Procurement portal has been also provided through OIL's web site (www.oil-india.com).

E-TENDER NO. CLI7392P22

- **4.0** The details of IFB / Bid Documents can be viewed using "Guest Login" provided in the E-Procurement portal.
- **5.0** To participate in OIL's e-procurement tender, bidders should have a legally valid **Digital Certificate Class III [Organization] along with Encryption Certificate** as per Indian IT Act from the licensed Certifying Authorities (CA) operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. Digital Signature Certificates having "**Organization Name**" field other than **Bidder's Name** are not acceptable. Bidders are advised to go through "<u>User Manuals</u>" provided in OIL's E-Tender portal for bid submission procedure.

Digital Signature Certificates issued by the following Certifying Authorities (CA) are currently configured in OIL's E-Tender portal:

- ✓ e Mudhra
- ✓ Safescrypt
- ✓ (n)Code Solutions
- ✓ Verasys
- ✓ Capricorn
- ✓ Pantasign
- ✓ RISL
- ✓ NSDL

DATE: 16.07.2021

In case, bidder is using Class 3 DSC (Organization) along with Encryption Certificate issued by a Certifying Authority other than those mentioned above then, the bidder has to inform OIL at least 15 days before the Bid Closing date to enable OIL to verify credibility of the same for necessary mapping in OIL's E-Tender portal.

6.0 In accordance with OM No. 6/9/2020-PPD dated 24.08.2020 issued by Department of Expenditure (Procurement Policy Division), Ministry of Finance, it shall be mandatory for sellers providing Goods and Services to Central Government Organizations to be registered in GeM and obtain a unique GeM Seller ID, at the time of placement of order/acceptance of contract. Accordingly, bidders are required to provide their GeM Seller ID in their bid, if available at the time of tendering. However, in case any bidder does not have GeM Seller ID at the time of tendering then, such bidder will be required to provide their GeM Seller ID in case considered for award of contract before issuance of LOA.

(Ujjwal Jyoti Gogoi) Chief Manager (Materials) For General Manager (C&P)

For Chairman & Managing Director

E-TENDER NO. CLI7392P22

INDEX

S1. No.	Subject	Sections	Page Nos.		
(a)	Forwarding letter	Section – I	Page 1-5		
(b)	Instruction to Bidders	Section – II	Page 6-13		
(c)	Bid Evaluation Criteria/Bid Rejection Criteria	Section – III	Page 14-17		
(d)	General Conditions of Contract	Section – IV	Page 18-36		
(e)	Scope of Work and Special Conditions of Contract	Section – V Page 37-4			
(f)	Integrity Pact	Section – VI	Page 44-47		
(g)	Commercial Check list	Section – VII	Page 48-52		
(h)	General Health, Safety & Environment (HSE) Measures	Section – VIII	Page 53		
(i)	Bidding Format (Price Bid)	Section – IX	Page 54-56		
(j)	Confidentiality and Non-Disclosure Agreement	Annexure – I	Page 57-88		
(k)	Undertaking for Authenticity of Information	Annexure – II	Page 89		
(1)	Bid Form	Proforma – I	Page 90-91		
(m)	Format of Undertaking by bidders for declaring percentage of Local Content	Proforma – II	Page 92		
(n)	Certificate of Annual Turnover & Net Worth	Proforma – III	Page 93		
(o)	Proforma for affidavit / undertaking in terms of Note-II under Clause 1.2 of BEC/BRC	Proforma – IV	Page 94		
(p)	Statement of Non-Compliance	Proforma – V	Page 95		
(q)	Proforma Letter of Authorisation for attending bid opening	Proforma – VI	Page 96		
(r)	Proforma Letter of Authority	Proforma – VII	Page 97		
(s)	Proforma for E-remittance details	Proforma – VIII	Page 98		
(t)	Form of Declaration for Bid Security	Proforma – IX	Page 99		
(u)	Form of Performance Bank Guarantee	Proforma – X	Page 100		
(v)	Sample form of Agreement	Proforma – XI			

FORWARDING LETTER

OIL INDIA LIMITED invites Domestic Competitive Bids (LCB) from experienced / approved Contractors / Firms for the following mentioned work / service under **SINGLE STAGE TWO BID SYSTEM** through its e-Procurement site:

DESCRIPTION OF WORK/ SERVICE:

INTERIOR DECORATION, FURNISHING, ELECTRICAL APPLIANCES, AND HORTICULTURE WORK FOR REDEVELOPMENT OF OIL'S PROPERTY AT M-125, GREATER KAILASH -II, NEW DELHI.

CONTRACT PERIOD: Five months (20 weeks).

BID SECURITY:

NIL. However, bidders to submit a "Bid Security Declaration" accepting that if they withdraw or modify their Bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the NIT, they will be suspended for the period of two years. This suspension of two year shall be automatic without conducting any enquiry.

BID CLOSING DATE & TIME: 24.08.2021 (14:00 HRS : Server Time)

TECHNICAL BID OPENING DATE & TIME: 24.08.2021 (15:00 HRS: Server Time)

٥)	Bid	Security	deposited	Tride	On-line	Dayment	1	Rank	Guaran	too /	Rank	Draft	1
αj	Dia	Decuirey	acpositea	viac	On mic	Tayment	7	Dann	duaran	100 /	Dann	Drait	7
В	anker's C	Sheque											

TA T	1 , 1		
$\mathbf{M}_{\mathbf{A}}$	dated	O†	
110.	dated	01	

Original hard copy of (a) (In case of Bidder(s) submitting Bid Security in the form of Bank Guarantee / Bank Draft / Banker's Cheque) should reach the office of General Manager (C&P), Oil India Limited, Plot No. 19, Sector-16A, Noida-201-301, Uttar Pradesh on or before bid closing date & time, otherwise Bid will be rejected. A seanned copy of Bid Security document / EMD Invoice (in case of Bid Security deposited on-line) may also be uploaded along with the Un-priced Techno-Commercial Bid documents.

- b) Bidders to confirm that in the event of the award of Contract will submit Performance Security Deposit <u>@</u> 3% of contract value excluding GST and this will not earn any interest.
- 2.0 SEALED ENVELOPES containing the **Bid Security Deposit**, **Power of Attorney**, **Printed catalogue and Literature**, if called for in the tender shall be marked with the above Tender Number and description of work and addressed to:

GENERAL MANAGER (C&P), OIL INDIA LIMITED, PLOT NO. 19, SECTOR-16A, NOIDA-201 301 UTTAR PRADESH

All bidders (except those exempted) shall deposit the requisite BID SECURITY DEPOSIT in the form of On-line Payment / Bank Guarantee (as per format provided and valid for minimum 150 days from the original date of opening of Technical Bid) / Bank Draft / Banker's Cheque from any Scheduled Indian Bank in favour of M/s Oil India Limited and payable at NOIDA / DELHI. This Bid Security Deposit shall be refunded to all unsuccessful bidders, but is liable to be forfeited in full or part, at Company's discretion, as per Clause No. 6.0 below. Bids without Bid Security Deposit in the manner specified above will be summarily rejected.

- 3.0 Bid should be submitted online up to 02:00 PM (IST) (Server Time) on the date as mentioned and will be opened on the same day at 03:00 PM (IST) at Office of the CGM (C&P) in presence of authorized representative of the bidder.
- 4.0 The rates shall be quoted per unit as specified in the "BIDDING FORMAT" attached under "Notes and Attachments" tab of the e-tender portal.

The bid and all uploaded documents must be Digitally signed using **Digital Certificate Class III [Organization] along with Encryption Certificate** as per Indian IT Act from the licensed Certifying Authorities (CA) operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

Digital Signature Certificates having "Organization Name" field other than Bidder's Name are not acceptable.

The authenticity of above digital signature may be verified through authorized CA (Certifying Authority) after bid opening. If the digital signature used for signing is not of Class III [Organization] along with Encryption Certificate, the bid will be rejected.

Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employee.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidding company.

- 5.0 The Company reserves the right to reject any or all the tenders or accept any tender without assigning any reason.
- 6.0 (a) No Bidder can withdraw his bid within the validity or extended validity of the bid. Withdrawal of any bid within validity period will lead to action against the erring / defaulting agency as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com.
- (b) Once a bid is withdrawn, the offer will be treated as withdrawn and no further claim / correspondence will be entertained in this regard.
- 7.0 The Bid must be valid for 120 (One Hundred Twenty) days from the original date of Technical bid opening.
- 8.0 Conditional bids are liable to be rejected at the discretion of the Company.
- 9.0 The work may be split up, if applicable, amongst more than one contractor at the sole discretion of the Company.
- 10.0 The selected bidder will be required to enter into a formal contract, which will be based on their bid and O.I.L's Standard Form of Contract.
- 11.0 Time will be regarded as the essence of the Contract and the failure on the part of the Contractor to complete the work within the stipulated time shall entitle the Company to recover liquidate damages and / or penalty from the Contractor as per terms of the tender /contract.
- 12.0 The contractor will be required to allow OIL officials to inspect the work site and documents in respect of the workers payment.

- 13.0 **BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, Bid Security will be forfeited and the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.
- 14.0 **BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the Bid Security shall be forfeited and the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

15.0 PROVISION FOR ACTION IN CASE OF ERRING / DEFAULTING AGENCIES:

Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com

16.0 The tender will be governed by:

Forwarding Letter: SECTION-I

Instruction to Bidders: SECTION - II

Bid Evaluation Criteria (BEC) / Bid Rejection Criteria (BRC): SECTION - III

General Conditions of Contract: SECTION-IV

Scope of Work and Special Conditions of Contract: SECTION-V

Integrity Pact: SECTION-VI

Commercial Check list: SECTION - VII

General Health, Safety & Environment (HSE) Measures: SECTION - VIII

Bidding Format: SECTION - IX (Attached under "Notes and Attachments" tab in

the main bidding engine of OIL's e-Tender portal)

Annexures & Proformas

SPECIAL NOTE:

Please note that all tender forms and supporting documents are to be submitted through OIL's E-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender No. and due date to The General Manager (C&P), Oil India Limited, Plot No. 19, Sector-16A, Noida-201 301, Uttar Pradesh:

- a) ORIGINAL BID SECURITY (Only in case of Bidder(s) submitting Bid Security in the form of Bank Guarantee/Bank Draft/Bankers' cheque)
- A scanned copy of Bid Security may also be uploaded along with the Unpriced Techno-Commercial Bid documents.
- b) <u>Power of attorney or authorization, or any other document consisting of</u> adequate proof of the ability of the signatory to bind the bidder, in original

A notarized true copy of the "Power of Attorney" shall also be accepted in lieu of the original, if the power of attorney is a general "Power of Attorney". However, photocopy of such notarized true copy shall not be accepted.

Bidder should ensure to submit original documents in accordance with the bidding documents.

c) ANY OTHER DOCUMENT REQUIRED TO BE SUBMITTED IN ORIGINAL AS PER TENDER REQUIREMENT.

Scanned copy(s) of the same should also be uploaded along with the Unpriced Techno-Commercial Bid documents.

The above documents including the Original Bid Security (in case of bidders submitting Bid Security in the form of Bank Guarantee /Bank Draft / Bankers' eheque) must be received at OIL's GM (C&P)'s office at Noida on or before the bid closing date & time failing which the bid may be rejected.

Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications. Offers sent without the requisite value of prescribed bid security (if called for in the bid) in original will be ignored straightway.

17.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidder has to submit both the "Un-Priced Techno-Commercial" and "Priced" bid through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The Technical Bid is to be submitted as per Scope of Work & Technical Specification of the tender. The Price Bid shall be quoted as specified in the "BIDDING FORMAT" attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal. The price quoted in the "PRICE BIDDING FORMAT" will only be considered for evaluation.

18.0 In Technical Bid opening, only Un-Priced Techno-Commercial Bid will be opened. Therefore, the bidder should ensure that Technical bid is uploaded under "Technical Attachments" of "RFx Information" Tab Page only. No price should be given along with Un-Priced Techno-Commercial Bid; otherwise the offer will be rejected. Please go through the help document provided in OIL's e-Portal, in detail before uploading the document.

<u>NB</u>: All the Bids must be Digitally Signed using Digital Certificate Class III [Organization] along with Encryption Certificate as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

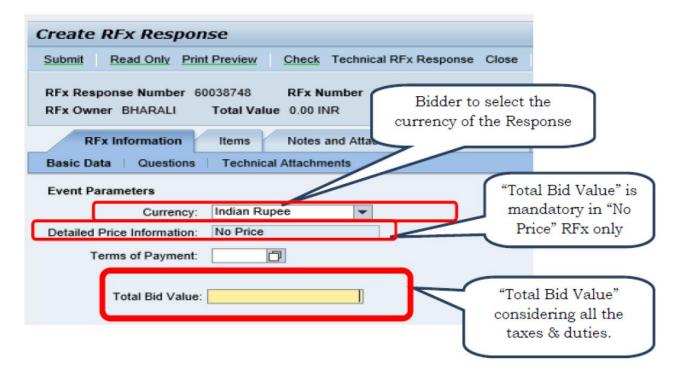
19.0 The Integrity Pact is applicable against this tender:

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide "Section-VI- Integrity Pact" of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.

(<u>Note</u>: Shri Rudhra Gangadharan, IAS (Retd.), Ex-Secretary, Ministry of Agriculture, E-Mail ID: rudhra.gangadharan@gmail.com, Shri Sutanu Behuria, IAS (Retd.), E-Mail ID: sutanu2911@gmail.com and Shri Om Prakash Singh, IPS (Retd.), Former DGP, Uttar Pradesh, E-mail: Ops2020@rediffmail.com have been appointed as Independent External Monitors).

- (a) In case of a joint venture, if applicable and allowed as per tender terms, all the partners of the joint venture should sign the Integrity Pact;
- (b) In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organisation may take further action as per the terms and conditions of the contract.
- 20.0 In order to participate against OIL's E-Tenders, Bidders are advised in their own interest to kindly go through the "<u>User Manuals</u>" available in the main login page of OIL's E-Tender portal.

21.0 Maintenance of Total bid value in the Response: For convenience of the qualified Bidders and to improve transparency, the rates/costs quoted by bidders against OIL's etenders shall be available for online viewing by such Bidders whose price bids are opened by Company. A Bidder can view item-wise rates/costs of all other such peer bidders against the tender immediately after price bid opening, if the e-tender is floated by Company with PRICE CONDITION. In case the Price-Bid is invited by Company through attachment form under "Notes & Attachment" (i.e. NO PRICE Condition), Bidders must upload their detailed Price-Bid as per the prescribed format under "Notes & Attachment", in addition to filling up the "Total Bid Value" Tab taking into account the cost of all individual line items and other applicable charges like freight, tax, duties, levies etc. Under NO PRICE Conditions (i.e., Price Bid in attachment form), the "Total Bid Value" as calculated & quoted by the Bidder shall only be shared amongst the eligible bidders and Company will not assume any responsibility whatsoever towards calculation errors/omissions therein, if any. Notwithstanding to sharing the "Total Bid Value" or the same is whether filled up by the Bidder or not, Company will evaluate the cost details to ascertain the inter-se-ranking of bidders strictly as per the uploaded attachment and Bid Evaluation Criteria only. Online view of prices as above shall be available to the Bidders only upto seven days from the date of Price-Bid opening of the tender.



(END OF SECTION-I)

INSTRUCTION TO BIDDERS

1.0 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as 'Company', will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2.0 BIDDING DOCUMENTS:

- **2.1** The services required, bidding procedures and contract terms are prescribed in the Bidding Documents. This Bidding Document includes the following:
 - a) A forwarding letter (SECTION-I) highlighting the following points
 - (i) Company's IFB/ Tender No.
 - (ii) Description of Work / Service
 - (iii) Bid closing date and time
 - (iv) Bid opening date, time and place
 - (v) Bid submission place
 - (vi) The amount of Bid Security
 - (vii) The amount of Performance Guarantee
 - b) Instructions to Bidders: **SECTION-II**
 - c) Bid Evaluation Criteria (BEC) / Bid Rejection Criteria (BRC): **SECTION III**
 - d) General Conditions of Contract: SECTION-IV
 - e) Scope of Work and Special Conditions of Contract: SECTION-V
 - f) Integrity Pact: SECTION-VI
 - g) Commercial check list: **SECTION VII**
 - h) General Health, Safety & Environment (HSE) Measures: **SECTION VIII**
 - i) Bidding Format (Attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal): SECTION-IX
 - j) Annexures & Proformas
- **2.2** The bidder is expected to examine all instructions, forms, terms and specifications in the Bid document. Failure to furnish all information required in the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid.

3.0 TRANSFERABILITY OF BID DOCUMENTS:

- **3.1** Bid Documents are non-transferable. Bid can be submitted only in the name of the bidder in whose name the Bid Document has been issued.
- **3.2** Unsolicited offers will not be considered and will be rejected straightway.

4.0 AMENDMENT OF BIDDING DOCUMENTS:

- **4.1** At any time prior to the deadline for submission of bids, the company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by issuance of an Addendum.
- The Addendum will be sent in writing through post / courier / Fax / e-mail to all prospective Bidders to whom Company has sent the bid documents and also be uploaded in the OIL's e-portal in the "Technical RFx" area under the tab "External Area → Amendments". The company may, at its discretion, extend the deadline for bid submission for any reason. Bidders shall also check OIL's E-Tender portal ["Technical RFx" area under the tab "External Area → Amendments"] for any amendments to the bid documents before submission of their bids.

5.0 PREPARATION OF BIDS

5.1 LANGUAGE OF BIDS: The bid as well as all correspondence and documents relating to the bid exchanged between the Bidder and the Company shall be in English language, except that any printed literature may be in another language provided it is accompanied by an English translated version, which shall govern for the purpose of bid interpretation.

5.2 DOCUMENTS COMPRISING THE BID:

(A) UN-PRICED TECHNO-COMMERCIAL BID:

- (i) Bid Documents duly filled up as indicated.
- (ii) Complete technical details / specifications of the services offered as per tender requirement.
- (iii) Documentary evidence established in accordance with BEC / BRC.
- (iv) Statement of Non-Compliance (if any).
- (v) Bid Security Declaration (scanned copy). Hard copy of original Bid Security (Only in case of bidder(s) submitting bid security in the form of Bank Guarantee / Bank Draft / Banker's Cheque) should be sent separately to reach on or before the bid closing date & time failing which the bid shall be rejected.
- (vi) Any other document as per tender requirement (scanned copy). Hard copy(s) of the same, if called for in the tender, should be sent separately to reach <u>on or before the bid closing date & time failing</u> which the bid shall be rejected.
- (vii) Integrity Pact

Note: Please note that no price details should be uploaded along with the UN-PRICED TECHNO-COMMERCIAL BID

(B) PRICED BID:

Bidder shall quote their rates / prices in the "BIDDING FORMAT" attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal. The price quoted in the "BIDDING FORMAT" will only be considered for evaluation.

Offer should be inclusive of any Tax, Duty, etc., as applicable. The rates shall be fixed and firm for the entire tenure of the contract and shall be binding on both the parties. No changes in these rates shall be allowed under any circumstances during the tenure of this service agreement except as mentioned in the Bid Document.

6.0 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS:

6.1 These are listed in **BID EVALUATION CRITERIA (BEC) / BID REJECTION CRITERIA (BRC),** SECTION-III of the Bid document.

7.0 BID SECURITY:

- **7.1** The Bid Security is required to protect the Company against the risk of Bidder's conduct, which would warrant forfeiture of the Bid Security, pursuant to sub-clause 7.9.
- **7.2** All the bids (except those exempted) must be accompanied by Bid Security in Original for the amount as mentioned in the "Forwarding Letter" and shall be in the OIL's prescribed format as Bank Guarantee (BG) enclosed with the NIT vide Proforma-VII or a Bank Draft/Bankers' cheque in favour of OIL and payable at NOIDA / DELHI from any schedule Indian Bank.

Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-scheduled Bank of India shall not be acceptable.

- **7.3** Alternatively, Bidders can submit Bid Security on line through OIL's electronic Payment Gateway.
- **7.4** Any bid not secured in accordance with sub-clause 7.2 above shall be rejected by the Company as non-responsive.
- **7.5** The bidders shall extend the validity of the Bid Security suitably, if and when specifically advised by OIL, at the bidder's cost.
- **7.6** Unsuccessful Bidder's Bid Security will be discharged and/or returned within 30 days after finalization of IFB.
- **7.7** Successful Bidder's Bid Security will be discharged and/or returned upon Bidder's signing of the contract. Successful bidder will however ensure validity of the Bid Security till such time the formal Service Agreement in conformity with Clause 22.0 below is signed.
- **7.8** Bid Security shall not accrue any interest during its period of validity or extended validity.
- **7.9** The Bid Security may be forfeited:
 - i) If the bidder withdraws the bid within its original/extended validity.
 - ii) If the bidder modifies/revises their bid suo-moto.
 - iii) If the bidder does not accept the order/contract.
 - iv) If the bidder does not furnish Performance Security Deposit within the stipulated time as per tender/order/contract.
 - v) If it is established that the bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice, the bid security shall be forfeited after due process in addition to other action against the bidder.
- **7.10** In case any bidder withdraws their bid during the period of bid validity, Bid Security will be forfeited and the party shall be dealt with as per OIL's Banning Policy.
- **7.11** A scanned copy of the original Bid Security in the form of either Bank Guarantee or Banker's Cheque or Bank Draft may be uploaded by bidder along with the Technical bid in the "Technical Attachment" tab of OIL's E portal. The original Bid Security (In case of Bidder(s) submitting Bid Security in the form of Bank Guarantee / Bank Draft / Banker's Cheque) shall be submitted by bidder to the office of General Manager (C&P), Oil India Limited, Plot No. 19, Sector 16A, Noida 201 301, Uttar Pradesh **on or before Bid Closing date and time**.
- **7.12** A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.

8.0 PERIOD OF VALIDITY OF BIDS:

- **8.1** The Bid must be valid for 120 (One Hundred Twenty) days from original date of Technical bid opening. **Bids of shorter validity will be rejected as being non-responsive.** If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is valid for 120 days from original date of Technical bid opening.
- **8.2** In exceptional circumstances, OIL may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (or

by Fax / E-mail). A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will neither be required nor permitted to modify their bid.

9.0 FORMAT AND SIGNING OF BID:

9.1 The original and all copies of the bid shall be typed or written in indelible inks and shall be signed digitally by the Bidder to bind the Bidder to the contract.

10.0 SUBMISSION OF BIDS:

10.1 Bids are to be submitted online through OIL's E-procurement portal with digital signature. The bid and all attached documents should be digitally signed by the bidder using **Digital Certificate Class III [Organization] along with Encryption Certificate** as per Indian IT Act from the licensed Certifying Authorities (CA) operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India before bid is uploaded.

Digital Signature Certificates having "Organization Name" field other than Bidder's Name are not acceptable.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder to bind the Bidder to the contract. The authenticity of above digital signature shall be verified through authorized CA after bid opening and in case the digital signature is not of Class III [Organization] along with Encryption Certificate, the bid will be rejected.

Bidder is responsible for ensuring the validity of digital signature and it's proper usage by their employees.

- **10.2** Any person signing the Bid or any other document in respect of this Bid Document or other relevant documents on behalf of the Bidder without disclosing his authority to do so shall be deemed to have the authority to bind the Bidder. If it is discovered at any time that the person so signing has no authority to do so, the Company (OIL) may, without prejudice to any other right or remedy, cancel his Bid or Contract and hold the Bidder liable to the Company (OIL) for all costs and damages arising from the cancellation of the Bid or Contract including any loss which the Company (OIL) may sustain on account thereof.
- **10.3** Timely submission of the bids is the responsibility of the Bidder and Bids should be submitted before the bid closing date and time. Company shall not be responsible for any delay.
- **10.4** Physical Bid/ E-mail/ Fax /Telephonic offers will not be accepted.
- **10.5** Bidder shall submit the Bid, duly completed in terms of the Bid Document.
- **10.6** Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works to be executed under this contract.

11.0 DEADLINE FOR SUBMISSION OF BIDS:

- **11.1** Bids should be submitted on-line up to 02.00 PM (IST) (Server Time) on the Bid Closing date mentioned in the Forwarding Letter.
- **11.2** No bid can be submitted after the submission deadline is reached. The system time displayed on the e-procurement web page shall decide the submission deadline.

11.3 The documents in physical form must be received by Company at the address specified in the "Forwarding Letter" **on or before the bid closing date & time**. Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

12.0 LATE BIDS:

12.1 Bidders are advised in their own interest to ensure that their bids are uploaded in system before the closing date and time of the bid. No Bid can be submitted once the submission deadline displayed on the e-procurement page has been reached.

13.0 MODIFICATION AND WITHDRAWAL OF BIDS:

- **13.1** Bidders will be permitted by System to withdraw or make any changes in their bid after the bid has been uploaded by the bidder prior to the Bid Closing date and time as mentioned in the bid. However, it is the responsibility of the bidder to re- submit before the bid closing date and time. But no changes would be allowed by the system once the due date and time for submission of bids has been reached and bids are opened.
- **13.2** No bid can be modified / withdrawn subsequent to the deadline for submission of bids.
- **13.3** No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity. Withdrawal of any bid within validity period will lead to forfeiture of his / her / their Bid Security Deposit in full and debarred from participation in future tenders, at the sole discretion of the company.

14.0 EXTENSION OF BID SUBMISSION DATE:

14.1 Normally no request for extension of Bid Closing Date & Time will be entertained. However, OIL at its discretion, may extend the Bid Closing Date and / or Time due to any reasons.

15.0 BID OPENING AND EVALUATION:

15.1 The Un-priced Techno-Commercial (Technical) bid will be opened on scheduled Bid opening date & time in the presence of any attending Bidder(s) or their Authorized Representative, if any. However, an authorized letter (format given in Proforma Section) from the Bidder must be produced by Bidder's representative at the time of opening of Tender, without which such representative won't be allowed to attend the opening of Tenders. Only one representative against each Bid will be allowed to attend the bid opening. Attending Bidder(s) & Authorized Representative(s) will have to sign a register evidencing their presence.

In Technical bid opening date, only "Technical RFx" Tab Page will be allowed to be opened by the system. Bidders therefore should ensure that Un-priced Techno-Commercial bid is uploaded under "Technical Attachments" of "RFx Information" Tab Page only.

- **15.2** In case it happens to be a bundh / holiday, the tender will be opened on the next working day (except Saturday). Accordingly, Bid Closing Date / time will get extended up to the next working day and time (except Saturday).
- **15.3** Bids which have been withdrawn pursuant to Clause 13.1 will not be allowed to be opened by the system. OIL shall examine bids to determine whether they are complete, whether requisite Bid Securities have been furnished, whether documents have been properly signed and whether the bids are generally in order.
- **15.4** OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 15.3

- **15.5** To assist in the examination, evaluation and comparison of bids, normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid (i.e. document is deficient or missing), or due to some statement at other place of the Bid (i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL at its discretion. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.
- **15.6** Prior to the detailed evaluation, OIL will determine the substantial responsiveness of each bid to the requirement of the Bidding Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations or reservation. A material deviation or reservation is one which affects in any way substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the bidding documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. OIL's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.
- **15.7** A Bid determined as not substantially responsive will be rejected by the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- **15.8** The Company may waive minor informality or nonconformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver, does not prejudice or affect the relative ranking of any Bidder.

16.0 OPENING OF PRICED BIDS:

- **16.1** Company will open the Priced Bids of the techno-commercially qualified Bidders on a specific date in presence of representatives of the qualified bidders. The techno-commercially qualified Bidders will be intimated about the Priced Bid Opening Date & Time in advance. In case of any unscheduled holiday or Bandh on the Priced Bid Opening Date, the Bids will be opened on the next working day.
- **16.2** The Company will examine the Price quoted by Bidders to determine whether they are complete, any computational errors have been made, the documents have been properly signed, and the bids are generally in order.
- **16.3** Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price (that is obtained by multiplying the unit price and quantity) the unit price shall prevail and the total price shall be corrected accordingly. If there is a discrepancy between words, and figures, the amount in words will prevail. If any Bidder does not accept the correction of the errors, their Bid will be rejected.

17.0 EVALUATION AND COMPARISON OF BIDS:

- **17.1** OIL will evaluate and compare the bids as per Bid Evaluation Criteria (BEC) of the bidding documents.
- **17.2** DISCOUNTS / REBATES: Unconditional discounts / rebates, if any, given in the bid or along with the bid will be considered for evaluation.
- 17.3 Post bid or conditional discounts / rebates offered by any bidder shall not be considered for evaluation of bids. However, if the lowest bidder happens to be the final

acceptable bidder for award of contract, and if they have offered any discounts / rebates, the contract shall be awarded after taking into account such discounts / rebates.

17.4 Conditional bids are liable to be rejected at the discretion of the Company.

18.0 CONTACTING THE COMPANY:

- **18.1** No Bidder shall contact OIL on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded except as required by OIL vide sub-clause 15.5.
- **18.2** An effort by a Bidder to influence OIL in the bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

19.0 AWARD CRITERIA:

19.1 OIL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and as per the terms of the BEC/BRC, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

20.0 OIL'S RIGHT TO ACCEPT OR REJECT ANY BID:

20.1 OIL reserves the right to accept or reject any or all bids and to annul the bidding process and reject all bids, at any time prior to award of contract, without thereby incurring any liability to the affected bidder, or bidders or any obligation to inform the affected bidder of the grounds for OIL's action.

21.0 NOTIFICATION OF AWARD:

- **21.1** Prior to the expiry of the period of bid validity or extended validity, OIL will notify the successful Bidder in writing by registered letter or by cable or telex or fax or e-mail (to be confirmed in writing by registered / couriered letter) that its bid has been accepted.
- **21.2** The notification of award will constitute the formation of the Contract.

22.0 SIGNING OF CONTRACT:

- **22.1** The successful bidders(s) shall be notified by the Company of its intention to enter into an Agreement with him/her/them on the basis of his/her/their acceptance of the offer. Such notification shall be treated as a "Letter of Award (LOA)".
- **22.2** Within 2 Weeks from the date of issue of Letter of Award (LOA), the successful Bidder(s) will be required to pay an interest free Performance Security by way of Bank Guarantee (in specified format) favouring "OIL INDIA LIMITED" payable at "NOIDA / DELHI" from any Scheduled Indian Bank. Upon furnishing of the Performance Security, the successful Bidder(s) will be required to enter into a formal Service Agreement within 30 (thirty) days of issue of Letter of Award (LOA) based on the instant tender on the OIL Standard forms of agreement.
- **22.3** This Performance Security must be valid for 90 days beyond defect liability period of 01 (one) year from the date of completion of work certified by OIL. In the event of contract being extended within the provisions of the contract agreement, the contractor will have to extend suitably the validity of the "Security Deposit" for the extended period.
- **22.4** The Bank Guarantee towards Performance Security issued by the Bank must be routed through SFMS platform as per following details:
 - (i) MT 760 / MT 760 COV for issuance of Bank Guarantee
 - (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee.

The above message / intimation shall be sent through SFMS by the BG issuing Bank branch to HDFC Bank, E 13/29, 2nd Floor, Harsha Bhavan, Middle Circle, Connaught Place, New Delhi - 110001, IFS Code : HDFC0000003; BIC Code (Swift): HDFCINBB

The copy of the SFMS message as sent by the issuing bank branch shall be submitted along with the original bank guarantee.

- **22.5** The "Performance Security" will be refunded to the contractor not later than 30 days following its expiry, but part or whole of which shall be used by the Company in realisation of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason.
- **22.6** Failure of the successful bidders to comply with the conditions as specified in Para 22.2 above would render him liable for rejection and in turn forfeiture of Bid Security apart from any other actions the Company may take against him at its sole discretion. The party shall also be debarred for a period of 2(two) years or for a period as mentioned in OIL's Banning Policy dated 6th January, 2017 from the date of default.

23.0 PROVISION FOR ACTION IN CASE OF ERRING / DEFAULTING AGENCIES:

Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com

24.0 SPECIFICATIONS:

Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works/services to be executed under the contract.

25.0 Along with the Un-Priced Techno-Commercial bid, bidders must submit duly filled undertaking as per format provided vide **Annexure-II** as undertaking towards submission of authentic information/documents.

(END OF SECTION-II)

BID EVALUATION CRITERIA (BEC) / BID REJECTION CRITERIA (BRC)

The bid shall conform generally to the specifications and terms and conditions given in the Bid Documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Not-withstanding the general conformity of the bid to the stipulated specifications, the following mandatory requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. All the documents related to BEC/BRC must be submitted along with the Un-Priced Techno-Commercial Bid.

1.0 TECHNICAL CRITERIA:

1.1 <u>Technical Requirements</u>: The bidder should have experience of at least one SIMILAR WORK of minimum value **Rs. 94,49,000.00 (Rupees Ninety Four Lakh Forty Nine Thousand only)** in previous 7(seven) years reckoned from the original bid closing date

Notes to Clause 1.1 above:

- **A.** SIMILAR WORK means New works including all services such as Civil/Interior decoration, Plumbing & Sanitary work, Water-supply, Electrical & Land Scaping. Annual Maintenance contracts for civil / electrical works will not be considered for the purpose of consideration of SIMILAR WORK.
- **B.** For proof of work experience of SIMILAR WORK the bidder must submit copies of contract document or work order documents issued by Govt./ Semi-Govt./ PSU/ Private Organization showing details of work along with Completion Certificates or payment certificates along with the Bid.
- **C.** If the prospective bidder is executing SIMILAR WORK which is still running and the contract value / quantity executed prior to original bid closing date is equal to or more than the minimum prescribed value in the BEC/BRC, such experience will also be taken into consideration provided that the bidder has submitted satisfactory service execution certificate issued by end user.
- **D.** SIMILAR WORK executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC/BRC.

1.2 Financial Requirements:

- 1.2.1 Annual Financial Turnover of the bidder during any of preceding three financial / accounting years from the original bid closing date should be at least Rs. 56,70,000.00 (Rupees Fifty Six Lakh Seventy Thousand only)
- **1.2.2** Net worth of bidder must be positive for preceding financial/ accounting year.

Notes to Clause 1.2 above:

- I. For proof of Annual Turnover & Net worth, any one of the following documents/ photocopies must be submitted along with the bid:-
 - (i) Audited Balance Sheet along with Profit & Loss account.

OR

- (ii) A certificate issued by a practicing Chartered / Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **Proforma-III**.
- II. Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the

preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year _____ has actually not been audited so far' as per format prescribed in **Proforma-IV**.

III. In case the bidder is a Central Govt. organization / PSU /State Govt. organization / Semi-State Govt. Organization or any other Central / State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidences for the same.

2.0 COMMERCIAL CRITERIA:

- **2.1** The bids are to be submitted in **single stage under 2 (two) bid system** i.e. Unpriced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.
- **2.2** The price quoted by the successful bidder must be firm during the performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with adjustable price quotation other than the above will be treated as non-responsive and rejected.
- **2.3** Bid security declaration shall be furnished as a part of the Un-priced Techno-Commercial Bid.
- **2.4** Bid Documents / User Id & Password for OIL's E-Tender portal are not transferable. Bid made by parties who have not been allowed to participate against the tender will be rejected.
- **2.5** Any bid received in the form of Physical document/Fax/E-mail will not be accepted.
- **2.6** Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign the bid digitally, failing which the bid will be rejected.
- **2.7** The bid and all attached documents should be digitally signed by the bidder using **Digital Certificate Class III [Organization] along with Encryption Certificate** as per Indian IT Act from the licensed Certifying Authorities (CA) operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India before bid is uploaded. Digital Signature Certificates having "**Organization Name**" field other than **Bidder's Name** are not acceptable.
- **2.8** Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.
- **2.9** Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.
- **2.10** Bidders must quote clearly and strictly in accordance with the price schedule outlined in Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal; otherwise the bid will be rejected. All other techno-commercial documents to be submitted with Techno-Commercial Bid as per tender requirement in "**Technical Attachments**" area under "**RFx Information**" tab.

- **2.11** Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:
 - (i) Firm price
 - (ii) EMD / Bid Bond
 - (iii) Period of validity of Bid
 - (iv) Price Schedule
 - (v) Performance Bank Guarantee / Security deposit
 - (vi) Delivery / Completion Schedule
 - (vii) Scope of work
 - (viii) Guarantee of material / work
 - (ix) Liquidated Damages clause
 - (x) Tax liabilities
 - (xi) Arbitration / Resolution of Dispute Clause
 - (xii) Force Majeure
 - (xiii) Applicable Laws
 - (xiv) Specifications
 - (xv) Integrity Pact
 - (xvi) Any other condition specifically mentioned in the tender documents elsewhere that non-compliance of the clause lead to rejection of the bid.
- **2.12** There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.
- **2.13** The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide "Section-VI- Integrity Pact" of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the Unpriced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.
- **2.14** Bid received with validity of offer less than 120 (one hundred twenty) days from the original bid closing date will be rejected.

3.0 GENERAL:

- **3.1** In case bidder takes exception to any clause of bidding document not covered under BEC/BRC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw / modify the deviation when / as advised by company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BEC/BRC.
- **3.2** To ascertain the substantial responsiveness of the bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered under BEC/BRC also and such clarifications fulfilling the BEC/BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be will be evaluated based on the submission. However, mere submission of such clarification shall not make the offer responsive, unless company is satisfied with the substantial responsiveness of the offer.
- **3.3** If any of the clauses in the BRC contradict with other clauses of bidding document elsewhere, the clauses in the BRC shall prevail.
- **3.4** Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.

- **3.5** The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.
- **4.0** Bidders are required to quote for all the items as per Bidding Format, otherwise the offer of the bidder will be straightway rejected. Offer should be inclusive of any Tax, Duty, etc., as applicable.
- **5.0** If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- **6.0** The quantities shown against each item in the Bidding Format shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities of various items in the price bidding format are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual consumption.
- **7.0** Price Bids of only techno-commercially qualified bidders will be evaluated on overall lowest cost basis (L-1 offer) i.e. considering total quoted price for all items inclusive of all liabilities including statutory liabilities as per Bidding Format.
- **8.1** Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST.
- **8.2** When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/Contracts will be binding on the bidder.
- **9.0 Discount**: Bidders are advised not to indicate any separate discount. Discount if any, should be merged with the quoted price. Discount of any type indicated separately will not be taken into account of evaluation purposes. However, in the event such offer without considering discount is found to be successful, OIL shall avail such discount at the time of award of contract.
- **10.0** Based on the evaluation of techno-commercially qualified bidders whose bids have been found to be substantially responsive, the job will be awarded to the techno-commercially qualified L-1 bidder. A substantially responsive bid is one that meets the terms and conditions of the Tender and / or the acceptance of which bid will not result in indeterminate liability on OIL.
- **11.0** In case of identical overall lowest offered rate by more than 1 (one) technocommercially qualified bidder, OIL reserves the right to select the successful bidder by draw of lot between the parties offering the same overall lowest price.
- **12.0** Purchase Preferences allowed as per Government Guidelines in Vogue and PPP [Public Procurement policy] for Micro and Small Enterprises is not applicable for this tender (being works contract tender).

13.0 Purchase Preference Policy (Linked with Local Content) (PP-LC):

(a) Purchase Preference Policy- Linked with Local Content (PP-LC) as notified vide Letter No. FP-20013/2/2017-FP-PNG dated 17th November, 2020 of Ministry of Petroleum and Natural Gas (MoPNG) shall be applicable in this tender. Copy of the policy is enclosed.

- **(b)** Only Class-I local supplier and Class-II local supplier as defined under the above order / policy shall be eligible to bid against this tender. However, only Class-I local supplier shall be eligible to get purchase preference under the above policy against this tender.
- **(c)** In order to establish their status as Class-I local supplier or Class-II local supplier, it is mandatory for the bidders to give adequate documentation along with the technical bid as follows:
 - The bidder shall provide the percentage of local content through an undertaking in their letterhead as per format prescribed in **Proforma-II** from the authorised signatory of bidder having the power of Attorney along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- **(d)** The work to be carried out against this tender is non-divisible.
- (e) (i) In case participating Class-I local supplier quote price within price band of L1+20%, such Class-I local supplier shall be considered for award of contract subject to matching their price with natural L1 bidder in a situation where L1 price is from a Class-II local supplier as defined in the policy.
 - (ii) In case of more than one such Class-I local supplier are found to be within the price band of L1+20%, opportunity for price matching with natural L1 bidder shall be given on ascending order of inter-se ranking of price (L2, L3, ...) and the lowest eligible Class-I local supplier consenting to match their price with the natural L1 bidder shall be considered for award of contract in a situation where L1 price is from a Class-II local supplier as defined in the policy.

(END OF SECTION-III)

GENERAL CONDITIONS OF CONTRACT

1.0 DEFINITIONS:

Following terms and expressions shall have the meaning hereby assigned to them unless the context otherwise requires:

- 1.1 'Contract' means the terms and conditions contained in the document entitled "Interior decoration, furnishing, electrical appliances, and horticulture work for redevelopment of OIL's property at M-125, Greater Kailash–II, New Delhi" and the attached exhibits. In the event of any conflict between the text of the contract and the exhibits, the text of the Contract shall have precedence over the exhibits.
- 1.2 'Contractor' means the individual or firm or body incorporated performing the work under this contract.
- 1.3 'Company' means OIL INDIA LIMITED (OIL) and its executors, successors, administrators and assignees.
- 1.4 The 'Work' means each and every activity required for the successful performance of the services described under this contract.
- 1.5 Here 'Operating Area' means Operational Area under OIL's Corporate Office, Noida.
- 1.6 'Services' means the work specified and all other obligations to be complied with by Contractor pursuant to and in accordance with the terms of this contract.
- 1.7 'Site' means the land and other places, on, under, in or through which the works are to be executed by the Contractor and any other land and places provided by the Company for working space or any other purpose as designated hereinafter as forming part of the Site.
- 1.8 'Contract Price' means the price payable to the Contractor under the contract for the full and proper performance of its contractual obligations.
- 1.9 'Contractor's personnel' means the personnel as required to be provided by Contractor from time to time for execution of this contract.
- 1.10 'Company Representative' means the person or persons appointed and approved in writing from time to time by the Company to act on its behalf for overall coordination.
- 2.0 EFFECTIVE DATE, DATE OF COMMENCEMENT OF THE CONTRACT, MOBILISATION TIME, DATE OF COMMENCEMENT OF THE WORK AND DURATION OF CONTRACT:
- 2.1 **Effective Date, Date of Commencement of the Contract:** The contract shall become effective as of the date Company notifies Contractor in writing (through Letter of Award) that it has been awarded the contract. Such date of notification of award of Contract will be the Effective Date of Contract as well as the Date of Commencement of the Contract.
- 2.2 **Mobilisation Time, Date of Commencement of the Work:** Contractor must mobilise his men, materials, equipment and be ready to commence work within 01 (one) week from date of issue of Work Order / notification to commence work by OIL, which shall be considered as the Mobilisation Time. The date on which the mobilisation is complete and the contractor is ready to commence work or 01 (one) week from date of issue of Work Order / notification to commence work by OIL, whichever is earlier, shall be the Date of Commencement of the Work.
- 2.2 **Duration of Contract**: Duration of this Contract will be for a period of Five months (20 weeks) from the Date of Commencement of Work.

3.0 CONTRACTOR'S PERSONNEL:

- 3.1 Contractor's Personnel Contractor warrants that it shall provide all manpower for the necessary operations, supervision and execution of all works under this Contract to Company's satisfaction. The personnel to be deployed by the Contractor must be competent and sufficiently experienced to perform the works correctly and efficiently except where otherwise stated.
- 3.2 Except as otherwise hereinafter provided, the selection, replacement and remuneration of Contractor's personnel shall be determined by Contractor. Such employees shall be the employees solely of Contractor. Contractor shall ensure that its personnel will be competent and efficient.
- 3.3 Replacement of Contractor's Personnel- Contractor will immediately remove and replace any of the Contractor's personnel, who in the opinion of Company, is incompetent, or negligent or of unacceptable behaviour or whose employment is otherwise considered by Company to be undesirable.

4.0 GENERAL OBLIGATIONS OF CONTRACTOR:

- 4.1 It is expressly understood that Contractor is an independent entity and that neither it nor its employees and its sub-contractors, if any are employees or agents of Company. Company is authorised to designate its representative, who shall at all time have access to the related equipment and all records, for the purposes of observing, inspecting and designating the work to be performed hereunder by Contractor. The Contractor may treat Company's representative for the time being at site as being in-charge of all Company's and Company designated personnel at site. The Company's representative may, amongst other duties, observe, test, check the work performed by Contractor.
- 4.2 Compliance with Company's Instructions: Contractor shall comply with all instructions of Company consistent with the provision of this Contract and perform the works described in the Terms of reference/Scope of Work.
- 4.3 Contractor shall perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for successful and timely execution of the work.
- 4.4 Contractor shall be deemed to have satisfied itself before submitting its bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except insofar as otherwise provided herein, cover all its obligations under the contract.
- 4.5 Contractor shall give or provide all necessary supervision during the performance of the services and as long thereafter as Company may consider necessary for the proper fulfilling of contractor's obligations under the contract.

5.0 GENERAL OBLIGATIONS OF COMPANY:

- 5.1 Company shall, in accordance with and subject to the terms and conditions of the Contract, pay Contractor for its full and proper performance of obligations as per provision of this contract.
- 5.2 Allow Contractor and its employees to access, subject to normal security and safety procedures, to all areas of Company as required for orderly performance of the work.

6.0 PAYMENT TERMS:

6.1 No advance payment will be made against this contract.

- 6.2 Payment will be made on monthly basis within 30 days from the date receipt of the undisputed bills of the Contractor. Payments shall also be subject to TDS and other deductions, if any.
- 6.3 Request for payment/part payment to third party i.e. other than the party on whom the contract has been awarded will not be entertained by OIL under any circumstances. The offers stipulating payment/part payment to such third party will be considered as non-responsive and such offers will be rejected.
- 6.4 All payments due by Company to Contractor shall be made at Contractor's designated bank. All bank charges will be to Contractor's account.
- 6.5 Payment of any invoices shall not prejudice the right of company to question the validity of any charges therein, provided company within one year after the date of payment shall make and deliver to contractor written notice of objection to any item or items the validity of which Company questions.

7.0 TAXES AND DUTIES:

- 7.1 Tax levied on Contractor as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on Contractor's account.
- 7.2 Contractor shall be responsible for payment of personal taxes, if any, for all the personnel deployed in India by Contractor.
- 7.3 The Contractor shall furnish to the Company, if and when called upon to do so, relevant statement of accounts or any other information pertaining to work done under the contract for submitting the same to the Tax authorities, on specific request from them in accordance with provisions under the law. Other than the information provided by the Contractor, the Contractor shall not be responsible for any inaccurate information provided by the Company to the Tax authorities and the Company shall indemnify the Contractor for all claims, expenses, costs or losses of any nature arising from such inaccuracy. Contractor shall be responsible for preparing and filing the return of income etc. within the prescribed time limit to the appropriate authority.
- 7.4 Prior to start of operations under the contract, the Contractor shall furnish the Company with the necessary documents, as asked for by the Company and/ or any other information pertaining to the contract, which may be required to be submitted to the Income Tax authorities at the time of obtaining "No Objection Certificate" for releasing payments to the Contractor.
- 7.5 Corporate income tax will be deducted at source from the invoice at the specified rate of income tax as per the provisions of Indian Income Tax Act as may be in force from time to time and Company will issue TDS Certificate to the Contractor as per the provisions of Income Tax Act.
- 7.6 Corporate and personnel taxes on Contractor shall be the liability of the Contractor and the Company shall not assume any responsibility on this account.
- 7.7 All local taxes, levies and duties, sales tax, octroi, etc. on purchases and sales made by Contractor (except customs duty) shall be borne by the Contractor.
- 7.8 GST: The price excludes GST and the GST as applicable shall be to the Company account. The GST amount on the taxable part of the services provided by the Contractor shall be paid by the Company as per provisions of the GST Act. However, the liability for payment of the GST to the appropriate authority in case of Indian bidders and/or overseas bidders having registered office establishment in India will lie on the Contractor. In case of foreign Contractor who does not have registered

office establishment in India, the GST shall be paid to the tax authorities by the Company, on behalf of such contractor.

8.0 GOODS AND SERVICES TAX

8.1 GENERAL REMARKS ON TAXES & DUTIES:

In view of **GST** Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in **GST**. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of **GST** mentioned in the bidding document shall be ignored.

- 8.2 Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever **GST** (CGST & SGST/UTGST or IGST) is applicable.
- 8.3 "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.
- Quoted price/rate(s) should be inclusive of all taxes and duties, except GST(i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service. However, GST rate (including cess) to be provided in the respective places in the Price Bid. Please note that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the Supplier of Goods / Services (Service Provider) only. Supplier of Goods / Services (Service Provider) providing taxable service shall issue an Invoice/Bill, as the case may be as per rules/ regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods / Services (Service Provider) with requisite details.
- 8.5 Bidder should also mention the **Harmonised System of Nomenclature** (HSN) and **Service Accounting Codes (SAC)** at the designated place in SOR.

8.6 Where the OIL is entitled to avail the input tax credit of GST:

- 8.6.10IL will reimburse the **GST** to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST to enable OIL to claim input tax credit of **GST** paid. In case of any variation in the executed quantities, the amount on which the **GST** is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws & rules should be timely filed by supplier with requisite details.
- 8.6.2The input tax credit of **GST** quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

8.7 Where the OIL is not entitled to avail/take the full input tax credit of GST:

- 8.7.10IL will reimburse **GST** to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of **GST** subject to the ceiling amount of **GST** as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which **GST** is applicable will be modified on pro-rata basis.
- 8.7.2The bids will be evaluated based on total price <u>including **GST**</u>.
- 8.8 Payments to Service Provider for claiming **GST** amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of **GST** collected from OIL.

- 8.9 Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL. In the event that the contractor / vendor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules there under, OIL shall not be liable to make any payment on account of **GST** against such invoice.
- 8.10 **GST** shall be paid against receipt of tax invoice and proof of payment of **GST** to government. In case of non-receipt of tax invoice or non-payment of **GST** by the contractor/vendor, OIL shall withhold the payment of **GST**.
- 8.11 **GST** payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL.
- 8.12 Where OIL has the obligation to discharge **GST** liability under reverse charge mechanism and OIL has paid or is /liable to pay **GST** to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by OIL to Contractor / Supplier.
- 8.13 Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the **GST** charged by the Contractor / Vendor is denied by the tax authorities to OIL for reasons attributable to Contractor / Vendor, OIL shall be entitled to recover such amount from the Contractor / Vendor by way of adjustment from the next invoice. In addition to the amount of **GST**, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.
- 8.14 TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.
- 8.15 The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/ duties by the contractor shall be to contractor's account.
- 8.16 It is the responsibility of the bidder to quote the correct GST rate. The classification of goods/services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.
- 8.17 In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/ tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference and in case the rate of duty/ taxes finally assessed is on the lower side.
- 8.18 Notwithstanding anything mentioned elsewhere in the Bidding Document the aggregate liability of OIL towards Payment of Taxes & Duties shall be limited to the volume of GST declared by the bidder in its bid & nothing shall be payable extra except for the statutory variation in taxes & duties.

- 8.19 Further, it is the responsibility of the bidders to make all possible efforts to make their accounting/IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- 8.20 GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.
- 8.21 In case of statutory variation in **GST**, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/ Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.

Beyond the contract period, in case OIL is not entitled for input tax credit of **GST**, then any increase in the rate of **GST** beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate **GST** shall be passed on to the OIL.

Beyond the contract period, in case OIL is entitled for input tax credit of **GST**, then statutory variation in applicable **GST** on supply and on incidental services, shall be to OIL's account.

Claim for payment of **GST**/ Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) **GST**, otherwise claim in respect of above shall not be entertained for payment of arrears.

The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

- 8.22 The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.
- 8.23 In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.
- 8.24 OIL will prefer to deal with registered supplier of goods/ services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
- 8.25 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be leviable on such imports. Bidders should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

8.26 Documentation requirement for GST

The vendor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to OIL, and pass on the benefits, if any, after availing input tax credit.

Any invoice issued shall contain the following particulars

- a) Name, address and GSTIN of the supplier;
- b) Serial number of the invoice;
- c) Date of issue;
- d) Name, address and GSTIN or UIN, if registered of the recipient;
- e) Name and address of the recipient and the address of the delivery, along with the State and its code,
- f) HSN code of goods or Accounting Code of services[SAC];
- g) Description of goods or services;
- h) Quantity in case of goods and unit or Unique Quantity Code thereof;
- i) Total value of supply of goods or services or both;
- j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
- k) Rate of tax (IGST, CGST, SGST/ UTGST, cess);
- Amount of tax charged in respect of taxable goods or services (IGST,CGST, SGST/UTGST, cess);
- m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;
- n) Address of the delivery where the same is different from the place of supply and
- o) Signature or digital signature of the supplier or his authorised representative.
- p) GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner
 - i) The original copy being marked as ORIGINAL FOR RECIPIENT;
 - ii) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
 - iii) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

8.27 Anti-profiteering clause

As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Supplier of Goods / Services may note the above and quote their prices accordingly.

8.27.1 In case the GST rating of vendor on the GST portal / Govt. official website is negative / black listed, then the bids may be rejected by OIL. Further, in case rating of bidder is negative / black listed after award of work for supply of goods / services, then OIL shall not be obligated or liable to pay or reimburse GST to such vendor and shall also be entitled to deduct / recover such GST along with all penalties / interest, if any, incurred by OIL.

9.0 INSURANCE:

- 9.1 The Contractor shall arrange insurance to cover all risks in respect of their personnel, materials and equipment(except when tools/equipment are below Rotary Table or in the well bore) belonging to the Contractor or its subcontractor (if applicable) during the currency of the contract including the third party items/consumables. For materials/equipment belong to the Contractor or its subcontractor, Contractor may self-insure the same.
- 9.2 Contractor shall at all time during the currency of the contract provide, pay for and maintain the following insurances amongst others except when tools/equipment are below Rotary Table or in the well bore:
 - a) Workmen compensation insurance as required by the laws of the country of origin of the employee.
 - b) Employer's Liability Insurance as required by law in the country of origin of employee.

- c) General Public Liability Insurance or Comprehensive General Liability insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of Contractor required to fulfil the provisions under this contract.
- d) Contractor's equipment used for execution of the work hereunder shall have an insurance cover with a suitable limit (as per international standards) except when tools / equipment are below Rotary Table or in the well bore or Contractor may self-insure its tools/ equipment.
- e) Automobile Public Liability Insurance covering owned, non-owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits as governed by Indian Insurance regulations.
- f) Public Liability Insurance as required under Public Liability Insurance Act 1991, if applicable.
- 9.3 Any deductible set forth in any of the above insurance shall be borne by Contractor.
- 9.4 Contractor shall furnish to Company prior to commencement date, certificates of all its insurance policies covering the risks mentioned above.
- 9.5 If any of the above policies expire or are cancelled during the term of this contract and Contractor fails for any reason to renew such policies, then the Company will renew/replace same and charge the cost thereof to Contractor. Should there be a lapse in any insurance required to be carried out by the Contractor for any reason whatsoever, loss/damage claims resulting there from shall be to the sole account of Contractor.
- 9.6 Contractor shall require all of his sub-Contractor to provide such of the foregoing insurance coverage as Contractor is obliged to provide under this Contract and inform the Company about the coverage prior to the commencement of agreements with its sub-Contractors.
- 9.7 All insurance taken out by Contractor or their sub-contractor shall be endorsed to provide that the underwriters waive their rights of recourse on the Company and to the extent of the liabilities assumed by Contractor under this Contract.
- 9.8 Contractor shall obtain additional insurance or revise the limits of existing insurance as per Company's request in which case additional cost shall be to Contractor's account.

10.0 STATUTORY OBLIGATIONS OF CONTRACTOR:

- 10.1 The Contractor shall comply with all the statutory obligation of Government of India and State applicable at the Site and the Purchaser shall not be liable for any action of the statutes applicable due to non-fulfilment of statutory obligations by the contractor.
- 10.2 The Contractor shall give all notices and pay all fees required to be given or paid under any Central or State statute, ordinance or other law or any regulation or bylaw of any local or other duly constituted authority in relation to the execution of the Work.
- 10.3 The Contractor shall conform and comply in all respects with the provisions of any statute, ordinance or laws as aforesaid and the rules, regulations or by-laws of any local or other duly constituted authority which may be applicable to the works or to any temporary works and with such rules and regulations of public bodies as aforesaid and shall indemnify the Purchaser against all penalties and liabilities of every kind for breach of any such statute, ordinance, law, rule, regulation or by-law.

11.0 SUBSEQUENTLY ENACTED LAWS:

- 11.1 In the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased/decreased cost of the works under the CONTRACT increased/decreased liability of taxes, (other than personnel and Corporate taxes), duties, the Parties shall agree to a revision in pricing to reflect such change subject production of documentary proof to the satisfaction COMPANY/CONTRACTOR as applicable to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.
- 11.2 Any increase in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date during the extended period will be to the contractor's account, where delay in completion/mobilization period is attributable to the CONTRACTOR. However, any decrease in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date will be to COMPANY's account.
- 11.3 The Contract Price and other prices given in the Schedule of Prices are based on the applicable tariff as indicated by the CONTRACTOR in the Schedule of Prices. In case this information subsequently proves to be wrong, incorrect or misleading, COMPANY will have no liability to reimburse/pay to the CONTRACTOR the excess duties, taxes, fees, if any finally levied/imposed by the concerned authorities. However, in such an event, COMPANY will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.
- 11.4 Notwithstanding the provision contained in clause 11.1 to 11.2 above, the COMPANY shall not bear any liability in respect of:
 - i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-contractor /sub-sub-contractors and Agents etc.
 - ii. Corporate taxes and Fringe benefit tax in respect of contractor and all of their sub-contractors, agents etc.
 - iii. Other taxes & duties including Customs Duty, Excise Duty and Service Tax in addition to new taxes etc. in respect of sub-contractors, vendors, agents etc. of the CONTRACTOR.
- 11.5 In order to ascertain the net impact of the revisions/enactment of various provisions of taxes/duties, the CONTRACTOR is liable to provide following disclosure to COMPANY:
 - i. Details of each of the input services used in relation to providing service to COMPANY including estimated monthly value of input service and service tax amount.
 - ii. Details of Inputs (material/consumable) used/required for providing service to Company including estimated monthly value of input and excise duty/CVD paid/payable on purchase of inputs.

12.0 LIQUIDATED DAMAGES FOR DEFAULT IN TIMELY COMPLETION OF WORKS AND SERVICES:

12.1 In normal case of works /service contracts, if the delay in completion is due to default on the contractor's part the Total Contract price shall be reduced by 0.5% of the total Contract Price per complete week of delay or part thereof subject to a maximum of 7.5% of the Total Contract Price, by way of liquidated damages for delay and not as penalty. Liquidated damages will be reckoned from the stipulated date of

completion defined in the contract. Company may without prejudice to any other right or remedy available to it to recover damages for breach of contract, recover the liquidated damages as above from the Contractor. This is an agreed genuine preestimate of damages duly agreed by the parties.

12.2 The Company also reserves the right to cancel the Contract without any compensation whatsoever in case of failure by the Contractor to commence operation within the stipulated period.

13.0 WAIVERS AND AMENDMENTS:

- 13.1 It is fully understood and agreed that none of the terms and conditions of the Contract shall be deemed waived or amended by either party unless such waiver or amendment is executed in writing by the duly authorized agents or representatives of such party. The failure of either party to execute any right of termination shall not act as a waiver or amendment of any right of such party provided hereunder.
- 13.2 Any delay in exercising and any omission to exercise any right, power or remedy exercisable by the Company under this contract shall not impair such right, power or remedy nor shall any waiver by the Company of any breach by the Contractor of any provision of this contract prevent the subsequent enforcement of that provision by the Company or be deemed a waiver by the Company of any subsequent breach by the Contractor.

14.0 CONFIDENTIALITY, USE OF CONTRACT DOCUMENTS AND INFORMATION:

- 14.1 Contractor shall not, without Company's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information furnished by or on behalf of Company in connection therewith, to any person other than a person employed by Contractor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance with prior permission from Company. However, nothing hereinabove contained shall deprive the Contractor of the right to use or disclose any information:
 - (a) which is possessed by the Contractor, as evidenced by the Contractor's written records, before receipt thereof from the Company which however the Contractor shall immediately inform to Company; or
 - (b) which is required to be disclosed by the Contractor pursuant to an order of a court of competent jurisdiction or other governmental agency having the power to order such disclosure, provided the Contractor uses its best efforts to provide timely notice to Company of such order to permit Company an opportunity to contest such order subject to prior permission from Company.
- 14.2 Contractor shall not, without Company's prior written consent, make use of any document or information except for purposes of performing the contract.
- 14.3 Any document supplied to the Contractor in relation to the contract other than the Contract itself remain the property of Company and shall be returned (in all copies) to Company on completion of Contractor's performance under the Contract if so required by Company.
- 14.4 During this Contract, Company and its employees, agents, other contractors, sub-contractors (of any tier) and their employees etc. may be exposed to certain confidential information and data of the Contractor. Such information and data shall held by the Company, its employees, agents, other contractors, sub-contractors (of any tier) and their employees in the strictest Confidence and shall not be disclosed to any other party except on a need to know basis.
- 14.5 However, the above obligation shall not extend to information which:

- i) is, at the time of disclosure, known to the public which Contractor shall immediately inform Company;
- ii) is lawfully becomes at a later date known to the public through no fault of Contractor subject to Contractor's undertaking that no information has been divulged by them to the public;
- iii) is lawfully possessed by Contractor before receipt thereof from Company which should be immediately informed to Company;
- iv) is developed by Contractor independently of the information disclosed by Company which should be shared with the Company;
- v) Contractor is required to produce before competent authorities or by court order subject to prior permission from Company

15.0 NOTICES:

15.1 Any notice given by one party to other, pursuant to the Contract shall be sent in writing or by Fax or E-mail and confirmed in writing to the applicable address specified below:

Company

Contractor

a) For contractual matters

General Manager (C&P)
Oil India Limited
Plot No. 19, Sector-16 A, NOIDA-201 301

Tel: 0120-2419112

E-mail: anitadam@oilindia.in

b) For matters relating to Scope of Work

Deputy General Manager (Civil) Oil India Limited Plot No. 19, Sector-16 A, NOIDA-201 301 E-mail: dcbharali@oilindia.in

15.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

16.0 HEADINGS:

The headings of the clauses of the Contract are for convenience only and shall not be used to interpret the provisions hereof.

17.0 ASSIGNMENT AND SUB-LETTING:

The whole of the work included in the Contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part or share thereof / interest therein without the written consent of Oil India Limited. No undertaking shall relieve the Contractor from the full and entire responsibility.

18.0 FORCE MAJEURE:

- 18.1 In the event of either Party being rendered unable by 'Force Majeure' to perform any obligation required to be performed by them under the contract, the relative obligation of the Party affected by such 'Force Majeure' will stand suspended as provided herein. The word 'Force Majeure' as employed herein shall mean acts of God, war, revolt, agitation, strikes, riot, fire, flood, sabotage, civil commotion, road barricade (but not due to interference of employment problem of the Party) and any other cause, whether of kind herein enumerated or otherwise which are not within the control of the Party to the contract and which renders performance of the contract by the said Party impossible.
- 18.2 Upon occurrence of such cause and upon its termination, the Party alleging that it has been rendered unable as aforesaid thereby, shall notify the other Party in writing

within Seventy Two (72) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

18.3 Should 'Force Majeure' condition as stated above occurs and should the same be notified within seventy two (72) hours after its occurrence, either Party will have the right to terminate the contract with prior written notice if such 'Force Majeure' condition continues beyond consecutive ten (10) days. Should both Parties decide not to terminate the contract even under such condition, no payment would apply during the force majeure period unless otherwise agreed to.

19.0 TERMINATION:

19.1 TERMINATION ON EXPIRY OF THE TERMS (DURATION):

This contract shall be deemed to have been automatically terminated on the expiry of duration of the contract or extension, if any, thereof.

19.2 TERMINATION ON ACCOUNT OF FORCE MAJEURE:

Either party shall have the right to terminate this Contract on account of 'Force Majeure' as set forth in Para 18.0.

19.3 TERMINATION ON ACCOUNT OF INSOLVENCY:

In the event that the Contractor at any time during the term of this Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Company shall, by a notice in writing have the right to terminate this Contract and all the Contractor's rights and privileges hereunder, shall stand terminated forthwith.

19.4 TERMINATION FOR UNSATISFACTORY PERFORMANCE:

If the Company considers that, the performance of the Contractor is, not as per the scope of the work as specified in the contract, the Company shall notify the Contractor in writing and specify in details the cause. The Company shall have the option to terminate this Contract by giving 15 days' notice in writing to the Contractor, if Contractor fails to comply with the requisitions contained in the said written notice issued by the Company.

19.5 TERMINATION DUE TO CHANGE OF OWNERSHIP & ASSIGNMENT:

In case the Contractor's rights and / or obligations under this Contract and/or the Contractor's rights, title and interest to the equipment/material, are transferred or assigned without the Company's consent, the Company may at its absolute discretion, terminate this Contract.

19.6 CONSEQUENCES OF TERMINATION:

In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

- 19.7 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the Company on giving 30 (thirty) days written notice to the Contractor due to any other reason not covered under the above clause from 19.1 to 19.6 and in the event of such termination the Company shall not be liable to pay any cost or damage to the Contractor except for payment for services as per the Contract upto the date of termination including the De-mob cost, if any.
- 19.8 Upon termination of this Contract, Contractor shall return to Company all of Company's items, which are at the time in Contractor's possession.
- 19.9 In the event of termination of contract, Company will issue Notice of termination of the contract with date or event after which the contract will be terminated. The

contract shall then stand terminated and the Contractor shall demobilize their personnel & materials.

20.0 APPLICABLE LAW:

- 20.1 The Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the exclusive jurisdiction of Courts situated in New Delhi.
- 20.2 The Contractor shall ensure full compliance of various Indian Laws and Statutory Regulations, to the extent applicable, as stated below, but not limited to, in force from time to time and obtain necessary permits/licenses etc. from appropriate authorities for conducting operations under the Contract:
 - a) The Mines Act as applicable to safety and employment conditions.
 - b) The Minimum Wages Act, 1948.
 - c) The Oil Mines Regulations, 1984.
 - d) The Workmen's Compensation Act, 1923.
 - e) The Payment of Wages Act, 1963.
 - f) The Payment of Bonus Act, 1965.
 - g) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under.
 - h) The Employees Pension Scheme, 1995.
 - i) The Interstate Migrant Workmen Act., 1979 (Regulation of employment and conditions of service).
 - j) The Employees Provident Fund and Miscellaneous Provisions Act, 1952.
 - k) Goods & Services Tax (GST) Law and the Acts and rules framed thereunder.
 - 1) Customs & Excise Act & Rules
 - m) Environment Protection Act
 - n) Public Liability Act
 - o) Any other law and regulations applicable to carry out the complete job/assignment as per the Contract.

21.0 LIABILITY:

- 21.1 Except as otherwise expressly provided, neither Company nor its servants, agents, nominees, Contractors, or subcontractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the Contractor and or his Contractors or subcontractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Company and/or its servants, agents, nominees, assignees, Contractors and subcontractors. The Contractor shall protect, defend, indemnify and hold harmless Company from and against such loss or damage and any suit, claim or expense resulting there from.
- 21.2 Neither Company nor its servants, agents, nominees, assignees, Contractors, subcontractors shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the Contractor and / or of its Contractors or subcontractors irrespective of how such injury, illness or death is caused and even if caused by the negligence of Company and/or its servants, agents, nominees, assignees, contractors and sub-contractors. Contractor shall protect, defend, indemnify and hold harmless Company from and against such liabilities and any suit, claim or expense resulting there from.
- 21.3 The Contractor hereby agrees to waive its right to recourse and further agrees to cause his underwriters to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, contractors and subcontractors for loss or damage to the equipment of the Contractor and/or its subcontractors when such loss or damage or liabilities arises out of or in connection with the performance of the Contract.

- 21.4 The Contractor hereby further agrees to waive its right of recourse and agrees to cause its under writers to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, contractors and subcontractors for injury to, illness or death of any employee of the contractor and of its contractors, subcontractors and / or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.
- 21.5 Except as otherwise expressly provided, neither Contractor nor its servants, agents, nominees, contractors or subcontractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the Company and/or his contractors or subcontractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Contractor and / or its servants, agents, nominees, assignees, contractors and subcontractors. The Company shall protect, defend, indemnify and hold harmless Contractor from and against such loss of damage and any suit, claim or expense resulting therefrom.
- 21.6 Neither Contractor nor its servants, agents, nominees, assignees, contractors, subcontractors shall have any liability or responsibility whatsoever to whomsoever or injury to, illness, or death of any employee of the Company and/or of its contractors or subcontractors irrespective of how such injury, illness or death is caused and even if caused by the negligence of contractor and/or its servants, agents, nominees, assignees, contractors and subcontractors Company shall protect, defend indemnify and hold harmless contractor from and against such liabilities and any suit, claim or expense resulting therefrom.
- 21.7 The Company agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against contractor and / or its underwriters, servants, agents, nominees, assignees, contractors and subcontractors for loss or damage to the equipment of Company and/or its contractors or subcontractors when such loss or damage or liabilities arises out of or in connection with the performance of the Contract.
- 21.8 The Company hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against contractor and / or its underwriters, servant, agents, nominees, assignees, contractors and subcontractors for injury to, illness or death of any employee of the Company and of its contractors, subcontractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the contract.

21.9 LIMITATION OF LIABILITY:

Notwithstanding any other provisions except only in cases of willful misconduct and / or criminal acts,

- (a) Neither the Contractor nor the Company (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs.
- (b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the Company with respect to Intellectual Property Rights.

Company shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

22.0 CONSEQUENTIAL DAMAGE:

22.1 Neither party shall be liable to the other for special, indirect or consequential damages resulting from or arising out of the contract, including but without limitation, to loss of profit or business interruptions, howsoever caused and regardless of whether such loss or damage was caused by the negligence (either sole or concurrent) of either party, its employees, agents or sub-contractors.

23.0 WITH-HOLDING:

- 23.1 Company may with-hold or nullify the whole or any part of the amount due to Contractor on account of subsequently discovered evidence in order to protect Company from loss on account of:
 - a) For non-completion of jobs assigned as per Section-V.
 - b) Contractor's indebtedness arising out of execution of this contract.
 - c) Defective work not remedied by Contractor.
 - d) Claims by sub-contractor of Contractor or others filed or on the basis of reasonable evidence indicating probable filing of such claims against Contractor.
 - e) Failure of Contractor to pay or provide for the payment of salaries / wages, contributions, unemployment, compensation, taxes or enforced savings with-held from wages etc.
 - f) Failure of Contractor to pay the cost of removal of unnecessary debris, materials, tools, or machinery.
 - g) Damage to another Contractor of Company.
 - h) All claims against Contractor for damages and injuries, and / or for non-payment of bills etc.
 - i) Any failure by Contractor to fully reimburse Company under any of the indemnification provisions of this contract. If, during the progress of the work Contractor shall allow any indebtedness to accrue for which Company, under any circumstances in the opinion of Company may be primarily or contingently liable or ultimately responsible and Contractor shall, within five days after demand is made by Company, fail to pay and discharge such indebtedness, then Company may during the period for which such indebtedness shall remain unpaid, withhold from the amounts due to Contractor, a sum equal to the amount of such unpaid indebtedness.
 - i) With-holding will also be effected on account of the following:
 - i. Garnishee order issued by a Court of Law in India.
 - ii. Income-tax deductible at source according to law prevalent from time to time in the country.
 - iii. Any obligation of Contractor which by any law prevalent from time to time to be discharged by Company in the event of Contractor's failure to adhere to such laws.
 - iv. Any payment due from Contractor in respect of unauthorised imports.
- 23.2 When all the above grounds for with-holding payments shall be removed, payment shall thereafter be made for amounts so with-held.
- 23.3 Notwithstanding the foregoing, the right of Company to withhold shall be limited to damages, claims and failure on the part of Contractor which is directly / indirectly due to some negligent act or omission on the part of Contractor relating to the Contractor's obligation on the Contract.

24.0 INDEMNITY AGREEMENT:

24.1 Except as provided hereof Contractor agrees to protect, defend, indemnify and hold the Company and its co-leases harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Contractor's employees, agents, contractors and sub-contractors or their employees on account of bodily injury or death of personnel, or damage to properly as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

- 24.2 Except as provided hereof the Company agrees to protect, defend, indemnify and hold Contractor harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Company's employees, agents, contractors and sub-contractors or their employees on account of bodily injury or death of personnel, or damage to properly as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.
- **25.0 INDEMNITY APPLICATION**: The indemnities given herein above, whether given by Company or Contractor shall be without regard to fault or to the negligence of either party even though said loss, damage, liability, claim, demand, expense, cost or cause of action may be caused, occasioned by or contributed to by the negligence, either sole or concurrent of either party.

26.0 MISCELLANEOUS PROVISIONS:

- 26.1 Contractor shall give notices and pay all fees at their own cost required to be given or paid by any National or State Statute, Ordinance, or other Law or any regulation, or bye-law of any local or other duly constituted authority as may be in force from time to time in India, in relation to the performance of the services and by the rules & regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the services.
- 26.2 Contractor shall conform in all respects with the provisions of any Statute, Ordinance of Law as aforesaid and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation public bodies and Companies as aforesaid and shall keep Company indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.
- 26.3 During the tenure of the Contract, Contractor shall keep the site where the services are being performed reasonably free from all unnecessary obstruction and shall store or dispose of any equipment and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary works no longer required. On the completion of the services, Contractor shall clear away and remove from the site any surplus materials, rubbish or temporary works of every kind and leave the whole of the site clean and in workmanlike condition to the satisfaction of the Company.
- 26.4 Key personnel cannot be changed during the tenure of the Contract except due to sickness/death/resignation of the personnel in which case the replaced person should have equal experience and qualification, which will be again subject to approval, by the Company.

27.0 EMPLOYMENT OF OFFICIAL/PERSONNEL OF THE COMPANY:

27.1 Contractors are advised not to employ serving Company employees without its prior permission. It is also advised not to employ ex-personnel of the Company within the initial two years period after their retirement/resignation/severance from service without specific permission of the Company. Company may decide not to deal with such firm(s) / Contractors who fail to comply with the advice.

28.0 SET OFF:

Any sum of money due and payable to the Contractor (including security Deposit refundable to them) under this or any other contract may be appropriated by the Company and set off against any claim of the Company (or such other person or persons contracting through the Company) for payment of a sum of money arising out of this contract or under any other contract made by the Contractor / with the Company (or such other person or persons contracting through the Company).

29.0 SETTLEMENT OF DISPUTES AND ARBITRATION:

29.1 ARBITRATION (APPLICABLE FOR SUPPLIERS/CONTRACTORS OTHER THAN PSU):

Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder:

a) A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

b) The number of arbitrators and the appointing authority will be as under:

Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority				
Upto Rs. 5 Crore	Sole Arbitrator	OIL				
Above Rs. 5 Crore	3 Arbitrators	One Arbitrator by each party and the 3 rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.				

- **c)** The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.
- **d)** Parties agree that there will be no objection if the Arbitrator appointed holds equity shares of OIL and/or is a retired officer of OIL/any PSU. However, neither party shall appoint its serving employees as arbitrator.
- **e)** If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
- f) Parties agree that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.
- **g)** The arbitral tribunal shall make and publish the award within time stipulated as under:

Amount of Claims and counter	Period for making and publishing of the
claims(excluding interest)	award(counted from the date of first meeting of
	the Arbitrators)
Upto Rs. 5 Crore	Within 8 months
Above Rs. 5 Crore	Within 12 months

The above time limit can be extended by Arbitrator, for reasons to be recorded in writing, with the consent of the other parties.

- **h)** If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties.
- i) Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator pointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, OIL shall make all necessary arrangements for his travel, stay and the expenses incurred shall be shared equally by the parties.

- **j)** The Arbitration shall be held at Noida / Delhi. However, parties to the contract can agree for a different place for the convenience of all concerned.
- **k)** The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.
- 1) Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.
- **m)** The venue of all arbitrations under 29.1 will be Noida / Delhi. The award made in pursuance thereof shall be binding on the parties.
- 29.2 ARBITRATION CLAUSE FOR SETTLEMENT OF COMMERCIAL DISPUTES BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES (CPSES) INTER SE AND CPSE(S) AND GOVERNMENT DEPARTMENT(S)/ORGANIZATIONS(S) ADMINISTRATIVE MECHANISM FOR RESOLUTION OF CPSES DISPUTES (AMRCD):

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 Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in OPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018.

30.0 CHANGES:

- 30.1 During the performance of the work, Company may make minor change to take care of any supplementary work within the general scope of this Contract including, but not limited to, changes in methodology, and minor additions to or deletions from the work to be performed. Contractor shall perform the work as changed. Changes of this nature will be affected by written order by the Company.
- 30.2 If any change result in an increase in compensation due to Contractor or in a credit due to Company, Contractor shall submit to Company an estimate of the amount of such compensation or credit in a form prescribed by Company. Such estimates shall be based on the rates shown in the Schedule of Rates (Section V). Upon review of Contractor's estimate, Contractor shall establish and set forth in the Change Order the amount of the compensation or credit for the change or a basis for determining a reasonable compensation or credit for the change. If Contractor disagrees with compensation or credit set forth in the Change Order, Contractor shall nevertheless perform the work as changed, and the parties will resolve the dispute in accordance with Clause 27.0 hereinabove. Contractor's performance of the work as changed will not prejudice Contractor's request for additional compensation for work performed under the Change Order.

31.0 ROYALITY AND PATENTS:

Each party shall hold harmless and indemnify the other from and against all claim and proceedings for or on account of any patent rights, design, trade mark or other protected rights arising from any use of materials, equipment, processes, inventions and methods which have not been imposed on the attending party by the terms of the contract or the specifications or drawings forming part thereof.

32.0 PROVISION FOR ACTION IN CASE OF ERRING / DEFAULTING AGENCIES:

Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com

33.0 PERFORMANCE SECURITY:

The	Contractor	has	furnished	Performance	Security	for	an ar	nount	of F	₹s.
		(F	upees) [<u>Not</u>	to be	filled	up b	y wh	ıile
subn	nitting the Bi			ed up by OIL s						
succ	<mark>essful bidder</mark>] vide	Bank Guar	antee No	is	sued t	оу		a:	nd
valid	ity up to _		The Per	rformance Sec	urity sha	all be	valid ι	ap to 9	90 da	ıys
beyo	nd defect lia	bility	period of 0	01 (one) year f	rom the	date o	f comp	oletion	of wo	rk
certi	fied by OIL	λ . The	e performa	nce security	shall be	payal	ble to	Comp	any	as
comp	pensation fo	or an	y loss res	sulting from	Contracto	or's fa	ilure	to fulf	fil th	eir
oblig	ations unde	r the (Contract. Ir	the event of e	extension	of the	Contr	act per	riod, t	he
Cont	ractor shall	suita	ably extend	the validity	of the 1	Perforn	nance	Securi	ity. T	'ne
"Perf	ormance Se	curity	" will be re	efunded to the	contract	tor not	t later	than	30 da	ıys
follov	wing its exp	iry, bi	at part or	whole of which	n shall b	e used	by th	e Com	pany	in
reali	sation of liqu	iidate	d damages	or claims, if an	y or for a	djustn	nent of	compe	ensati	on
or lo	ss due to the	Com	pany for an	y reason.	-	-		_		

(END OF SECTION-IV)

SCOPE OF WORK AND SPECIAL CONDITIONS OF CONTRACT

Special Conditions:

- i. Bidder will have to engage an experienced Supervisor preferably a Junior Engineer (Civil)/ BE (Civil) i.e. passed from a recognized University. He must have at least three years' experience of similar nature of jobs.
- ii. Bidder must submit a detail work programme for the project to complete the work within the allotted time along with the tender document.
- iii. Since it is time bound project, bidder must ensure that he will be able to complete the work within the stipulated time and be able to execute work on shift basis at least in two shifts of 8 Hours each with adequate manpower and materials to meet the target date of completion. Moreover all necessary arrangement including the power for light shall have to be made to work in all days including the rainy days.
- iv. Bidders have to keep a Telephone connection/Mobile Phone connection exclusively for the site and same should be communicated to OIL.
- v. Formwork has to be sufficient to complete RCC work of one slab continuously without any days of break.

TECHNICAL REQUIREMENTS

1.0 SCOPE OF WORK:

The scope of work envisaged under this tender covers as per tender specifications, drawings and standards etc. In general job shall be done as per CPWD specifications. However brief specifications are given here under for general guidance purpose of the tenderers. The job to be executed as per drawings, and all other activities as spelt out in the detailed drawings and specifications. It shall be clearly be noted that the bidders are required to give their lump-sum rates taking into consideration all aspects as per site requirements and specifications enclosed along with this tender document. Quoted offers shall be inclusive of all materials and labour and all other taxes & levies but excluding GST. Water and Power shall have to be arranged by the contractor for execution of the tendered work. The contractor shall be responsible to complete the entire work in all respects and also any other works necessary to complete the job though especially not covered in the scope of work. In general, the scope of work covers the following but not limited to:

- a. Interior works like wall papering/ wall panelling/ cup board/ Seamless tiles in external façade etc.
- b. Procurement and placement of furniture and home furnishing works.
- c. Procurement, placement and commissioning of Electrical appliances
- c. Procurement, placement and commissioniging of lift with related electrical job.
- d. Procurement, placement and commissioning of Solar panel for 10 KWP capacity.
- e. CCTV Survelience system.
- f. WiFi networking system.
- g. Horticulture & landscaping.

Shop Inspection and Approval

General

The Engineer in Charge or their representative shall have free access at all responsible times to the contractor's fabrication shop and shall be afforded all reasonable facilities for satisfying himself that the fabrication is being undertaken in accordance with drawings and specifications.

Technical approval of the steel structure in the shop by the Engineer in Charge is mandatory.

The contractor shall not limit the number and kinds of tests, final as well as intermediate once, or extra tests required by the Engineer in Charge.

The contractor shall furnish necessary tools, gauges, instruments etc. and technical non-technical personnel for shop tests by the Engineer in Charge, free of cost.

Shop Acceptance

The Engineer in Charge shall inspect and approve at the following stages:

The following approvals may give in shop:

- Intermediate approvals of work that cannot be inspected later.
- Partial approvals
- Final approvals

Intermediate approval of work shall be given when a part of the work is preformed later:

- Cannot be inspected later
- Inspection would be difficult to perform and results would not be satisfactory.

Partial approval in the shop is given on members and assemblies of steel structures before the primer coat is applied and includes:

- Approval of materials
- Approval of field joints
- Approval of parts with planed surfaces
- Test erection
- Approval of members
- Approval of markings
- Inspections and approvals of special features, like Rollers, loading platform mechanism etc.

During the partial approval, intermediate approvals as well as all former approvals, shall be taken in to consideration.

Final approval in the Shop

The final approval refers to all elements and assemblies of the steel structures, with shop primer coat, ready for delivery from shop to be loaded for transportation or stored.

The final approval comprises of:

- Partial approvals
- Approval of shop primer coat
- Approval of mode of loading and transport
- Approval of storage (for materials stored)

Painting and Delivery

Preparation of parts for shop painting

Painting shall consist of providing one coat of red oxide zinc chromate primer to steel members before dispatch from shop.

Primer coat shall not be applied unless:

- Surface have been wire brushed, cleaned of dust, oil, rust etc.
- Erection gaps between members, spots that cannot be painted or where moisture or other aggressive agents may penetrate, have been filled with an approved type of oil and putty.
- The surface to be painted are completely dry.
- The parts where water of aggressive agents may collect (during transportation, storage, erection and operation) are filled with putty and provided with holes for drainage of water.
- Members and parts have been inspected and accepted
- Welds have been accepted.

The following are not to be painted or protected by any other product:

- Surface which are in the vicinity of joints to be welded at site.
- Surfaces bearing markings
- Other surfaces indicated in the design.

The following shall be given a coat of hot oil or any approved resistant lubricant only.

- Planed surfaces
- Holes for links

The surfaces that are to be embedded or in contact with the concrete shall be given a cost of cement wash.

The surfaces which are in contact with the ground, gravel or AAC work and subject to moisture shall be given bituminous coat.

The other surfaces shall be given a primer coating.

Special attention shall be given to locations not easily accessible, where water can collect and which after assembly and erection cannot be inspected, painted and maintained. Holes shall be provided for water drainage and in accessible box type sections shall be hermetically sealed by welds.

If specified elsewhere, in the schedule of quantities, the contractor shall paint further coats of red-oxide after erection and placing in position of the steel structures.

Packing, transportation, delivery

After final shop acceptance and marking, the item shall be packed and loaded for transportation.

Packing must be adequate to protect item against warping during loading and unloading. Proper lifting devices shall be used for loading, in order to protect items against warping. Slender projecting parts shall be braced with additional steel bars, before loading, for protection against warping during transportation.

Loading and transportation shall be done in compliance with transportation rules.

If certain parts cannot be transported in the lengths stipulated in the design, the position and type of additional splice joints shall be approved by the Engineer in Charge.

Items must be carefully loaded on platforms of transportation means to prevent warping, bending or falling during transportation.

The small parts such as fish-plates, quests etc. shall be securely tied with wire to their respective parts. Bolts, nuts and washers shall be packed and transported in crates.

The parts shall be delivered in the order stipulated by the Engineer in Charge and shall be accompanied by document showing:

- Quality and quantity of structure or members
- Position of member in the structure
- Particulars of structure
- Identification number job symbol.

Field Erection

The erection work shall be permitted only after the foundation or other structure over which the steel work will be erected is approved and is ready for erection.

The contractor shall satisfy himself about the levels, alignment etc. for the foundations well in advance, before starting the erection. Minor chipping etc. shall be carried out by the contractor on his expense.

Any faulty erection done by the contractor shall be made good at his own cost.

Approval by the Engineer in Charge or their representatives at any stage of work does not relieve the contractor of any of his

required guarantees of the contract.

Storage and preparation of parts prior to erection

The storage place for steel parts shall be prepared in advance and got approved by the Engineer in Charge before the steel structures start arriving from the shop.

A platform shall be provided by the Contractor near the erection site for preliminary erection work. The contractor shall make the following verifications upon receipt of material at site.

- for quality certificates regarding materials and workmanship according to these general specifications and drawings.
- Whether parts received are complete without defects due to transportation, loading and unloading and defects, if any, are well within the admissible limit.

For the above work sufficient space must be allotted in the storage area. Steps shall be taken to prevent warping of items during unloading.

The parts shall be unloaded, stored and stored so as to be easily identified.

The parts shall be stored according to construction symbol and markings so that these may be taken out in order erection.

The parts shall be at least 150 mm clear from ground on wooden or steel blocks for protection against direct contact with ground and to permit drainage of water.

If rectification of members like straightening etc. are required, these shall be done in a special place allotted which shall be

adequately equipped.

The parts shall be clean when delivered for erection.

Erection & Tolerances

Erection in general shall be carried out as required and approved by the Engineer in Charge.

Positioning and leveling of the structure, alignment and plumbing of the stanchion and fixing every member of the structure shall be in accordance with the relevant drawings and to the complete satisfaction of the Engineer in Charge. The following checks and inspection shall be carried out before during and after erection.

- Damage during transportation
- Accuracy of alignment of structures
- Erection according to drawings and specifications
- Progress and workmanship.

In case there are any deviations regarding positions of foundations or anchor bolts, which would lead to erection deviations, the Engineer in Charge shall be informed immediately. Minor rectifications in foundations, orientation of bolts holes etc. shall be carried out as part of the work, at no extra cost.

The various parts of the steel structure shall be so erected so to ensure stability against inherent weight, wind and erection stresses.

The structure shall be anchored and final erection joints completed after plan and elevation positions of the structural members have been verified with corresponding drawings and approved by the Engineer in Charge.

The bolted joints shall be tightened so that the entire surface of the bolt heads and nuts shall rest on the member. For parts with sloping surfaces tapered washers shall be used.

Final acceptance and handing over the structure

At acceptance, the contractor shall submit the following documents:

- Shop and erection drawings either in tracings or reproducible.
- 4 copies of each of the following:
- shop acceptance documents
- Quality certificate for structural, plates, etc. (electrodes, welding wire, bolts, nuts, washers etc.)
- List of certified welders who worked on erection of structures.
- Acceptance and intermediate control procedure of erection operations.

Approval by the Engineer in Charge at any stage of work does not relieve the contractor of any of his required guarantees of the contract.

Method of Payments

Payment for steel work shall be made on basis of admissible weight of the structure accepted, the weight being determined as described in such Clause 9.10.2 below:

The rate for supply, fabrication and erection, shall include cost of all handling and transportation to Owner's store/site of work where supply and fabrication only are involved, trimming, straightening, edge preparation etc.

LIST OF CODES

The materials and workmanship shall be in accordance with the requirement of the appropriate IS code wherever applicable together with any building regulations or bye-laws governing the works.

The following list is included for guidance only and the omission from the list does not relieve the contractor from compliance therewith:

IS 1200: Mode of measurement.

IS 269

IS 3812, 1981: Ordinary Portland cement. Fly ash for use as pozzolana and admixtures,

IS 2386: Method of test for aggregate for concrete.

IS 516: Method of test for strength of concrete

Coarse and fine aggregate from natural sources for concrete.

- IS 1077, 1970: Method of test for Bricks.
- IS 456: Code of practice for plain and reinforced concrete.
- IS 1597: Code of practice for construction of stone masonry.
- IS 1597 PART 1: Code of practice for construction of rubble stone masonry.
- IS 6313 PART 2: Anti-termite measures in buildings, pre-constructional chemical treatment measures.
- IS 2571: Code of practice for laying in situ cement concrete flooring
- IS: 226: Structural Steel (Standard Quality)
- IS: 800: Code of Practice for Use of Structural Steel in General Building Construction
- IS: 806: Code of Practice for Use of Steel Tubes in General Building Construction
- IS: 813: Scheme of Symbols for Welding
- IS: 814: Covered Electrodes for Metal Arc Welding of (part I & II) Structural Steel
- IS: 816: Code of Practice for Use of Metal Arc Welding for General Construction in Mild Steel
- IS: 822: Code of Practice for Inspection of Welds
- IS: 961: Structural Steel (High Tensile)
- IS 702: Industrial Bitumen
- IS 1322: Bitumen felts for waterproofing and damp proofing.
- IS 1609: Code of practice for laying damp proof treatment using bitumen felts.
- IS 104: Specification for ready mixed painted, brushing, zinc chrome, priming.

SUBMITTALS & TESTING

Stress level on glass whether the glass is Annealed / Heat Strengthened or Fully Tempered can be checked by GASP (Grazing Angle Surface Polarimeter) Equipment. Warranty: Manufacturer's warranty certifying that, where in it is specifically noted, the glass has been furnished and installed in accordance with contract documents certify that the glazing including laminated glass and insulated glass shall be free of defects in performance, material and workmanship for a period of 10years from the date the glass is accepted.

Insulated Glass: Preassembled units consisting of sealed lite of glass separated / interspaced and complying with ASTM E 774.

- Seal system: Dual seal with primary and secondaryseal
- Spacer Specifications: Aluminum Spacer with Black colour Anodizedfinish.
- Desiccant: Molecular Sieve or silica gel or blend ofboth.
- Corner Construction: Manufacturer's standard clipping cornerconstruction.

Fabrication of Glass and other Glazing Products:

- Machine Grind smooth and polish exposed glass edges.
- Clean-cut-or flat-grind vertical edges of butt-glazed monolithic lite in a manner that produces square edges with slight kerfs at junctions.
- Fabricate glass and other glazing products in sizes required to glaze openings indicated for project with surface conditions and bite complying with written instructions of the product manufacturer and referenced glazing standards to comply with system performance requirements.

Curtain wall Tests:

The following tests are to be carried out and shall be in accordance with following standards:

1. Air Infiltration as per ASTM E 283 -04. Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under Specified Pressure Differences across the Specimen.

- 2. Static Water Penetration as per ASTM E 331-00. Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
- 1. Dynamic Water Penetration as per AAMA 501.1-05. Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure.
- 3. Wind Load Serviceability as per ASTM E 330-02. Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- 4. Seismic Floor Displacement as per AAMA 501.4-00. Static Test Method For Evaluating Curtain Wall and Storefront Systems Subjected To Seismic And Wind Included Inter story Drifts.

FACADE TESTING

The aluminum facade shall be got tested from any approved laboratory for wind, water pressure & other approved testing as desired by Engineer-in-charge.

1.0 WALL LINING (WOODEN PANELLING)

Specified timber shall be used, and it shall be sawn in the direction of the grains. Sawing shall be truly straight and square. The timber shall be planed smooth and accurate to the full dimensions, rebates, rounding, and moulding as shown in the drawings made, before assembly. Patching or plugging of, any kind shall not be permitted except as provided.

Grounds

Grounds shall be provided where so specified. These shall consist of first class hard wood plugs or the class of wood used for fabricating the frames, of trapezoidal shape having base of 50×50 mm and top 35×35 mm with depth of 5.0 cm and embedded in the wall with cement mortar 1:3 (1 cement : 3 fine sand) and batten of first class hard wood or as specified of size 50×25 mm or as specified, fixed over the plugs with 50 mm long wood screws. The plugs shall be spaced at 45 to 60 centimeter centre to centre, depending upon the nature of work. The battens shall be painted with priming coat, of approved wood primer before fixing.

Paneling

Material:

This paneling shall be decorative or non -decorative (Paintable) type as per design and thickness specified by the Engineer- in- Charge, of 2nd class teak wood, FPT-1 or graded wood pre-laminated particle board or as specified in item.

Ornamental Work:

The ornamental wood work shall be painted on the back with priming coat of approved wood primer before fixing the same to the grounds with screws, which shall be sunk into the wood work and their tops covered with putty. The ornamental work shall be made true and accurate to the dimensions shown in the working drawings. The fixing shall be done true to lines and levels. The planks for wall lining shall be tongued and grooved, unless otherwise specified.

VENEERED DECORATIVE PLYWOOD

Decorative plywood shall be of two grades namely BWR and MR Decorative Plywood shall be of two types. Type I and type 2 and shall conform to IS 1328.

Requirement of Type-I Veneered decorative plywood shall be as under:

- (a) Open slits checks or open joints not more than 150 mm in length and 0.5 mm in width shall be permissible provided the same are rectified with a veneer insert bounded with synthetic resin adhesive, as the case may be and further provided that the insert matches with the surrounding veneer in colour as well asfigure.
- (b) The decorative veneered surface shall be free from torn grain, dead knots decolourisation and sapwood.
- (c) The decorative veneered surface shall be selected for figure, texture, colour and grain etc. It shall be free from all manufacturing and wood defects except to the Engineer-in-

charge permitted under para 8.16.1.1(a). All veneers shall be matched or mismatched to achieve a decorative effect in colour figure and grain.

Adhesive: The adhesive for bonding veneers shall be MR and BWR type synthetic resin adhesive conforming to IS 848 for MR and BWR grade veneered decorative plywood respectively.

Dimensions and Tolerances:

The dimensions of plywood boards shall be as follows:

2400 mm x 1200 mm 2100 mm x 900mm

2100 mm x 1200 mm 1800 mm x 900mm

1800 mm x 1200 mm

Thickness: The thickness of plywood board shall be 3 mm, 4 mm, 6 mm, 9 mm, 12 mm, 19 mm and 25 mm.

Note: Any other dimensions (length, width and thickness) as agreed to between the manufacturer and the purchaser may also be used.

Tolerances: Tolerances on the nominal sizes of finished boards shall be as follows:

S.No. DIMENSION Tolerance

LENGTH +6 mm-0

Width +3 mm-0 mm

- 3. Thickness
- (i) Less than 6 mm + 10 per cent

Edge straightness 2 mm per 1000 mm Or 0.2 per cent

5. Squareness 2 mm per 1000 mm Or 0.2 per cent

Finish: The decorative plywood shall be uniform in thickness within the tolerances limits specified. The ends shall be trimmed straight and square edge straightness and squareness when tested as per Appendix I shall be within the tolerance specified in above table.

Sampling and Criteria for Conformity: The method for drawing representative samples and criteria for conformity shall be as per IS7638

Tests: Boards shall be subjected to following tests:

- (i) Moisture content: Decorative veneered plywood of either type when tested in accordance with IS1734 (Pt. I) shall have moisture content not less than 5 per cent and not more than 15percent.
- (ii) Water Resistance Test: Three test specimen of size 250 mm x 100 mm shall be prepared for each of the boards selected and submerged in water at 62+2 # for a period of 3 hours and dried for 8 hours at a temperatur eof 65+2 # and then followed by two more cycles of soaking and drying under same conditions described above. Decorative Veneered plywood of either type shall not show delamination or blister formation.

Marking: Each plywood bound shall be legibly and indelibly marked or stamped with the following on the face of board near one corner.

- (a) Indication of the source of manufacture
- (b) Year of manufacture
- (c) Batch no.
- (d) Type of plywood
- (e) Criteria for which the plywood has been labeled as ECO mark

The decorative veneered plywood may also be marked with standard BIS certification mark.

2.0 ACRYLIC SOILD SURFACE

Providing & fixing of straight and curved independent Paneling for walls & Columns anchored in floor slab & ceiling, cladded with any color Acrylic Solid Surface 12mm thick solid surface sheet straight fabricated on a single face, finished in matte finish, pasted with industrial grade silicon on a robust substrate. Substrate shall be with suitable MS box sections [Appx. 15 to 20 kg/ Sqm] as per structural requirement & duly painted with anti-rust red oxide coating and covered with 6mm thick water proof ply as per the design and dimensions approved. The proposal includes the cost of preparing appropriate

substrate surface over the civil structure provided, along with material cost & installation / fixing on straight walls and curved profiles which require thermoforming the material by making dyes and template sets.

FOR COUNTERS Providing and fixing counters (vanity or in any other location) with 12 mm thick acrylic solid surface manufactured as per ISO 19712-2. Solid surface used should be Microbial resistant and resistant to mould growth, boiling water resistant, heat resistant, impact resistant, stain resistant, scratch resistant as per ASTM G171 (min 800 MPa), Green Guard certified and with a fire rating conforming Class 1 as per BS 476 (Part 6 and 7). Acrylic solid surface of approved make and having minimum density of 1.65 g/cm3, fixed over Aluminum Sections designed to support a weight of 25 Kg. per Sqmtr. with suitable flexible adhesives (moisture cured Silicon Sealants) as per manufacturer's specification and guideline, including fascia and back splash area as per approved drawings and design, including fixing of solid acrylic surface over 18 mm thick WPC Board of approved make. The Joints of Solid surface should be joined with adhesives having Low VOC of 238 g/ litre as per UL 2818 and SCAOMD.

The Counter top should be finished with molding of edges, buffing of surface, making of holes for plumbing fixtures, flushing of joints, installing of necessary hardware, sealing with silicon sealants, etc. All complete as per direction of Engineer In charge. The Solid surface used should confirm to impact resistance of more than 180cm in ball drop test as per ISO EN 438-2 Clause 21, The plan and elevation area (horizontal and vertical) excluding wash basin area will be measured for payment. Fabrication to be done as per the manufacturer's fabrication manual, Solid surface manufacturer to provide 10 years installed warranty on the works.

FOR HORIZONTAL CLADDING

- Ø Acrylic solid surface sheets of approved make will be cut, pasted, thermoformed, engraved, inlayed and finished to give the desired shape and finish as per the drawings and design by provided by the Engineer In Charge. The finished material will be installed on site on Marine Ply/ Metal framework made of Steel Sections of desired Design and thickness
- Ø Use Good Quality Silicon Sealant for Pasting of Acrylic solid surface to the marine ply fixed on MS Frame provided for Support and for filling invisible undesired gaps happening. Ø All fabrication work to be carried out by approved Quality network Fabricator for claiming Limited installed warranty of 10 years

VERTICAL ACRYLIC SOLID SURFACE WALL CLADDING

- Ø Providing and Fixing Acrylic solid surface chosen color sheets on a Frame work of Aluminum Profile as specified and approved by Engineer In Charge the help of Silicon / Squirrel/ Kiel Mechanical Fixtures.
- Ø Make the desired markings on the Floor and ceiling. Fix aluminum sections preferably box sections of $50 \, \text{mm} \times 50 \, \text{mm} \times 3 \, \text{mm}$ thick aluminum on the markings so as to form a grid of $750 \, \text{mm} \times 600 \, \text{mm}$. The sections should be fixed to the wall with Metal anchor Fasteners
- Ø As an additional option where height is limited, less than 3 meters, acrylic solid surface Panels of the desired size, shape and finish can be installed on marine ply with the help of silicon(preferably Dowcorning)
- Ø Check the Panels for the desired aesthetics, line and level and Paste the panels to each other and finish them as per approved manufacturer fabrication manual.
- Ø In no case there should be direct screwing in the material Acrylic solid surface solid surfaces as this creates stress in material and may lead to developing cracks
- Ø All fabrication work to be carried out by Quality network Fabricator for claiming limited installed warranty of 10years.
- 1. Material Description
- a. Composition and Materials: Acrylic solid surface is a solid, non-porous surfacing material homogeneously composed of $\pm 1/3$ acrylic resin (also known as Poly Methyl M Acrylate or PMMA), and $\pm 2/3$ natural minerals. The main ingredient is the mineral Aluminum Tri Hydrate (ATH) derived from bauxite, an ore from which aluminum is extracted. For more information on the composition of the material, please consult the

Acrylic solid surface Material Safety Data Sheets (MSDS) available via the secured via local supplier.

b. Standard products:

Acrylic solid surface Sheets– Available in various standard thicknesses easily cut to size by Professional fabricators. All colours are available in 12 x 760 x 3680mm sheets. Many are available in the other sizes.

Check with acrylic solid surface supplier for the latest product availability.

- 10 mm sheet: 760 x 2490mm
- 12 mm sheet: 760 x 3658mm
- 19mm sheet:760X3658mm
- 1. INSTALLATION
- Sheet Thickness: Use of 6 mm sheet should generally be restricted to vertical applications only. The choice between 12.3 mm and 19 mm is generally based on aesthetic, performance and cost considerations. Consult a local Acrylic solid surface specialist for assistance.

• Joints and Cutouts:

To minimize material and facilitate installation, corner joints should be made square (butt) rather than mitered. All Acrylic solid surface joints should be reinforced. The edges to be joined should be straight, smooth and clean. Joints should only be made with "Joint Adhesive for approved equivalent. Make cutouts with a router equipped with a sharp 9.5 mm diameter (minimum) carbide bit. Corners of a cutout must be rounded to 5 mm radius and edges smoothed, top and bottom, all around a cutout. L- and U- shaped corners need smooth, 13 mm radius inside corners. For hob cutouts corners should reinforced with Acrylic solid surface corner block.

• Colour and Pattern Match:

Acrylic solid surface is a mineral-filled material, and like natural materials, some slight colour variation may exist from sheet to sheet, sheet to bowl, or bowl to bowl.

• Sealants and Adhesives:

Acrylic solid surface is compatible with many commercially available caulks and sealants. However, a specially developed FDA-listed silicone sealant sold by Acrylic solid surface Distributors should be used to achieve the best performance and colour match. Vertical panels of Acrylic solid surface may be installed over suitable substrates, including water resistant is required. In other cases, light coloured elastic polyurethane adhesive or Type I (ANSI A 136.1-1967) elastic solvent-based spread mastic adhesives may also be used.

• Do Not Use Water-Based Adhesives. Install counter tops on perimeter framing support (without added substrate) using small amounts of silicone sealant. When used in accordance with manufacturer's instructions, it provides a smooth and inconspicuous joint. Repairs, while sound and fully functional, can be expected to be slightly visible. Joint Adhesive is available wherever Acrylic solid surface is sold. Joint Adhesive can also be used to add decorative inlay designs into horizontal and vertical Acrylic solid surface surfaces. Check with a local Acrylic solid surface specialist for details.

• Clearances:

The recommended expansion clearance with uncalled Acrylic solid surface joints is minimum 30.5×10 -6 x (length of the Acrylic solid surface piece) x (biggest temperature range expected in °C). Joints to be caulked should be approximately 3 mm wide to allow satisfactory caulk penetration and expansion

3.0 FAÇADE CLEANING

The complete external facade, in Existing & extension of Terminal building shall be provisioned with mechanized cleaning and maintenance system.

The scope includes design, engineering, documentation, manufacture, supply, testing, installation, a facade cleaning system appropriate for the Existing & extension of Terminal building including all necessary coordination in design, supply and execution with Structural, Architectural, Façade and MEP systems for the buildings.

The Facade cleaning system / Building Maintenance system (BMU) shall be designed appropriately to provide mechanised cleaning of

Existing & extension of Terminal building exterior glazing by means of roof mounted traversing trolley jib system with two men Articulated Cradle or by means of travelling ladder system and

The complete system shall be design by taking into consideration required necessary the safety features and statutory requirements.

TRACK

Supply, commissioning, installation and testing of aluminum alloy rising track. The track will be T-6 tempered and will be installed with the help of soffit mounted brackets which will be MS and hot dip galvanised at 80-100 microns. The brackets will be bolted with hex bolts (SS-304 A2-70 hardened). The motorized rising rollers will be provided and a Articulated cradle will be suspended from these motorized rollers. The cradle will have a safe working load of 240kgs and will comprise of all the safety features. The winches will be European make. All complete as per manufacturer's guidelines & direction of engineer in charge. Any provisions in structure that needs to be done shall be integrated by the manufacturer / agency.

- 1. Aluminum Alloy rising track.
- 2. Rising motorized rollers.
- 3. Soffit mounted brackets.
- 4. Hex bolts for installation of soffit mounted brackets. The Hex Bolts are SS 304 A2-70Hardened.
- Material

Material: Aluminum Alloy AA6351, T6 Temper

- Load Carrying Capacity: 240Kg. Safe Working Load
- Safety Features: End Stops with limit switch
- Additional Features: Provided with Traverse Rollers with stainless steel AISI 304 components & hardware for traverse movements.
- Dimensions: 140*46 mm

A. Applications

Work is Inclusive of:

ii. Electrical:

- Supply of 3 phase power outlets (5Pin).
- Supply of Single phase power outlet adjacent to parking area.
- Provision of temporary adequate power for installation purposes within 30 m of working areas.
- Post uprights and hook restraints for all power cables.
- Provide earthing and lightning protection, if applicable.

iii. System Fixing Requirements:

- Casting in of all holding down bolts or thru bolt sleeves, ferrules and sockets.
- Design, supply and installation of fixings to secure the cast in bolt clusters supplied by CRL
- Grouting of holding down bolts, ferrules or sockets according to manufacturers specifications and drawings if applicable.
- Builder is to ensure that after casting in or fixing of hold down bolts, ferrules or sockets that the threads are free of concrete and damage that could cause additional costs and delays.
- Application of grout and water proofing membrane around the plinths which support our track system.

iv. Restraint System (supply only):

• Installation of the restraint sockets supplied by Sub-Contractor.

v. GeneralRequirements:

- Provision of scaffolding as required for safe and convenient access to the installation.
- Lifting of all equipment from ground level to roof or relevant level.
- Any/all steel work required to be executed for installation of cradle system shall be deemed to be inclusive in the offer.
- The system shall be integrated with the existing structure.

CRADLE

Design supply installation of articulated cradle .The winches will be European make by Power Climber. All complete as per manufacturer's guidelines &direction of engineer in charge. Any provisions in structure that needs to be done shall be integrated by the manufacturer/agency.

Material

Two number of Articulated cradle set comprises of all steel welded construction with Aluminum chequered plate floor comprising hollow box section frame of front Part of the cradle, shot blasted, zinc flame sprayed after fabrication and finished with calcium plumbate or zinc chromate primer, one undercoat and one gloss coat of paint. The cradle is fitted with PVC covered foam buffering to the leading edge and two return sides at floor level. The cradle is equipped for rigging with a pair of electrically powered hoisting winches, each with an inter locked over speed device complete with wire suspension ropes of appropriate length and power supply cable from the roof to cradle. The cradle has castors fitted to the base for ease of transfer.

4.0 HIGH PRESSURE LAMINATES

Providing and fixing 6mm thick High Pressure interior compact Laminate made out of Thermos setting resign treated Kraft as core material and design paper as a finish surface.

Platform Construction Constructed out of MS Box section. The flooring is Aluminium chequered plate with toe board; fitted with PVC covered foam buffering. Provided with two no. slewing and two no.

fixed position castors. Complete paneling in SS perforated sheet.

Safe working load on platform 180 kg. (2 persons + materials)

Power requirement plug and socket outlet 5 pin (IP 64 protected) 415V, 3phase, 50Hz. 20 Amps

Cable required at site PVC copper flexible cable 6 core X 2.5 SQ mm. Length as per site condition

Cradle Size 2315mm [L] X 1466mm [W] X 3635mm [H] Including castors

Hoisting Height As per actual

Hoisting / Lowering Speed 8.5 M / Min.

Suspension Wire ropes Two, one at each end

Safety wire ropes Two, one at each end

Wire rope Specification Size: Dia.8mm, 6 X 19 Galvanized

Wire rope safety factor 10:1

Overspeed Devices Inbuilt

Hoist Units European make Hoist or Equivalent

Power Supply As per project requirement.

Rope Reeving Rope winding / unwinding onto power reelers fitted below the winches for both, main suspension and secondary safety wire. Torque limiters provided for slack free reeving.

Central control in the cradle for traction hoists with IP55 Protection, main Switch, phase protection & Push Buttons.

Compact laminates should be resistance to water immersion through permissible increase on thickness and mass

<0.60% and board should have density >1.35kg/cm3.

Compact should be flame retardant fulfilled the criteria of under BS-476/97 and EN438-6 with classification of BS1D0 standard property , Anti-bacterial & Anti-termite (under JIS Z2801:2000 certification), Chemical resistance, Scratch resistant ,flame resistance, weather & climatic shock resistance(The manufacturer should provide10 years warranty certification on any manufacturing and moisture related defects.), and fulfilled the criteria of FSC and Green Guard Gold certification and manufactured under EN438-2&3:2005 standard.

Finish and colour of compact laminates should be finalized under direction of Engineer – in-charge. Compact laminates should be installed on 25x50mm aluminium tube or approved tube size at 500mm c/c under desirable height and fixed through same compact colour rivets or compact adhesive as per recommended by compact supplied agency.

INSTALLATION OF COMPACT-

Clad should be installed on 14 gauge of Aluminum tubular tube in the size of as per site requirement, Spacing of two vertical should always be maintain at 600 mm c/c distance (without CNC cutting board) or 400mm C/C in perforated board (CNC catted board) and panels should be fixed on these vertical tubes with the help of 5mm dia. colour matched rivets as per manufacturer specification.

This aluminum tubular tube should be fixed on wall with the help of 85x50x5mm thick dead load bracket and wind load bracket through 10mm fastener. Wind load bracket will have vertical slot & dead load bracket will have in horizontal slot. Maintain 6 mm both horizontal and vertical gaps between two installed clad panels. Shade and CNC perforation in approved pattern and designed finalized under direction of Engineer—in-charge.

5.0 DIAMOND FINISH STAINLESS STEEL CLADDING

Design, Supply, fabrication, and installation of stainless steel sheet SS 316 Superior grade finish make with 1.5mm thick sheet with 90 degree right angle sharp V grooving bending without radius and as per approval including marine ply thick 19mm thick framework as per vendor design. Metal to be cladded on 19mm marine plywood with appropriate silicone produced for construction of FC Silicone Sizes and spacing to be designed by bidder with neat and clean appearance. Nowhere screws should be visible. Metal panel shall be completed in all aspects as shown in drawing including all other necessary related works as specified and as directed by Engineer in Charge. Necessary cutout to be provided as specified. Same shall be cleaned and handed over to the client.

GENERAL DESCRIPTION Fabrication, supply and installation of stainless steel cladding consisting of internal Aluminium frame (as per design requirement) thick box section and cladded with Stainless steel sheet of 2 mm thick with pattern sheet (conforming to ASTM 304 Grade) as per drawing and details. Grade-SS304

GENERAL EXECUTION SYSTEM

The cladding work is followed by the steps as mentioned below

Ø The internal Box section (as per design requirement) Aluminium box section is fixed to the RCC column with the help of M.S L-cleat (as per design requirement).

Ø Factory made Stainless steel sheet as per the design is fixed on the Box section with SS screws.

Ø The groove created by the SS sheet is filled by the U-channel FINISH

Diamond finish

CORROSION RESISTANCE

The Material should have excellent corrosion resistance.

6.0 ACOUSTIC CARPET TILES TUFTED TEXTURED

Providing and laying Digital Placement of Color / 100% Solution Dyed Nylon 6,6carpet tiles Tufted Textured Loop Pile tiles of Mohawk/Milliken/Shaw / Interface or approved equivalent of approved shade & size 500 x 500 mm / 600 x 600 mm with protective stain treatment(s), soil protection to repel and resist Stain and Anti-Microbial treatment, Appearance Retention Rating (CRI 101) for severe use with PVC free backing having min. 9 stitches per inch, minimum density of 6000 oz per cud conforming to ASTME – 648 Flooring Radiant Panel Class I grade including fixing with Voluntary Organic Compound (VOC) Free Adhesive etc. complete as per drawing and directions of Engineer-In-Charge.

MATERIAL

The Solution Dyed Nylon carpet tile shall conform to the following specifications:-

Sl.No Description Specification

Construction Tufted Textured LoopPile
 Yarn/ Fiber Nylon6,6
 Gauge / Carpet thickness Min.1/10"
 4Yarn weight Min. 24 oz per sq.yd 5 Tufts 2230.3/100 sq. cm

SECTION-V

5	Rows/Stitches	Min. 9.9/Inch
6	Primary backing	NonWoven
7	Secondary backing	PVC-Free Hard Back/ComfortPlus
8	Minimum Density	6000 oz per cuyd
9	Tile Size	500 x 500 mm / 600 x 600mm
10	Indoor Air Quality	CRI Green Label Plus Certification

Before starting the work the contractor shall get the sample of carpet tiles approved by Engineer- in charge.

LAYING

- a. Flooring shall be neatly leveled with smoothly cemented surface.
- b. All the junction boxes to be covered & leveled to the cemented surface.
- c. All the expansion joints to be covered or leveled properly.
- d. Wall corners & below the skirting (if applied) shall be dust free.
- e. Before laying carpet one coat of paint shall be applied on floor & dust free.
- f. Skirting work to be completed before laying carpet.

ADHESIVE

Green Adhesive is a releasable, pressure sensitive adhesive specially engineered to install carpet tiles. This premium adhesive is formulated to facilitate release & re bonding of carpet tiles while permanently retaining its tack, allowing individual tiles to be lifted out easily and replaced without substantial loss of adhesive properties for the life of the installation.

QUALITY ASSURANCE

Performance Specifications

Radiant Panel: (ASTM E-648) Class 1 Smoke Density: (ASTM E - 662) Light fastness: (AATCC 16 - E) Static: (AATCC - 134) < 3.0 KV

SECTION - 2

STRUCTURED CABLING FOR TELEPHONE SYSTEM

1 STRUCTURED CABLING FOR TELEPHONE SYSTEM

This section contains the definitions of terms, acronyms and abbreviations that have special technical meaning of that are unique to the technical content of the standard special definitions that are appropriate to individual technical sections are included.

1.1 DEFINITIONS

ADAPTER: It will be a device that will enable different sizes or shape of plugs to mate with one another or to fit into a telecommunications outlet or provide for the rearrangement of leads that allow large cables with numerous wires to fan out into smaller groups of wires, or make interconnections between cables.

CROSS CONNECT: A group of connection points, wall or rack mounted, tied to mechanically terminate and administer building wiring.

PATCH CORD: A length of wire or optical fiber cable with connectors on each end used to join communications circuits at a cross connect.

PATCH PANEL: A system of terminal blocks, patch cords, backboards that facilitate administration of cross- connected fields for moves and rearrangements.

TELECOMMUNICATIONS OUTLET: A connecting device located in a work area on which horizontal wiring system cable terminates and which will receive a mating connector.

1.2 BASIS OF DESIGN:

Depending upon the characteristics of the individual application, choice with respect to transmission media have been made. In making this choice factors which have been considered include.

Flexibilitywithrespecttosupportedservices; Requiredusefullifeofbackbonewiring; Site size and user populations.

Sincebuildingoccupantsneedsfortelecommunicationsservicesvaryovertime and from occupant to occupant hence plans for the future use of the backbone wiring may range from highly predictable to very uncertain. Wherever possible, different service requirements have been determined.

1.3 BACK BONE WIRING

1.3.1 General

The function of the backbone wiring shall be to provide interconnections between telecommunications closets, equipment rooms and entrance facilities in the telecommunications wiring system. The backbone wiring shall consist of the transmission media, intermediate and main cross connects, and mechanical terminations for interconnection of telecommunications closets, equipment rooms and entrance facilities. The backbone wiring shall include transmission media in the building.

The backbone wiring shall use the star topology wherein each telecommunications closet shall be wired to a main cross connect / patch panel or an intermediate cross connect then to a main cross-connects / patch panel. There shall be no more than two hierarchical levels of cross connects / patch panel in the backbone wiring. Interconnections between any two telecommunications closet shall pass through three or fewer cross-connects / patch panel.

Bridged taps shall not be permitted as part of the backbone wiring.

Either of the following four types of cables shall be used for backbone wiring as defined in schedule of quantities.

- i. 100-ohm UTP multiplier backbonecable.
- ii. 150-ohm STPcable
- iii. 50-ohm coaxialcable.

The tenderer has to assure that cross talk coupling between individual, unshielded twisted-pairs shall not affect the transmission performance of multi-pair cables.

1.4 HORIZONTAL WIRING

1.4.1 General

The horizontal wiring shall be the portion of the telecommunications wiring system that will extend from the work area telecommunications outlet to the telecommunications closet. The horizontal wiring shall include the telecommunications outlet in the work area, mechanical termination for the horizontal cables, and cross-connections located in the telecommunications closet.

The horizontal wiring shall be capable of handling he following minimum services.

- i. Voicetelecommunications.
- ii. Premises switchingequipment.
- iii. Local area network(LAN)

The horizontal wiring shall be a star topology with each work area telecommunications outlet connected to a telecommunications closet. Horizontal wiring shall preferably contain no more than one transition point between different forms of the same cable type.

Bridged taps shall not be permitted as part of the horizontal wiring.

The maximum horizontal distance shall be limited to 90 meters (295ft) independent of media type i.e.thecable length from the mechanical terminating of the media in the telecommunications closet to the telecommunications outlet in the work area shall be limited to this distance. This horizontal distance includes cabling required from the telecommunications outlet to the work station. Horizontal cable shall be limited to one of the following four types of a slisted out in the schedule of quantities.

- i. Four-pair100-ohm unshielded twisted pair(UTP) cables.
- ii. Two-pair150-ohm shielded twisted pair(STP) cable.
- iii. 50-ohm coaxialcables.
- iv. 62.5/125 um optical fibercable.

1.4.2 Grounding Considerations

Grounding system shall be an integral part of the telecommunications wiring system. In addition to helping protect personnel and equipment from hazardous voltages, the grounding system shall reduce the effect of electromagnetic interference ((EMI) to and from the telecommunications wiring system.

Grounding shall meet the NEC requirements and practices or local authorities or codes whichever impose a more stringent requirement.

The following shall be considered for the grounding system:

Installation conforms with proper practices and requirements.

Each telecommunications closet shall have an appropriate grounding access.

Grounding shall be available for cross-connect frames, patch panel racks, telephone and data equipment and equipment required for maintenance and testing.

1.5 BACKBONE WIRING DISTANCES

Telecommunications Closet to Main Cross-Connect

The maximum backbone distance between the main cross-connect patch panel and the mechanical termination in the telecommunications closet shall be as follows:

For 100 ohm UTP cable, maximum distance between telecommunication closet and main cross connect / panel shall be 800 mts.

For 150 ohm STP cable, maximum distance between telecommunication closet and main cross connect shall be 700 mts.

Telecommunications equipment which connect directly to main or intermediate cross-connects / patch panel shall done via cables of 30 m or less.

1.6. WORK AREA

The work area shall be defined as those components which extend from the telecommunications outlet end of the horizontal wiring to the station equipment. The station equipment shall be any of the number of devices including but not limited to telephones, data terminals and computers.

When adapters are needed at the work area, they shall be external to the telecommunications outlet. Following adaptations at the work shall be followed:

A special cable or adapter when the equipment connector is different from the telecommunication outlet connector.

A "Y" adapter when two services run on a single multiplier cable.

Passive adapters when the cable type in the horizontal wiring is different from the cable type required by the equipment.

Active adapters when connecting devices use different signaling schemes. Pair transposition wherever necessary for compatibility.

Termination resistors wherever required in the work area. These shall be external to the telecommunications outlet.

1.7 TELECOMMUNICATIONS CLOSET

A telecommunications closet shall be defined as an area within the building set aside for the exclusive purpose of housing equipment associated with the telecommunications wiring system. There shall be no upper limit on the number of telecommunications closets which may be provided within the building. The telecommunication closet shall have following three possible configurations.

1.7.1 Horizontal BackboneConnection

The telecommunications closet shall contain the mechanical terminations for a portion of the horizontal wiring system and a portion for the backbone wiring system. In such a case the telecom closet shall provide facilities (space, power, grounding etc.) for the passive (cross-connect) / patch panel or active devices or both used to interconnect the two system.

1.7.2 Backbone Wiring System Interconnection

The telecommunications closet may contain the intermediate cross-connect / patch panel or main cross connect / patch panel for different portions of the backbone wiring system. In this usage, the telecommunications closet shall provide facilities for the passive or active devices or both used to inter connect two or more portions or the backbone wiring system.

1.7.3 Entrance Facilities

A telecommunications closet may be used to contain the demarcation point or an interbuilding entrance facility. In this usage, the telecommunications closet shall provide facilities for the active and / or passive devised required inter-connecting the demarcation point or interbuilding entrance facility or both to the telecommunication wiring system.

The design of the telecommunications closet shall be as per the requirements of EIA/TIA-569.

1.8 EQUIPMENT ROOM

The equipment room shall be defined as an area with in the building where telecommunications systems shall be housed along with the mechanical termination of one or more portions of the telecommunications wiring system. Equipment room shall be considered to be distinct from telecommunications closets because of the nature or complexity of the equipment they contain. Any or all of the functions of a telecommunications closet shallbealternatively provided by an equipment room.

1.9 CABLE SPECIFICATIONS

This section covers the detailed specifications of the cable for the horizontal and backbone wiring sections.

All cables shall meet the requirement of the EIA 568 category 6 for voice whichever impose a more stringent requirement.

1.9.1 1000hm Category 6 UTP Cable

The cable shall consist of 24 AWG solid copper conductors, insulated with HDPE. All conductors shall be conferred with a low smoke halogen jacket. it shall be possible to obtain transmission rate of 10 mbps upto 150

m. This cable shall meet the specifications of EIA/ITA-568, IEEE 802.3,10 BASE-T, IEEE 802.5 % ICEA.

1.9.1.1 PairAssembly

The cable shall be restricted to four pair size to support a broad range of applications. The pair twists of any pair shall not be exactly the same as any other pair. The pair twist lengths shall be selected be the manufacturer to ensure compliance with the crosstalk requirements of this standard.

1.9.1.2 ColorCodes

The color codes shall be as shown below:

Conductor Identification Color Code Abbreviation

Pair 1 White-Blue Blue (W-BL)(BL)

Pair 2 White-Orange Orange (W-O)(O)

Pair 3 White-Green Green (W-G) (G)

Pair 4 White-Brown Brown (W-BR) (BR)

1.9.1.3 Cable Diameter

The diameter of the jacketed cable shall be less than 5.6 mm.

1.9.1.4 DC Resistance

The resistance of any conductor, measured in accordance with ASTM D 4566 shall not exceed 28.6 ohms per 1000 ft.

1.9.1.5 DC Resistance Unbalance

The resistance unbalance between the two conductors of any pair shall not exceed 5% in accordance with ASTM D 4566.

1.9.1.6 Mutual Capacitance

The mutual capacitance of any pair at 1 Khz, measured in accordance with ASTM D 4566 shall not exceed 20 nF per 1000.

1.9.1.7 Capacitance Unbalance Pair toGround

The capacitance unbalance to ground at 1 Khz of any pair, measured with ASTM D 4566 shall not exceed 1000 pF per 1000 ft.

1.9.1.8 Attenuation

The attenuation of any pair cat-6 cables shall take performance to 300 Mhz in accordance with ASTM 4566.

Frequency (MHz) Maximum Attenuation (dB per 1000 ft)

1.0 6.3

4.0 13

8.0 18

10.0 20

1.9.1.9 CharacteristicImpedance

The characteristic impedance shall meet the following requirements when measured using the equipment test procedure given in the ASTMN D 4566.

1.9.1.10 Near and Crosstalk

The near-end cross talk coupling loss between any two pairs within a cable shall be in accordance with ASTM D 4566

1.9.2 Hook - UP Wire

The hookup wire shall be solid annealed copper conductors individually insulated with PVC with insulation markedatregularintervalswithanadditionalcodeforcolors. The pairs izes shall be 1,2,3 or 4 as specified in schedule of quantities.

The electrical specifications shall be as follows:

1.9.3 Riser Cable

DC Resistance 52 ohm per 1000 ft. Mutual capacitance 4.9nFper100mt.

This cable shall consist of solid copper conductors insulated with expanded polyethylene covered by a PVC sheet. The core shall be covered with a layer of plastic tape and overlaid with a corrugated PVC plastic. it shall be suitabletobeusedwithoutconduit. The cableshall meet. EIA/TIA-568, CSAT-529, IEEE802.3&10BASE

-T. The pair sizes shall be as per the schedule of quantities. The cable shall meet the following specifications.

Maximum DCResistance 26.5ohmper100ft. Maximum D CUnbalancedResistance 17% Mutual Capacitance at1Khz 16 nF per 1000ft.

SECTION - 3

STRUCTURED CABLING FOR MATV SYSTEM

1 MATV SYSTEM

1.1 COAXIAL CABLES

The coaxial cables shall be of wideband type with operation upto 860 MHz capability, with PE dielectric and PVC jacket.

The cables shall meet or exceed the following specifications

6 Foam Series 11 Foam Series 500 Series IS Standard IS:14131 5CA4 7CA4 Centre Copper Conductor Dia. 1.02 mm 1.63 mm 2.77

Dielectric Dia. 4.57 mm 7.11 mm 11.43

Dielectric Material Cellular PE Cellular PE Cellular PE

Outer Dia. 7.0 mm 10.03 mm 14.22

Bending Radius >75 mm >115 mm >200mm

Impedance 75 Ohms 75 Ohms 75 Ohms

Return Loss >23 dB >23 dB >23Db

Attenuation at 20° C Max dB/100 Mtr Max dB/100 Mtr Max dB/100 Mtr

5 MHz 1.9 1.25 0.52

45 MHz 5.25 3.5 1.61

300 MHz 11.65 7.38 4.3

450 MHz 14.45 9.02 5.35

550 MHz 16.1 9.97 5.97

860 MHz 20.1 12.52 7.65

1.2 TAP OFF

These shall be of ultra wide bandwidth and of hybrid type

These shall have a flat frequency response over the entire operating range.

These shall have aluminium cast housing for high frequency radiation resistance. The tapoffs shall be available in one way, two way and four way configurations. The Tap offs shall be available in different Tap values ranging from 11dB, 15dB, 20dB,

The Tapoffs shall meet or exceed the following Specifications. Oneway Twoway Fourway

TapLoss 15 -20dB 15 -20dB 15 - 20dB

ThroughLoss 2.0 -0.5dB 2.5 -1.0dB 3 - 1.5dB

25dB & 30 dB to enable uniform signal balancing.

Isolation >22dB >22dB > 22dB

ScreeningFactor >75dB >75dB >75dB

Impedance 750hms 750hms 750hms

1.3 SPLITTERS

These shall be of ultra wide band width and of hybrid type

These shall have a flat frequency response over the entire operating range.

These shall have a aluminium cast housing for high frequency radiation resistance. The splitters shall be available in 2 way, 3 way & 4 way Configurations.

The Splitters shall meet or exceed the following specifications

Two way Three way Four way
Through Loss 3.5 dB 6 dB 7.5 dB
Isolation > 20 dB > 20 dB > 20 dB
Screening Factor > 75 dB > 75 dB > 75 dB

1.4 CATV AMPLIFIERS (LINEEATENDER)

- 1.4.1 The CATV Amplifier shall be of ultra wideband type and fully hybrid solid state.
- 1.4.2 The CATV Amplifier shall have a single I/P and single 0/P connector with a- $20~\mathrm{dB}$ monitorports.

143

The CATVA mplifiers hall incorporate its own DC supply unit and shall only require a source of 220 V AC.

- 1.4.4 The CATV Amplifier shall be housed in a high frequency resistant Aluminiumhousing
- 1.4.5 The CATV Amplifier shall have an in built variable equaliser and Attenuator for site signal condition adjustments.

The CATV Amplifier shall meet or exceed the following Specifications

1.4.6 ForwardFrequencyRange: 45 - 860MHz

1.4.7 Video Signal/Noise: 55 dB/Min

1.4.8 Gain: 36dB

1.4.9 GainAdjustment: Plug in fixed variable 10dB

1.4.10 Maximum O/Plevel: 114 dB µv as per DIN45004B

1.4.11 NoiseFigure : < 6dB

1.4.12 Flatnessofresponse: ± 1 dB over entireband

1.4.13 Levelstability : \pm 0.5 dB (-10° C to +50°C)

1.4.14 Equalisation Plug in Fixed and 0-9dB: continuously Variable

1.4.15 ReturnFrequencyRange: 5-30MHz

1.4.16 Returnpathgain : < -2 dB (optional Plug-in Amplifier 15 dB)

1.4.17 Housing : Aluminium

1.5 TV ROOM OUTLET

The Room Outlet shall have IEC Male Plug fixed for mating with IEC Female Plug of Connecting Lead.

The Room Outlet shall have either a screw clamp connection or 'F' Connector connections for connecting In-house Cable to Room Outlet.

The Room Outlet shall provide DC isolation for centre conductor between TV Set and Distribution network. The room outlet shall meet or exceed the following specifications

End of line type Through type Splitter type Through Loss --- 1 dB 3.5 dB Branch Loss 0.5 dB 12 dB 3.5 dB Screening Factor >50 dB >50 dB >50 dB Impedance 75 Ohms 75 Ohms

1.6 CONNECTING LEADS

The connecting leads shall use a standard Coaxial cable of 75 ohms Impedance. (at least RG-6)

The connecting leads shall have a male plug at both ends.

The connectors used at both ends shall confirm to DIN 42325 and should be moulded on to the cable. The length of the connecting lead shall be 1.5 m The connecting lead shall have a screening factor of >50 dB.

SECTION-4 - UPS SYSTEM

Three Phase Solid State Uninterruptible Power Supply Single System - Guide Specifications 30/40/50 kva UPS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions, and other applicable specification sections in the Project Manual apply to the work specified in this Section.

1.2 SUMMARY

- A. Scope: Provide design and engineering, labor, material, equipment, related services, and supervision required, including, but not limited to, manufacturing, fabrication, erection, and installation for a solid state uninterruptible power supply (UPS) as required for the complete performance of the work, and as shown on the Drawings and as hereinspecified.
- B. Section Includes: The work specified in this Section includes, but shall not be limited to, a three-phase, on-line, double conversion, solid state UPS. The UPS shall operate in conjunction with the existing building electrical system to provide high quality power conditioning, back-up power protection, and distribution for electronic equipment loads. The system shall consist of a solid state IGBT rectifier/inverter, power factor corrected rectifier, a 100 percent rated for continuous duty static switch, battery plant, LCD status/control panel, and synchronizing circuitry as describedherein.

1.3 REFERENCES

A. General:

The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only. The edition/revision of the referenced publications shall be the latest date as of the date of the Contract Documents, unless otherwise specified.

B. Institute of Electrical and Electronics Engineers, Inc.(IEEE): ANSI / IEEE C62.41, "Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits" (copyrighted by IEEE, ANSI approved).

C. International Organization for Standardization(ISO): ISO 9001, "Quality Management Systems - Requirements."

D. European UPS Standards:

CEI EN 62040-1:2008

CEI EN 62040-2:2006

CEI EN 62040-3:2012

Following the provisions of the Directives: 2004/108/CE 2006/95/CE

1.4 UPS DEFINITIONS

A. Purpose: The purpose of this specification is to define the design, manufacture and testing characteristics required in view of supplying, putting into operation and maintaining an Uninterruptible Power Supply system (referred to as a UPS in the rest of thisdocument).

The UPS system shall be designed to supply dependable electric power to:

1. The Single-UPS unit with static bypass shall be designed to supply dependable electricpower

2. Active redundancyN+1:

System of No.1 in parallel

The total load supplied by the UPS system shall be equal to 30/40/50 kva, at a power factor pf = 0.9.

B. Brief description:

- 1. The UPS system shall be made up of No. identical parallel-connected single-UPS units (same power rating), operating in double-conversion mode (also called on-line mode); it shall be a VFI-type UPS (as per standard IEC62040-2).
- 2. Each UPS unit shall have a unit rating of 30/40/50 kva and shall comprise the following components, described below in this specification:
- a. PFC rectifier
- b. Battery charger
- c. 3-Level Inverter
- d. VRLA Battery
- e. User and communicationsinterface
- f. User friendly TFT touch frontpanel
- g. Integrated BackfeedProtection
- h. Any and all other devices required for safe operation and maintenance, including circuit breakers, switches, etc.

(for a system with 2 or more UPSs in an active redundancy configuration)

- a. Static bypass (via a static switch) for each UPSunit
- b. Manual maintenance bypass for each UPSunit

(for all other cases)

- a. User and communicationsinterface
- b. Battery management system
- c. Any and all other devices required for safe operation and maintenance, including circuit breakers, switches, etc.

C. System Aim:

The UPS shall ensure continuity of electric power to the load within the specified tolerances, without interruption upon failure or deterioration of the normal AC source (utility power) for a maximum protection time determined by the capacity of the backup batteries installed.

1.5 OPERATING PRINCIPLES

A. System Typology:

Each single-UPS unit shall operate in double-conversion mode (also called on-line mode); it shall be a VFI- type UPS (as per standard IEC 62040-2), made up of the following components, de-scribed in detail in this specification.

B. Normal operation (normal AC sourceavailable):

The rectifier supplies the inverter with DC current while the charger simultaneously float charges the battery. The load is continuously supplied with dependable electrical power by the inverter.

C. Operation on battery power (normal AC source not available or outsidetolerances): Upon failure or excessive deterioration of the normal AC source, the inverter shall continue to supply the load from battery power without interruption or disturbance, within the limits imposed by the specified battery backup time.

D. Battery recharge (normal AC source restored):

When the normal AC source is restored, the rectifier shall again power the inverter, without interruption or disturbance to the load, while the charger automatically recharges the battery. The UPS system shall ensure equal sharing of the total load between the various parallel-connected units.

E. Parallel operation andredundancy

1. Without redundancy: The system shall not be redundant. The No. 1UPS units must operate in parallel to supply the load. Shutdown of a UPS unit shall result in load transfer to the bypass AC source via the various static bypass switches. The Parallel connection must up to the maximum number of 8 UPSunits.

It shall be possible to configure and set up the parallel configuration on site.

2. With redundancy:

- a. The units shall operate in parallel with redundancy, with the load shared equally between theunits.
- b. Redundancy shall be of the "n+1" (or n+2) type, i.e. "1" (or 2) units shall be redundant in the total of n units. If a major fault occurs on a unit, it shall automatically disconnect.
- c. If the remaining unit(s) are sufficient to supply the load, it/they shall remain inoperation.
- d. If the total available power is insufficient, the load shall be automatically transferred, with-out interruption, to the bypass AC source, if it is withintolerances

F. Transfer to bypass AC source:

- 1. In the event of an overload exceeding system capabilities (short-circuits, heavy inrush currents, etc.) the load shall be automatically transferred, instantaneously and without interruption, to the bypass AC source, on the condition that bypass power is available and withintolerances.
- 2. To that end, synchronization of each inverter in phase and frequency with the bypass source shall be automatic. Transfer of the load back to the UPS-unit outputs shall be automatic or manual. During transfer, the load shall not suffer an outage or disturbance in the supply of power.
- 3. To ensure transfer in complete safety, the system shall simultaneously control the staticswitches.
- 4. On request, the UPS system may automatically transfer the load with a micro interruption if a major fault occurs on the UPS system and if synchronization with the bypass source has not beenestablished.

G. UPS maintenance:

- 1. For maintenance purposes, all electronic components shall be accessible from the front and from the sides of the UPS.
- 2. In addition, a built-in manually-operated mechanical bypass system shall be:

- a. Installed in each UPS unit; (for a system with 2 or more UPS units with activeredundancy)
- b. Possibility to install separately in an external bypass enclosure or cubicle (othercases).
- 3. For personnel safety during servicing or testing, this system shall be designed to isolate the UPS units while continuing to supply power to the load from the bypass AC source. Transfer to the manual bypass mode and back shall be possible without interruption to theload.
- 4. The UPS shall also include a device making it possible to isolate the rectifiers and the chargers from the normal ACsource.

PART 2 - SYSTEM DESCRIPTION

2.1 TechnicalCharacteristics

A. UPS DesignRequirements:

- 1. Output Power Continuous Rating: The continuous output power rating of the UPS shall be 30/40/50 kva at PF=0.9 lagging powerfactor.
- 2. Rectifier Input Voltage: 415 volts AC, -20 percent +15 percent, three-phase, 5 wires 3Ph +N + PE. 400 voltsstandard.
- 3. Bypass line Input Voltage: 415 volts AC, -20 percent +15 percent, three-phase, 5 wires 3Ph +N + PE. 400 voltsstandard
- 4. OutputVoltage:415voltsAC,three-phase,3wiresplusNeutralplusground. 400 voltsstandard.
- 5. Battery Autonomy: UPS shall be capable of operating at 70% load for 30 minutes at 0.9 PF output at a temperature of 25 °C on batterypower.
- 6. Battery Type: Valve regulated sealed lead acid (VRLA).
- B. AC Input Characteristics:
- 1. Voltage (Rectifier and Bypass line):415 volts AC, -20 percent +15 percent, three-phase, 5 wires 3Ph +N +PE.
- 2. Frequency: 50 hertz, ±10%.
- 3. Power Factor: Greater than 0.99lagging.
- 4. Total Harmonic Distortion: Less than 3% at 100%load.
- C. AC Output Characteristics:
- 1. Voltage: 3100/400/415V AC (adjustable from front panel ± 10%, 15%, 20%, 25%, etc.), ±1 percent steady state variation phase-to-phase voltage volts AC, three-phase, 5wires.
- 2. Frequency:50hertz,±2percent50/60(adjustablefromfrontpanel±1%,2%,3%,...,10%etc)with ±0,1% Inverter Synch with Mains; 50 hertz, ±0.01 percent when free running.
- 3. Voltage Stability: ±1.0 percent for balanced load, ±2.0 percent for unbalancedload.
- 4. Voltage Distortion: Maximum 2 percent total (THD) linear loads, maximum 5 percent total (THD) not linear loads.
- 5. Power Factor: 0.9 at the rated volt amperes(VA).
- 6. Inverter Overload Capability: 125 percent of rated load for 10 minutes, 150 percent of rated load for 1minute.

- D. Battery:
- 1. Number of Cell: 360 (60 blocks with middle point:30+30)
- 2. BatteryVoltage:
- +/-320 volts DC minimum before cutoff;
- +/-360 volts volts DC nominal;
- +/-404 volts floating voltage at 25°C.
- 3. The battery charger is equipped with a temperature probe to enable temperature compensated charging.
- E. EnvironmentalRequirements:
- 1. The UPS shall operate under the following environmental conditions:
- a. Temperature:
- 1) UPS Module Operating: 0 °C to 40°C.
- 2) Non-Operating (Storage): -10 °C to 60°C.
- b. Relative Humidity (Operating and Storage): 0 percent to 95 percentnon-condensing.
- c. Barometric Pressure: Up to 1000 meters above sealevel.
- d. Audible Noise: 55 dBA at1m.

2.2 MODES OF OPERATION

A. UPS module shall be designed to operate as a double conversion, on-line reverse transfer system in the following modes.

Normal: The inverter shall continuously supply power to the critical load. The PFC rectifier shall derive power from the utility AC source and supply DC power to the inverter while simultaneously float charging the battery.

Emergency: Upon failure of the utility AC power source, the critical load shall be supplied by the inverter, which, without any interruption, shall obtain its power from the battery.

Recharge: Upon restoration of the utility AC power source (prior to complete battery discharge), the PFC rectifier shall power the inverter and simultaneously recharge the battery.

Bypass Mode: The static bypass transfer switch shall be used to transfer the load to the bypass without interruption to the critical power load. This shall be accomplished by turning the inverter off. Automatic re- transfer or forward transfer of the load shall be accomplished by turning the inverter on.

2.3 COMPONENT DESCRIPTION

A. PFC Rectifier and Battery Charger: Incoming AC power shall be converted to a regulated DC output voltage by an IGBT (insulated gate bipolar transistor) power factor correction (PFC) rectifier. The PFC rectifier shall provide high quality DC power to charge the batteries and power the inverter and shall have the following characteristics:

Input Power Factor Correction (PFC): The PFC rectifier shall be power factor corrected so as to maintain an input power factor of 0.99 lagging to unity at 75 percent or above load levels to ensure generator compatibility and avoid reflected harmonics from disturbing loads sharing the utility power.

Input Harmonic Current Suppression: The PFC rectifier shall produce a sinusoidal input AC current on each phase with low harmonic content, limiting THD on the UPS input to below 3 percent.

Temperature Compensated Charging: The battery charger shall be equipped with a temperature probe to enable temperature compensated charging and shall adjust the battery float voltage to compensate for the ambient temperature.

- B. Inverter: The UPS output shall be derived from a variable frequency Pulse Width Modulated (PWM) 3 Level IGBT inverter design. The inverter shall be capable of providing the specified precise output power characteristics while operating over the battery voltagerange.
- C. Static Bypass 100 Percent Rated, Continuous Duty: The static bypass transfer switch shall be solid state, rated for 100 percent continuous duty without mechanical contactor device in parallel for higher reliability and consistent response time and shall operate under the following conditions:
- 1. Uninterrupted Transfer: The static bypass transfer switch shall automatically cause the bypass source to assume the critical load without interruption after the logic senses one of the following conditions:
- a. Inverter overload exceeds unit's rating.
- b. Battery protection period expired and bypass current isavailable.
- c. Inverterfailure.
- 2. Interrupted Transfer: If the bypass source is beyond the conditions stated below, the UPS shall make an interrupted transfer (not less than 100 milliseconds in duration).
- a. Bypass voltage greater than +10 percent, -10 percent from the UPS rated outputvoltage.
- b. Bypass frequency greater than ±1-±5 hertz (programmable) from the UPS rated outputfrequency.
- 3. Automatic Uninterrupted Forward Transfer: The static bypass transfer switch shall automatically forward transfer power, without interruption, after the UPS inverter is turned on after an instantaneous overload-induced reverse transfer has occurred and the load current returns the UPS's nominal rating orless.
- 4. Manual Transfer: A manual static transfer shall be initiated from the UPS control panel by turning the UPS inverter off.
- 5. Overload Ratings: The static bypass transfer switch shall have the following overloadcharacteristics:
- a. 1000 percent of UPS output rating for onecycle
- b. 150 percentcontinuous.
- 2.4 SYSTEM CONTROLS AND INDICATORS
- A. DSP Microprocessor-Controlled Logic:
- 1. The full UPS operation shall be provided through the use of DSP microprocessor-controlled logic. Operation and parameters shall be firmware-controlled, thus eliminating the need for manual adjustments or potentiometers. The logic shall include, but shall not be limited to, a self-test and diagnostic circuitry such that a fault shall be isolated down to the printed circuit assembly or plug-in power assembly level. Every printed circuit assembly or plug-in power assembly shall be monitored. Diagnostics shall be performed via a PC through the local diagnostics port on the UPS. UPS shall be DSPmicroprocessor-controlled.
- 2. The UPS shall include, but shall not be limited to, a standard easy-to-use control and indicator panel. Included shall be a graphic color touch screen and statuslight.

- 3. Display shall facilitate operation by offering the functions listedbelow:
- a. Operating information supplied on thescreens.
- b. The display shall assist the Owner by providing step-by-step help in the Owner'slanguage.
- c. Graphic mimic diagram on the 3.5" touch screen. The mimic diagram shall enable display of installation parameters, configuration, operating status and alarms and indication of operator instructions for switching operations (i.e.,bypass).
- d. It shall be possible to display the following measurements:

INPUT

Voltage (Vac), per phase Current (Aac), per phase Frequency (Hz)

OUTPUT (INVERTER)

Voltage (Vac), per phase Current (Aac), per phase Frequency (Hz)

Power (kVA), per phase Power (kW), per phase Load (%), per phase

Power Factor (load), per phase

BYPASS

Voltage (Vac), per phase Frequency (Hz)

BATTERY

DC Bus Voltage (±Vdc) Battery Voltage (±Vdc)

Charge/Decharge Current (±Adc) Temperature (°C)

Autonomy (minute)

- f. Additional information shall be provided in view of accelerating servicing of thesystem.
- g. Log of time-stamped events. This function shall store in memory and make available, for automatic or manually initiated recall, time-stamped logs of important status changes, faults, and malfunctions, complete with an analysis and display of troubleshootingprocedures.
- B. Front Panel Touch screen Display: The UPS control panel shall provide touch screen with choice of several operating languages for indication of UPS status, metering, battery status, alarm/event log, and advanced operational features.
- 1. Access: The display shall provide accessto:
- a. Mimic diagram indicating UPS powerflow.
- b. Measurements, status indications, andevents.
- c. Event log withtime.
- d. Password protected adjustments for voltage, frequency andservice
- e. Access to measurements.
- f. Dry contact alarmadjustments
- C. LED Status Indicators: The UPS control panel shall provide three LEDs that shall signal the following status conditions:

Green LED: Load protected, Normal operation, no alarm, ECO Mode

Yellow LED: Battery Run, UPS on Bypass, Maintenance Mode, Minor fault (The load is supplied by UPS but an alarm is active, control is required).

Red LED: Major fault, load not protected.

- D. Audible Alarm Reset: The UPS shall provide an audible alarm that can be stopped using the touch screen. If a new alarm is sensed after the original alarm has been silenced, it shall reactivate the audiblealarm.
- E. Remote Emergency Power Off (REPO): The UPS shall be equipped with provisions for remote emergency power off and dry contact input that shall be used to command UPS shutdownremotely.
- F. RS232:One RS232 connector with serial output shall be provided for field diagnostics.

- G. Dry Contacts:
- 4 dry contact sockets on the Interface Board which can be programmable from the display with following signals:

General Alarm Input failure Battery failure Output failure High temperature

2. The contacts shall be normally open and shall change state to indicate the operating status. The contacts shall be rated at 42 VAC voltage 16A current, 50 VDC voltage 1A current resistiveload.

2.5 MECHANICAL DESIGN ANDVENTILATION

- A. Enclosure: The UPS shall be housed in a freestanding enclosure with dead front construction. The mechanical structure of the UPS shall be sufficiently strong and rigid to withstand handling and installation operations without risk. The sheet metal elements in the structure shall be protected against corrosion by a suitable treatment, such as zinc electroplating, bi-chromating, epoxy paint, or anequivalent.
- B. Cable Access: The standard UPS available shall accommodate bottom entry cables.
- C. Ventilation and Heat Rejection: The UPS shall be designed for forced air cooling.

2.6 BATTERY

A. General: The UPS module shall use a valve-regulated sealed lead acid heavy duty industrial battery, designed for auxiliary power service in an UPS application. The primary battery shall be furnished with impact-resistant plastic cases and housed internally to the UPS module.

SECTION- 5: LOW VOLTAGE SYTEM

Technical specification for low voltage works

1. Video ManagementSystem:-Video Management Software Make: Tyco/Mobotix/Axis

Sr. No. Technical Description Compliance Deviations

- 1 The Video Management System (VMS) software shall be used to view live and recorded video from capture cards and IP devices connected to local and wide area networks. The VMS software shall have a client/server-based architecture that can be configured as a standalone VMS system with the client software running on the server hardware and/or the client running on any network-connected TCP/IP workstation. Multiple client workstations shall be capable of simultaneously viewing live and/or recorded video from one or more servers. Multiple servers shall also be able to simultaneously provide live and/or recorded video to one or more workstations.
- 2 The VMS shall be supplied with minimum 100 nos of thick clients and 16 mobile clients 3 Recording of all video transmitted to the VMS shall be continuous, uninterrupted and unattended
- 4.1 The VMS system shall offer the capability of video motion detection recording, such that video is recorded when the NVRMS detects motion within a region of interest of the camera's view. Video prior to the detection of the motion shall also be stored with recording using the pre- recorded feature.
- 4.2 It should also provide following feature:
- a. Suspect Tracking: Configure camera links between cameras to follow a suspect between different camera scenes

- b. Archive bookmarks: Specifically archive bookmarked video to create a second copy of important video and avoid using limited WAN bandwidth
- c. Inactivity timeout: Save bandwidth with blacked out video panels after inactivity
- 5 The VMS system shall manage the video it has been configured to monitor. Loss of video signal shall be configured to annunciate on VMS client by an on-screen visual indication alerting operators of video loss.
- 6 The VMS software shall have an open architecture supporting IP cameras and encoders from multiple manufacturers providing best-of-breed solutions ranging from low-cost, entry-level features to high-resolution, megapixel features
- 7 The VMS client software shall be able to view live video and audio, recorded video and audio and be able to configure the complete system all from a single application
- 8 The VMS client software shall have the same functionality when connected remotely as it does when it is run locally on the same computer as the server software
- 9 The VMS client software shall operate on all of the following operating systems: Windows, Linux, Mac OSX
- 10 The VMS software shall allow the user to have any combination of VMS client applications running on any of the supported operating systems and be able to connect to any of the VMS servers running on any of the supported operating systems. For example, a VMS client running on Microsoft Windows 7 shall be able to simultaneously connect to four (4) different VMS servers all running on different operating systems, such as Windows Server 2003, Windows XP, Vista and Linux
- 11 The VMS software shall have the capability to run multiple client applications simultaneously on one workstation with multiple monitors. Up to 12 monitors shall be configured on a single workstation with one (1) client application running on each monitor. Because decompressing video is CPU-intensive, the PC workstation shall have multiple core processors with a recommendation of one core for each VMS client application.
- 12 The VMS shall also allow an authorized user to view video through a web client interface. The web client interface shall allow authorized users to view live video, view recorded video, control pan-tilt zoom (PTZ) cameras and activate triggers. The web client interface shall allow connections to multiple VMS servers simultaneously
- 13 The web client interface shall operate without requiring installation of any software
- 14 When using the web client interface, the VMS server shall transcode the video into a JPEG file of the size as the browser screen before sending it to the browser
- 15 The web client interface shall support the following browsers: IE, Firefox,
- Opera, Safari, Chrome and shall be compliant with HTML 4
- 16 The VMS server software shall record and retrieve video, audio and alarm data and provide it to the VMS clients upon request
- 17 The VMS software shall provide a purpose built mobile application capable of viewing multiple simultaneous live video streams and playing a recorded video stream. Application shall be provided for both iOS and Android operating systems. Min. 5 mobile clients to be supplied at each location.
- 18 The VMS server software shall operate on any of the following operating systems: Windows, Linux
- 19 The VMS server software shall record video based on metadata generated by an edge network device. The edge network devices shall generate the
- metadata and transmit it with the video stream to the VMS server software
- 20 The VMS shall license the total number of cameras on the system. This license shall be based on the MAC address of a single network card that is present on the system. The VMS shall only require that this network card be enabled and does not require that data is actually sent through it
- 21 The VMS shall be able to use the Active Directory or LDAP features of a network to authenticate users and determine which permissions they will have on each server.
- 22 The VMS shall allow the use of maps. The maps will be accessible to users with the appropriate permission levels and display video sources and their status
- 23 The VMS shall allow maps to be embedded inside of maps (i.e. hierarchical or nested maps). When an event happens on a map that is embedded inside of a map, it shall transmit the alert to all parent maps and
- change the color of the icon on the parent map and all subsequent parent maps

- 24 The VMS allows soft triggers to be placed, viewed and triggered from a map
- 25 The VMS shall have a single page that displays the status of all servers and cameras currently connected. This page shall display any alarms, events, MAC addresses, camera configuration, format and frame rate from each individual camera
- 26 When in live display mode, the user shall be able to view live video, live audio, point of sale (POS) data and alarm information
- 27 The VMS shall provide an option to view 16:9 wide video display panels
- 28 The VMS shall allow the customization of the user interface to allow software triggers to be shown. This shall allow them to activate events through the push of a button, which could trigger recording, PTZ presets, output triggers or email
- 29 TheVMSsoftwareshallallowcontrolofPTZcamerastoauthorizedusers and be used to maneuver a PTZ camera. When used on a non-PTZ camera, it shall allow you to digitally pan, tilt and zoom on any video whether in live or recorded mode.
- 30 The VMS shall allow following methods of controlling a PTZ camera to be available:
- PTZ graphics controlwindows
- Live graphic overlay PTZ controlicons
- Keyboard control (up, down, left, right arrows; page up,page down forzoom)
- PTZpresets
- DigitalPTZ
- USB joystick to control PTZcameras
- Proportional PTZ control by clicking the mouse in the centerand moving it
- 31 The VMS software shall allow virtual matrix functionality by designating a cell to do so. This video cell shall automatically show video as it is triggered
- 32 The VMS software shall have a feature for viewing logical groups of cameras. This shall allow efficient viewing of cameras in a logical order
- 33 The VMS software shall have a feature to organize your cameras into preset views. Views are preconfigured arrangements of the video panels so that they may be easily recalled later. A view can save the location of the video streams, audio streams, maps and eventviews. These views shall be accessible in both live and recorded videomodes
- 34 The VMS software shall have the capability to automatically cycle through two or more saved views to create a video tour. The VMS shall allow the configuration of the dwell time and the different views it shall

use

- 35 The VMS software shall support searching through recorded video based on time, date, video source and image region and have the results displayed as both a clickable timeline and a series of thumbnail images
- 36 The VMS software shall have the capability to export video, maps, and audio files
- 37 The VMS software shall provide the option of exporting the file in the following formats:
- Standalone Exe (*.exe) includes an executable player withthe video and audiodata
- AVI File (*.avi) a multimedia containerformat
- 1. PS File (*.ps) a format for multiplexing video andaudio
- 38 The VMS standalone player shall package all of the exported video into a single executable. The VMS standalone player shall be able to authenticate that the video has not been tampered with using a keyed Hash Message Authentication Code (HMAC)
- 39 The VMS system shall be able to display system information about users that are currently logged into the system, plug-in file version information number and status, and a system log that contains a detailed history of the processes that occur on the system
- 40 TheVMSsystemshallhavetheabilitytorecordanaudittrailofwhen users log in that shows what changes they have made, what videothey have viewed and what they haveexported
- 41 The VMS shall allow monitoring of the inputs on both network devices and on manufacturer provided hardware. The VMS shall also allow triggering of outputs on the network devices and manufacturer provided

hardware

- 42 The VMS shall allow for the configuration of what drives to use for recording video. Those drives may be local drives, direct attached storage drives or iSCSI drives
- 43 The VMS shall not require a database when recording video

- 44 The VMS shall have the ability to receive ASCII data through the COM port on the server or over the network
- 45 The VMS shall have the ability to look for keywords in the ASCII data and use these to execute various events such as PTZ presets, recording video, recording audio and sending email notifications
- 46 The VMS software shall be able to send a predefined email based on an event trigger. The VMS software shall also support SSL and TLS connections for transmissions of the mail.
- 47 The VMS software shall have a feature to export a video segment from specific cameras or audio inputs to a CD or DVD upon an input trigger or other event being activated.
- 48 The VMS software shall be used to connect different types of events, such as input triggers, to a desired action such as recording video or triggering an alarm. The VMS software shall recognize the following event types: Video Motion, Video Loss, Input Trigger, Health, IP Camera Connection,

Software Trigger and Analytics

- 49 The VMS client shall be able to use OpenGL and Direct 3D to decompress and render video.
- 50 The VMS software shall allow the user to input time-based triggers through event monitoring, including the time of day and day of week
- 51 Camera preview Style e.g Hovering
- 52 Video Pane must be identify by color e.g Motion, Alarm, Free Run, PTZ Focused, Book Marked
- 53 VMS has Video Push feature to another Client desktop simultaneously
- 54 Support mainstreaming to manage all quality stream
- 55 Server and Client must be run on single machine another client machine not Required.
- 56 Support configuration of multiple DNS servers
- 57 At least 60 second timeout for out of schedule login failure
- 58 Support analytic metadata in live and search
- 59 Support Video Wall
- 60 Search and display analytic meta data when searching analytic event linkages
- 61 VMS shall support CIFS and NFS network shares for archive target locations
- 62 All streams can be individually configurable for recording schedules and storage rules
- 63 configurable recording of video prior to the detection of the motion
- 64 The VMS shall support a graphical representation of drive status for associated RAID-based storage
- 65 The VMS shall support local HDD disk storage
- 66 The VMS shall support iSCSI extended storage whereby a remote storage unit can appear as a local drive
- 67 support Map Functionality and multi-level mapping
- 68 Support bookmarking feature shall allow the tagging, naming, and retention of video clips

Failover Management :-

- 1 System Manager Minimizes Downtime of Servers
- 2 Maximize uptime of servers with constant server health monitoring. Receive email notifications or use browser-based dashboard to receive immediate notification of system errors and warnings
- 3 Instant health assessment of all servers from anywhere using the intuitive dashboard to visually confirm the health of all servers from a PC browser, tablet or smartphone
- 4 Highly flexible e-mail notifications allow individual users or groups of users to be e-mailed real-time or periodically for over 25 user selectable

errors and warnings such as VMS recorder offline, storage warning, drive failure, temperature alarm or camera disconnected

- 5 Reduce software maintenance time with scheduled software updates. In a matter of minutes, you can schedule hundreds or thousands of servers to receive the latest features
- 6 Monitor camera health and events to confirm camera uptime and proper positioning.
- 7 Continually monitors all recorders to immediately detect a failure
- 8 Ensures video continues to record and users can utilize live view functions during downtime
- 9 Automatically transfers failed recorder duties back to the primary recorder when available
- 10 Manually failover recorders at any time for system maintenance
- 11 Intuitive dashboard for constant server health monitoring
- 12 Receive e-mails for immediate notification of system errors and warnings
- 13 Schedule automatic software updates during non-peak hours, Automatically synchronize user permissions across all recorders, Integrated backup and restore of recorder configurations, Plan software updates to hundreds or thousands of servers within minutes.
- **Server & Storage to support 64 HD Camera

Make Tyco/Mobotix/Axis

- Sr. No. Technical Description Compliance Deviations
- 1 It should connect min 64 full HD (1920x1080p) cameras per appliances
- 2 It must continuously record up to 550 Mbps of video for high concentration of high definition IP cameras
- 3 Local client display rate:

WindowsOS: up to 1800 frames per second LinuxOS: up to 1200 frames persecond

- 4 It should support streaming live/recorded video up to 100 simultaneous PC clients
- 5 It should support two-way audio
- 6 Processor: Gen 4 Intel Core i7
- 7 It must work on Windows/Linux platform with 2x1 Gbps NIC and 16 GB of RAM
- 8 It should support maximum 80 TB of storage (It should be configured as per the storage calculation provided by VMS OEM), and 8 USB slot.
- 9 It must support DVI-I, HDMI, 1 display ports, max 2 simultaneous monitors
- 10 Operating temperature should be 5 35° C
- 11 NVR Support Maximum 8 HDD slot support .
- 12 Windows, or Linux operating system and factory installed Video

Management System (VMS) must be installed in SSD Drive.

- 13 minimum capability: 2 GigE Network ports
- 14 Operating Temperature 40° 95°F (4.5° 35°C)
- 15 Operating System must be support Windows/Linux both platform
- 16 Requirement is of critical nature and hence offered camera must be of global standards and hence should be CE, FCC and UL certified.

**Server & Storage to support 128 HD Camera

Make Tyco/Mobotix/Axis

Sr. No. Technical Description Compliance Deviations

1 It should connect min 128 full HD (1920x1080p) cameras per appliances

2 It must continuously record up to 800 Mbps (Windows) 1200 Mbps (Linux) of video for high concentration of high definition IP cameras

3 Local client display rate:

WindowsOS: up to 700 frames persecond LinuxOS: up to 1100 frames persecond

4 It should support streaming live/recorded video up to 500 simultaneous PC clients

5 NVR should Two way audio feature

6 Processor: Gen 4 Intel® Xeon E3

7 It must work on Windows/Linux platform with 2x1 Gbps NIC and 16 GB of RAM

8 6 USB slot

9 It must support DVI-I, HDMI, 1 display ports, max 2 simultaneous monitors

10 Operating temperature should be 5 – 35° C

11 NVR should support maximum 240 TB RAID 6 (It should be configured as per the storage calculation provided by VMS OEM)

12 Windows, operating system shall boot and run on a solid-state drive (SSD) to ensure high performance and reliability.

13 NVR shall have 2 Gigabit 1000Base-T RJ-45 NIC card

14 NVR shall have RS-485 serial port capabilities to communicate with serial devices

15 Requirement is of critical nature and hence offered camera must be of global standards and hence should be CE, FCC and UL certified.

16 It should support 3/1 Alarm Inputs/Output

17 NVR shall have Dual Hot Swap redundant Power Supplies

18 Operating Temperature 40° - 95°F (4.5° - 35°C)

19 Operating System must be support Windows/Linux both platform

Dome Camera Tyco/Mobotix/Axis

S/N

Parameter

Description

Camera

1 Image Sensor 1/2.8" Progressive Scan CMOS

2

Min. Illumination 0.01Lux @ (F1.2, AGC ON), 0 Lux with IR 0.028 Lux @ (F2.0, AGC ON) ,0 Lux with IR

3 Shutter Speed 1/3 s to 1/100,000 s

Lens 2.8mm @ F2.0 Angle of view: 106°

5 Lens Mount M12

6

Day & Night

IR cut filter with auto switch

7 Digital Noise Reduction 3D DNR

8

Wide Dynamic Range

Digital WDR

Angle Adjustment

Pan:0° - 355°, Tilt: 0° - 75°, Rotation: 0-355°

Compression Standard

10 Video Compression H.264/ MJPEG

11 H.264 Type Main Profile

12 Video Bit Rate 32 Kbps - 8 Mbps

13 Dual Stream Supported

Image

14 Max. Resolution 1920 x 1080

15

Frame Rate $25fps(1920 \times 1080)$, $25fps(1280 \times 960)$, $25fps(1280 \times 720)$

16

Image Settings

Rotate mode, Saturation, Brightness, Contrast adjustable

17 Backlight compensation Required

18 ROI Required

Network

19 Network Storage Local storage: Built-in Micro SD/SDHC/SDXC card slot, up to 128 GB

20 Alarm Trigger

Motion detection, Dynamic Analysis, Tampering alarm, Network disconnect, IP address conflict, Storage full, Storage error

21 Protocols

TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour

22 Security

User Authentication, Watermark

23 Standard ONVIF

Interface

24 Communication Interface

1 RJ45 10M/100M Ethernet interface

General

25 Regulatory CE, FCC, UL

26 Operating Conditions

-30 °C - 60 °C (-22 °F - 140 °F) Humidity 95% or less (non-condensing)

27 Power Supply

12 V DC ± 10% PoE (802.3af)

28 Power Consumption Max. 5W

29 Ingress Protection level IP66

30 IR Range 30 meters

28 Impact Protection

IEC60068-2-75Eh, 20J; EN50102, up to IK10

Bullet Camera Tyco/Mobotix/Axis

Camera

Image Sensor 1/2.8" Progressive Scan CMOS

Min. Illumination Color: 0.005 Lux @ (F1.2, AGC ON), 0 Lux with IR Color: 0.0068 Lux @ (F1.4, AGC ON),

0 Lux with IR

Shutter Speed 1/3 s to 1/100,000 s, Slow Shutter supported

Day & Night IR Cut Filter

Digital Noise 3D DNR

Reduction

WDR 120dB

3-Axis Adjustment Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°

Lens

Focal length Aperture

Lens Mount 2.8 to 12 mm F1.4

Ø14

Compression Standard

Video Compression Main stream: H.265+/H.265/H.264+/H.264

Sub stream: H.265+/H.265/H.264+/H.264/MJPEG Third stream:

H.265+/H.265/H.264+/H.264

H.264 Type Main Profile/High Profile

H.265 Type Main Profile

Video Bit Rate 32 Kbps to 16 Mbps

Audio Compression G722.1/G711ulaw/G711alaw/G726/MP2L2

Audio Bit Rate 32 to 128kbps

Intelligence

Behavior Analysis Line crossing detection, intrusion detection, unattended

baggage detection, object removal detection

Face Detection Support

Region of Interest Support 1 ROI per stream

Image

Max. Resolution 1920 × 1080

Main Stream 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280×720)

60Hz: 30fps (1920 × 1080, 1280 × 960, 1280×720)

Sub Stream 50Hz: 25fps (640 × 360, 352 × 288)

60Hz: 30fps (640 × 360, 352 × 240)

Third Stream 50Hz: 25fps (1920 × 1080, 1280×720, 640 × 360, 352 ×

288

60Hz: 30fps (1920 × 1080, 1280×720, 640 × 360, 352 ×

240)

Image Enhancement Back Light Compensation

Image Setting Rotate mode, saturation, brightness, contrast, sharpness

adjustable by client software or web browser

Day/Night Switch Auto/Schedule/Triggered by Alarm

Network

Alarm Trigger Motion detection, video tampering, network disconnected, IP address conflict, illegal login, HDD full, HDD error, Alarm input, Alarm output

Protocols TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP,

802.1X, QoS, IPv6, Bonjour

General Function One-key reset, anti-flicker, password protection, privacy mask, watermark, IP address filter

ONVIF Supports PROFILE S, PROFILE G

Simultaneous Live View Up to 6 channels

User/Host Up to 32 users

3 levels: Administrator, Operator and User

Interface

Audio 1 input (line in, 3.5 mm), 1 output (3.5 mm)

Communication Interface 1 RJ45 10M/100M self-adaptive Ethernet port

Alarm 1 input, 1 output (max. 12 VDC, 30 mA)

Video Output 1Vp-p composite output (75 #/BNC)

On-board storage Built-in Micro SD/SDHC/SDXC slot, up to 128 GB

Reset Button Support

General

IR Range

Regulatory Up to 50m

UL, CE, FCC

Operating Temperature: -30 °C to +60 °C (-22 °F to +140 °F) Humidity: 95% or less (non-

condensing)

Conditions

Power Supply 12 VDC ± 25%, PoE (802.3at)

Power Consumption 12 VDC, 1.2A, max. 14.5W

and Current PoE (802.3at, 42.5V to 57V), 0.5A to 0.1A, max. 16.5W

Protection Level IP67, IK10

TVS 2000V Lightning Protection, Surge Protection and Voltage Transient Protection

PTZ Camera Tyco/Mobotix/Axis

Parameter Specification

Camera

Image Sensor 1/2.8" progressive scan CMOS

Min. Illumination Color: 0.001 Lux @ (F1.6, AGC ON) B/W: 0.0001Lux @ (F1.6, AGC ON)

0 Lux with IR

White Balance Auto/Manual/ATW (Auto-tracking White Balance)/

Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp

Gain Auto/Manual

Shutter Time 50Hz: 1/1 s to 1/30,000s

60Hz: 1/1 s to 1/30,000s

Day & Night IR cut filter

Digital Zoom 16×

Privacy Mask 24 programmable privacy masks

Focus Mode Auto/Semi-automatic/Manual

WDR 120dB

Lens

Focal Length 4.8 mm to 153 mm, 32× optical zoom

Zoom Speed Approx. 5.6 s (optical lens, wide-tele)

Field of View Diagonal FOV: 63° to 2.34° (wide-tele)

Working Distance 10 mm to 1500 mm (wide-tele)

Aperture Range F1.2 to F4.4

ΙĒ

IR Distance 150 m

Smart IR Support

PTZ

Movement Range (Pan) 360° endless

Pan Speed Configurable, from 0.1°/s to 200°/s, Preset speed: 300°/s

Movement Range (Tilt) From -15° to 90° (auto-flip)

Tilt Speed Configurable, from 0.1°/s to 200°/s Preset Speed: 240°/s

Proportional Zoom Support

Presets 300

Patrol Scan 8 patrols, up to 32 presets for each patrol

Pattern Scan 4 pattern scans, record time over 10 minutes for each scan

Power-off Memory Support

Park Action Preset/Pattern Scan/Patrol Scan/Auto Scan/

Tilt Scan/Random Scan/Frame Scan/Panorama Scan

3D Positioning Support

Scheduled Task Preset/Pattern Scan/Patrol Scan/Auto Scan/

Tilt Scan/Random Scan/Frame Scan/Panorama Scan/ Dome Reboot/Dome Adjust/Aux

Output

Compression Standard

Video Compression Main Stream: H.265+/H.265/H.264+/H.264

Sub-stream: H.265/H.264/MJPEG Third Stream: H.265/H.264/MJPEG

H.264 Type Baseline Profile/Main Profile/High Profile

H.264+ Support

H.265 Type Baseline Profile/Main Profile/High Profile

H.265+ Support

Video Bitrate 32 Kbps to 16 Mbps

Audio Compression G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/PCM

Audio Bitrate G.711alaw/G.711ulaw: 64 Kbps; G.722.1/G.726: 16 Kbps; MP212/PCM: 32

Kbps/64 Kbps/128 Kbps

SVC Support

Smart Features

Basic Event Motion Detection, Alarm Input, Alarm Output, Video Tampering Detection, Exception

Smart Event Face Detection, Intrusion Detection, Line Crossing Detection, Region Entrance Detection, Region Exiting Detection, Object Removal Detection, Unattended Baggage Detection

Smart Record Automatic Network Replenishment, Dual-VCA

ROI Main stream, sub-stream, and third stream respectively support four fixed areas.

Auto-Tracking Support

Image

Max. Resolution 1920 × 1080

Main Stream 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720)

50fps (1920 × 1080, 1280 × 960, 1280 × 720)

60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720)

60fps (1920 × 1080, 1280 × 960, 1280 × 720)

Sub-Stream 50Hz: 25fps (704 × 576, 640 × 480, 352 × 288)

60Hz: 30fps (704 × 480, 640 × 480, 352 × 240)

Third Stream 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576,

 $640 \times 480, 352 \times 288$

60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480,

 $640 \times 480, 352 \times 240$

Image Enhancement HLC/BLC/3D DNR/Defog/EIS/Regional Exposure/ Regional Focus Network

Network Storage Built-in memory card slot, support Micro SD/SDHC/ SDXC, up to 256 GB; NAS (NPS, SMB/ CIPS), ANR

Alarm Linkage Alarm actions, such as Notify Surveillance Center, Upload to FTP, Send Email, Trigger Recording, Recording Linkage, and Alarm Input, etc.

Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour

API Open-ended, support ONVIF, ISAPI, and CGI, support

Simultaneous Live View Up to 20 channels

User/Host Up to 32 users; 3 levels: Administrator, Operator and User

Security Measures User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering

Web Browser IE 8 to 11, Chrome 31.0 to 44, Firefox 30.0 to 51

ONVIF Supports Profile S & G

Interface

Alarm Interface 2-ch alarm input and 1-ch alarm output

Audio Interface 1-ch audio input and 1-ch audio output

Network Interface 1 RJ45 10 M/100 M Ethernet, Hi-PoE

General

Power 24 VAC and Hi-PoE; Max.: 40 W (Max. 14 W for IR)

Working Temperature -30°C to 65°C (-22°F to 149°F)

Working Humidity # 90%

Protection Level IP66 & IK10 Standard, TVS 4000V Lightning Protection, Surge Protection and Voltage Transient Protection

Regulatory UL, CE, FCC

SECTION-6: EPABX SYSTEM

Supply Installation, Testing and Commissioning of Server Based EPABX Fully Computerized IP System, SIP Compliant. Multi slot 19: U Rack Mountable 2U Rack Expandable upto 900 Ports Presently Configuration as Below: (Make: NEC/Ayaya/Cisco) CO Line 32Nos.

PRI (30Channel) 2Nos.

SIPExtension 64Nos

Digital Extension Circuits 64Nos

Analog Extension Circuits 596Nos.

Integrated Voicemail System 4 Level IVR software with 6 different languages and 4 time schedule(As per OEM).

Digital Phone (24Key+ 60-line DSS Console) Backlit keypad Hands-free, full duplex ,Headset support Easy to use soft keys/LCD prompts, Directory dialling, Navigation wheel, Call history, Backlit LCD screen, Bluetooth support (BCAZ),Security lock key XML open interface

24Key Digital Phone Backlit keypad Hands-free, full duplex ,Headset support Easy to use soft keys/LCD prompts, Directory dialling, Navigation wheel, Call history, Backlit LCD screen, Bluetooth support (BCAZ),Security lock key XML open interface.

12 key display Backlit keypad Hands-free working Easy to use soft keys / LCD prompts on display model Directory dial key 1000 system, 1000 group, 10 personal, 600 phonebook Conference key Wall mountable Message waiting indicator.

Digital Phone 6 key display Backlit keypad Hands-free working Easy to use soft keys / LCD prompts on display model Directory dial key 1000 system, 1000 group, 10 personal, 600 phone book Conference key Wall mountable Message waiting indicator

Analog CLI Phone with handsfree.

Audio -Visual System (Conference Room)

Projector Single 0.7" DLP® Technology having Resolution WUXGA (1920 x 1200), Brightness - 6000 ANSI Lumens and Contrast Ratio -2000:1 ,Lamp Life and Type - 1,500/3,500 hours (Normal/Eco Mode) 370W/280W, Projection Lens - F = 2.46 - 2.56 f = 22.82 - 28.49mm (std lens) ,Zoom Ratio -1.25x (std lens) Aspect Ratio -4:3 Native, 16:10 and 16:9 Compatible ,DisplayPort VGA-In (2x), HDMI v.1.4b, DisplayPort, DVI-D, Component (5-BNC), Component (3xRCA), S-Video, Composite, Audio-In (RCA)(2X), Audio-In (Mini-Jack)(2X), Audio-Out (Mini-Jack), RJ-45, RS- 232, 12V- trigger, 3D-Sync-Out, USB Type-A (power only), Remote-Jack (for wired R/C), VGA-out(1x) ,Built-in 12V trigger for external wireless module connection ,Audio ready with 2x3W stereo speakers complete in all respects. Make: Delta/Barco/Christie

Motorised front Projection Screen, wide(12ft) X hight (8ft) with Remote Control with heavy duty projector ceilling mount kit.

Wired Table Top Digital Delegate unit with Gooseneck Microphone with Super Cardiod Capsule. Gooseneck length: 14.20" to 15.47". Gooseneck Microphone: Not detachable. Connection: standard CAT5 cable. Twin Loudspeaker THD: 0,03 % at 50 mW/16ohm. Per Microphone recording option required to of record minute of meeting Digital Signal processor limiter inbuilt Maximum power consumption: 3.8W Homogenius sound level from speaker 3.5mm headphone jack with volume control Operating voltage: 35 V to 52,8 V DC. Push to Talk button. Make: Sennheiser / ClockAudio / Passo

Wired Table Top Digital Chairman unit with Gooseneck Microphone with Super Cardiod Capsule, Gooseneck length: 14.20" to 15.47" Gooseneck Microphone: Not detachable, Connection: standard CAT5 cableTwin LoudspeakerTHD: 0,03 % at 50 mW/16ohmPer Microphone recording option required to of record minute of meeting. Digital Signal processor limiter in built Maximum power consumption: 3.8W, Homogenius sound level from speaker 3.5mm headphone jack with volume controlOperating voltage: 35 V to 52,8 V DC. Priority and Next-Key for delegate control. Make: Sennheiser /ClockAudio/Passo

Digital Central Unit to connect 40 participants and with USB Recording Capability. Supplies up to 40 and controls up to 400 discussion units. USB Conference recording. Electronically balanced XLR In & Out. Per Microphone recording option required to of record minute of meeting. Open Media Control Protocol over Ethernet, Permanent malfunction monitoring and error diagnostics. Integrated PC with pre-installed control SoftwareIntegrated software package. Conference Manager' can be used directly on the CU1 by connecting a Screen, Mouse and Keyboard.Frequency response: 100 – 14.000 HzTotal harmonic distortion: 0,01%, Signal-to-noise ratio: >80 dBAudio input and output ports: balanced XLR connection. Make: Sennheiser/ClockAudio/Passo

Wireless digital Handheld Microphone one set with 18 or more channel, RF output 80mW or more, super cardiod pickup pattern, Frequency range: 1880 to 1930 MHz, Connectivity: RJ-45, battery can be chargable through mini / micro USB as well etc complete required as per specifications. Make: Sennheiser/ClockAudio/Passo

Wireless digital Lavalier Microphone one set with 18 or more channel, RF output 80mW or more, Omni-directional pickup pattern, Frequency range: 1880 to 1930 MHz, Connectivity: RJ-45, battery can be chargable through mini / micro USB as well etc complete required as per specifications. Make: Sennheiser/ClockAudio/Passo

4.25" two-way, thin edge ceiling speaker with back can, Speaker system: 2-way with bass reflex, Woofer Size: 4.25" - 5:25", Woofer cone material: polypropylene, nominal impedance: 160hm, 100V transfo power taps: 30 - 15, frequency range: 75 - 20,000 Hz, low impedance dynamic power: 80 watts, RMS power: 50watts, max SPL at 1m: 108, dispersion angle (1000 Hz): 180° etc complete required as per specifications. Make: BOSE/Martin-Audio/Audac

High power Hypex Class-D amplifier, High thermal efficiency, Integrated APC limiter, Transformer: Toroidal, Input connections: 4 x unbalanced on RCA with passthrough + 4 x balanced on euroblock, Input sensitivity: 0 dBV / 1 V or less, Input impedance: 22 k#, S/N ratio: >101 dB A weighted or better, THD: < 0.07 %, Frequency response: 50 – 20 kHz, Protection circuits: over current, over temperature, Channel separation: >68 dB @ 1 kHz, Power supply: 2Xswitching mode power supply, Cooling: temperature controlled fan, Bridged output power: 2x480W@100V etc complete required as per specifications. Make: BOSE/Martin-Audio/Audac

12x8 Audio Digital Signal Processor with minimum 8 channel of AEC, Matrix switching, Phantom Power supply.20Hzto20KHzorFrequencyresponse,AECtaillength:>200msecorbetteretcasrequired, S/Nratio

>102 dB , A/D & D/A conversion: 24 bit, 48 kHz sampling etc as required at site. Make: Xilica/Sennheiser/Clearone.

Cable Manager with 1 no. multiregion AC Power socket, 1x USB power, Black anodised/ brushed aluminium finish, Tilt up lid with pass through holes for 1 HDMI, 1 VGA with audio, 1x LAN complete with CE, UL certification complete etc. as required.Make-AMX/Extron/Crestron

8x8 HDMI to HDBT Matrix switcher having minimum Inputs of 8Nos.x HDMI (female), 9Nos. infrared on 3.5mm mini jacks, 1No. RS232 on a 9pin D sub connector, 1No. Ethernet on an RJ45 connector or better, Outputs of 8Nos. x HDMI (female), 8 x HDBaseT (RJ45), 9 Nos. infrared on 3.5mm mini jack or better, Max. data rate: 6.75Gbps or better,

Audio support: upto 7.1 channels@192GHz or better, Resolution support upto 4K or better, with all built-in features complete as per the site requirement. Make-AMX/Extron/Crestron

- 2.5 Metres HDMI patch cord with connectors in existing conduit i/c testing etc. as required. Make- AMX/Extron/Crestron
- 1.5 Metres HDMI patch cord with connectors inexisting conduit i/c testing etc. as required. Make- AMX/Extron/Crestron
- 16 AWG 2 core speaker cable with connectors in existing conduit i/c testing etc. as required. Make- AMX/Extron/Crestron
- 24 AWG or better shielded CAT 6 cable withsuitable connectors in existing conduit i/c testing etc.Make-AMX/Extron/Crestron

Floor Standing Rack network Rack - 22U / 600w / 800d, with Heavy Duty Extruded Aluminium Frame for rigidity. Top cover with FHU provision. Top & Bottom cover with cable entry gland plates. Two pairs of 19" mounting angles with 'U' marking. Depth support channels - 3 pairs. With a Overall Weight Carrying Capicity of 500Kgs. Side Panels - 22U/800d Front MS Door perforated honeycomb 22U/600w Rear MS Door (Fully Perforated - Mesh) 22U/600w Fan 90CFM 230V AC, 4" dia Castors with Brake (set of 4) Cable manager 1U MS with Loops Shelf, Stationery 475mm N/W PDU 7Sockets 5Amps with MCB Mounting Hardware (Pkt. Of 20) Vertical Cable Channel 50mmW 22U. Make-Rittal /APW /VALRACK /RITTAL.

Audio-Visual System

12" to 15" two way full range speaker, nominal impedance : 700 or more watts, rotatable constant directivity horn, $80^{\circ}H$ x $60^{\circ}V$ or more, protection : HF overload protection, SPL 1 watt / 1m : 98 dB or better, SPL peak : 130dB, frequency response (-10 dB) : 40 Hz - 22 Khz etc complete required as per specifications and compliancesheet.

Powerful passive dual 10" to 15" subwoofer, woofer size: 2 X 10" or more, impedance (ohms): 4 or 16, low impedance RMS power: 300watts or more, max SPL 1m: 140dB, loudspeaker system: dual coil, SPL 1W/1m: 99dB or better, frequency response: 40 - 150 etc complete required as per specifications and compliancesheet.

8" to 10" two-way full range speaker, impedance (ohms): 8, low impedance RMS power: 200watts or more, max SPL 1m: 118dB, main construction material: mdf wood, Vertical dispersion angle 1000 Hz: 140° or more, SPL 1W/1m: 90dB or better, frequency response: 40 - 25K Hz, Horizontal dispersion angle 1000 Hz: 120° or more etc complete required as per specifications and compliance sheet.

12" to 15" two way full range speaker, nominal impedance: 700 or more watts, rotatable constant directivity horn, 80°H x 60°V or more, protection: HF overload protection, SPL 1 watt / 1m: 98 dB or better, SPL peak: 130dB, frequency response (-10 dB): 40 Hz - 22 Khz etc complete requrired as per specifications and compliancesheet.

30watt wall mount speaker (powered / external) with all the required details of all connectivity and specifications (external amp should be class - D), Frequency range : 40 - 20000 Hz, THD : <0.07%, S/N ratio : >90 dB, should have volume operation through wall control panel / IR remote, Stereo inputs on standard 3.2 mm mini stereo jack, compatible with headphone outputs and line inputs (Computer, MP3 players) , RS232 control etc complete required as per specification and compliancesheet.

8-channel bridgeable class D power amplifier, Output power RMS at 8 ohms : 500watts, Input sensitivity : 0dB or better, S/N ratio : >100 dB, THD : <0.5%, Frequency response :

20 – 20 kHz, Protection circuits : over current, over temperature, Channel separation : >60 dB @ 1 kHz or better etc complete required as per specifications and compliance sheet.

Digital Wireless Gooseneck Microphone operating on 1.9 GHz bandwidth, 256 bit AEC Encryption, Automatic frequency management and Automatic Audio level Management, AF Frequency response: 20 Hz-20 kHz, Dynamic range: > 120 dB(A), Audio Sampling: 24 bit/48 kHz, RF Power: adaptive 79 mW or more, Receiver with front panel LED Display, LAN port for control and Monitoring. It should come with rechargeable accupacks with up to 15 hrs of operating time, Minimum 18 channels or more, polar pattern: cardioid / super cardioid etc complete required as per specifications and compliance required.

Wireless digital gooseneck microphone charger, charger should be charge microphone wirelessly etc complete required as per specifications and compliancesheet..

Drum kit 1no. Dynamic cardioid bass instrument microphone with integral stand mount (Frequency response: 20 - 16000 Hz, Nominal impedance: 350 # or better, Min. terminating impedance: 1000 #), 4no. Dynamic cardioid instrument microphone (Frequency response: 40 - 18000 Hz, Sensitivity: 2 mV/Pa or better, Nominal impedance: 350 # or better, Min. terminating impedance: 1000 #), 2no. High-grade cardioid condenser microphone (Frequency response: 20 - 20000 Hz, Sensitivity: 7 mV/Pa or better, Nominal impedance: 100 # or better, Min. terminating impedance: 1000 #, Equivalent noise level: 19 dB(A) or bette) etc complete required as per specifications and compliance.

Digital Wireless Handheld Microphone operating on 1.9 GHz bandwidth, 256 bit AEC Encryption, Automatic frequency management and Automatic Audio level Management, AF Frequency response: 20 Hz-20 kHz, Dynamic range: > 120 dB(A), Audio Sampling: 24 bit/48 kHz, RF Power: adaptive 79 mW or better, Receiver with front panel LED Display, LAN port for control and Monitoring. It should come with rechargeable accupacks with up to 15 hrs of operating time, Minimum 18 channels or more, polar pattern: Super-Cardioid etc complete required as per specifications and compliancesheet.

Digital Wireless Lavalier Microphone operating on 1.9 GHz bandwidth, 256 bit AEC Encryption, Automatic frequency management and Automatic Audio level Management, AF Frequency response: 20 Hz-20 kHz, Dynamic range: > 120 dB(A), Audio Sampling: 24 bit/48 kHz, RF Power: adaptive 79 mW or better, Receiver with front panel LED Display,

LAN port for control and Monitoring. It should come with rechargeable accupacks with up to 15 hrs of operating time, Minimum 18 channels or more, polar pattern: Omnidirectional etc complete required as per specifications and compliance sheet.

Digital Wireless Headworn Microphone operating on 1.9 GHz bandwidth, 256 bit AEC Encryption, Automatic frequency management and Automatic Audio level Management, AF Frequency response: 20 Hz-20 kHz, Dynamic range: > 120 dB(A), Audio Sampling: 24 bit/48 kHz, RF Power: adaptive 79 mW or better, Receiver with front panel LED Display, LAN port for control and Monitoring. It should come with rechargeable accupacks with up to 15 hrs of operating time, Minimum 18 channels or more, polar pattern: Omnidirectional etc complete required as per specifications and compliance sheet.

Antenna module (complete set) complete soluiton for wireless microphone of gooseneck, handheld, lavalier, headworn microphone etc complete required as per specifications. Network enabled charger with minimum 4 individual charging trays etc complete required as per specifications and compliance.

Dante pre amp 4 XLR balanced and RF filtered mic/line inputs, Gain is individually adjustable per channel via software, PoE powered to work with any compliant PoE network switch, Phantom power is switchable per channel via software, Communication: Dante etc complete required as per specifications and compliance.

Digital signal processor with 24 input x 8 output with AEC on all 24 inputs and cascadable upto 64 inputs / outputs, VOIP, USB Audio, Audio interface, POTS connectivity etc complete required as per specifications and compliance sheet.

Ceiling Microphone with dynamic beam forming 29 omni-directional, high-performance microphone capsules, ceiling microphone covers up to 60 m², pre-polarized condenser microphone, Sensitivity -1 dBV/Pa (930 mV/Pa), Equivalent noise level 20 dB(A), Max. sound pressure level : 119 dB SPL, Dynamic range 99 dB(A) complete with ceiling mounting kit and power module etc. (Bidder has choice to choose any of the approved make and decide on total qty meeting the minimum requirement of Coverage (60m²).

Audio control matrix, zone outputs: 8 or more, output level unbalanced (dB): 4 or more, signal to noise level SNR (dB): >100, S/PDIF output, line input unbalanced: 5 or more, S/PDIF input: stereo, RS232 (serial communication port), frequency response (in Hz): 13 - 30 k etc complete required as per specifications & compliancesheet.

Professional Indoor Type, 16ft X12ft 2.5mm pixel Pitch based Indoor Direct View True Color LED Video Wall ,Video & Image Processor with atleast 4in/4out DVI ports, Pixel density should not be less than 162,000 pixels/m2, contrast minimum 5000:1, brightness should not be less than 600 nits, LED lifes span should not be less than 100,000 hours, LED wall should be 100 front serviceable, Galvanized Steel mounting structure duly powder coated in mat black/ approved shade. Complete including warranty period of three years with 5% spares on site.

Multiform at twisted pair wall mount transmitter with HDMI, VGA & audio input. Twisted pair output supporting audio, video, control & power upto at least 90mtrs. Resolution of 4K, auto switching between Inputs. HDCP & EDID Management etc.

HDMI & Control (RS 232/IR) twisted pair receiver supporting audio, video & power upto at least 90mtrs. Resolution of 4K support. HDMI Data Rate: 10.2 Gb or better, HDCP & EDID management. etc as required.

HDMI & Control (RS 232/IR) twisted pair transmitter supporting audio, video & power upto at least 90mtrs. Resolution of 4K support. HDMI Data Rate: 10.2 Gb or better, HDCP & EDID management etc asrequired.

2 output HDMI switcher. Resolution of 4K support. HDMI Data Rate: 10.2 Gb or better, HDCP & EDID management. etc as required.

HDCP-compliant scaling presentation Matrix switcher and scalar with 6x HDMI inputs, 4 x Twisted Pair inputs, 4 x Matrix Twisted Pair outputs, 4 x Matrix HDMi ouputs. 4K matrix switching and scaling. Audio embedding and deembedding. Built in Ethernet.

Wireless Presentation system, supporting upto 64 participants, wireless video transmission at min 1080p @ 30 fps, VGA & HDMI output. With inbuilt WAP or supplied with external WAP. Simultaneous four feed viewing. etc as required.

Full HD, 30x optical Zoom Camera with Power, Control and Video on CAT6 shielded cable for up to 100 meters. HDMI, HD-SDI and HD YPbPr Outputs. CCU allows control of AWB, red and blue gain, pedestal, knee, gamma, chroma, detail, iris and gain controls.

Recording and web streaming with Full HD support. Single Channel H.264 Streaming Media Processor. Record and stream simultaneously. High quality scaling with aspect ratio control, size, and position. Produces MP4 media files that are compatible with virtually any media player. Automatic file uploading. 32 GB inbuilt storage. INput Resolution range 480i, 480p, 576i, 576p, 720p, 1080i, 1080p, 640x480 to 1920x1200* 1 x H.264/AVC digital video output over Ethernet 1 x HDMI digital video outputf or monitoring. 1 HDMI input and 1 stereo (balanced or unbalanced) input, File types H.264 and AAC in an MP4 container, M4A, JPEG, JSON, XM. Scaled resolution HDMI

output/record: 480p, 720p, 1080p, 512x288, 1024x768, 1280x1024 Stream: 480p, 720p, 1080p, 512x288, 1024x768, 1280x1024. Frame rate: Up to 30 fps for all output rates.

AV Control processor with 6 or more BI Directional RS 232 Port, 8 IR/Serial port, 6 or more relay port, 4 or more IO Port, Ethernet monitoring control . Should be supplied with license / software for control from third party iPAD device. , any required power supply. etc as required.

7" Wired table top Touch Panel, IR Probe, 10" I-Pad, 16GB, WIFI Only complete etc., Wireles iPAD Charger cum table mount docking station complete etc. as required, 16 port L2 network switch with 8 PoE and 8 Normal port with 100/1000 MBps Support, Wireless Access Point PoE enabled.

STAGE FURNISHING:

MAIN CURTAIN made out of fire retardant velvet curtain cloth with horizontal sliding arrangement complete with fixing curved rails, brackets, sliding arrangement & motorised operation complete with runners, master runners, pullies, 3mm steel wire rope, 1 HP motor (Crompton) 2nos. air breaker contactors (L&T/SIEMENS), 2nos. micro switches for auto stop, 3 nos push buttons for forward, reverse and stop positions. The curtain should be draped to half area when in closed position. Minimum overlap at centre should be 900mm and should be stitched in double gathering, with vertical liftingarrangement.

REAR CURTAIN made out of fire retardant Glazed Cotton / crepe Cloth with Horizontal Sliding arrangement with Motorized Operation with extruded Aluminum Track (I-Section with centre web of approximate size 60 x 80 mm) centre parting with 1 Meter overlap and mounting arrangement to fix on existing grid. The system shall be complete with Electro-Mechanical drive with 1 HP Single Phase AC Motor (Crompton), Compact Gear Box, Belt driven grooved cable drum suitable for 3mm Dia. Wire Rope, Master / Slave Curtain Trollies, diverting Pulley, Low- Voltage Magnetic Control System for operation of Curtain Mechanism, Limit Switches, Air Break Contactors (L&T / Siemens) complete with low-voltage magnetic control push station for operation from more than one location with Touch Panel. The Curtain should be draped to half area when in closed position and should be stitched in double gathering.

M.S. Pipe Ladders to be provided on sides of the Stage to be fixed on the existing GI pipe or top grid. Made of 50mm x 25mm MS pipe.Make: Custom.

Providing and fixing cloth wings made out of black glazed cotton cloth fixed on 6mm thick commercial plywood fixed on one side of MS 50mm x 25mmx 16G pipe wielded frame work. The pipe framework made out of 25mmx50mm pipe .c/c750x750 fixed with over head pivote track complete with duly painted on both frame work.

50mm dia B class GI Pipe to be hung from existing grid or roof structure for side wings, lighting bars. Lighting Bar made out of 400mm Aluminum Truss with 2 nos. 1 ton motorised hoisting system.

16BG CRCA sheet steel fabricated epoxy powder coated IP52 type curtain control panel for all the curtains, complete with & including MCB's, contactor starters, contactors, overload relays, LED indication lamps, push buttons for local control as well as wiring and terminal blocks for remote control and indication from projector room alongwith 1 No. remote control console with push buttons and lamps for installation in projector room.

Cubical Electrical Control Panel for all motors of motorised winch comprising of 1 incomer of 40A TPN MCB alongwith DOL reversible starter for each motor. Each DOL reversible starter shall have 1 No. TP MCB along with 2 Nos. air break contactors for reversible operation, overload relay, push buttons & LED indicating light plus provision of remote control.

STAGE LIGHTING

200 W CE Certified LED FRESNEL LIGHT 200W cool white LED, Life: More than 30000 hrs, Field Angle: Spot Light (1/10 peak), 29-degrees; Soft Light (1/10 peak) ? 29-degrees, Manual zoom, Color Temperature: 5000K, Color Rendering Index: Ra=84, Dimmer: 0-100% linearly adjustable, Channel: 1 channel for dimmer, Housing: High-intensity die-casting, aluminum, IP20 complete with suitableclamp.

LED Profile Light: Light Source: 200W LED, LED Color: CW&WW 2in1(200WColor Rendering Index: Ra#92, Zoom Range: 18°-42°, Strob1-25 times/sec, IP 20, Power Consumption: 220W/320WPower Supply: AC 100- 260V, 50/60Hz. 1000W, 240 Volt, PAR Sealed Beam Light CE Certified with CRC Sheet Metal and aluminum die casting, mat black color, yoke & clamp.

1000W Halogen Plano convex spot light CE Certified complete with 1000 W Halogen Bipin T-11 lamp, spherical anodized reflector, imported socket, 150mm dia plan convex lens, bottom sliding knob, voke, colour frame & suitable clamp.

280W Beam Moving Head CE Certified with Input Voltage: AC110/240V, 50-60Hz, Lamp: 10R 280W, Power: 400W, Average Lifespan: 2000 H, Color Temperature: 8000K, Channel: 16CH, Pan: 540° (16bit), Tilt: 270° (16bit), Color: 14 colors + white, Gobo: 17 fixed gobos + white, Prism: rotation 8- face prism + frost + shake, Lens: high precision optical lens, Focus: 0-100% linear adjustment, Dimmer: 0-100% linear adjustment, Strobe: Double lens strobe (0-13 times/ second), Dimmer: 0%- 100% linear adjustment, Beam angle: 0°-30° parallel beam angle, Control Mode: Standard DMX512, Master / slave mode, IP Rate: IP20 complete with suitable clamp.

LED PAR: 54 x 3W, 15°/30°/45°/60° LED PAR of IP65 rating, having life of 30,000 Hrs & deliver 4200 Lumens. The fixture should have capability to work on standby mode, via DMX 512 or integrated sound – 2 light program.

LED Long BAR Light with Electrical: Voltage: AC100~240V... 50/60Hz, Rated Power: 252W, LED: Total LED: 16pcs (14 x 18), Beam Angle: 10° # 15° # 30°.Functions: RGBW color mixing / Custom programs / Strobe / white Balance / RGB to White / RGB Calibration / Dimmer / Fan speed control / Color macros, Operation: DMX512: 3CHS / 4CHS / 5CHS / 10CHS / 12CHS / 16CHS / 30CHS / 40CHS / 60CHS.

24CH×4KW Electronic Dimmer with Dual DMX signals input and can work simultaneously, Fade accuracy: 4096 (16 bit) Integrative design, light weight, easy for maintenance Independent dimming, Soft and hard patch for optional English menu, LCD display, user-friendly interface, Response time: quick, normal or slow, helping prolong lamp's life, 50 backup cues, run both manually and automatically, selectable when no DMX signal, 3 working modes for each channel: normal, fix and switch, 5 User-selectable curves linear, square, scurve, extraction or userdefined, Very low interference, Over load and Neutral-lost warning system force to limit output, Each dimmer output can be set as range of 110 to 250VAC Technical parameter, Voltage: 160Vac~240 Vac Frequency: 45Hz~65Hz, Fade accuracy: 4096 (16 bit), Auto voltage compensation: effective with a 10% voltage variation input, output variation 1%, Power Consumption: 60W, Output4KW for 24 channel, Signal: DMX-512

Lighting Console with Internal Flash Drive, similar in functionality to a hard disk but faster and more rugged. Provides enough storage for:- The entire Fixture Library of more than 3,000 files, Over a hundred show files, Removable external Memory Stick, Cache the entire Fixture library of more than 3,000 files, Improved method of Fixture selection for Patching, New Locate Fixture button, Fixture Selects (selecting the top row of faders), 2048 Channels, 240 Intelligent Fixtures, 240 Dimmer Control Channels, Theatrical Plotting and Playback functions, Shape Generator for instant creation of patterns and effects, 15 Playback Masters controlling 450 memories, chases or cue lists, MIDI and Bass, Mid, Treble sound to light triggers, Colour VGA output fitted as standard, Front panel now reverse printed Poly Carbonate Laminate using technology from the Diamond 4, this is incredibly hard wearing and looks excellent, Each console individually has an electronic

serial number, linked to physically engraved metalwork numbering making reselling of stolen consoles more difficult, Supplied with PC applications: Avolites Visualiser, Pearl Simulation program and CacheBuilder.

SPLITTER: DMX Splitter with one DMX input and 6 buffered outputs and 3 pin / 5 pin XLR connectors.

Light Point Wiring from dimmer / existing DB to be provided near stage to various stage light fixtures with

2.5 Sq.mm 3 Core PVC Insulated and PVC Sheathed Cable including Cable Tray of suitable size for laying these wires on the tray including 20 amps metallic clad sockets for Halogen Points & 15 Amp 3 Pin Socket for LED Points with box & plug top etc. asrequired.

DMX Wiring Points including looping point with DMX wire from Splitter to fixtures / fixture to fixtures complete with 3 / 5 pin XLR connector with box (whereverrequired). Haze Machine with Power: AC100V/ AC120V/ AC230V/2.5 Liter, Fluid Consumption Rate: 24 hr/Liter, , Control: LCD Screen, Timer Mode, Complact Flight Case, Air Pressure: 100 Psi, DMX: On Board, Remote operated. Type: HZ- 500, AC240V, 50Hz-60Hz, Output: 3000 cu.ft/min., Tank Capacity. 1500W Strobe Light with DMX. SECTION-7:

.LAN & TELEPHONE NETWORK

4-PAIR CAT-6 COPPER UTP CABLE COLORED (305 METER)

Detail Technical Specification Compliance Deviation

Conductor 23 AWG solid bare copper with a Diameter #0.56 mm

Separator Cross-member (+) fluted Spine/isolator for uniform separation for all pairs.

Cable Diameter 6.1 ± 0.3

Maximum Attenuation 32.8 dB per 100m

Min Next (dB) 30.2

ACRF (dB/100m) 20.7

Return Loss (dB) 24.6

PSACR-F 20.4

TCL 36.1

Insertion Loss 54.9

Standards ROHS complied and U/L listed EC Verified to ISO 11801 IEC 60332-1 EN 50173-1 TIA/EIA 568A in accordance with NFC 32062 with flame retardant effect & NFC 32070. The cable NEXT, PSNEXT, FEXT, ELFEXT, PSELFEXT test result should meet & exceed the performance requirement as per ANSI/TIA 568C.2.

All UTP Components should be from the same OEM.

The OEM should be ISO 9001:2000 Certified.

In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage.

Certifications 3P, UL, ETL and RoHS Copper Guage 23AWG Frequency Minimum 700Mhz

Characteristic Impedance from 1

to 100 MHz 100 Ohm \pm 15%

Sheath PVC

Colour Blue box of 305 Mtrs.

Make Systimax/Legrand/Panduit

Standards and Approvals The electrical performance of installation outlet shall meet or exceed requirement as per

- ISO/IEC 11801 Edition 2
- CENELEC EN 50173-1 2007
- ANSI/EIA/TIA 568-C.2
- IEC series 60603-7

Certifications 3P, UL, ETL and RoHS

Connection of

RJ 45 Should accept RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).

Conductors Supported Single-wire: 0.5 to 0.65 mm, AWG 22 to 25

Multiple-wire: AWG 26

Polyethylene conductor insulation: max Ø with insulation 1.58 mm

Shutter Information outlet should have transparent shutter for protection against dust when not used.

Tool Less Crimping The information outlet termination should be of built in self crimping type without use of 110 punching tool requirement

Body Contacts: gold/nickel, minimum thickness of gold > 0.8 #m

Metal parts: bronze, nickel, platinum, gold

The information outlet shall be made of high impact PBT Polycarbonate plastic material Break Down

Voltage Greater than or equal to 1000V

Contact

Resistance Less than or equal to 20mOhms

Insulation

Resistance Greater than or equal to 500 M Ohm at 100 V DC

Load Testing Connector should be tested and guaranteed under PoE restrictions, IEEE 802.3af standard and PoE+, standard 802.3at, up to 2500 on- load connections / disconnections.

Tested with 2 simultaneous PoE+ circuits for a minimum total power of 50W

Endurance 2500 mating cycles (plug insertion/withdrawal). IK03

Performance

Warranty 25 years warranty

Make Systimax/Legrand/Panduit

FACE PLATE-SINGLE/DUAL/QUAD

Detail Technical Specification Compliance Deviation

Material Polycarbonate Hi-Grade Plastic FR Grade & UV Resistant 850 degree C/ Glow Wire Test

No. of Ports 1 Module to 4 Module

Size Single/Dual – 86mmx86mm

Quad - 86mmx146mm

Compatibility Should be Modular and compatible to Cat5e, Cat6 and Cat6A range of UTP, STP I/O modules and AV connectors, HDMI connectors, BNC connectors

Make Systimax/Legrand/Panduit

32. 24 PORT CAT 6 PATCH PANEL

Detail Technical Specification Compliance Deviation

Type 24-port, Unshielded Twisted Pair, Category 6,TIA / EIA 568- 6.2

Ports 24

Port arrangement Each port to be modular and be able to remove & plug in from front.

Configuration The panel configuration shall be of minimum 6 connectors in 19" & maximum 24connectors in 1U design with rear cable manager design.

The patch panel connector of 6port shall be of back removable type for ease of maintenance.

Earthing The patch panel shall provide through body earthing while installed in cabinet.

Height 1 U (1.75 inches)

Port Identification Labelling provision to be on blank port inbuilt in the jack panel

Number of plug insertion cycles

(Endurance) 2500

Max. number of connections and disconnections 5 without refreshing the wiring.

Accessories Integrated bend-limiting strain-relief unit for cable entry or other mechanism

to reduce the strain and bends at cable entry

Material Housing Polyphenylene oxide, 94V-0 rated

Wiring blocks RAL 9005 polycarbonate

Jack contacts Gold/nickel, thickness of gold > 0.8 #m

Panel DC01 galvanised steel sheet

Approvals UL / ETL /3P Certified

Termination Pattern Tool less - TIA / EIA 568 A and B

ROHS Compliant ROHS/ELV Compliant

Make Systimax/Legrand/Panduit

CAT6 UTP PATCH CORD COLOURED-1/2/3/5MTRS

Detail Technical Specification Compliance Deviation

Type The patch cord shall provide air-tight connection for cross- connection and shall meet or exceed Unshielded Twisted pair, Categary6, TIA/EIA 568.B.2-1, EN 50173-1,

Conductors 24 AWG 7/32, multi stranded copper conductors 100 #

Plug Protection Over-molded boot at each end maintains minimum bend radius of the cable

Jacket PVC / LSZH

Insulation Polyethylene

Construction of Patch cords Assembled with RJ45 50#" gold plated contacts.

Operating

temperature range: -10°C to +60° C

Separator Cross separator within patch cord

Copper Multistranded copper in conductor

colour blue, Green, Red, Yellow

Performance Warranty 25 years warranty

Approvals UL listed / ETL Verified

Make Systimax/Legrand/Panduit

SC/LC Couplers/Adapter - Multimode Mode - 12 Port

Detail Technical Specification Compliance Deviation

Should be able to house Single mode Fiber connectors

Should have option of 3/6 Duplex SC/LC adaptor

Should have transparent label holders with 6 different coloured labels

Should be compatible with ST, SC, LC, SC / APC Connector

Base should be of Polycarbonate RAL 9005

Should have rugged ceramic (Ziconia) Sleeve for fibre ferrule alignment 0.5dB

0.2dB

Service life (Cycles): 500 cycles

Operating temperature: -40#C to +70#C Storage temperature: -55#C to +85#C Make Systimax/Legrand/Panduit

SC/LC Couplers/Adapter – Multimode Mode - 24 Port

Detail Technical Specification Compliance Deviation

Should be able to house Single mode Fiber connectors

Should have option of 6/12 Duplex SC/LC adaptor

Should be compatible with ST, SC, LC, SC / APC, MPO connector

Base should be of Polycarbonate RAL 9005

Should have rugged ceramic (Ziconia) Sleeve for fibre ferrule alignment 0.5dB

0.2dB

Service life (Cycles): 500 cycles

Operating temperature: -40#C to +70#C Storage temperature: -55#C to +85#C Make Systimax/Legrand/Panduit

Multi mode OM3 pigtails - 50/125 #m:

Detail Technical Specification Compliance Deviation

CONNECTOR SPECIFICATION

OPTICAL PERFORMANCE Multi mode CONFORMANCE

IL MAX/Master (Acceptance) 0.25dB IEC 61300-3-4

IL Average/Master 0.15dB IEC 61300-3-4

IL Average/Random 0.20dB IEC 61300-3-34

CHARACTERISTIC

SC/LC connectors

Low smoke zero halogen (LSZH) sheath

900 #m tight buffer or easy strip

The multimode fibre conforms to ITU-G651 and TIA/EIA 492AAAA standards.

CABLE SPECIFICATION

CHARACTERISTICS SIMPLEX

Crush resistance 500 (N/100 mm)

Operating Temperature - 20 to + 60 ° C

Normal sheath Diameter (2mm,2.4mm & 3mm) 900 ± 50 #m

Maximum Tensile Load 6N

Attenuation (dB)/km 2.8 @ 850 nm / 0.8 @ 1300 nm

OFL bandwidth (MHz x km) 3500 50 nm /500

@ 1300 nm / 4700 @ 850 nm

Make Systimax/Legrand/Panduit

Multimode Fiber Optic Patch Cords

OM 3 (PC) Multimode optical duplex cords (50/125 #m) – SC/SC, SC/LC, LC/LC

Detail

Technical Specification Compliance

Deviation

Standards & Approvals:

Conform to IEC, ANSI-TIA, and Telecordia performances requirements

RoHS, REACH & SvHC compliant

CONNECTOR SPECIFICATION:

OPTICAL PERFORMANCE OM3 CONFORMANCE

IL MAX/Master (Acceptance) 0.3dB IEC 61300-

3-4

MAX IL/Random 0.4dB IEC 61300-

3 - 34

Ave/Master * 0.15dB IEC 61300-

3-4

Ave/Random * 0.20dB IEC 61300-

3-34

Return Loss NA IEC 61300-

3-6

*The change in attenuation for all the above listed criteria shall be a maximum of 0.2dB.

MECHANICAL PROPERTIES CONFORMANCE:

Mechanical endurance 500 matings IEC 61300-

2-2

Vibration 10-55 Hz, 0,75 amplitude IEC 61300-

2-1

Cable retention Magnitude 90 N IEC 61300-

2-4

Cable torsion 1.5 kg - 2.5 kg for 2 mm - 3 mm cable

dia.. IEC 613000-

2-5

CONNECTOR TYPE CONFORMANCE

SC IEC 61754-4

LC IEC 61754-20

CABLE SPECIFICATION:

CHARACTERISTICS DUPLEX

Cable Material LSZH or PVC

Strength Member Aramid

Crush 1000 N

Operating Temperature - 20 to + 60 ° C

Secondary Buffer Diameter (2mm, 2.4mm & 3mm) 900 ± 50 #m

Minimum Bending Radius (mm) 10 D (installed) 20 D (loaded)

Make Systimax/Legrand/ Panduit

50 Pair annealed tinned copper conductor PVC insulated and sheathed armoured copper telephone cables with suitable clamps, saddles and including making terminal joints complete asrequired.

100 Pair annealed tinned copper conductor PVC insulated and sheathed armoured copper telephone cables with suitable clamps, saddles and including making terminal joints complete asrequired.

Network/Server Rack - 42U / 800w / 800d, with Heavy Duty Extruded Aluminium Frame for rigidity. Top cover with FHU provision. Top & Bottom cover with cable entry gland plates. Two pairs of 19" mounting angles with 'U' marking. Depth support channels - 3 pairs. With a Overall Weight Carrying Capacity of 500Kgs. Side Panels - 42U/800d Front MS Door Perforated honeycomb 42U/800w Rear MS Door Split Perforated honeycomb 42U/800wFan 90CFM 230V AC, 4" dia Castors with Brake (set of 4) Vertical Cable manager 80mmW 42U Shelf, Stationery 700mm N/W PDU 12Sockets 5/15Amps with MCB Mounting Hardware (Pkt. Of 20) earthing Kit 150mmH Cable manager 1U MS with Loops complete in all respect.Make-Rittal/APW/VALRACK/RITTAL

Network Rack -22U / 600w / 800d, with Heavy Duty Extruded Aluminium Frame for rigidity. Top cover with FHU provision. Top & Bottom cover with cable entry gland plates. Two pairs of 19" mounting angles with 'U' marking. Depth support channels - 3 pairs. With a Overall Weight Carrying Capacity of 500Kgs. Side Panels - 22U/800d Front MS Door perforated honeycomb 22U/600w Rear MS Door (Fully Perforated - Mesh) 22U/600w Fan 90CFM 230V AC, 4" dia Castors with Brake (set of 4) Cable manager 1U MS with Loops Shelf, Stationery 475mm N/W PDU 7Sockets 5Amps with MCB Mounting Hardware (Pkt. Of 20).Make- Rittal / APW/ VALRACK/ RITTAL

PA SYSTEM

Ceiling mount speaker, speaker system: dual cone, Woofer size: 6.5" - 8", 100V power tap : 6watt or more, SPL 1W/1m : 91dB or better, max SPL 1m : 99dB or better, frequency response: 60Hz to 20KHz, IP rating: 50 or more, Grill mailn material: steel, Dispersion angle: 180° etc complete required as perspecifications.

Audio Control matrix Balanced inputs 1 - 6, Unbalanced inputs 7 - 12, Unbalanced outputs 1 - 8, SPDIF in to analog output : 97 dB @ 1 kHz, 75 dB @ 20 kHz @ nominal output level, Unbalanced inputs to analog output: 92 dB @ 1 kHz, 82 dB @ 20 kHz, Balanced inputs to analog output: 95 dB @ 1 kHz, 82 dB @ 20 kHz, Input: SPDIF 2 channel. 8 - 24 bit, 32 - 96 kHz sampling rate with sampling rate converter, Output:

SPDIF 2 channel. 24 bit, 48 kHz fixed sampling rate, RS232A port settings: 19200 Baud, 8 data bits, no parity and 1 stop bit, RS232 B and C settings: selectable via GII: baudrate: 600, 1200, 2400, 4800, 9600, 19200, 38400 8 databits, no parity and 1 stop bit, 8 wall panel connections: euroblock 2 wire, DSP and AD/DA specifications: 48 kHz sampling rate, 1.2 ms latency from analog input to analog output, Frequency response: 20Hz to 20 kHz +- 1dB, serial port on front panel for configuration using the GII (graphic installer interface) etc complete required as perspecifications.

Paging station, with uni directional / cardioid / omni-directional microphone, 12 keys for different required zone, 1 ky for all call zone etc complete required as per specifications.

High power Hypex Class-D amplifier, High thermal efficiency, Integrated APC limiter, Transformer: Toroidal, Input connections: 4 x unbalanced on RCA with pass through + 4 x balanced on euro block, Input sensitivity: 0 dBV / 1 V or less, Input impedance: 22 k#, S/N ratio: >101 dB A weighted or better, THD: < 0.07 %, Frequency response: 50 – 20 kHz, Protection circuits: over current, over temperature, Channel separation: >68 dB @ 1 kHz, Power supply: 2Xswitching mode power supply, Cooling: temperature controlled fan, Bridged output power: 2x480W@100V etc complete required as per specifications.

Professional CD/DVD player with USB flash port & 19" Rack mount arrangement.

19-inch Equipment Rack with standardized frame or enclosure for mounting multiple PA controllers, CD player, Amplifiers etc modules. Size 24U.

SECTION - 8: COMMISSIONING & GUARANTEE

1. SCOPE OF WORK

Work under this section shall be executed without any additional cost. The rates quoted in this tender shall be inclusive of the works given in this section.

Contractor shall provide all tools, equipment, metering and testing devices required for the purpose.

On award of work, Contractor shall submit a detailed proposal giving methods of testing and gauging the performance of the equipment to be supplied and installed under this contract.

All tests shall be made in the presence of the Architect or his representative or any inspecting authority. At least five working days notice in writing shall be given to the inspecting parties before preforming anytest.

Water flow rates of all equipment and in pipe lines through valves shall be adjusted to design conditions. Complete results of adjustments shall be recorded and submitted.

Contractor shall ensure proper balancing of the hydraulic system and for the pipes / valves installed in his scope of work by regulating the flow rates in the pipe line by valve operation. The contractor shall also provide permanent Tee connection (with plug) in water supply lines for ease of installing pressure gauge, temperature gauge & rotameters. Contractor shall also supply all required pressure gauge, temperature gauge & rotameter for system commissioning and balancing. The balancing shall be to the satisfaction of Consultant / Engineer in Charge.

Three copies of all test results shall be submitted to the Engineer in A4 size sheet paper within two weeks after completion of the tests.

2 PRE-COMMISSIONNIG

On completion of the installation of all pumps, piping, valves, pipe connections, insulation etc. the Contractor shall proceed as follows:

- a. Prior to start-up and hydraulic testing, the Contractor shall clean the entire installation including all fitments and pipework and the like after installation and keep them in a new condition. All pumping systems shall be flushed and drained at least once through to get rid of contaminating materials. All pipes shall be rodded to ensure clearance of debris, cleaning and flushing shall be carried out in sections as the installation becomescompleted.
- b. All strainers shall be inspected and cleaned out orreplaced.
- c. When the entire systems are reasonably clean, a pre-treatment chemical shall be introduced and circulated for at least 8 hours. Warning signs shall be provided at all outlets during pre-treatment. The pre-treatment chemicalshall:
- · Remove oil, grease and foreign residue from the pipe work and fittings;
- · Pre-condition the metal surfaces to resist reaction with water orair.
- · Establish an initial protectivefilm;
- · After pre-treatment, the system shall be drained and refilled with fresh water and left until the system is put intooperation.
- \cdot Details and procedures of the pre-treatment shall be submitted to the Architect forapproval.
- d. Check all clamps, supports and hangers provided for the pipes.
- f. Fill up pipes with water and apply hydrostatic pressure to the system as given in the relevant section of the specification. If any leakage is found, rectify the same and retest thepipes.

Commissioning and Testing

- a. Pressurize the fire hydrant system by running the jockey pump and after it attains the shutoff pressure of the pump ,then
- b. Open bypass valve and allow the pressure to drop in the system. Check that the jockey pump cuts-in and cuts-out at the preset pressure. If necessary adjust the pressure switch for the jockey pump. Close by-passvalve.
- c. Open hydrant valve and allow the water to below into the fire water tank in order to avoid wastage of water. The main fire pump shall cut-in at the preset pressure and shall not cutout automatically on reaching the normal line pressure. The main fire pump shall stop only by manual push button. However the jockey pump shall cut-out as soon as the main pumpstarts,
- d. Switch off the main fire pump and test check the Diesel engine driven pump in the same manner as the electrically drivenpump,
- e. When the fire pumps have been checked for satisfactory working on automatic controls, open fire hydrant valves simultaneously and allow the hose pipes to discharge water into the fire tank to avoid wastage.
- f. Check each landing valve, male and female couplings and branch pipes, for compatibility with each other. Any fitting which is found to be incompatible and do not fit into the other properly shall be replaced by the Contractor. Each landing valve shall also be checked by opening and closing under pressure.

g. Check all annunciations by simulating the alarm conditions atsite.

3 STATUTORY AUTHORITIES' TESTS AND INSPECTIONS

As and when notified in writing or instructed by the Architect, the Contractor shall submit shop drawing and attend all tests and inspections carried out by Local Fire Authorities, Water Authority and other Statutory Authorities, and shall forthwith execute free of charge any rectification work ordered by the Architect as a result of such tests and inspections where these indicate non-compliance with Statutory Regulations. Some of these tests may take place after the issue of Practical Completion of the Main Contract and the Contractor shall make all allowances in this respect.

The Contractor shall be responsible for the submission of all necessary forms and shop drawings to the Statutory Authorities which shall conform in layout to the latest architectural plans submitted to and kept by theseAuthorities.

The submission shall comply with the requirements set forth in the current Codes of Practice and circular letters of the Statutory Authorities. The shop drawings to be submitted shall be forwarded to the Architect for checking before submission.

The Contractor shall allow for at least two submissions of complete sets of shop drawings to the Authorities, one to be made within six months after the award of the Contract but not less than six weeks before the inspection. The Architect may at his discretion instruct the Contractor for additional submissions to the Local Authorities whenevernecessary.

The Contractor shall notify the Architect at least seven days in advance of his application for local Authority tests and inspections. On receipt of a confirmed date for test and inspection the Contractor shall inform the Architect without delay.

4 FINAL ACCEPTANCETESTS

Following commissioning and inspection of the entire installation, and prior to issue of the Completion Certificate, the Contractor shall carry out final acceptance tests in accordance with a programme to be agreed with the Architect.

Should the results of the acceptance tests show that plant, systems and/or equipment fail to perform to the efficiencies or other performance figures as given in this Specification, the Contractor shall adjust, modify and if necessary replace the equipment without further payment in order that the required performance is obtained.

Where acceptance tests are required by the relevant Authorities having jurisdiction, these tests shall be carried out by the Contractor prior to the issue of Completion Certificate to the acceptance of the Authorities.

6. WARRANTY AND HANDOVER

The Contractor shall warrant that all plant, materials and equipment supplied and all workmanship performed by him to be free from defects of whatsoever nature before handover to the Client.

7. HANDING OVER OF DOCUMENTS

All testing and commissioning shall be done by the Contractor to the entire satisfaction of the Project-in-Charge and all testing and commissioning documents shall be handed over to the Project-in-Charge.

8. The Contractor shall also hand over all maintenance and operation manuals, all certificates and all other documentation as per the terms of the contract to the Project-in-Charge.

Provide certificate of compliance that components are compatible and, where applicable, certified for intended use by recognized testing agency.

Meet local building and fire regulations, including the most recent issue of the following:

NFPA 10 - Standard for Portable Fire Extinguishers

NFPA 13 - Standard for the Installation of Sprinkler Systems

NFPA 14 - Standard for the Installation of Standpipe and Hose Systems

NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection NFPA 22 - Standard for Water tanks for Private Fire Protection

NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances

All components of the standpipe and hose systems shall be UL listed and labeled. Material shall meet current ASTM and ANSI standards.

Perform all tests and provide certification as required by authorities having jurisdiction.

9. SHOP DRAWINGS & SPECIFICATIONS

The Contractor shall submit to the Consultant two copies of Shop Drawings for Fire Fighting works as an Advance Copy to the Engineer for approval before start of work. Subsequent to the approval of the shop drawings, the Contractor shall submit six copies of Shop Drawings for execution to the Engineer. Also the Contractor shall submit four copies of the Technical Specifications and Catalogues.

Shop drawings shall be submitted for the following conditions:

Structural supports/hanging/laying and jointing details for all types of pipes as required. Fire Fighting layout plans as required and for any changes in the layout of Fire Fighting/Architectural drawings. The Contractor can only commence the work after the approval of above documents by Consultant

SECTION - 14-TESTS AT SITE & FACTORY

1. GENERAL

The contractor must perform all inspection and tests of the system as a whole and of components individually as required, under the supervision of the purchasers/ Engineer-in-charge in accordance with the provisions of the applicable ASHRAE / SMACNA / ARI standards or approved equal and as per loadrequirements.

2. FOR ASSOCIATES WORKS AT SITE

- 2.1 All electrical items will be subjected to inspection at any stage during manufacturing activity. Routine electrical test as per relevant codes. Inspection of manufacturer's testcertification.
- 2.2 Inspection of raw materials to be used for fabrication and assembly and inspection of manufacturer'scertificates.
- 2.3 Checking of electrical circuits (power & controls) and checking functioning of controls and other circuits of ventilationsystem..
- 2.4 Checking of assemblies for electrical control panel, instruments panels, local panels (dimensional and functional) annunciator panelsetc.

- 2.5 Inspection of complete electrical installation atsite.
- 2.6 Performance testing of complete Ventilation system as perspecifications.
- 3. The above inspection procedure is given for general guidance and information of vendors and inspection of purchaser is strictly not limited to these and inspection engineer of purchaser will have full right to have detailed inspection at any stage right from placement of order to completion of project as desired by inspection engineer, coordination of inspection agency of purchaser with his factory/sub-contractor's factory/erection site will be the sole responsibility of successful contractor after placement of order for complete air conditioning plant covered under these technicalspecifications.

4. DUCTWORK

- 4.1 All branches and outlets shall be tested for air quantity, and the total of the air quantities shall be within plus five percent (5%) of fancapacity.
- 4.2 Fire dampers, volume dampers and splitter dampers shall be tested for properoperation.

5. BALANCING AND ADJUSTMENT

All air handling ventilation equipment, duct work and outlets shall be adjusted and balanced to deliver the specified air quantities indicated, at each inlet and outlet, on the drawings. If these air quantities can not be delivered without exceeding the speed range available horse power, the department shall be notified before proceeding with the balancing of air distribution system.

6. ELECTRICAL EQUIPMENT

- 6.1 All electrical equipment shall be cleaned and adjusted on site before application of power.
- 6.2 The following tests shall be carried out:
- 6.2.1 Wire and cable continuitytests.
- 6.3 Insulation resistance tests, phase to phase and phase to earth, on all circuits and equipment, using a 500 volt meggar. The meggar reading shall be not less than one meg.ohm.
- 6.4 Earth resistance between conduit system and earth must not exceed half (1/2) Ohm.
- 6.5 Phasing out and phase rotationtests.
- 6.7 Operating tests on all protective relays to prove their correct operation before engineering the mainequipment.
- 6.7 Operating tests on all starters, circuit breakers, etc.

7. PERFORMANCE TESTS

- 7.1 The installation as a whole shall be balanced and tested upon completion, and all relevant information, including the following shall be submitted to the purchasers.
- 7.1.1 Air volume passing through each unit, duct, grilles andapertures.
- 7.1.2 Differential pressure readings across eachfan.

- 7.1.3 Electrical current readings, in amperes of full and average load running, and starting, together with name plate current of each electricalmotor.
- 7.1.4 Continuous recording over a specified period, of ambient wet and dry bulb temperatures under varying degrees of internal heat loads and use and occupation, in each zone of each part of thebuilding.
- 7.1.5 Daily records should be maintained of hourly readings, taken under varying degrees of internal heat load and use and occupation, of wet and dry bulb temperaturesl. The current and voltage drawn by each machine.
- 7.1.6 Any other readings shall be taken which may subsequently be specified by the client.

8. MISCELLANEOUS

- 8.1 The above tests are mentioned herein for general guidance and information only but not by way of limitation to the provisions of conditions of contract and specification.
- 8.2 The date of commencement of all tests listed above shall be subject to the approval of the purchaser, and in accordance with the requirements of this specification.
- 8.3 The contractor shall supply the skilled staff and all necessary instruments and carry out any test of any kind on a piece of equipment, apparatus, part of system or on a complete system if the purchaser requests such a test for determining specified or guaranteed data as given in the specification or on the drawings.
- 8.4 Any damage resulting from the tests shall be repaired and/or damaged material replaced, to the entire satisfaction of thedepartment.
- 8.5 In the event of any repair or any adjustment having to be made, other than normal running adjustment, the tests shall be void and shall be recommended after the adjustment or repairs have been completed.
- 8.6 The contractor must inform the department when such tests are to be made, giving sufficient notice, in order that the purchaser or his nominated representative may be present.
- 8.7 Complete records of all tests must be kept and 3 copies of these and location drawings must be furnished to the department.
- 8.8 The contractor may be required to repeat the test as required, should the ambient conditions at the time not given, in the opinion of the purchaser, sufficient and suitable indication of the effect and performance of the installation as a whole or of any part, asrequired.
- 8.9 In case of equipments being supplied by the contractor from a place outside India for which department may or may not be able to send its representative, the manufacturers test certificates (for all acceptance test) for inspection of material and witnessing the various tests at the factory as carried out by the manufacturer have to be submitted alongwith the supply of equipments. This must be witnessed by a representative of the contractor.

NOTES:

A. TEST INSTRUMENTS

- 1. All instruments for testing shall be provided by the Ventilation systemcontractor.
- 2. Thermometer shall have graduations of 0.1oC and shall be got calibrated from N.P.L. or any recognized test house beforehand.

- 3. Thermometers used in the psychrometers shall have graduations of 0.2° C and shall be calibrated as at (2) above.
- 4. Pressure gauges shall also be got calibrated before hand from a recognized testhouses.
- 3 Air flow rates shall measure in the supply duct using pitot tube.

LIST OF MAKES

S. No. Description of Material Make

1 HT PANEL ZENIYA

GEMTECH POWER CONTROL

SPCELETROTECH

PRECISION SYSTEM CONTROL

RISHA

SANKHLA

Schneider

ABB- MNS/ Advance

INDIAN

SPC Electrotech

NEPTUNE

Seimens - Sivacon/ Triolite

2 LT PANEL ZENIYA

KANDI ELECTRICAL

RISHA

SANKHLA

Schneider

ABB- MNS/ Advance

INDIAN

SPC Electrotech

NEPTUNE

Seimens - Sivacon/Triolite

3 DISTRIBUTION BOARD RISHA

ABB

C&S

Hager

Legrand

4 HT CABLE TAMRA

CORDS

HAVELLS

BONTON

SKYLINE

KEI

POLYCAB

SKYTONE/HAVELLS

5 LT CABLE TAMRA

CORDS

HAVELLS

BONTON

SKYLINE

KEI

POLYCAB

SKYTONE/HAVELLS

6 PVC INSULATED FIRE PROOF, COPPER WIRE 1.1 KV GRADE TAMRA

CORDS CABLE

HAVELLS

BONTON

R.R KABLE

TORQUE CABLE

KALINGA CABLE

SKYLINE

KEI

POLYCAB

SKYTONE

FINOLEX/ HPL

7 DATA CABLE RJ45 SKYTONE

POLYCAB

D-link

8 KWh METERS / MFM L&T

Secure

9 VCB (11 KV PANEL) Schneider

Siemens

L&T/ ABB

10 ACB (LT PANEL) Schneider (Easy Pact -MVS)

Siemens (WL)

HPL

C&S

L&T (U Power)

11 PROTECTIVE RELAYS (MICROPROCESSOR BASED COMPATIBLE WITH PC & PLC)

Siemens

Schneider

C&S

ABB

12 PROGRAMABLE TIMER Siemens

Hager

Schneider

13 SHUNT CAPACITOR Siemens

HAGER

Epcos

L&T

14 CONTACTOR Siemens

HAGER

L&T/ HPL

C&S

BCH

15 CT / PT's CAST RESIGN AEI

Kappa

Pragati

16 MCCB Schneider/ ABB

HAGER

C&S

Siemens/ GE

L&T/ Legrand

17 MCB, RCCB, ELCB, DB's Schneider

HAGER

C&S

Siemens

Hager

18 PANEL ACESSORIES Risha

C&S

Siemens

BCH

19 LUGS/ THIMBLES Dowels

Commet

20 AUXILARY RELAY Schneider

Alstom

Siemens

21 BRASS COMPRESSION GLANDS Commet

Dowell's

Grip Well

22 RISING MAIN & BUS DUCT Schneider Electric

Siemens

SANKHLA

RISHA

GEMTECH POWER CONTROL

PRECISION SYSTEM CONTROL

SPCELETROTECH

INDIAN

Legrand

23 TELEPHONE TAG BLOCK WITH BOXES Krone

Pouvet

24 TELEPHONE CABLES Delton

Skytone

D Link

Lapp Cables

25 TELEPHONE INSTRUMENT Beetal

D-link

Panasonic

26

SWITCH & SOCKET Anchor

Crabtree

Legrand

C&S

MEGA

MK

27 INDUSTRIAL SOCKET OUTLET Havells

ABB

C&S

L&T

28 CEILING / WALL FAN Crompton

Orient

Havells

29 MS CONDUIT PIPE (ISI Marked) BEC Delhi

AKG

Norpack

JPC

Sencon

30 PVC CONDUIT PIPE (ISI Marked) Norpack

BEC Delhi

AKG / RKG

JPC

Precision

31 GI PIPES Jindal-Hisar

Mukut

JPC

Tata

32 CABLE TRAY SANKHLA

GEMTECH POWER CONTROL

PRECISION SYSTEM CONTROL

SPCELETROTECH

Profab

Indiana

33 CONDUIT ACESSORIES Rama

Nove1

34 FIRE ALARM SYSTEM Notifier- Honeywell

Cerberus-Siemens

Newtech

Phillips

Lift Guard 35 CCTV CAMERA Honeywell (UL) Pelco Bosch 36 SPEAKER Bosch 37 EPABX Siemens Alcatel Avava 38 GI / CU EARTHING MATERIAL ELDEE **UJJWAL POWER** Indiana Bharti UniEarth 39 INDOOR LUMINARIES Phillips Havells GE Bajaj/Wipro Halonex Regent Trilux **Crompton Greeves** SYSKA LED 40 OUTDOOR LUMINARIES Phillips Havells GE Bajaj/Wipro Halonex Regent Trilux Crompton Greeves SYSKA LED 41 AVIATION OBSTRUCTION LIGHT Philips Havells/GE Wipro 42 MS STEEL (ANGLE, CHANNEL & STRIP) Tata 43 HEAT SHRINKABLE JOINTING KITS Raycam Cab Seal Mahendra & Mahendra 44 UPS & UPS BATTERIES APC - Schneider Emerson Delta Consul Neowatt UNILINE Nexus. 45 LIGHNING PROTECTION SYSTEM Ericco UniEarth / France Jef Techno Solution 46 MDB, FDB, UMDB, UPSDB, KITCHEN & LIFT PANEL (CPRI APPROVED) SPC Electrotech **GE** Panels 47 LIGHTING MANAGEMENT SYSTEM Schneider Berker **ABB** 48 LED's/Light LEGERO

Havells

Bajaj/Wipro

49 BIOMETRIC SYSTEM Bosch

Software House

Linen

50 SILENT DG SET Cummins- Jakson

CatterPillar/ Kirsoler

COOPER

CSH

51 IT NETWORK SYSTEM INTEGRATOR NCI Pvt Ltd

Exel Frontline

Precision

52 PROGRAMABLE LOGIC CIRCUIT (PLC) Allen Bradley

Siemens

53 SOLAR PHOTOVOLTAIC SYSTEM Fairwood Smart Green

Lanco

Jakson

Tata BP

54 INDICATION LAMPS (LED TYPE) L&T (Essbee)

Schneider

Siemens/ Vaishno

55 METER (DIGITAL TYPE) WITH / WITHOUT BUILT-IN SELECTOR SWITCH Conzerv

ΑE

C&S

Rishabh

56 ANALOG VOLTMETER/AMMETER 96 SQ. MM 90° DEFLECTION AE

Meco

IMP/ Rishabh

57 SELECTOR SWITCH Kaycee

C&S

Sakzer

58 INSTRUMENT TRANSFORMER AE

Kappa

Nuetec

#

59 NON HYGROSCOPIC INSULATED SUPPORTS Powermat or equal

60 TERMINAL BLOCKS L&T

ABB

Areva/ C&S

61 ASTRONOMICAL TIMER ABB

L&T

Legrand/ Siemens

62 DWC HDPE PIPE Duraline

REX

Gemini/Tirupati

63 FR PVC INSULATED GREEN COPPER EARTH WIRE Skyline

National Cables

BONTON

Ecko/ Finolex

64 ACSR CONDUCTOR Hindustan Vidyut Products

Diamond Industries

Haryana Conductor

65 FR PVC INSULATED YELLOW + GREEN COPPER EARTH WIRE Skyline

National Cables

Ecko/ Finolex

66 DISC/PIN INSULATORS BHEL

WSI/ Jayshree

Rashtriya/ NP

67 LIGHTNING ARRESTERS UniEarth / France

Raychem/ Oblum Rashtriya/ Lamco 68 FIRE EXTINGUISHERS Chawla Omax/ Rapid Howeells/ Minimax 69 RUBBER MATS ISI Marked (IS 5424 - 1969) 70 BATTERY CHARGER/DCDB HBL Nife/ Amco Chhabi/ Hirel Caldyne/ Amararaja 71 DC BATTERIES Exide Amco Amaraja/ Statcon 72 11 KV SWITCH GEAR ABB/ Siemens/ Schneider Areva/ Alstom/ L&T Crompton Greaves/BHEL 73 LIGHTING FIXTURE LEGERO Phillips Havells

74 LIFT KONE

OTIS

Bajaj

SCHINDLER

NOTE:

- 1.) The contractor shall produce all samples before procurement of the materials for approval from Engineer-in-Charge.
- 2.) In respect of materials for which approved makes are not specified above, these makes will be decided by Engineer-in-Charge.

(END OF SECTION-V)

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder)......hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for **Interior decoration, furnishing, electrical appliances, and horticulture work for redevelopment of OIL's property at M-125, Greater Kailash-II, New Delhi.** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - 1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 - 2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 - 3. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder/Contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - 1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or

immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- 2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 -Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- 1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- 2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- 4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the completion of the contract or as mentioned in Section 9- Pact Duration whichever is later. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings. Any issue relating to execution of contract, if specifically raised before the IEMs shall be looked into by IEMs.

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.
- (3) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 -Previous transgression

- (1) The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section: 6 -Equal treatment of all Bidders/Contractor/Subcontractors

- (1) The Principal will enter into Pacts on identical terms with all bidders and contractors.
- (2) The Bidder / Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its subcontractors/sub-vendors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 - Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 -External Independent Monitor/Monitors

(1) The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- (3) The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
- **(4)** The Principal will provide to the Monitor 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 Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- **(5)** As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the bidder / contractor to present its case before making its recommendations to the Principal.
- **(6)** The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) If the Monitor 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 Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (8) The word 'Monitor' would include both singular and plural.

Section:9 -Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

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

Section:10 -Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- **(2)** Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

SECTION-VI

- **(3)** If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
- **(4)** Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

For the Principal	For the Bidder/Contractor
	Witness 1:
Place. Date .	Witness 2:

(END OF SECTION-VI)

COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" (WHEREVER APPLICABLE) TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

Sl. No.	REQUIREMENT	COMPLIANCE
1.0	Whether bid submitted under Single Stage Two Bid System?	Yes/ No
2.0	Whether submitted Declaration for Bid Security?	Yes/ No
3.0	Whether quoted offer validity of 120 (One Hundred Twenty) days from the original date of Technical bid opening?	Yes/ No
4.0	Whether all BRC/BEC clauses accepted?	Yes/ No
4.1	Whether documentary evidence submitted in support of requirements as per BEC/BRC?	Yes/ No
4.2	Whether Undertaking submitted as per Annexure-II towards submission of authentic information/documents along with the Un-priced Techno-Commercial Bid?	Yes/ No
5.0	Whether prices submitted as per Bidding format?	Yes/ No
5.1	Whether Bidding format uploaded under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal?	Yes/ No
6.1	Whether confirmed to submit PBG as asked for in NIT?	Yes/ No
6.2	Whether agreed to submit Performance Security / Security Deposit within 2 weeks of the issue of Letter of Award?	Yes/ No
7.0	Whether confirmed acceptance of tender Payment Terms?	Yes/ No
8.1	Whether Integrity Pact accepted?	Yes/ No
8.2	Whether Integrity Pact uploaded along with Un-priced Techno-Commercial Bid?	Yes/ No
9.0	Whether quoted as per NIT (without any deviations)?	Yes/ No
9.1	Whether deviation separately highlighted?	Yes/ No/ Not Applicable
10.0	Whether bidder has unique GeM Seller ID? If YES, bidder to provide GeM Seller ID in E-remittance format (Proforma-VIII) If NO, Bidder to provide GeM Seller ID in case considered for award of contract before issuance of LOA	Yes/ No

Offer ref Dated

(END OF SECTION-VII)

GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) MEASURES

- 1. It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub-sub contractors.
- 2. Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.
- 3. The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries & material from the mining operation / operations to be done by the contractor and how it is to be managed.
- 4. The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.
- 5. Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner /Agent /Manager.
- 6. Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line.
- 7. All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.
- 8. The contractor shall submit to DGMS returns indicating Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.
- 9. The return shall be submitted quarterly (by 10th of April, July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.
- 10. It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in

OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager / Safety Officer / Engineer / Official / Supervisor/Junior Engineer for safe operation.

- 11. Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.
- 12. Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.
- 13. The contractor shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.
- 14. The contractor has to keep a register of the persons employed by him/her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.
- 15. If the company arranges any safety class / training for the working personnel at site (company employee, contractor worker, etc) the contractor will not have any objection to any such training.
- 16. The health check up of contractor's personnel is to be done by the contractor in authorized Health Centers as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.
- 17. To arrange daily tool box meeting and regular site safety meetings and maintain records.
- 18. Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.
- 19. A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.
- 20. A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.
- 21. Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.
- 22. In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/Rules/Regulations.
- 23. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the contractor to cease work until the non-compliance is corrected.
- 24. The contractor should prevent the frequent change of his contractual employees as far as practicable.

- 25. The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.
- 26. For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.

(END OF SECTION-VIII)

	BIDDING FORMAT (PRICE BID)							
	Name of Bidder:							
Item No.	Description of Services	Unit of Measurement		Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)			
Α	В	С	D	E	F=D*E			
10	Supplying and fixing solid vinyl or paper backed viny wall paper at desired location upon the smooth finsihed wall surfaceas per the design approved by Engineer in charge/ Architect. Basic cost of wall paper to be Rs 1500 per sqm.	SOUARE	25.00		0.00			
20	Providing and laying modular carpet of approved make with 100% nylon 6.6.tuffed textured loop pile, manufactured using digital injection dying process with protective treatment stain smart(stain repel/stain resist/ stain release) anti microbal alphasan wwith pvc free pu cushin backing nominal total thickness of minimm 6.5 mm (pile height minimum 2.75mm) nominal total weight 3018 gms/ sqm(nominal pile weight 1800 oz/yard) material shall be LEED certified preferably included fixing with green adhesive of approved make, all inclusive of sides flashing, fixing angles, flat etc, nozing angle for staircase etc complete in all respects as per the approved Design by Engineer in charge/ Architect. Basic price of carpet should be Rs 2000 per sqm. (Misc.)	SQUARE METER	25.00		0.00			
30	Providing and fixing wall panelling consisitng of (commercial ply to be fixed upon commercial water proof board) to be fixed upon wooden and steel frames with necessary screws/nuts & bolts/ nails, including a coat of approved primer on one face, and fixed on wooden /steel frame work, complete as per direction of Engineer-incharge/ Architect. 1. Frame work with 45 x 25 mm GI sections of 24 G @ 450 / 600 2. Fixing 12mm thk MDF board on frame work. 3. Fixing 4 mm thick MDF with grooves as per drawings and 4. Lamination on over MDF surface shall be with 1.0 mm thick Sqm 102 5. As per above specification panelling item no G(i)(ii)(iii) of Sqm 9 Finishing all wood surfaces with PU polish as per standard	SQUARE METER	149.00		0.00			

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
40	Providing and fixing built in plywood framed cupboard with shelves or as per drawing consisting of frame work for side support, top & bottom members and galzed/solid shutters made of 19mm thick BWP plywood of IS 710 and backing with 12 mm thick BWP ply of approved quality make as per IS 710 including providing & fixing machine pressed lamination on outer /inner surface using 1 mm (high Gloss) /0.8 mm thick sheet of approved colour & design with necessary glue / addhesive of makes like Marine Fevicol of M/s. Pidilite or equivalent. The edges of shutter & frame to be provided with machine pressed approved PVC beading of Rehau or equivalent 22 x 2 mm size fixed with the approved adhesive. The cabinet shutters to be provided with required fittings i.e. S/S soft close Auto hinges (box) of approved makes like Hettich or Hafele or equivalent with required S/S screws or approved telescopic guide channels of make Hettich / Hafele or equivalent etc. all complete as per the directions of Engineer In charge. (The rate inclusive of materials like plywood, glazing, beading, Soft close Auto hinges / soft close telescopic guide channels, screws and Labour for making it etc. All plywood & lamination should be of makes of M/s. Kitply, M/s. Century ply, M/s. Greenply. Rates are inclusive of hardware fittings suchas almirah lock 75mm of double lock bar, magnetic catcher, SS hanger rods 20mm dia with fittings, 150-200 mm long stainless steel/ brass handles as per requirement and detailed drawing).	SQUARE METER	43.20		0.00
50	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete. Triple strip vertical type	EACH	24.00		0.00
60	Providing and Fixing Wood Cladding using IPE Brazian Wood Planks size 20mm thickx140mmwide x900-1800mm Long of approved shade. These Planks to be fixed with SS screws / Rivets sunk in to the wood and top shall be filled with silicone finnished polished of matching the planks. The Planks to be fixed with 2mm gape on all sides to the Aluminium Frame using 25mmx50mm Hoollow Tube frame of 16 Guage with SS Metal fastners onn Plastered Surface of Walls, Projections, soffit etc.	SQUARE METER	36.75		0.00
/()	Providing and Fixing MS sheet jaali with approved design cut with CRC technology fixed with all the necessary ss screws/welding/ rivets etc. The joints for MS jaali to be properly sealed.	SQUARE METER	36.75		0.00
80	Providing and Fixing MS Bars and strips in the external elevational facade of the building of approved shade. These Planks to be fixed with SS screws / Rivets sunk in to the MS planks and top shall be filled with silicone finnished polished of matching the planks. The Planks to be fixed with 2mm gape on all sides to the Aluminium Frame using 25mmx50mm Hoollow Tube frame of 16 Guage with SS Metal fastners onn Plastered Surface of Walls, Projections, soffit etc.	KILOGRAM	500.00		0.00
90	Providing and Fixing seamless tiles in the external facade of the building as per approved design. The tiles to be fixed wth epoxy based solutions.	SQUARE METER	55.13		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
Α	В	С	D	E	F=D*E
100	Providing and placing console table made of Solid Sagwan & Mirandi Wood frame. Polyster finish base, electroplating in gold or rose gold.	EACH	1.00		0.00
110	Providing and placing 6 seater sofa seat of PU foam with Density 32 ± 2 kg/cu. Seat should be upholstered with fabric or leatherette.having an additional top layer of super soft PU foam upholstered with fabric or leatheritte. The back is made of PU foam with two additional top layer of supersoft foam, upholstered with fabric or leatheritte. Understructure is made up of Mirandi wood.	EVCH	6.00		0.00
120	Providing and placing nesting centre table Centre Table base in metal with Chrome plated understructure. Top in natural polished wood.	EACH	1.00		0.00
130	Providing and placing Side Table in Chrome plated understructure electropalted in metal finsih.	EACH	1.00		0.00
	Providing and placing Dining Table with metal support legs of section tapered down to bottom. The top of table to be made of double layer 19mm commercial board (Duro/Uniply make) with 1mm laminate (merino, greenply, formica) as approved by Engineers in charge/ Architect.		4.00		0.00
150	Providing and placing Dining Chair with metal legs in black powdered coating. The seat shall have a cushioned base made of min. 4" thick mattress foam (Sleepwell /Kurlon make) and upholstered with A class molfino Fabric (Decor or equivalent make). as approved by Engineers in charge/ Architect.		24.00		0.00
160	Providing and placing Round Table made of 19mm commercial board (Duro/Uniply make) finished in 1 mm laminate (Greenply, Merino, Formica) as approved. The base frame shall be made of 1st class teak wood as per design. The wooded parts shall be matte melamine polished as approved by Engineers in charge/ Architect.		4.00		0.00
170	Providing and placing Chair 10"(seat top) and back made of 1st class teak wood glossy polyster finsih .The seat shall have a cushioned base made of min. 4" thick mattress foam (Sleepwell /Kurlon make) and upholstered with A class molfino Fabric (Ddecor or equivalent make). as approved by Engineers in charge/Architect.		16.00		0.00
180	"Providing and placing Providing TV Cabinet depth made up of 19mm thick commercial board (Duro/Uniply make) finished in 4mm veneer (Duro, Merino, National) of approved shade and texture on all sides (inside as well as outside) melamine matte polished to approved shade. The Cabinet shall have 3 drawers and open shelves with locks etc. all complete as per the details drawing provided. The drawers and cabinet shutters shallhave telescopic channels and hinges of Hettich/Hafele make as approved by Engineers in charge/ Architect."	EACH	1.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
	Providing and placing Console table top made from 19 mm thick pre- laminated board . All the edges are sealed with 2 mm thick PVC edge band all around . Base in black matte powdered coating, as approved by Engineers in charge/ Architect.	EACH	3.00		0.00
200	"Providing and placing Bed frame and legs of made of 1st class teak wood of section with central panel made in 8mm thick anti termite and water proof Plywood (Duro/Uniply make) pasted with 1mm laminate (merino/formica/ greenply make) as approved upholstred in fabric/ leatherite. Head panel to be upholstered in fabric/ leatherite. All the exposed teak wood parts as well as any other part of wood/ board/ ply, shall be melamine polished (matte). as approved by Engineers in charge/ Architect."		12.00		0.00
210	Providing and placing Bed side Table of outer dimensions 18"x18" x18" made of 19mm commercial board (Duro/Uniply make), having one drawer. All outersurfaces to be finished in 1 mm laminate (greenply, formica, merino). The drawer shall be supported on telescopic channels (Hettich/Hafele make) as approved by Engineers in charge/ Architect.	FACH	24.00		0.00
220	Providing and placing Sofa Chair structure made of A- grade Mirandi structure .The seat shall have a cushioned base made of min. 4" thick mattress foam (Sleepwell /Kurlon make) and upholstered with A class molfino Fabric (Ddecor or equivalent make) (texture and color as per design) as approved by Engineers in charge/ Architect.	FACH	6.00		0.00
230	Providing and placing Coffee Table with marble top, base in hardwood with matte polish. Design as per image as approved by Engineers in charge/ Architect.	EACH	12.00		0.00
	Providing and placing Sofa lounge Base in black powdered polish finish. Seat top layer of PU foam upholstered with fabric or leatheritte. Understructure to be made up of Mirandi wood. Design as approved by Engineers in charge/ Architect.		6.00		0.00
250	Providing and placing TV Cabinet in 19mm thick commercial board (Duro/Uniply make) finished in 4mm veneer (Duro, Merino, National) of approved shade and texture on all sides (inside as well as outside). The Cabinet shall have 2 drawers as per the details drawing provided. The base of the drawers shall have telescopic channels and hinges of Hettich/Hafele make. Design as approved by Engineers in charge/Architect.		12.00		0.00
260	Providing and placing Sofa Chair structure made of Metal frame. The seat shall have a cushioned base made of min. 4" thick mattress foam (Sleepwell /Kurlon make) and upholstered with A class molfino Fabric (Ddecor or equivalent make) (texture and color as per design). Design as approved by Engineers in charge/ Architect.	EACH	12.00		0.00
	Providing and placing Sofa base in durable powder-coated steel wrapped in weather-resistant PE cords, waterprroof seat and back in fabric for terrace. Design as approved by Engineers in charge/ Architect. (3+1+1 SEATER)	EACH	5.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
	Providing and placing Center table in durable powder-coated steel wrapped in weather-resistant PE cords for terrace. Design as approved by Engineers in charge/ Architect.	EACH	2.00		0.00
290	Providing and placing Sofa base in durable powder-coated steel wrapped in weather-resistant PE cords, waterprroof seat and back in fabric for terrace. Design as approved by Engineers in charge/ Architect. (6 SEATER)	EACH	6.00		0.00
300	Providing and placing Sofa base in durable powder-coated steel wrapped in weather-resistant PE cords, waterprroof seat and back in fabric for terrace. Design as approved by Engineers in charge/ Architect. (SINGLE SEATER)	EACH	1.00		0.00
310	Providing and placing on bed with double bed mattresses having thekness from 6"-8" with twin comfort layer, pocket springs and warranty period of 5 years on product. Design as approved by Engineers in charge/Architect. Minimum price of mattresses should be Rs 25000.	EACH	18.00		0.00
	Providing and placing on bed with pillows having warranty period of 3 years on product. Design as approved by Engineers in charge/ Architect. Baisc price should be of Rs 2100.	EACH	24.00		0.00
330	Providing and placing on bed with double bed, bed linned/ bed sheet amed out super fine fabric and pattern. Design as approved by Engineers in charge/ Architect. Basic price should be of Rs 1500.	EACH	24.00		0.00
	Providing and placing on bed with double bed size comforter out super fine fabric and pattern. Design as approved by Engineers in charge/ Architect. Basic price should be of Rs 4300.	EACH	12.00		0.00
	Providing and placing on floor with rugs and carpets of minimum size 160x230 cms in solid color or pattern as per the approved Design by Engineer in charge/ Architect. Basic price should be of Rs 22000.	EACH	14.00		0.00
300	Providing and placing in each bathroom a combo set of towel and hand towel and bathrobe as per the approved Design by Engineer in charge/ Architect. Basic price should be of Rs 3000.	EACH	12.00		0.00
370	Providing and fixing in each room ready made set of dual curtains of size 135x260 cm made out of fine fabric in solid color or pattern as per the approved Design by Engineer in charge/ Architect. The item includes complete cost of fixtures and fittings. Basic price should be of Rs 4300.		72.00		0.00
380	Providing and placing in each room a pair of two cushions of size 450x450 mm as per the approved Design by Engineer in charge/ Architect. Basic price should be of Rs 2200.	PAIR	20.00		0.00
300	Providing and fixing in each room bath mat as per the approved Design by Engineer in charge/ Architect. The item includes complete cost of fixtures and fittings. Basic price should be of Rs 800.	EACH	12.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
Α	В	С	D	E	F=D*E
400	Providing and fixing in each room a pair of bath slippers as per the approved Design by Engineer in charge/ Architect.The item includes complete cost of fixtures and fittings. Basic price should be of Rs 699	PAIR	12.00		0.00
410	Providing and laying modular carpet of approved make with 100% nylon 6.6.tuffed textured loop pile, manufactured using digital injection dying process with protective treatment stain smart(stain repel/stain resist/ stain release) anti microbal alphasan wwith pvc free pu cushin backing nominal total thickness of minimm 6.5 mm (pile height minimum 2.75mm) nominal total weight 3018 gms/ sqm(nominal pile weight 1800 oz/yard) material shall be LEED certified preferably included fixing with green adhesive of approved make, all inclusive of sides flashing, fixing angles, flat etc, nozing angle for staircase etc complete in all respects as per the approved Design by Engineer in charge/ Architect. Basic price of carpet should be Rs 2000 per sqm. (Misc.)	SQUARE METER	10.00		0.00
420	"Supply 'Installation, testing & commissioning of of 49"" FHD Smart TV An all-in-one display enabling secure content delivery and in-room convenience. Resolution 1920 X 1080 (Full HD) The model to be approved by Engineer in charge/ Architect."	EACH	12.00		0.00
430	"Supply 'Installation, testing & commissioning of 75" Interactive Flat Panel Brightness(w/Protection Glass): 330 cd/m^2 Touch Type: IR Multi Touch Point: Max 20 points / Max 10 writing Interface: HDMI (3), RGB / Audio In,RS232C In, RJ45,USB 2.0 (3, Front: 2ea, Bottom side: 1ea Only for software update), USB 3.0 (3), Touch Out(USB2.0,B Type) (2),HDMI (1), Optical Output / Audio Out.The model to be approved by Engineer in charge/ Architect."		1.00		0.00
440	"Supply 'Installation, testing & commissioning of Video Conferencing system CAMERA Smooth motorized pan, tilt and zoom, controlled from remote or console 260° pan, 130° tilt 10x lossless HD zoom 90° Field of View Full HD 1080p 30fps H.264 UVC 1.5 with Scalable Video Coding (SVC) Autofocus 5 camera presets Far-end control (PTZ) of ConferenceCam products ZEISS lens certification Kensington security slot LED to confrm video streaming Standard tripod thread. The model to be approved by Engineer in charge/ Architect."	EACH	1.00		0.00
450	"Supply 'Installation, testing & commissioning of wireless presenter system Color: Black Laser Class: Class 2 Laser Max Output: Less than 1mW Wave Length: 640?660nm (red light) Battery type: 2 AAA batteries Battery life (Laser pointer): 20-hour maximum Battery life (Presenter): 1050-hour maximum Wireless operating distance: Approx 10m 2 Wireless technology: 2.4 GHz wireless technology Supported OS: Windows Vista, Windows 7, Windows 8 Interface: USB Accessories: Carring case.The model to be approved by Engineer in charge/ Architect."	EACH	1.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
	Supply 'Installation, testing & commissioning of Full range Ceiling Speaker, min 3", 20 watt @ 80hm 15W or higher,multi-tap at 70V/100V, Frequency Response- 96Hz -15kHz or better ,Sensitivity -84dB or better, coverage angle-120deg conical, SPL 96dB.The model to be approved by Engineer in charge/ Architect.		40.00		0.00
470	Supply 'Installation, testing & commissioning of Two-channel Amplifier, 350W per channel @ 80hm, Sensitivity 1.4Vrms Frequency Response +0dB, -1dB Signal to Noise > 97dB (at .775Vrms sensitivity, 6dB lower) Intermodulation Distortion < 0.3% Damping Factor > 200 THD < 0.5% Crosstalk At 1kHz: > 85dB, At 20kHz: > 55dBTHDThe model to be approved by Engineer in charge/ Architect.		2.00		0.00
480	Supply 'Installation, testing & commissioning of 12 Inputs & 8 Outputs signal processor Clear Front Panel LED Indication Bi-Directional Locate Functionality 12 Control Inputs and 6 Logic Outputs for GPIO Integration. The model to be approved by Engineer in charge/ Architect.		1.00		0.00
490	Supply 'Installation, testing & commissioning of 2 core shielded Audio Cable, 23AWG.	METER	1,500.00		0.00
	Supply 'Installation, testing & commissioning of 2 Core Speaker cable, 2.5 sq.mm.	METER	2,000.00		0.00
510	Supply 'Installation, testing & commissioning of Connectors and Accessories	EACH	1.00		0.00
520	Supply 'Installation, testing & commissioning of Landscape two way Speaker 30W @ $70V/100V$ multi-tap transformer, Coverage Angle- 360×360 deg , Frequency Response -70 Hz - 15 kHz or better, SPL-100 dB or better , Sensitivity-86 dB or better. The model to be approved by Engineer in charge/ Architect.		4.00		0.00
530	Supply 'Installation, testing & commissioning of 250 watts Impedance 4 and 8 Ohm Frequency 50+-5% Frequency Response 50-15000+-3db Signal To Noise Ratio 70 dB (Amplifier). The model to be approved by Engineer in charge/ Architect.		1.00		0.00
540	Supply 'Installation, testing & commissioning of 8" Woofer with woven fiberglass cone 120 Watt power handling (240 Watt program) in direct 8? setting, plus built-in 60 Watt 70V/100V multi-tap transformer. High fidelity sound character with broad frequency response of 45 Hz – 20 kHz. Frequency Response (- 0dB) 45 Hz to 20 kHz Frequency Response (±3 dB) 62Hz - 16 kHz (VIP IOUNGE). The model to be approved by Engineer in charge/ Architect.	EACH	4.00		0.00
550	Supply 'Installation, testing & commissioning of 1 or 2 channels X 300W output Built-in 70V and 100V Space-saving 2 RU design Sleep mode disable function Energy-efficient amplifier (VIP LOUNGE). The model to be approved by Engineer in charge/ Architect.		1.00		0.00
560	Supply 'Installation, testing & commissioning of Dyson air purifier vide model no Dyson pure hot + cool air purifier, two in one purifier with in built heater with minimum two year warranty. The color and model to be approved by Engineer in charge/Architect.		16.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
Α	В	С	D	E	F=D*E
570	Supply 'Installation, testing & fixing of mini type fridge having capacity 45-55 lts. The refrigerator should be equipped with veggie tray, ice tray, temperature control dial having 3-5 star rating on the product. The color and model to be approved by Engineer in charge/Architect.	EACH	12.00		0.00
580	Supply 'Installation, testing & fixing of lage commercial type fridge having capacity 850-1100 lts. The refrigerator should be equipped with veggie tray, ice tray, temperature control dial having 5 star rating on the product. The color and model to be approved by Engineer in charge/Architect.		1.00		0.00
590	Supply 'Installation, testing & fixing of commercial type deep freezer cum coller having capacity 450-500 lts with dual compartment and temp ranger of cooler from 2'c -8'c and -18'c22'c for freezer. The color and model to be approved by Engineer in charge/Architect.		1.00		0.00
	Supply 'Installation, testing & fixing of electrical kettle having capacity of 1.7 ltrs aith auto shut off feature with two years warranty. The color and model to be approved by Engineer in charge/Architect. Ref product Viva collection double wall of philips.		12.00		0.00
	Supply 'Installation, testing & commissioning of build in kitchen cooker hoods (chimney) with designed air flow 1080m3/h having minimum air outlet of 150 mm. The color and model to be approved by Engineer in charge/Architect.	EACH	2.00		0.00
620	Supply 'Installation, testing & commissioning of SITC of telephone equipment including connection ets as required for successful working on site. The color and model to be approved by Engineer in charge/Architect.	EACH	18.00		0.00
630	Supply of Installation & Commissioning material for 10 Kwp solar system on grid supply.	SET	1.00		0.00
	Supply installation testing and commissioning of the following as per specification: 1/3" day and night indoor mini Dome color Camera, 530 TV Lines, 0.002 Lux with 3m fixed iris lens.	EACH	12.00		0.00
650	9 Channel Real time Digital Vedio Recorder, 9 loop through vedio output Respectively, TCP/IP Connectivity, Live monitoring at 400FPS, Recording at 200 FPS, Simultaneous recording & Play Back Built in motion sensor, 4 Channel audio recording, Two Way audio over anetwork, Built in CD-R/RW, Auto recording with Optimum file size, easy back up through USB, One monitor and 1 VGA output, Support multiprotocols with 540GB HDD complete as required.	EACH	2.00		0.00
	21-INCH Color LCD CCTV MONITOR for viewing complete as required	EACH	1.00		0.00
670	PVC insulated copper conductor 1100 volts grade "FR"Signal wires in existing MS conduits complete as required: RG 59 coaxial cable	METER	300.00		0.00
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm dia.	METER	225.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
690	Supplying, installation, testing and commissioning of Ipad Air Wifi 16 GB Silver etc complete with standard accessories as required As per approved.	EACH	1.00		0.00
700	Supplying, installation, testing and commissioning of Base station etc complete with standard accessories as required. As per approved.	EACH	1.00		0.00
710	Supplying, installation, testing and commissioning of Wireless access point for touch panel etc complete with standard accessories as required As per approved.	EACH	4.00		0.00
720	Supplying, installation, testing and commissioning of 16port ethernet gigabit switch etc complete with standard accessories as required As per approved.	EACH	1.00		0.00
730	Supplying and stacking of good earth at site including royalty and carriage upto 5 km lead complete (earth measured in stacks will be reduced by 20% for payment).	CUBIC METER	13.50		0.00
740	Supplying and stacking at site dump manure from approved source, including carriage upto 5 km lead complete (manure measured in stacks will be reduced by 8% for payment): Screened through sieve of I.S. designation 4.75 mm	CUBIC METER	4.00		0.00
750	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge	CUBIC METER	18.00		0.00
760	Grassing with selection No. 1/ Doob grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately). In rows 5 cm apart in both directions		70.00		0.00
	Providing & fixing of White River (Stone) Pables size of 2" to 2.50" dia in natural colour at site of work including loading, unloading, carriage and all taxes paid etc.and as per direction of officer in charge.	QUINTAL	5.00		0.00
	Providing and Displaying of Araucaria cookie having ht. 90 cm to 120 cm, straight, well developed, fresh and healthy with lush green leaves from bottom to top in 25 cm size of earthen pot/plastic pot	EACH	7.00		0.00
	Providing and displaying of Croton Duck Foot (Elite) having ht. 60 cm to 75 cm with 4 to 5 branches, well developed, fresh and healthy colorful leaves in 25 cm size of Earthen pot/Plastic pot & as per direction of the officer-in-charge.		25.00		0.00
800	Providing and displaying of Raphis palm having ht. 75 cm to 90 cm with 12 to 15 equal suckers, well developed, full of fresh & healthy leaves from bottom to top in 25 cm size Earthen pot/Plastic pot & as per direction of the officer-in-charge.	EACH	10.00		0.00
	Providing and Displaying of Rubber variegated, well developed, having 45 to 60 cm ht.with fresh, healthy leaves in 25 cm size Earthen pot/Plastic pot & as per direction of the officer-in-charge.	EACH	12.00		0.00

	Name of Bidder:				
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)
A	В	С	D	E	F=D*E
820	Providing and Displaying Acalypha green well developed, fresh & healthy with good foliage, multi branch 30 to 45 cm ht. in 20 cm size Earthen Pot/ Plastic Pot bushy as per direction of the officer-in-charge	EACH	10.00		0.00
830	Providing and Displaying Adenium Obesum grafted well developed with fresh & healthy 30 to 60 cm ht. in 25 cm size Earthen Pot/ Plastic Pot as per direction of the officer-in-charge	EACH	10.00		0.00
840	Providing and Displaying Bougainvillea named variety, Sobhra, Thima, Marry palmar, Cherry Blossom etc. well developed with fresh & healthy bushy in full bloom 75 to 90 cm ht. in 40 cm Cement Pot as per direction of the officer-in-charge.	EACH	15.00		0.00
850	Providing and stacking of Ficus benjamina (green) of height 120-135 cm. with 6-8 branches and lush green foliage in g. bags of size 25 cm as per direction of the officer-in-charge	EACH	20.00		0.00
860	Providing and stacking of Ficus elastica Decora (Rubber) of height 45-60 cm. in earthen pots of size 25 cm as per direction of the officer-in-charge	EACH	25.00		0.00
870	Providing and stacking of Plumeria alba of height 165-180 cm. with 3-4 branches and thick stem in big size HDPE bags as per direction of the officer-in-charge.	EACH	10.00		0.00
880	Providing and stacking of Nerium oleander variegated of height 60-75 cm., multibranched in earthen pots of size 25 cm as per direction of the officer-in-charge.	EACH	840.00		0.00
	Providing, fixing and placing natural vertical garden with the specified plants and placing it with ms steel structures on back sufficed enough o support its weight along with provision of drip irrigation on it. Design to be pre approved by Engineer-in-charge or Architect.	SOTIARE.	71.42		0.00
900	Providing, and placing extra large circular shaped plant pots having dia as 750 mm with prependicular height as 750 mm of design and color as approved by Engineer-in-Charge or Architect .	EACH	30.00		0.00
910	Providing, and placing extra large square/rectangular shaped plant pots having size as 600x600 mm with prependicular height as 750 mm of design and color as approved by Engineer-in-Charge or Architect .	EACH	20.00		0.00
920	Providing Circular ceramic pots of specified size, and stacking in required rows & height, all complete as per direction of Officer-in-charge.	EACH	20.00		0.00
	Supplying Installation Testing and Commissioning of outdoor wall type water fountain on the roof the building. The wall type water fountain shall be 7'x3'. The wall type foundation shall be claddeded with high qualiity white/black marble. The system should be well equipped with in build water ciculation pump and discharge point well connected to the nearest drain point. The design shall be approved by Engineers-in-charge/ Architect.	EACH	1.00		0.00

	Name of Bidder:						
Item No.	Description of Services	Unit of Measurement	Estimated Quantity	Unit Rate (Rs.) including all taxes but excluding GST (To be quoted by the Bidders)	Total Amount including all taxes but excluding GST (Rs.)		
Α	В	С	D	E	F=D*E		
940	Supplying Installation Testing and Commissioning of indoor circular/spherial type water fountain on the upper ground floor of the building. The water fountain shall have a minimum dia of 2'. The foundation shall have outer finish in white/grey/black marble. The system should be well equipped with in build water ciculation pump and discharge point well connected to the nearest drain point. The design shall be approved by Engineers-in-charge/ Architect.	EACH	1.00		0.00		
	TOTAL ESTIMATED CONTRACT COST INCL	UDING ALL TA	XES BUT EX	CLUDING GST (Rs.), I	0.00		
	GST AMOUNT PAYABLE EXTRA O	N TOTAL ESTI	MATED CONT	RACT PRICE (Rs.), II			
	TOTAL EVALUATED CONTRACT CO	ST INCLUDING	ALL TAXES	& GST (Rs.), III = I+II	0.00		
				IGST :			
GST RATES CONSIDERED BY BIDDER IN ESTIMATED CONTRACT PRICE CGST :							
				SGST :			
				SAC Code:			

Note: Comparison of techno-commercially acceptable offers will be done on Total evaluated contract cost, i.e. 'III' in above

(END OF SECTION-IX)

ANNEXURE-I

CONFIDENTIALITY AND NON- DISCLOSURE AGREEMENT

This confidentiality between	and	non-disclosure	agreement	is	executed	on	,,,,,,	' 20_
M/s	•••••							
AND								
OIL INDIA LIMITEI having its registered expression, unless the acting through its du	offic ne con	e at Duliajan-78 itext otherwise r	36602, Distrequires, sha	rict	Dibrugarh	ı, Assam,	India	which

WHEREAS, OIL and M/s ______ have entered into a contract for "Interior decoration, furnishing, electrical appliances, and horticulture work for redevelopment of OIL's property at M-125, Greater Kailash-II, New Delhi". M/s ______ will have access to certain proprietary and confidential information in due course of time as and when required to be used during the course of time for execution of jobs to be carried out under the project, hence the confidentiality agreement is executed on the terms and condition set henceforth.

As used herein "Confidential Information" means all plans, specifications, manuals, numerical results, general conclusions, design reports, studies, cost estimates, and all other materials, information and data developed by, or in the possession a party and which is directly or indirectly made available to the other party in any form or which is directly or indirectly made available to the other party during the performance of the services. Accordingly, each party is willing to allow the other party to have access to such information, under the following terms and conditions:

- 1. Each party agrees that it will maintain in confidence and will not disclose to any third party, without the other party's prior written permission, any confidential information that is disclosed to it directly or indirectly. Each party further agrees that it will limit access to Confidential Information to only those employees of their company who actually need to know such Confidential Information for carrying out the above indicated purpose of this agreement.
- 2. Each party agrees that:
 - a) It will not use any of their Confidential Information for any purpose other than as necessary to perform its services;
 - b) It will promptly return to the other party all documents provided by such party which contain Confidential Information (including all copies thereof) and
 - c) Based on the study result of this dataset, no technical paper or presentation will be published/ shared in any forum/ technical seminar without prior consent of OIL. Upon written request, except that each party shall be entitled to retain one copy of such information for archival purposes only.
- 3. Each party agrees that it will inform each of its employees who receives or has access to any Confidential Information of the provisions of this Agreement.
- 4. The foregoing obligations of each party shall not apply to:
 - a) Information which, at the time of disclosure, is in the public domain as evidenced by printed publication or otherwise;
 - b) Information which, after disclosure, becomes part of the public domain by publication or otherwise through no act or failure to act of each party;

ANNEXURE-I

c) Information which each party can show was in its possession prior to the time of disclosure and was not acquired directly or indirectly from the other party;

Or

d) Information which is received by each party subsequent to the time of disclosure from a third party who has the right to disclose such information and who did not acquire the same directly or indirectly from each party.

Disclosures made to each party in connection with this Agreement shall not be deemed to be within the foregoing exceptions merely because they are embraced by more general information in the public domain or in the possession of each party.

- 5. All Confidential Information disclosed by a party pursuant to or in connection with this Agreement shall at all times remain the property of that party.
- 6. This Agreement shall be construed and the rights of the parties shall be determined in accordance with the laws of India.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their duly authorized representatives, effective as of 20__.

<u>M/s</u>		
By:	Witness:	
Title:	_ Title:	
Date:	_ Date:	
OIL INDIA LIMITED		
By:	Witness:	
Title:	_ Title:	
Date:	_ Date:	

(END OF ANNEXURE-I)

FORMAT OF UNDERTAKING BY BIDDERS TOWARDS SUBMISSION OF **AUTHENTIC INFORMATION/DOCUMENTS**

(To be typed on the letter head of the bidder)

Ref. No Date
Sub: Undertaking of authenticity of information/documents submitted Ref: Your tender No. CLI7392P22 Dated 16.07.2021
To, The GM (C&P) Oil India Limited Plot No. 19, Sector-16 A Noida
Sir,
With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.
We take full responsibility for the submission of authentic information/documents against the above cited bid.
We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.
Yours faithfully,
For (type name of the firm here)
Signature of Authorised Signatory
Name:
Designation:
Phone No.
Place:
Date:
(Affix Seal of the Organization here, if applicable)

BID FORM

To M/s. Oil India Limited, Plot No. 19, Sector-16 A, NOIDA

Sub: TENDER No. CLI7392P22

Gentlemen,

We undertake, if our Bid is accepted, to commence the work as per the terms & conditions set out in the subject tender.

We agree to abide by this Bid for a period of 120 days from the original date fixed for Technical Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that	t you are not bound t	to accept the lowest or any Bid you may receive.
Dated this	day of	2021.
Authorised Person	's Signature:	
Name:		
Designation:		
Seal of the Bidder:	}	

(END OF PROFORMA-I)

FORMAT OF UNDERTAKING BY BIDDERS FOR DECLARING PERCENTAGE OF LOCAL CONTENT

(To be submitted on Bidder's letter head)

To, M/s. Oil India Limited, Plot No. 19, Sector-16 A, NOIDA
Sub: PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC):
Dear Madam / Sir,
I/We (Name of the bidder) undertake that we meet the mandatory minimum Local Content (LC) requirement i.e % as per Clause No. 2.5 & 4.4 (b) of the policy vide Letter No. FP20013/2/2017-FP-PNG dated 17th November, 2020 of MoPNG to bid against Tender No. CLI7392P22 .
The percentage of local content in the bid is%.
Yours faithfully,
For (type name of the firm here)
Signature of Authorized Signatory
Name:
Designation:
Phone No.
Place:
Date:
(Affix Seal of the Organization here)

(END OF PROFORMA-II)

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSU	ED BY	PRACTISING	CHARTERED	ACCOUNTANTS'	FIRM	ON THEIR	LETTER
			HEA	D			

TO WHOM IT MAY CONCERN

financial statements of	the following financial position (Name or upto(as the case	f the Bidder) for the last three
YEAR	TURN OVER In INR (Rs.)	NET WORTH In INR (Rs.)

Place: Date:		
Seal:		
Membership Number and Firm	n Registration Number :	
Signature:		
Unique Document Identification	on Number (UDIN):	

(END OF PROFORMA-III)

PROFORMA FOR UNDERTAKING / AFFIDAVIT IN TERMS OF NOTE-II UNDER CLAUSE 1.2 OF BEC/BRC OF TENDER NO. CLI7392P22

Ι	the	authorized	signatory(s) of
		name with	address) do hereby
solemnly affirm and declare/ undertake as unde	er:		
The balance sheet/Financial Statements for the not been audited as on the Original Bid Closing		year	have actually
Yours faithfully,			
3,			
For (type name of the firm here)			
,			
Signature of Authorized Signatory			
N			
Name:			
Designation:			
Phone No.			
Thore ito.			
Place:			
Date:			
Zato.			
(Affix Seal of the Organization here, if applicable)		

Note: Bidders to take note that this certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the Original Bid Closing Date.

(END OF PROFORMA-IV)

STATEMENT OF NON-COMPLIANCE (IF ANY) (TO CLAUSES OTHER THAN THOSE IN BEC-BRC)

(Only exceptions/deviations to be rendered)

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the Tender stipulations, terms and conditions in respect of each Section of Bid Document other than BEC-BRC in the following format:

Section No.	Clause No. (Page No.)	Non-Compliance	Remarks

Signature of Authorised Signatory: $_$	
Name of Authorised Signatory:	
Name of Bidder:	

NOTE:

OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, other than those in BEC-BRC, the same should be indicated as per above format and submit along with their bids. No deviation will be accepted in the clauses covered under BEC-BRC. If the "**Statement of Non-Compliance**" in the above Proforma is left blank (or not submitted along with the Bid), then it would be constructed that the bidder has not taken any exception/deviation to the Tender requirements.

(END OF PROFORMA-V)

PROFORMA LETTER OF AUTHORISATION FOR ATTENDING BID OPENING

(END OF PROFORMA-VI)

Date: _____

PROFORMA LETTER OF AUTHORITY

To General Manager (C&P) OIL INDIA LIMITED Plot No. 19, Sector-16 A, Noida, U.P.

Dear Sir,

We

SUB: OIL TENDER No. CLI7392P22

 $\circ f$

Confirm that Mr./Ms	
` '	resent us to Bid, negotiate and conclude the
· ·	Tender Invitation No. <u>CLI7392P22</u> for Interior
	ppliances, and horticulture work for
	125, Greater Kailash-II, New Delhi for any
commercial / Legal purpose etc.	
	by all and whatsoever our said representative
shall commit.	
Authorised Person's Signature:	
Name:	<u> </u>
	Yours faithfully,
	rours ranning,
	Signature :
	Name & Designation
	5
	For & on behalf of

NOTE: This letter of authority shall be on printed letter head of the bidder, and shall be signed by a person competent and having the power of attorney (Power of attorney shall be annexed) to bind such Bidder.

(END OF PROFORMA-VII)

[TO BE FILLED-UP / SUBMITTED BY THE VENDOR ON ITS LETTER HEAD FOR E-REMITTANCE]

Name:	
FULL Address:	
Phone Number: Mobile Number: E-mail address: Fax Number: Bank Account Number (in which the Bidder wants Bank Name: Branch: Address of the Bank: Bank Code: IFSC/RTGS Code of the Bank: NEFT Code of the Bank: PAN Number: GST Registration Number: GeM Seller ID:	remittance against invoices):
	Signature of Bidder with Official Sea

(END OF PROFORMA-VIII)

FORM OF DECLARATION FOR BID SECURITY

To, M/s. Oil India Limited Plot No. 19, Sector-16 A, Noida, U.P.

Sub: Declaration for Bid Security

Tender No: CLI7392P22 for Interior decoration, furnishing, electrical appliances, and horticulture work for redevelopment of OIL's property at M-125, Greater Kailash–II, New Delhi.

Dear Madam/Sir,

After examining / reviewing provisions of above referred tender documents (including all corrigendum/ Addenda), we M/s. (Name of Bidder) have submitted our offer / bid no............

We, M/s.(Name of Bidder) hereby understand that, according to your conditions, we are submitting this Declaration for Bid Security.

We understand that we will be put on watch list/holiday/banning list (as per policies of OIL INDIA in this regard), if we are in breach of our obligation(s) as per following:

- (a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- (b) having been notified of the acceptance of our Bid by the OIL INDIA LIMITED during the period of bid validity:
 - (i) fail or refuse to execute the Contract, if required, or
 - (ii) fail or refuse to furnish the Contract Performance Security, in accordance provisions of tender document.
 - (iii) Fail or refuse to accept 'arithmetical corrections' as per provision of tender document.
- (c) having indulged in corrupt/ fraudulent/ collusive/ coercive practice as per procedure.

Place: [Signature of Authorized Signatory of Bidder]

Date: Name:

Designation:

Seal:

(END OF PROFORMA-IX)

FORM OF PERFORMANCE BANK GUARANTEE

To:	
•	Oil India Limited,
	To. 19, Sector-16 A,
Noida	, U.P 201301
	REAS (Name and address of Contractor) nafter called "Contractor") had undertaken, in pursuance of Contract No to execute (Name of Contract and Brief Description of the Work) (hereinafter called "the Contract").
shall	WHEREAS it has been stipulated by you in the said Contract that the Contractor furnish you with a Bank Guarantee as security for compliance with Contractor's tions in accordance with the Contract.
THER total such Contr and wafores for the debt f	WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW EFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a of (Amount of Guarantee in figures) (in words), amount being payable in the types and proportions of currencies in which the act price is payable, and we undertake to pay you, upon your first written demand without cavil or argument, any sum or sums within the limits of guarantee sum as said without your needing to prove or to show grounds or reasons for your demand e sum specified therein. We hereby waive the necessity of your demanding the said from the Contractor before presenting us with the demand. There agree that no change or addition to or other modification of the terms of the act or the work to be performed thereunder or of any of the Contract documents a may be made between you and the Contractor shall in any way cease us from any ty under this guarantee, and we hereby waive notice of such change, addition or fication.
This g	guarantee is valid until theday of
11110 8	day of
The do	etails of the Issuing Bank and Controlling Bank are as under: Issuing Bank: BANK FAX NO: BANK EMAIL ID: BANK TELEPHONE NO.: IFSC CODE OF THE BANK:
B.	Controlling Office:
Addre	ess of the Controlling Office of the BG issuing Bank:
Name	of the Contact Person at the Controlling Office with Mobile No. and e-mail address:
	thstanding anything contained herein: Our liability under this Bank Guarantee shall be restricted up to Rs
b)	This guarantee shall be valid till
c)	We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before (Date of Expiry of BG PLUS one year claim period).

d) At the end of the claim period that is on or after (Date of Expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

SIGNATURE AND SEAL OF THE GUARANTORS	
Designation	
Name of Bank	
Address	
Witness	
Address	
Date	
Place	

(END OF PROFORMA-X)

SAMPLE FORM OF AGREEMENT

THIS AGGREEMENT is made on the day of 2020, between (Name Company) of (Mailing address of Company) hereinafter called "the Company", of the one part and (Name of Contraction (hereinafter called "the Contractor") of the other part.	,
WHEREAS the Company is desirous that certain works should be executed viz. (Indescription of works) and has, by Letter of Award dated (Databetter of Acceptance), accepted a Bid by the Contractor for the executed maintenance of such works.	te of
NOW THIS AGREEMENT WITNESSETH as follows:	
 In this agreement words and expressions shall have the same meanings as respectively assigned to them in the conditions of Contract hereinafter referred t 	
 The following documents shall be deemed to form and be read and construct part of this Agreement, viz.: a) This form of Agreement, b) The Letter of Award c) Integrity Pact, d) Confidentiality and Non-Disclosure Agreement, e) Schedule of Rates, f) Scope of Work & Special Conditions of Contract and, g) General Conditions of Contract 	i as
3. The aforesaid documents shall be taken as complementary and mutuexplanatory of one another, but in the case of ambiguities or discrepancies shall take precedence in the order set out above.	
4. In consideration of the payment to be made by the Company to the Contractor hereinafter mentioned, the Contractor hereby covenants with the Company execute, complete and maintain the works in conformity in all respects with provisions of the contract.	y to
5. The Company hereby covenants to pay the Contractor in consideration of execution, completion and maintenance of the works the Contract price at the ti and in the manner prescribed by the Contract.	
IN WITNESS WHEREOF the parties hereto have set their respective hands and seathlis Agreement on the day, year first written above.	ls to
SIGNED, SEALED AND DELIVERED.	
By the said Name	
On behalf of the Contractor in the presence of:	

(END OF PROFORMA-XI)
- END OF TENDER -